



2021 Development Charges Background Study

Municipality of Thames Centre

December 27, 2021

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca

Table of Contents

	Page
Executive Summary	i
1. Introduction.....	1-1
1.1 Purpose of this Document.....	1-1
1.2 Summary of the Process.....	1-2
1.3 Changes to the D.C.A.: Bill 73 – Smart Growth for our Communities Act, 2015.....	1-3
1.3.1 Area Rating	1-3
1.3.2 Asset Management Plan for New Infrastructure.....	1-3
1.3.3 60-Day Circulation of the D.C. Background Study	1-4
1.3.4 Timing of Collection of D.C.s.....	1-4
1.3.5 Other Changes.....	1-4
1.4 Further Changes to the D.C.A.: Bill 108, 138, 197, and 213	1-5
1.4.1 Bill 108: More Homes, More Choice Act – An Act to Amend Various Statutes with Respect to Housing, Other Development, and Various Matters	1-5
1.4.2 Bill 138: Plan to Build Ontario Together Act, 2019	1-6
1.4.3 Bill 197: COVID-19 Economic Recovery Act.....	1-6
1.4.4 Bill 213: Better for People, Smarter for Business Act, 2020	1-10
2. Current Municipality of Thames Centre Policy	2-1
2.1 Schedule of Charges	2-1
2.2 Services Covered	2-1
2.3 Timing of D.C. Calculation and Payment	2-2
2.4 Indexing	2-2
2.5 Redevelopment Allowance	2-2
2.6 Discretionary Exemptions	2-3
3. Anticipated Development in the Municipality of Thames Centre	3-1
3.1 Requirement of the Act	3-1



Table of Contents (Cont'd)

	Page
3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast	3-1
3.3 Summary of Growth Forecast	3-2
4. The Approach to the Calculation of the Charge	4-1
4.1 Introduction	4-1
4.2 Services Potentially Involved	4-1
4.3 Increase in the Need for Service	4-1
4.4 Local Service Policy	4-6
4.5 Capital Forecast	4-6
4.6 Treatment of Credits	4-7
4.7 Classes of Services	4-8
4.8 Existing Reserve Funds	4-9
4.9 Deductions	4-10
4.9.1 Reduction Required by Level of Service Ceiling	4-11
4.9.2 Reduction for Uncommitted Excess Capacity	4-11
4.9.3 Reduction for Benefit to Existing Development	4-12
4.9.4 Reduction for Anticipated Grants, Subsidies and Other Contributions	4-13
4.10 Municipal-wide vs. Area Rating	4-13
4.11 Allocation of Development	4-13
4.12 Asset Management	4-14
4.13 Transit	4-14
5. D.C.-Eligible Cost Analysis by Service	5-1
5.1 Introduction	5-1
5.2 Service Levels and 10-Year Capital Costs for D.C. Calculation	5-1
5.2.1 Fire Protection Services	5-1
5.2.2 Parks and Recreation Services (Formerly Outdoor and Indoor Recreation)	5-4
5.2.3 Library Services (Facilities)	5-8
5.2.4 Waste Diversion Services	5-10
5.2.5 Public Works (Facilities, Fleet and Equipment)	5-12
5.2.6 Growth Studies	5-14
5.3 Service Levels and 25-Year Capital Costs for Thames Centre's D.C. Calculation	5-19
5.3.1 Services Related to a Highway	5-19
5.4 Service Levels and Buildout Capital Costs for Thames Centre's D.C. Calculation	5-21
5.4.1 Water Services	5-21
5.4.2 Wastewater Services	5-27



Table of Contents (Cont'd)

	Page
6. D.C. Calculation	6-1
7. D.C. Policy Recommendations and D.C. By-law Rules	7-1
7.1 Introduction	7-1
7.2 D.C. By-law Structure	7-2
7.3 D.C. By-law Rules.....	7-2
7.3.1 Payment in any Particular Case.....	7-2
7.3.2 Determination of the Amount of the Charge.....	7-3
7.3.3 Application to Redevelopment of Land (Demolition and Conversion).....	7-4
7.3.4 Exemptions (full or partial)	7-4
7.3.5 Phasing in	7-5
7.3.6 Timing of Collection	7-5
7.3.7 Indexing	7-6
7.3.8 The Applicable Areas.....	7-6
7.4 Other D.C. By-law Provisions	7-6
7.4.1 Categories of Services/Classes of Services for Reserve Fund and Credit Purposes	7-6
7.4.2 By-law In-force Date	7-7
7.4.3 Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing	7-7
7.4.4 Area Rating	7-7
7.5 Other Recommendations	7-9
8. By-law Implementation	8-1
8.1 Public Consultation Process	8-1
8.1.1 Introduction	8-1
8.1.2 Public Meeting of Council.....	8-1
8.1.3 Other Consultation Activity	8-1
8.2 Anticipated Impact of the Charge on Development.....	8-2
8.3 Implementation Requirements	8-3
8.3.1 Introduction	8-3
8.3.2 Notice of Passage.....	8-3
8.3.3 By-law Pamphlet	8-3
8.3.4 Appeals.....	8-4
8.3.5 Complaints	8-4
8.3.6 Credits	8-5
8.3.7 Front-Ending Agreements.....	8-5
8.3.8 Severance and Subdivision Agreement Conditions	8-5
Appendix A Background Information on Residential and Non-Residential Growth Forecast.....	A-1



Table of Contents (Cont'd)

	Page
Appendix B Level of Service	B-1
Appendix C Long-Term Capital and Operating Cost Examination.....	C-1
Appendix D D.C. Reserve Fund Policy	D-1
Appendix E Local Service Policy	E-1
Appendix F Asset Management Plan.....	F-1
Appendix G Proposed D.C. By-law.....	G-1



List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
A.M.P.	Asset management plan
CANSIM	Canadian Socio-Economic Information Management System (Statistics Canada)
D.C.	Development charge
D.C.A.	Development Charges Act, 1997, as amended
F.I.R.	Financial Information Return
G.F.A.	Gross floor area
LPAT	Local Planning Appeal Tribunal
M.O.E.C.P.	Ministry of the Environment, Conservation and Parks
N.F.P.O.W.	No fixed place of work
O.L.T.	Ontario Land Tribunal
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O. Reg.	Ontario Regulation
P.O.A.	Provincial Offences Act
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
S.W.M.	Stormwater management
sq.ft.	square foot
sq.m.	square metre



Executive Summary



Executive Summary

1. The report provided herein represents the Development Charges (D.C.) Background Study for the Municipality of Thames Centre required by the *Development Charges Act, 1997*, as amended (D.C.A.). This report has been prepared in accordance with the methodology required under the D.C.A. The contents include the following:
 - Chapter 1 – Overview of the legislative requirements of the Act;
 - Chapter 2 – Review of present D.C. policies of the Municipality;
 - Chapter 3 – Summary of the residential and non-residential growth forecasts for the Municipality;
 - Chapter 4 – Approach to calculating the D.C.;
 - Chapter 5 – Review of historical service standards and identification of future capital requirements to service growth and related deductions and allocations;
 - Chapter 6 – Calculation of the D.C.s;
 - Chapter 7 – D.C. policy recommendations and rules; and
 - Chapter 8 – By-law implementation.
2. D.C.s provide for the recovery of growth-related capital expenditures from new development. The D.C.A. is the statutory basis to recover these charges. The methodology is detailed in Chapter 4; a simplified summary is provided below.
 - 1) Identify amount, type, and location of growth.
 - 2) Identify servicing needs to accommodate growth.
 - 3) Identify capital costs to provide services to meet the needs.
 - 4) Deduct:
 - Grants, subsidies and other contributions;
 - Benefit to existing development;
 - Amounts in excess of 10-year historical service calculation;
 - D.C. reserve funds (where applicable);
 - 5) Net costs are then allocated between residential and non-residential benefit.



- 6) Net costs divided by growth to provide the D.C.
3. A number of D.C. processes need to be addressed as a result of the *Smart Growth for Our Communities Act, 2015* (Bill 73). These processes have been incorporated throughout the report and in draft by-law, as necessary. These items include:
 - a. Area-rating: Council must consider the use of area-specific charges.
 - b. Asset Management Plan for New Infrastructure: The D.C. background study must include an asset management plan (A.M.P.) that deals with all assets proposed to be funded, in whole or in part, by D.C.s. The A.M.P. must show that the assets are financially sustainable over their full lifecycle.
 - c. 60-day Circulation Period: The D.C. background study must be released to the public at least 60-days prior to passage of the D.C. by-law.
 - d. Timing of Collection of Development Charges: The D.C.A. now requires D.C.s to be collected at the time of the first building permit.
4. Further changes to the D.C.A. were introduced through four bills passed in the Ontario legislature: Bill 108, Bill 138, Bill 197, and Bill 213. The following provides a brief summary of the changes.

Bill 108: More Homes, More Choice: Ontario's Housing Supply Action Plan

In May 2019, the Province introduced Bill 108, More Homes, More Choice Act, 2019 which would make changes to the current D.C. legislation. The Bill was passed and given Royal Assent on June 6, 2019. While the legislation has been passed, much of the detailed changes were to be implemented by Regulation, however, these changes were not implemented (subject to Bill 197 discussed later). The following items are currently in effect:

- a. Effective January 1, 2020, rental housing and institutional developments shall pay D.C.s in six (6) equal annual payments commencing at first occupancy. Non-profit housing developments shall pay D.C.s in 21 equal annual payments. Interest may be charged on the instalments, and any



unpaid amounts inclusive of interest payable shall be added to the property tax roll and collected in the same manner as taxes.

- b. Effective January 1, 2020, the D.C. amount for all developments occurring within two years of a Site Plan or Zoning By-law Amendment planning approval (for applications made after January 1, 2020), shall be determined based on the D.C. by-law in effect on the day of Site Plan or Zoning By-law Amendment application.

Other key elements of the changes that were not proclaimed and were dealt with subsequently through Bill 197 are provided below:

- The D.C. would be refined to only allow for the following services to remain within the D.C.: water, wastewater, storm water, roads, fire, policing, ambulance, waste diversion, parks development, recreation, public libraries, long-term care, and public health.
- The mandatory 10% deduction would be removed for all services that remain eligible in the D.C.
- A new community benefits charge (C.B.C.) would be introduced to include formerly eligible D.C. services that are not included in the above listing, parkland dedication, and bonus zoning contributions.

Bill 138: Plan to Build Ontario Together Act, 2019

On November 6, 2019, the Province released Bill 138 which provided further amendments to the D.C.A. and Planning Act. This Bill received Royal Assent on December 10, 2019 and was proclaimed which resulted in sections related to the D.C.A. (schedule 10) becoming effective on January 1, 2020. With respect to the D.C.A., this Bill removed instalment payments for commercial and industrial developments that were originally identified in Bill 108.

Bill 197: COVID-19 Economic Recovery Act, 2020

In March 2020, Canada was impacted by the COVID-19 global pandemic. As a result, the economy was put into a state of emergency in an effort to slow the spread of the virus. In response, the Province tabled legislation on July 8, 2020 which amended a number of Acts, including the D.C.A. and the Planning Act. With Bill 197, many changes proposed in Bill 108 have now been revised. With respect to



the above noted changes from Bill 108, the following changes are provided in Bill 197:

- **Eligible Services:** The list of eligible services for the D.C. has now been expanded to include most services eligible under the D.C.A. prior to Bill 108. For the Municipality of Thames Centre, this means that services currently provided in the D.C. by-law remain eligible.
- **Mandatory 10% Deduction:** The mandatory 10% deduction is removed (consistent with Bill 108). This applies to all D.C.-eligible services.
- **Community Benefits Charges:** a municipality may, by by-law impose a C.B.C. to pay for the capital costs for formerly-eligible D.C. services in addition to parkland dedication and bonus zoning contributions. However, based on the list of D.C.-eligible services under the new legislation, all current services are D.C. eligible, thus a C.B.C. has not been prepared for the Municipality at this time.

Bill 213: Better for People, Smarter for Business Act, 2020

On December 8, 2020, Bill 213 received Royal Assent. One of the changes of the Bill that took effect upon Royal Assent included amending the Ministry of Training, Colleges and Universities Act by introducing a new section that would exempt the payment of D.C.s for developments of land intended for use by a university that receives operating funds from the Government.

These changes to the D.C.A. were proclaimed on September 18, 2020 and are further discussed in Section 1.4 of this report.

5. The growth forecast (Chapter 3) on which the Municipal-wide D.C. is based, projects the following population, housing, and non-residential floor area for the 10-year (2021 to 2030), 25-year (2021 to 2045) and buildout time periods.



Table ES-1
Summary of Growth Forecast by Planning Period

Measure	10 Year 2021 to 2030	25 Year 2021 to 2045	Urban Buildout 2021 to Buildout
(Net) Population Increase	3,790	7,090	8,016
Residential Unit Increase	1,449	2,726	2,963
Non-Residential Gross Floor Area Increase (sq.ft.)	772,400	1,204,000	912,600

Source Watson & Associates Economists Ltd. Forecast 2021

6. On July 16, 2018, the Municipality of Thames Centre passed By-law 69-2018 under the D.C.A. The by-law imposes D.C.s on residential and non-residential uses. This by-law will expire on July 16, 2023. The Municipality is undertaking a D.C. public process and anticipates passing a new by-law in advance of the expiry date. The mandatory public meeting has been set for February 14, 2022 with adoption of the by-law on March 7, 2022.
7. The Municipality's D.C.s currently in effect total \$34,674 for single detached dwellings for full urban services and \$13.51 per sq.ft. of non-residential development. This report has undertaken a recalculation of the charges based on future identified needs (presented in Schedule ES-3 for residential and non-residential). Charges have been provided on a Municipal-wide basis for all services except Water and Wastewater which are provided for urban serviced lands. The corresponding single detached unit charge for full services is \$37,322. The non-residential charge is \$14.51 per sq.ft. of building area. These rates are submitted to Council for its consideration.
8. The D.C.A. requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-5. A summary of these costs is provided below:



Table ES-2
Summary of Expenditures Anticipated Over the Life of the By-law

Summary of Expenditures Anticipated Over the Life of the By-law	Expenditure Amount
Total gross expenditures planned over the next five years	\$38,154,118
Less: Benefit to existing development	\$7,576,927
Less: Post planning period benefit	\$3,132,600
Less: Ineligible re: Level of Service	\$1,039,920
Less: Grants, subsidies and other contributions	\$3,388,800
Net costs to be recovered from development charges	\$23,015,861

This suggests that for the non-D.C. cost over the five-year D.C. by-law (benefit to existing development, ineligible services, and grants, subsidies and other contributions), \$12.01 million (or an annual amount of \$2.4 million) will need to be contributed from taxes and rates, or other sources.

Based on the above table, the Municipality plans to spend \$38.15 million over the next five years, of which \$23.02 million (60%) is recoverable from D.C.s. Of this net amount, \$20.05 million is recoverable from residential development and \$2.96 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

9. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on a Urban buildout forecast:

- Wastewater Services; and
- Water Services.

The following services/classes of service are calculated based on a 25-year forecast:

- Services Related to a Highway



All other services/classes of service are calculated based on a 10-year forecast. These include:

- Parks and Recreation Services (formerly Indoor and Outdoor Recreation);
- Waste Diversion Services; and
- Library Services (Facilities).
- Fire Protection Services

In addition, classes of services have been established for Growth Studies which is calculated based on a Municipal-wide 10-year forecast and Public Works which is calculated based on a Municipal-wide 10-year forecast.

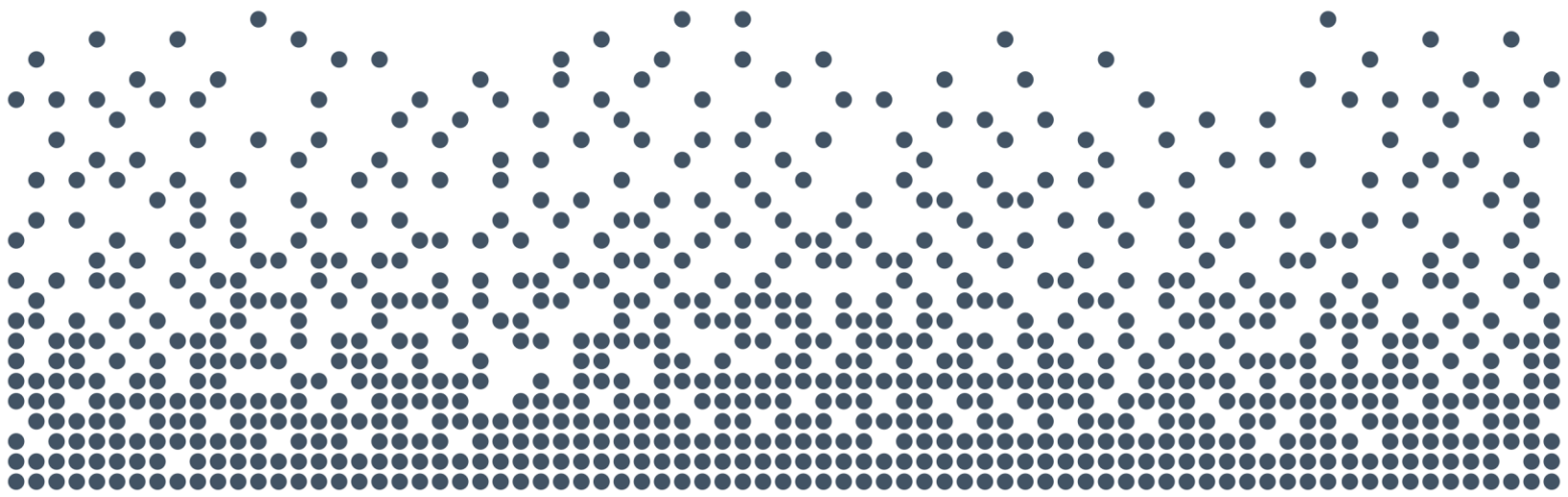
Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

- adopting the charges and policies recommended herein;
- considering additional exemptions to the by-law; and
- considering reductions in the charge by class of development (obtained by removing certain services on which the charge is based and/or by a general reduction in the charge).



**Table ES-3
Schedule of Development Charges**

Service/Class of Service	RESIDENTIAL					NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Nursing Home Bedroom Units	(per sq.ft. of Gross Floor Area)
Municipal Wide Services/Class of Service:						
Services Related to a Highway	2,938	1,916	1,829	1,153	991	1.14
Public Works	1,161	757	723	455	392	0.43
Fire Protection Services	1,237	807	770	485	417	0.46
Parks and Recreation Services	6,175	4,027	3,844	2,423	2,084	0.58
Library Services	444	290	276	174	150	0.04
Growth Studies	554	361	345	217	187	0.20
Waste Diversion	168	110	105	66	57	0.01
Total Municipal Wide Services/Class of Services	12,677	8,268	7,892	4,973	4,278	2.86
Urban Services						
Wastewater Services	15,162	9,888	9,437	5,949	5,116	7.17
Water Services	9,483	6,184	5,902	3,720	3,200	4.48
Total Urban Services	24,645	16,072	15,339	9,669	8,316	11.65
GRAND TOTAL RURAL AREA	12,677	8,268	7,892	4,973	4,278	2.86
GRAND TOTAL URBAN AREA	37,322	24,340	23,231	14,642	12,594	14.51



Report



Chapter 1

Introduction



1. Introduction

1.1 Purpose of this Document

This background study has been prepared pursuant to the requirements of the *Development Charges Act, 1997*, as amended, (D.C.A.) (section 10) and, accordingly, recommends new development charges (D.C.s) and policies for the Municipality of Thames Centre.

The Municipality retained Watson & Associates Economists Ltd. (Watson), to undertake the D.C. study process throughout 2021. Watson worked with Municipality staff in preparing the D.C. analysis and policy recommendations.

This D.C. background study, containing the proposed D.C. by-law, will be distributed to members of the public in order to provide interested parties with sufficient background information on the legislation, the study's recommendations, and an outline of the basis for these recommendations.

This report has been prepared, in the first instance, to meet the statutory requirements applicable to the Municipality's D.C. background study, as summarized in Chapter 4. It also addresses the requirement for "rules" (contained in Chapter 7) and the proposed by-law to be made available as part of the approval process (included as Appendix G).

In addition, the report is designed to set out sufficient background on the legislation (Chapter 4), Thames Centre's current D.C. policies (Chapter 2) and the policies underlying the proposed by-law, to make the exercise understandable to those who are involved.

Finally, it addresses post-adoption implementation requirements (Chapter 8) which are critical to the successful application of the new policy.

The chapters in the report are supported by Appendices containing the data required to explain and substantiate the calculation of the charge. A full discussion of the statutory requirements for the preparation of a background study and calculation of a D.C. is provided herein.



1.2 Summary of the Process

The public meeting required under section 12 of the D.C.A. has been scheduled for February 14, 2022. Its purpose is to present the study to the public and to solicit public input. The meeting is also being held to answer any questions regarding the study's purpose, methodology, and the proposed modifications to the Municipality's D.C.s.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review on December 27, 2021.

The process to be followed in finalizing the report and recommendations includes:

- consideration of responses received prior to, at, or immediately following the public meeting;
- refinements to the report, if required; and
- Council consideration of the by-law subsequent to the public meeting.

Figure 1-1 outlines the proposed schedule to be followed with respect to the D.C. by-law adoption process.

Figure 1-1
Schedule of Key D.C. Process Dates for the Municipality of Thames Centre

Schedule of Study Milestone	Dates
1. Data collection, staff review, D.C. calculations and policy work	July to December, 2021
2. Public release of final D.C. Background study and proposed by-law	December 27, 2021
3. Public meeting advertisement placed in newspaper(s)	No later than January 23, 2022
4. Public meeting of Council	February 14, 2022
5. Council considers adoption of background study and passage of by-law	March 7, 2022
6. Newspaper notice given of by-law passage	By 20 days after passage
7. Last day for by-law appeal	40 days after passage
8. Municipality makes pamphlet available (where by-law not appealed)	By 60 days after in force date



1.3 Changes to the D.C.A.: Bill 73 – Smart Growth for our Communities Act, 2015

With the amendment of the D.C.A. (as a result of Bill 73 and O. Reg. 428/15), there are a number of areas that must be addressed to ensure that the Municipality is in compliance with the D.C.A., as amended. The following provides an explanation of the changes to the Act that affect the Municipality's background study and how they have been dealt with to ensure compliance with the amended legislation.

1.3.1 Area Rating

Bill 73 has introduced two new sections where Council must consider the use of area-specific charges:

- 1) Section 2 (9) of the Act now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated. (Note that at this time, no municipalities or services are prescribed by the regulations.)
- 2) Section 10 (2) c.1 of the D.C.A. requires that, "the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas."

In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area rated. The second item requires Council to consider the use of area rating.

1.3.2 Asset Management Plan for New Infrastructure

The new legislation now requires that a D.C. background study must include an asset management plan (A.M.P.) (subsection 10 (2) (c.2)). The A.M.P. must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the A.M.P. related to transit services; however, they are silent with respect to how the asset management plan is to be provided for all other services. As part of any A.M.P., the examination should be consistent with the municipality's existing assumptions, approaches, and policies on asset management planning. This examination may include both qualitative



and quantitative measures such as examining the annual future lifecycle contribution needs (discussed further in Appendix F of this report).

1.3.3 60-Day Circulation of the D.C. Background Study

Previously the legislation required that a D.C. background study be made available to the public at least two weeks prior to the public meeting. The amended legislation now provides that the D.C. background study must be made available to the public (including posting on the municipal website) at least 60 days prior to passage of the D.C. by-law. No other changes were made to timing requirements for such things as notice of the public meeting and notice of by-law passage.

This D.C. study is being provided to the public on December 27, 2021 to ensure the new requirements for release of the study are met.

1.3.4 Timing of Collection of D.C.s

The D.C.A. has been refined by Bill 73 to require that D.C.s are collected at the time of the first building permit. For the majority of development, this will not impact the Municipality's present process. There may be instances, however, where several building permits are to be issued and either the size of the development or the uses will not be definable at the time of the first building permit. In these instances, the Municipality may enter into a delayed payment agreement in order to capture the full development.

1.3.5 Other Changes

It is also noted that a number of other changes were made through Bill 73 and O. Reg. 428/15, including changes to the way in which transit D.C. service standards are calculated, which does not impact the Municipality's D.C.; and the inclusion of waste diversion, which has been included in the Municipality's D.C.



1.4 Further Changes to the D.C.A.: Bill 108, 138, 197, and 213

1.4.1 ***Bill 108: More Homes, More Choice Act – An Act to Amend Various Statutes with Respect to Housing, Other Development, and Various Matters***

On May 2, 2019, the Province introduced Bill 108, which proposed changes to the D.C.A. The Bill was introduced as part of the Province's *"More Homes, More Choice: Ontario's Housing Supply Action Plan."* The Bill received Royal Assent on June 6, 2019.

While having received royal assent, many of the amendments to the D.C.A. would not come into effect until they are proclaimed by the Lieutenant Governor (many of these changes were revised through Bill 197). At the time of writing, the following provisions have been proclaimed:

- Effective January 1, 2020, rental housing and institutional developments will pay D.C.s in six equal annual payments commencing at occupancy. Non-profit housing developments will pay D.C.s in 21 equal annual payments. Interest may be charged on the instalments, and any unpaid amounts may be added to the property and collected as taxes.
- Effective January 1, 2020, the D.C. amount for all developments occurring within 2 years of a Site Plan or Zoning By-law Amendment planning approval (for application submitted after this section is proclaimed), shall be determined based on the D.C. in effect on the day of Site Plan or Zoning By-law Amendment application. If the development is not proceeding via these planning approvals, then the amount is determined the earlier of the date of issuance of a building permit.

On February 28, 2020, the Province released updated draft regulations related to the D.C.A. and the Planning Act. A summary of these changes to take effect upon proclamation by the Lieutenant Governor is provided below:

Changes to Eligible Services – Prior to Bill 108, the D.C.A. provided a list of ineligible services whereby municipalities could include growth related costs for any service that



was not listed. With Bill 108, the changes to the D.C.A. would now specifically list the services that are eligible for inclusion in the by-law. Further, the initial list of eligible services under Bill 108 was limited to "hard services", with the "soft services" being removed from the D.C.A. These services would be considered as part of a new community benefits charge (discussed below) imposed under the Planning Act. As noted in the next section this list of services has been amended through Bill 197.

Mandatory 10% deduction - The amending legislation would have removed the mandatory 10% deduction for all services that remain eligible under the D.C.A.

Remaining Services to be Included in a New Community Benefits Charge (C.B.C.) Under the Planning Act - It is proposed that a municipality may, by by-law, impose a C.B.C. against land to pay for the capital costs of facilities, services and matters required because of development or redevelopment in the area to which the by-law applies. The C.B.C. was proposed to include formerly eligible D.C. services that are not included in the above listing, in addition to parkland dedication and bonus zoning contributions.

1.4.2 Bill 138: Plan to Build Ontario Together Act, 2019

On November 6, 2019, the Province release Bill 138 which provided further amendments to the D.C.A. and Planning Act. This Bill received Royal Assent on December 10, 2019 and was proclaimed which resulted in sections related to the D.C.A. (schedule 10) becoming effective on January 1, 2020. The amendments to the D.C.A. included removal of instalment payments for commercial and industrial developments that were originally included in Bill 108.

1.4.3 Bill 197: COVID-19 Economic Recovery Act

In response to the global pandemic that began affecting Ontario in early 2020, the Province released Bill 197 which provided amendments to a number of Acts, including the D.C.A. and Planning Act. This Bill also revised some of the proposed changes identified in Bill 108. Bill 197 was tabled on July 8, 2020, received Royal Assent on July 21, 2020, and was proclaimed on September 18, 2020. The following provides a summary of the changes:



1.4.3.1 D.C. Related Changes

List of D.C. Eligible Services

- As noted above, under Bill 108 some services were to be included under the D.C.A. and some would be included under the C.B.C. authority. Bill 197, however, revised this proposed change and has included all services (with some exceptions) under the D.C.A. These services are as follows:
 - Water supply services, including distribution and treatment services.
 - Wastewater services, including sewers and treatment services.
 - Storm water drainage and control services.
 - Services related to a highway.
 - Electrical power services.
 - Toronto-York subway extension.
 - Transit services.
 - Waste diversion services.
 - Policing services.
 - Fire protection services.
 - Ambulance services.
 - Library services.
 - Long-term Care services
 - Parks and Recreation services, but not the acquisition of land for parks.
 - Public Health services.
 - Childcare and early years services.
 - Housing services.
 - Provincial Offences Act services.
 - Services related to emergency preparedness.
 - Services related to airports, but only in the Regional Municipality of Waterloo.



- Additional services as prescribed.

Classes of Services – D.C.

Pre-Bill 108/197 legislation (i.e. D.C.A., 1997) allowed for categories of services to be grouped together into a minimum of two categories (90% and 100% services).

The Act (as amended) repeals and replaces the above with the four following subsections:

- A D.C. by-law may provide for any eligible service or capital cost related to any eligible service to be included in a class, set out in the by-law.
- A class may be composed of any number or combination of services and may include parts or portions of the eligible services or parts or portions of the capital costs in respect of those services.
- A D.C. by-law may provide for a class consisting of studies in respect of any eligible service whose capital costs are described in paragraphs 5 and 6 of s. 5 of the D.C.A.
- A class of service set out in the D.C. by-law is deemed to be a single service with respect to reserve funds, use of monies, and credits.

As well, the removal of the 10% deduction for soft services under Bill 108 has been maintained.

Note: An initial consideration of “class” appears to mean any group of services.

1.4.3.2 C.B.C. Related Changes

C.B.C. Eligibility

- The C.B.C. is limited to lower-tier and single tier municipalities; upper-tier municipalities will not be allowed to impose this charge.
- O. Reg. 509/20 was filed on September 18, 2020. This regulation provides for the following:
 - A maximum rate will be set as a percentage of the market value of the land the day before building permit issuance. The maximum rate is set at 4%. The C.B.C may only be imposed on developing or redeveloping



buildings which have a minimum height of five stories and contain no less than 10 residential units.

- Bill 197 states that before passing a C.B.C. by-law, the municipality shall prepare a C.B.C. strategy that (a) identifies the facilities, services, and matters that will be funded with C.B.C.s; and (b) complies with any prescribed requirements.
- Only one C.B.C. by-law may be in effect in a local municipality at a time.

1.4.3.3 Combined D.C. and C.B.C. Impacts

D.C. vs. C.B.C. Capital Cost

- A C.B.C. may be imposed with respect to the services listed in s. 2 (4) of the D.C.A. (eligible services), “provided that the capital costs that are intended to be funded by the community benefits charge are not capital costs that are intended to be funded under a development charge by-law.”

Transition – D.C. and C.B.C.

- The specified date for municipalities to transition to the D.C. and C.B.C. is two years after Schedules 3 and 17 of the COVID-19 Economic Recovery Act comes into force (i.e. September 18, 2022).
- Generally, for existing reserve funds (related to D.C. services that will be ineligible):
 - If a C.B.C. is passed, the funds are transferred to the C.B.C. special account;
 - If no C.B.C. is passed, the funds are moved to a general reserve fund for the same purpose;
 - If a C.B.C. is passed subsequent to moving funds to a general reserve fund, those monies are then moved again to the C.B.C. special account.
- For reserve funds established under s. 37 of the Planning Act (e.g. bonus zoning)



- If a C.B.C. is passed, the funds are transferred to the C.B.C. special account;
- If no C.B.C. is passed, the funds are moved to a general reserve fund for the same purpose;
- If a C.B.C. is passed subsequent to moving funds to a general reserve fund, those monies are then moved again to the C.B.C. special account.

If a municipality passes a C.B.C. by-law, any existing D.C. credits a landowner may retain may be used towards payment of that landowner's C.B.C.

- As a result of the passage of Bill 197, and subsequent proclamation on September 18, 2020, this report has provided the D.C. calculations without the 10% mandatory deduction.

At this time, the Municipality does not require a C.B.C. as most high-density growth identified in the forecast does not anticipate meeting the minimum high density nor is the Municipality losing any services that are currently being recovered through D.C.s, therefore, this report does not address any C.B.C. charges.

1.4.4 Bill 213: Better for People, Smarter for Business Act, 2020

On December 8, 2020, Bill 213 received Royal Assent. One of the changes of the Bill that took effect upon Royal Assent included amending the Ministry of Training, Colleges and Universities Act by introducing a new section that would exempt the payment of D.C.s for developments of land intended for use by a university that receives operating funds from the Government. As a result, this mandatory exemption will be included in the D.C. by-law.



Chapter 2

Current Municipality of Thames Centre Policy



2. Current Municipality of Thames Centre Policy

2.1 Schedule of Charges

On July 16, 2018, the Municipality of Thames Centre passed By-law 69-2018 under the D.C.A. This by-law imposes D.C.s on residential and non-residential uses. The table below provides the rates currently in effect.

Table 2-1
Municipality of Thames Centre
Current D.C. Rates
(as of January 1, 2021)

Service	Residential					Non-Residential
	Single Detached & Semi-Detached	Multiples	Apartments with >= 2 Bedrooms	Apartments with < 2 Bedrooms	Nursing Home Bedroom Units	per sq.ft.
Municipal-Wide Services						
Services Related to a Highway	3,215	2,373	1,718	1,462	1,072	1.50
Fire Protection Services	1,247	921	667	568	415	0.59
Outdoor Recreation Services	2,489	1,836	1,331	1,131	831	0.33
Indoor Recreation Services	4,374	3,227	2,337	1,987	1,459	0.57
Library Services	450	332	239	205	150	0.05
Administration	678	500	362	308	226	0.31
Waste Diversion	544	403	292	249	181	0.26
Total Municipal-Wide Services	12,997	9,592	6,946	5,910	4,334	3.61
Urban Services						
Wastewater Services	14,689	10,840	7,851	6,675	4,898	6.71
Water Services	6,988	5,156	3,736	3,176	2,330	3.19
Total Urban Services	21,677	15,996	11,587	9,851	7,228	9.90
Total Municipal-Wide and Urban Services	34,674	25,588	18,533	15,761	11,562	13.51

2.2 Services Covered

The following services are covered under By-laws 69-2018:

- Services Related to a Highway;
- Fire Protection Services;
- Indoor Recreation Services
- Outdoor Recreation Services;
- Library Services;
- Administration;
- Waste Diversion
- Water services; and
- Wastewater services.



2.3 Timing of D.C. Calculation and Payment

D.C.s are payable at the time of building permit issuance (subject to the amendments to the D.C.A.). However, Council, from time to time, and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable.

2.4 Indexing

Rates shall be adjusted, without amendment to the By-law, annually on January 1, in accordance with the most recent twelve month change in the Statistics Canada Quarterly, "Construction Price Statistics".

2.5 Redevelopment Allowance

As a result of the demolition of all or a part of a residential building or structure:

- (1) a credit shall be allowed, provided that the land was improved by occupied structures (or structures capable of occupancy) within the five years prior to the issuance of the building permit, and the building permit has been issued for the development or redevelopment within five years from the date the demolition permit has been issued; and
- (2) if a development or redevelopment involves the demolition of and replacement of a residential building or structure, a credit shall be allowed equivalent to the number of dwelling units demolished multiplied by the applicable residential development charge in place at the time the development charge is payable.

If a development or redevelopment involves the demolition and replacement of a non-residential building or structure, a credit shall be allowed equivalent to the gross floor area demolished multiplied by the applicable non- residential development charge in place at the time the development charge is payable. A credit can, in no case, exceed the amount of the development charge that would otherwise be payable, and no credit is available if the existing land use is exempt under this by-law.



2.6 Discretionary Exemptions

Discretionary exemptions are provided in the by-law where full D.C.s are not imposed on the following:

- A college or university;
- A cemetery or place of worship;
- Non-residential farm buildings constructed for bona fide farm uses; and
- Industrial development.



Chapter 3

Anticipated Development in the Municipality of Thames Centre



3. Anticipated Development in the Municipality of Thames Centre

3.1 Requirement of the Act

Chapter 4 provides the methodology for calculating a D.C. as per the D.C.A. Figure 4-1 presents this methodology graphically. It is noted in the first box of the schematic that in order to determine the D.C. that may be imposed, it is a requirement of Section 5 (1) of the D.C.A. that “the anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.”

The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the Municipality of Thames Centre will be required to provide services, over a 10-year (mid-2021 to mid-2031), 25-year (mid-2021 to mid-2046), and buildout time horizon.

3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast

The D.C. growth forecast has been derived by Watson. In preparing the growth forecast, the following information sources were consulted to assess the residential and non-residential development potential for the Municipality over the forecast period, including:

- Middlesex County Housing Allocation Memo by Watson & Associates Economists Ltd., December 11, 2020;
- Municipality of Thames Centre Water and Waster Master Plan Update, GM BluePlan, November 2019
- Municipality of Thames Centre 2018 Development Charge Background Study by Watson & Associates Economists Ltd., May 4, 2018;
- 2006, 2011 and 2016 population, household, and employment Census data;
- Historical residential building permit data over the 2011 to 2021 year-to-date period;



- Residential and non-residential supply opportunities as identified by the Municipality of Thames Centre staff; and
- Discussions with Municipal staff regarding anticipated residential and non-residential development in the Municipality of Thames Centre.

3.3 Summary of Growth Forecast

A detailed analysis of the residential and non-residential growth forecasts is provided in Appendix A and the methodology employed is illustrated in Figure 3-1. The discussion provided herein summarizes the anticipated growth for the Municipality and describes the basis for the forecast. The results of the residential growth forecast analysis are summarized in Table 3-1 below, and Schedule 1 in Appendix A.

As identified in Table 3-1 and Appendix A, Schedule 1, population in Thames Centre is anticipated to reach approximately 17,930 by mid-2031 and 21,230 by mid-2046, and 22,370 by buildout, resulting in an increase of approximately 3,790, 7,090 and 8,230 persons, respectively.^[1]

^[1] The population figures used in the calculation of the 2021 D.C. exclude the net Census undercount, which is estimated at approximately 3.5%.



Figure 3-1
Population and Household Forecast Model

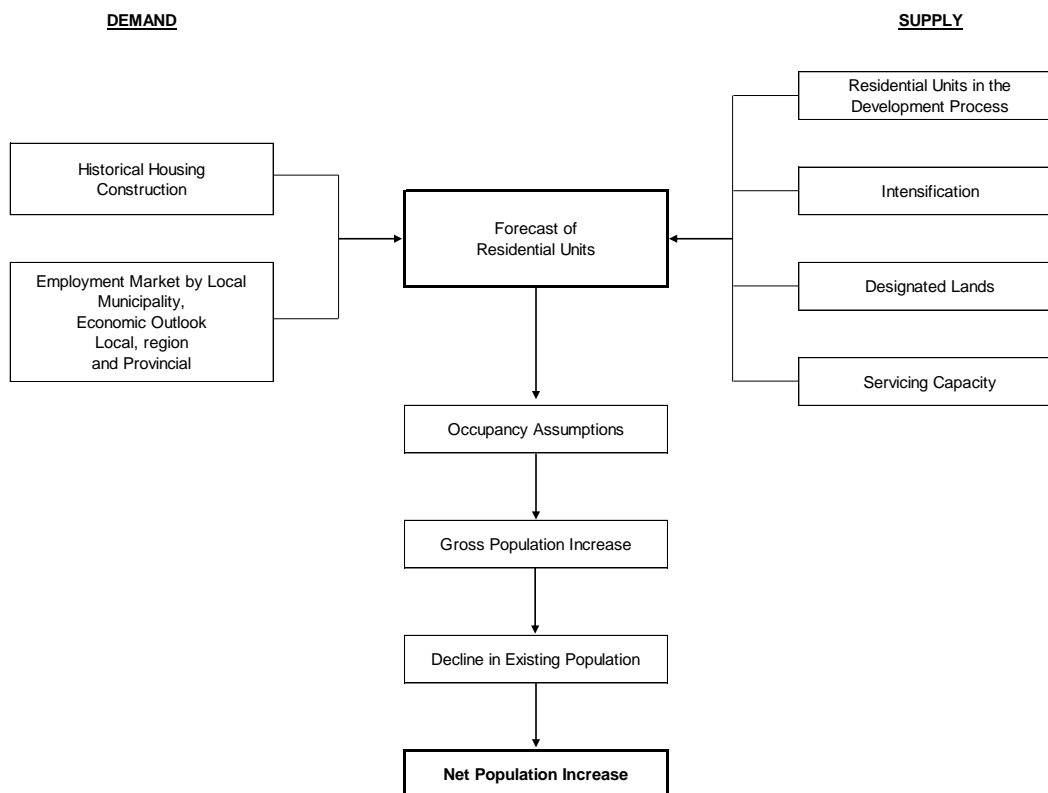




Table 3-1
Municipality of Thames Centre
Residential Growth Forecast Summary

	Year	Population (Including Census Undercount) ^[1]	Excluding Census Undercount			Housing Units						Persons Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ^[2]	Apartments ^[3]	Other	Total Households	Equivalent Institutional Households	
Historical	Mid 2006	13,540	13,085	70	13,015	4,215	80	125	165	4,585	64	2.854
	Mid 2011	13,450	13,000	5	12,995	4,367	72	109	178	4,726	5	2.751
	Mid 2016	13,650	13,191	11	13,180	4,530	80	160	160	4,930	10	2.676
Forecast	Mid 2021	14,630	14,141	12	14,129	4,885	80	193	160	5,318	11	2.659
	Mid 2031	18,550	17,931	15	17,916	6,163	201	240	160	6,764	14	2.651
	Mid 2046	21,966	21,231	18	21,213	6,943	457	479	160	8,039	16	2.641
	Buildout	23,142	22,368	19	22,349	7,274	517	525	160	8,476	17	2.639
Incremental	Mid 2006 - Mid 2011	-90	-85	-65	-20	152	-8	-16	13	141	-59	
	Mid 2011 - Mid 2016	200	191	6	185	163	8	51	-18	204	5	
	Mid 2016 - Mid 2021	980	950	1	949	355	0	33	0	388	1	
	Mid 2021 - Mid 2031	3,920	3,790	3	3,787	1,278	121	47	0	1,446	3	
	Mid 2021 - Mid 2046	7,336	7,090	6	7,084	2,058	377	286	0	2,721	5	
	Mid 2021 - Buildout	8,512	8,227	7	8,220	2,389	437	332	0	3,158	6	

^[1] Census undercount estimated at approximately 3.5%.

^[2] Includes townhouses and apartments in duplexes.

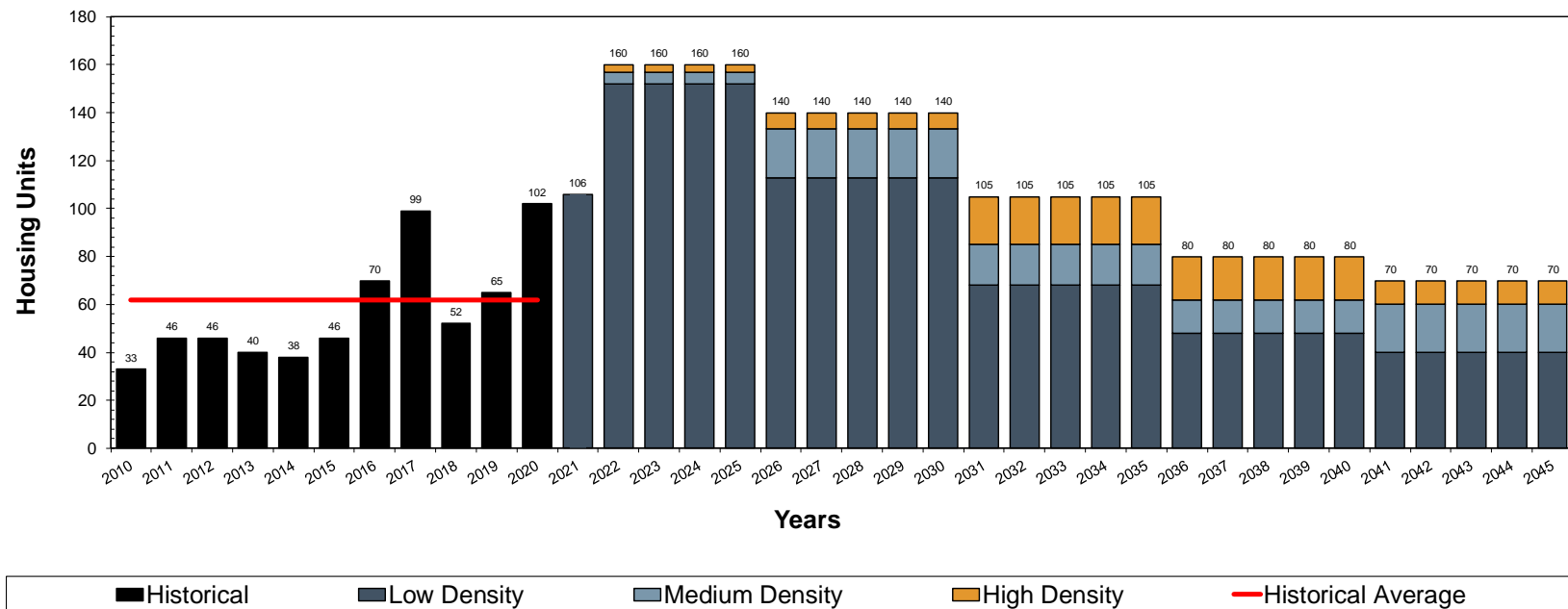
^[3] Includes bachelor, 1-bedroom, and 2-bedroom+ apartment units.

Note: Population including the Census undercount has been rounded.

Source: Derived from the Middlesex County Housing Allocation Memo prepared by Watson & Associates Economists Ltd, December 11, 2020. Buildout based on water and wastewater servicing capacity and designated vacant urban land supply provided by the Municipality of Thames Centre.



Figure 3-2
Municipality of Thames Centre
Annual Residential Growth Forecast Summary^[1]



^[1] Growth forecast represents calendar year.

Source: Historical housing activity derived from building permits from the Municipality of Thames Centre.



Provided below is a summary of the key assumptions and findings regarding the Municipality of Thames Centre D.C. growth forecast:

1. Housing Unit Mix (Appendix A – Schedules 1 and 6)

- The housing unit mix for the Municipality was derived from a detailed review active residential development applications and discussions with Municipal staff regarding anticipated development trends for Thames Centre.
- Based on the above indicators, the 2021 to buildout household growth forecast for the Municipality is comprised of a unit mix of 76% low density units (single detached and semi-detached), 14% medium density (multiples except apartments) and 10% high density (bachelor, 1-bedroom and 2-bedroom apartments).

2. Geographic Location of Residential Development (Appendix A – Schedule 2)

- Schedule 2 summarizes the anticipated amount, type, and location of development by servicing area for the Municipality of Thames Centre.
- In accordance with forecast demand, available land supply and servicing capacity, the amount and percentage of forecast housing growth between 2021 and buildout by development type is summarized below.

Development Location	Approximate Amount of Housing Growth, 2021 to buildout	Percentage of Housing Growth, 2021 to buildout
Dorchester	2,290	73%
Thorndale	670	21%
Rural	200	6%
<i>Municipal Total</i>	<i>3,160</i>	<i>100%</i>

Note: Figures may not add precisely due to rounding.



3. Planning Period

- Short- and longer-term time horizons are required for the D.C. process. The D.C.A. limits the planning horizon for transit services to a 10-year planning horizon. All other services can utilize a longer planning period if the municipality has identified the growth-related capital infrastructure needs associated with the longer-term growth planning period.

4. Population in New Housing Units (Appendix A - Schedules 3, 4 and 5)

- The number of housing units to be constructed by buildout in the Municipality of Thames Centre over the forecast period is presented in Figure 3-2. Over the 2021 to buildout forecast period, the Municipality is anticipated to average 109 new housing units per year.
- Institutional population^[1] is anticipated to increase by approximately 7 people between 2021 to buildout.
- Population in new units is derived from Schedules 3, 4, and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit (P.P.U.) by dwelling type for new units.
- Schedule 8a summarizes the average P.P.U. assumed for new housing units by age and type of dwelling based on Statistics Canada 2016 custom Census data for the Municipality of Thames Centre. Due to data limitations, medium and high density P.P.U. data was derived from Middlesex County, which includes the Municipality of Thames Centre, and is outlined in Schedule 8b. The total calculated P.P.U. for all density types has been adjusted accordingly to account for the P.P.U. trends which has been recently experienced in both new and older units. Forecasted 25-year average P.P.U.s by dwelling type are as follows:
 - Low density: 3.260
 - Medium density: 2.126
 - High density^[2]: 1.718

^[1] Institutional population largely includes special care facilities such as nursing home or residences for senior citizens. A P.P.U. of 1.100 depicts 1-bedroom and 2- or more bedroom units in collective households.

^[2] Includes bachelor, 1-bedroom and 2- or more bedroom apartments.



5. Existing Units and Population Change (Appendix A - Schedules 3, 4 and 5)

- Existing households for mid-2021 are based on the 2016 Census households, plus estimated residential units constructed between 2016 and 2020, assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 2021 to buildout forecast period is approximately 1,070.

6. Employment (Appendix A, Schedules 10a, 10b, 10c)

- The employment projections provided herein are largely based on the activity rate method, which is defined as the number of jobs in the Municipality divided by the number of residents. Key employment sectors include primary, industrial, commercial/ population-related, institutional, and work at home, which are considered individually below.
- 2016 employment data^[1] (place of work) for the Municipality of Thames Centre is outlined in Schedule 10a. The 2016 employment base is comprised of the following sectors:
 - 350 primary (9%);
 - 905 work-at-home employment (22%);
 - 1,158 industrial (29%);
 - 1,253 commercial/population related (31%); and
 - 365 institutional (9%).
- The 2016 employment by usual place of work, including work at home, is 4,030.
- Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment, which is the basis for the D.C. employment forecast. The impact on municipal services from work at home employees has already been included in the population forecast.
- Total employment for the Municipality of Thames Centre (excluding work at home employment) is anticipated to reach approximately 4,550 by mid-2031, 5,130 by 2046, and 5,280 by buildout. This represents an employment increase of

^[1] 2016 employment is based on Statistics Canada 2016 Place of Work Employment dataset by Watson & Associates Economists Ltd.



approximately 800 for the 10-year forecast period, 1,380 over the 25-year period, and 1,530 for the buildout forecast period. ^[1]

7. Non-Residential sq.ft. Estimates (G.F.A., Appendix A, Schedule 10b)

- Square footage estimates were calculated in Schedule 10b based on the following employee density assumptions:
 - 3,000 sq.ft. per employee for primary
 - 1,300 sq.ft. per employee for industrial;
 - 500 sq.ft. per employee for commercial/population-related; and
 - 695 sq.ft. per employee for institutional employment.
- The Municipal-wide incremental Gross Floor Area (G.F.A.) is anticipated to increase by 772,400 million sq.ft. over the 10-year forecast period, 1.2 million over the 25-year forecast period, and 1.4 million sq.ft. over the buildout forecast period.
- In terms of percentage growth, the 2021 to buildout incremental G.F.A. forecast by sector is broken down as follows:
 - primary – 22%
 - industrial – 27%;
 - commercial/population-related – 30%; and
 - institutional – 21%.

8. Geography of Non-Residential Development (Appendix A, Schedule 10c)

- Schedule 10c summarizes the anticipated amount, type and location of non-residential development by servicing area for the Municipality of Thames Centre by area.
- The amount and percentage of forecast total non-residential growth between 2021 and buildout by development type is summarized below.

^[1] G.F.A. and employment associated within special care institutional dwellings treated as residential, resulting in an institutional employment difference between Schedules 10a and 10b. Total employment growth in Schedule 10b (excluding work at home and employment) has been downwardly adjusted to account for institutional employment associated with special care facilities. Total employment in Schedule 10b is anticipated to reach approximately 4,550 by mid-2031, 5,130 by mid-2046, and 5,270 by buildout.



Development Location	Amount of Non-Residential G.F.A., 2021 to buildout	Percentage of Non-Residential G.F.A., 2021 to buildout
Dorchester	643,400	47%
Thorndale	269,200	20%
Rural	445,400	33%
<i>Municipal Total</i>	<i>1,358,000</i>	<i>100%</i>



4. The Approach to the Calculation of the Charge

4.1 Introduction

This chapter addresses the requirements of subsection 5 (1) of the D.C.A. with respect to the establishment of the need for service which underpins the D.C. calculation. These requirements are illustrated schematically in Figure 4-1.

4.2 Services Potentially Involved

Table 4-1 lists the full range of municipal services that are provided within the Municipality.

A number of these services are not listed as an eligible service for inclusion in the D.C. by-law as per subsection 2 (4) of the D.C.A. These are shown as “ineligible” on Table 4-1. Two ineligible costs defined in subsection 5 (3) of the D.C.A. are “computer equipment” and “rolling stock with an estimated useful life of (less than) seven years.” In addition, local roads are covered separately under subdivision agreements and related means (as are other local services). Services that are potentially eligible for inclusion in the Municipality’s D.C. are indicated with a “Yes.”

4.3 Increase in the Need for Service

The D.C. calculation commences with an estimate of “the increase in the need for service attributable to the anticipated development,” for each service to be covered by the by-law. There must be some form of link or attribution between the anticipated development and the estimated increase in the need for service. While the need could conceivably be expressed generally in terms of units of capacity, subsection 5 (1) 3, which requires that Municipal Council indicate that it intends to ensure that such an increase in need will be met, suggests that a project-specific expression of need would be most appropriate.



Figure 4-1
The Process of Calculating a Development Charge under the Act
that must be followed

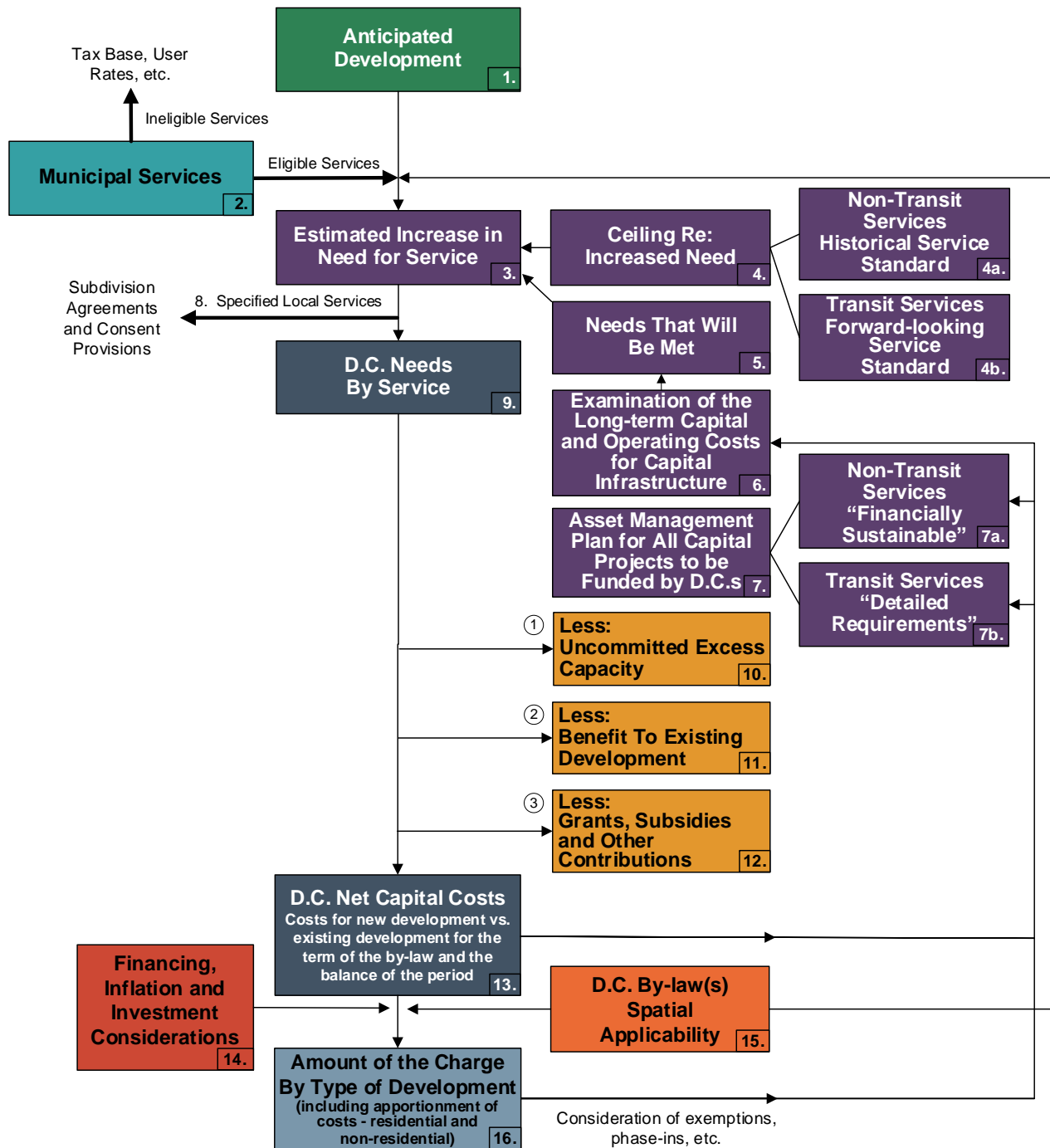




Table 4-1
Categories of Municipal Services to be Addressed as Part of the Calculation

Eligibility for Inclusion in the D.C. Calculation	Description
Yes	Municipality provides the service – service has been included in the D.C. calculation.
No	Municipality provides the service – service has not been included in the D.C. calculation.
n/a	Municipality does not provide the service.
Ineligible	Service is ineligible for inclusion in the D.C. calculation.

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Yes	1.3 Bridges, culverts, intersections and roundabouts	100
	No	1.4 Local municipal roads	0
	Yes	1.5 Traffic signals	100
	Yes	1.6 Sidewalks and streetlights	100
	Yes	1.7 Active transportation	100
2. Other Transportation Services	n/a	2.1 Transit vehicles ¹ & facilities	100
	n/a	2.2 Other transit infrastructure	100
	Ineligible	2.3 Municipal parking spaces - indoor	0
	Ineligible	2.4 Municipal parking spaces - outdoor	0
	Yes	2.5 Works yards	100
	Yes	2.6 Rolling stock ¹	100
	Ineligible	2.7 Airport ²	0
3. Stormwater Drainage and Control Services	No	3.1 Main channels and drainage trunks	100
	No	3.2 Channel connections	100
	No	3.3 Retention/detention ponds	100

¹with 7+ year useful life

²only eligible for the Region of Waterloo



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
4. Fire Protection Services	Yes	4.1 Fire stations	100
	Yes	4.2 Fire pumpers, aerials and rescue vehicles ¹	100
	Yes	4.3 Small equipment and gear	100
5. Parks Services (i.e. Parks, Open Space, and outdoor recreation)	Ineligible	5.1 Acquisition of land for parks, woodlots and E.S.A.s	0
	Yes	5.2 Development of parkland	100
	Yes	5.3 Outdoor Recreation Facilities and Park Amenities	100
	Yes	5.6 Parks rolling stock ¹ and yards	100
	Yes	5.7 Recreation Trails	100
6. Recreation Services	Yes	6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land)	100
	Yes	6.2 Recreation vehicles and equipment ¹	100
7. Library Services (Facilities)	Yes	7.1 Public library space (incl. furniture and equipment)	100
	n/a	7.2 Library vehicles ¹	100
	n/a	7.3 Library materials	100
8. Emergency Preparedness Services	No	8.1 Facility space (incl. furniture and equipment)	100
	No	8.2 Vehicles ¹	100
	No	8.3 Equipment	100
9. Electrical Power Services	Ineligible	9.1 Electrical substations	0
	Ineligible	9.2 Electrical distribution system	0
	Ineligible	9.3 Electrical system rolling stock	0
10. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres	Ineligible	10.1 Cultural space (e.g. art galleries, museums and theatres)	0
	Ineligible	10.2 Tourism facilities and convention centres	0

¹with 7+ year useful life



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
11. Wastewater Services	Yes	11.1 Treatment plants, Pumping Stations and Storage	100
	Yes	11.2 Sanitary Sewers	100
	n/a	11.3 Local systems	0
	Yes	11.4 Vehicles and equipment ¹	100
12. Water Supply Services	Yes	12.1 Treatment plants, Pumping Stations, Supply and Storage	100
	Yes	12.2 Distribution systems	100
	n/a	12.3 Local systems	0
	Yes	12.4 Vehicles and equipment ¹	100
13. Waste Management Services	Ineligible	13.1 Landfill collection, transfer vehicles and equipment	0
	Ineligible	13.2 Landfills and other disposal facilities	0
	Yes	13.3 Waste diversion facilities	100
	Yes	13.4 Waste diversion vehicles and equipment ¹	100
	Yes	13.5 Waste diversion other assets	100
14. Policing Services	No	14.1 Policing detachments	100
	No	14.2 Policing rolling stock ¹	100
	No	14.3 Small equipment and gear	100
15. Homes for the Aged	n/a	15.1 Homes for the aged space	100
	n/a	15.2 Vehicles ¹	100
16. Child Care and Early Years Programs and Services	n/a	16.1 Childcare space	100
	n/a	16.2 Early years programs and services space	100
	n/a	16.2 Vehicles and equipment ¹	100
17. Health	n/a	17.1 Health department space	100
	n/a	17.2 Health department vehicles ¹	100
18. Social Housing	n/a	18.1 Social housing space	100
19. Provincial Offences Act (P.O.A.)	n/a	19.1 P.O.A. space	100
20. Social Services	n/a	20.1 Social service space	0
21. Ambulance	n/a	21.1 Ambulance station space	100
	n/a	21.2 Vehicles ¹	100

¹with 7+ year useful life



Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
22. Hospital Provision	Ineligible	22.1 Hospital capital contributions	0
23. Provision of Headquarters for the General Administration of Municipalities and Area Municipal Boards	Ineligible	23.1 Office space	0
	Ineligible	23.2 Office furniture	0
	Ineligible	23.3 Computer equipment	0
24. Other Services	Yes	24.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost	0-100
	Yes	24.2 Interest on money borrowed to pay for growth-related capital	0-100

¹with a 7+ year useful life

²same percentage as service component to which it pertains

4.4 Local Service Policy

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of subdivision agreements or consent conditions. The Municipality's detailed Local Service Policy is provided in Appendix E.

4.5 Capital Forecast

Paragraph 7 of subsection 5 (1) of the D.C.A. requires that "the capital costs necessary to provide the increased services must be estimated." The Act goes on to require two



potential cost reductions and the regulation sets out the way in which such costs are to be presented. These requirements are outlined below.

These estimates involve capital costing of the increased services discussed above. This entails costing actual projects or the provision of service units, depending on how each service has been addressed.

The capital costs include:

- a) costs to acquire land or an interest therein (including a leasehold interest);
- b) costs to improve land;
- c) costs to acquire, lease, construct or improve buildings and structures;
- d) costs to acquire, lease or improve facilities, including rolling stock (with a useful life of 7 or more years), furniture and equipment (other than computer equipment), materials acquired for library circulation, reference, or information purposes;
- e) interest on money borrowed to pay for the above-referenced costs;
- f) costs to undertake studies in connection with the above-referenced matters; and
- g) costs of the D.C. background study.

In order for an increase in need for service to be included in the D.C. calculation, Municipal Council must indicate “that it intends to ensure that such an increase in need will be met” (subsection 5 (1) 3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast, or similar expression of the intention of Council (O. Reg. 82/98 section 3). The capital program contained herein reflects the Municipality’s approved and proposed capital budgets and master servicing/needs studies.

4.6 Treatment of Credits

Section 8, paragraph 5, of O. Reg. 82/98 indicates that a D.C. background study must set out “the estimated value of credits that are being carried forward relating to the service.” Subsection 17, paragraph 4, of the same regulation indicates that “the value of the credit cannot be recovered from future D.C.s,” if the credit pertains to an ineligible service. This implies that a credit for eligible services can be recovered from future D.C.s. As a result, this provision should be made in the calculation, in order to avoid a



funding shortfall with respect to future service needs. Outstanding credit obligations have been included in the D.C. calculations.

4.7 Classes of Services

Section 7 of the D.C.A. states that a D.C. by-law may provide for any D.C. eligible service or the capital costs with respect to those services. Further, a class may be composed of any number or combination of services and may include parts or portions of each D.C. eligible service. With respect to growth-related studies, Section 7(3) of the D.C.A. states that:

“For greater certainty, a development charge by-law may provide for a class consisting of studies in respect of any service listed in subsection 2 (4) whose capital costs are described in paragraphs 5 and 6 of subsection 5 (3).”

These provisions allow for services to be grouped together to create a class for the purposes of the D.C. by-law and D.C. reserve funds. The D.C. calculations and by-law provided herein includes classes for growth studies and public works (related to facilities, vehicles and equipment). These classes are comprised of the following services:

- Growth Studies
 - Water Services;
 - Wastewater Services;
 - Services Related to a Highway;
 - Policing Services;
 - Fire Protection Services;
 - Library Services (Facilities); and
 - Parks and Recreation Services.
- Public Works
 - Water Services;
 - Wastewater Services;



- Services Related to a Highway; and
- Parks and Recreation Services.

4.8 Existing Reserve Funds

Section 35 of the D.C.A. states that:

“The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5 (1).”

There is no explicit requirement under the D.C.A. calculation method set out in subsection 5 (1) to net the outstanding reserve fund balance as part of making the D.C. calculation; however, section 35 does restrict the way in which the funds are used in future.

For services that are subject to a per capita based, service level “cap,” the reserve fund balance should be applied against the development-related costs for which the charge was imposed once the project is constructed (i.e. the needs of recent growth). This cost component is distinct from the development-related costs for the next 10-year period, which underlie the D.C. calculation herein.

The alternative would involve the Municipality spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the Municipality will use these reserve funds for the Municipality’s cost share of applicable development-related projects, which are required but have not yet been undertaken, as a way of directing the funds to the benefit of the development that contributed them (rather than to future development, which will generate the need for additional facilities directly proportionate to future growth).

The Municipality’s D.C. reserve fund balances by service as of December 31, 2020 (adjusted for commitments) are provided in Table 4-2



Table 4-2
Summary of Development Charges Reserve Fund Balances
As of December 31, 2020

Service/Class of Service	Reserve Fund Balances as of December 31, 2020	Adjustments for Outstanding Commitments	Adjusted Reserve Fund Balances
Services Related to a Highway	\$455,014.58	\$31,693.37	\$486,707.95
Fire Protection Services	(\$500,510.94)	\$0.00	(\$500,510.94)
Parks and Recreation Services	\$242,034.84	(\$214.10)	\$241,820.74
Library Services	\$214,343.07	(\$823.2)	\$213,519.87
Administration (Growth Studies)	\$302,867.94	(\$15,215.08)	\$287,642.86
Waste Diversion	\$117,313.39	(\$15,887.12)	\$101,426.27
Wastewater Services	\$763,736.79	(\$17,515.39)	\$746,221.40
Water Services	\$1,953,025.34	\$7,320.71	\$1,960,346.05
Total	\$3,547,825.01	(\$10,640.82)	\$3,537,184.19

Note: Amounts in brackets are deficit balances.

4.9 Deductions

The D.C.A. potentially requires that five deductions be made to the increase in the need for service. These relate to:

- the level of service ceiling;
- uncommitted excess capacity;
- benefit to existing development;
- anticipated grants, subsidies, and other contributions; and
- costs related to services that are ineligible as per the D.C.A.



The requirements behind each of these reductions are addressed below.

4.9.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in section 4.3 does “not include an increase that would result in the level of service [for the additional development increment] exceeding the average level of the service provided in the municipality over the 10-year period immediately preceding the preparation of the background study” (D.C.A., subsection 5 (1) 4). O. Reg. 82/98 (section 4) goes further to indicate that “both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service.”

In many cases, this can be done by establishing a quantity measure in terms of units such as floor area, land area, or road length per capita and a quality measure, in terms of the average cost of providing such units based on replacement costs, engineering standards, or recognized performance measurement systems, depending on circumstances. When the quantity and quality factors are multiplied together, they produce a measure of the level of service, which meets the requirements of the Act, i.e. cost per unit.

With respect to transit services, the changes to the Act as a result of Bill 73 have provided for an alternative method for calculating the service standard ceiling. Transit services must now utilize a forward-looking service standard analysis, described later in this section.

The average service level calculation sheets for each service component in the D.C. calculation are set out in Appendix B.

4.9.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of subsection 5 (1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Municipality’s “excess capacity,” other than excess capacity which is “committed.”

“Excess capacity” is undefined, but in this case must be able to meet some or all of the increase in need for service, in order to potentially represent a deduction. The deduction of uncommitted excess capacity from the future increase in the need for service would normally occur as part of the conceptual planning and feasibility work associated with



justifying and sizing new facilities, e.g. if a road widening to accommodate increased traffic is not required because sufficient excess capacity is already available, then widening would not be included as an increase in need, in the first instance.

4.9.3 Reduction for Benefit to Existing Development

Section 5 (1) 6 of the D.C.A. provides that, “The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development.” The general guidelines used to consider benefit to existing development included:

- the repair or unexpanded replacement of existing assets that are in need of repair;
- an increase in average service level of quantity or quality (compare water as an example);
- the elimination of a chronic servicing problem not created by growth; and
- providing services where none previously existed (generally considered for water or wastewater services).

This step involves a further reduction in the need, by the extent to which such an increase in service would benefit existing development. The level of service cap in section 4.9.1 is related but is not the identical requirement. Sanitary, storm, and water trunks are highly localized to growth areas and can be more readily allocated in this regard than other services such as services related to a highway, which do not have a fixed service area.

Where existing development has an adequate service level which will not be tangibly increased by an increase in service, no benefit would appear to be involved. For example, where expanding existing library facilities simply replicates what existing residents are receiving, they receive very limited (or no) benefit as a result. On the other hand, where a clear existing service problem is to be remedied, a deduction should be made accordingly.

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a Municipal-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating), and different time availability for the same service (i.e. leisure skating available on Wednesdays in one arena and Thursdays



in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.9.4 *Reduction for Anticipated Grants, Subsidies and Other Contributions*

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies, and other contributions (including direct developer contributions required due to the local service policy) made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development. That is, some grants and contributions may not specifically be applicable to growth or where Council targets fundraising as a measure to offset impacts on taxes (O. Reg. 82/98, section 6).

4.10 Municipal-wide vs. Area Rating

This step involves determining whether all of the subject costs are to be recovered on a uniform municipal-wide basis or whether some or all are to be recovered on an area-specific basis. Under the amended D.C.A., it is now mandatory to “consider” area rating of services (providing charges for specific areas and services), however, it is not mandatory to implement area rating. Further discussion is provided in section 7.4.4.

4.11 Allocation of Development

This step involves relating the costs to anticipated development for each period under consideration and using allocations between residential and non-residential development and between one type of development and another, to arrive at a schedule of charges.



4.12 Asset Management

The new legislation now requires that a D.C. background study must include an asset management plan (A.M.P.) (subsection 10 (2) c. 2). The A.M.P. must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the A.M.P. related to transit services (as noted in the subsequent subsection); however, they are silent with respect to how the A.M.P. is to be provided for all other services. As part of any A.M.P., the examination should be consistent with the municipality's existing assumptions, approaches, and policies on the asset management planning. This examination has been included in Appendix F.

4.13 Transit

The most significant changes to the Act relate to the transit service. These changes relate to four areas of the calculations, as follows:

- A. Transit no longer requires the statutory 10% mandatory deduction from the net capital cost (subsection 5.2 (i) of the D.C.A.).
- B. The background study requires the following in regard to transit costs (as per subsection 8 (2) of the regulations):
 - 1. The calculations that were used to prepare the estimate for the planned level of service for transit services, as mentioned in subsection 5.2 (3) of the Act.
 - 2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit,
 - i. the anticipated development over the 10-year period immediately following the preparation of the background study, or
 - ii. the anticipated development after the 10-year period immediately following the preparation of the background study.
 - 3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.



4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the D.C. over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecast ridership will be from existing or planned development.
 5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study.
- C. A new forward-looking service standard (as per subsection 6.1 (2) of the regulations) requires the following:
1. The service is a discrete service.
 2. No portion of the service that is intended to benefit anticipated development after the 10-year period immediately following the preparation of the background study may be included in the estimate.
 3. No portion of the service that is anticipated to exist as excess capacity at the end of the 10-year period immediately following the preparation of the background study may be included in the estimate.
- D. A very detailed asset management strategy and reporting requirements (subsection 6.1 (3) of the regulation) that includes lifecycle costs, action plans that will enable the assets to be sustainable, a summary of how to achieve the proposed level of service, discussion on procurement measures and risk are required.

The Municipality does not currently, and in the near future does not intend to, provide transit services. Therefore, the above calculation and reporting requirements are not required.



Chapter 5

D.C.-Eligible Cost Analysis by Service



5. D.C.-Eligible Cost Analysis by Service

5.1 Introduction

This chapter outlines the basis for calculating eligible costs for the D.C.s to be applied on a uniform basis. In each case, the required calculation process set out in subsection 5 (1) paragraphs 2 to 8 in the D.C.A. and described in Chapter 4 was followed in determining D.C.-eligible costs.

The nature of the capital projects and timing identified in the Chapter reflects Council's current intention. Over time, however, Municipal projects and Council priorities change; accordingly, Council's intentions may alter, and different capital projects (and timing) may be necessary to meet the need for services required by new growth.

5.2 Service Levels and 10-Year Capital Costs for D.C. Calculation

This section evaluates the development-related capital requirements for fire protection, parks and recreation, library services, waste diversion services, public works, and growth studies over a 10-year planning period. Each service/class of service component is evaluated on two format sheets: the average historical 10-year level of service calculation (see Appendix B), which “caps” the D.C. amounts; and, the infrastructure cost calculation, which determines the potential D.C. recoverable cost. For the growth studies class of service, the infrastructure cost calculation, which determines the potential D.C. recoverable cost is provided.

5.2.1 *Fire Protection Services*

Thames Centre currently operates its fire services from 17,348 sq.ft. of facility space, providing for a per capita average level of service of 1.06 sq.ft. per capita or \$278 per capita. This level of service provides the Municipality with a maximum D.C.-eligible amount for recovery over the forecast period of \$1,055,212.



The fire department has a current inventory of 10 vehicles. The total D.C.-eligible amount calculated for fire vehicles over the forecast period is \$2,091,360, based on a standard of \$552 per capita.

The fire department provides 326 items of equipment and gear for the use in fire services. This results in a calculated average level of service for the historical 10-year period of \$94 per capita, providing for a D.C.-eligible amount over the forecast period of \$357,511 for small equipment and gear.

Based on the information above, the combined service standard ceiling for Fire services is \$3,504,083 over the 10-year forecast period.

The Municipality has identified the need for expansions to the Dorchester fire station, one additional vehicle, and a provision for additional equipment. These projects total \$4.11 million. In addition, outstanding growth-related debt in the amount of \$137,764, including financing costs (discounted), on the Thorndale station has been included. Finally, the reserve fund deficit of \$500,511 has been included for recovery, resulting in a total of \$4,748,275. A deduction in the amount of \$2,688,000 has been made to reflect the benefit of these works to the existing population. Therefore, the net growth capital cost of \$2,060,275 has been included in the D.C.

These costs are shared between residential and non-residential based on the population to employment ratio over the forecast period, resulting in 83% being allocated to residential development and 17% being allocated to non-residential development.



Table 5-1
Infrastructure Costs Included in the Development Charges Calculation
Fire Protection Services

Prj .No	Increased Service Needs Attributable to Anticipated Development 2021-2030	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
1	Dorchester Station Expansion/Replacement	2024-2026	2,110,000	-	-	2,110,000	1,688,000	-	422,000	350,260	71,740
2	Aerial Truck	2026	1,500,000	-	-	1,500,000	1,000,000	-	500,000	415,000	85,000
3	Provision for Future Equipment and Gear	2026-2030	500,000	-	-	500,000	-	-	500,000	415,000	85,000
4	Outstanding Growth-Related Debt Thorndale Station - Principal	2021-2039	128,286	-	-	128,286	-	-	128,286	106,477	21,809
5	Outstanding Growth-Related Debt Thronddale Station- Interest (Discounted)	2021-2039	9,478	-	-	9,478	-	-	9,478	7,867	1,611
6	Reserve Fund Adjustment		500,511	-	-	500,511	-	-	500,511	415,424	85,087
	Total		4,748,275	-	-	4,748,275	2,688,000	-	2,060,275	1,710,028	350,247



5.2.2 Parks and Recreation Services (Formerly Outdoor and Indoor Recreation)

The Municipality currently has 257.59 acres of parkland within its jurisdiction. This parkland consists of various sized parks and green space. Based on the inventory of parkland provided over the historical 10-year period (2011 to 2020), the Municipality has provided an average of 19.4 acres of parkland per 1,000 population. The Municipality also currently provides 69 outdoor recreation facilities and parkland amenities. These facilities and amenities include ball diamonds, basketball courts, splashpads, playground equipment, skateboard parks, wading pools, etc. Over the historical 10-year period the Municipality provided an average of 5 facilities & amenities per 1,000 population. In addition to parkland development and amenities, the Municipality has 8.47 linear kilometres of trails which has provided an average of 0.75 linear kilometres per 1,000 population, over the 10-year period. Including parkland development, outdoor recreation facilities & amenities, and trails the average level of service provided equates to \$1,929 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$7,311,175.

With respect to indoor recreation facilities, there are currently 21 facilities provided by the Municipality; including community centres, concession buildings, storage facilities, etc. In total, these facilities provide the Municipality with 126,974 sq.ft. of space. Based on the inventory of space provided over the historical 10-year period (2011 to 2020), the Municipality has provided an average of approximately 9.64 sq.ft. of space per capita or an investment of \$2,363 per capita. Based on this service standard, the Municipality would be eligible to collect \$8,956,376 from D.C.s for facility space.

In total the Municipality is eligible to collect approximately \$16.27 million for parks and recreation services.

The Municipality has identified parks and recreation capital works totalling \$13,449,800. These projects comprise of additional outdoor recreation facilities, parkland development, additional trail extensions, expansions to indoor recreation centres, etc. Deductions of \$3,935,500 has been made to recognize the benefit to the existing community, as well as \$2,138,530 to recognize donations received. Further, outstanding debt related to the growth-related component of the Outdoor Recreation Complex and Flight Exec. Centre, including financing costs (discounted), have been included in the



\$1,853,390. Finally, a deduction of \$241,821 has been made to reflect the balance in the D.C. reserve fund. The net growth capital cost included in the D.C. calculations is \$8,987,339.

As the predominant users of outdoor recreation tend to be residents of the Municipality, the forecast growth-related costs have been allocated 95% to residential and 5% to non-residential.



Table 5-2
Infrastructure Cost Included in the Development Charges Calculation
Parks and Recreation Services

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable	Total	Residential Share	Non-Residential Share
2021-2030											
1	Tennis and Pickle Ball Courts- Thorndale - Upgrading to add lights	2025	125,000	-	-	125,000	-	-	125,000	118,750	6,250
2	Outdoor lit BasketBall Court - Dorchester	2024-2028	250,000	-	-	250,000	-	-	250,000	237,500	12,500
3	Skateboard Parks Replace and Upgrade - Dorchester	2022-2024	225,000	-	-	225,000	60,100	-	164,900	156,655	8,245
4	Outdoor Recreation Complex - Dorchester (Lit artificial turf ball diamond, covered player benches, bull pens, batting cages)	2022	3,200,000	-	-	3,200,000	-	400,000	2,800,000	2,660,000	140,000
5	Outdoor Recreation Complex - Phase 2 (Parkland Development and additional amenities)	2030	750,000	-	-	750,000	-	-	750,000	712,500	37,500
6	Dorchester Park - Accessible/Inclusive Playground	2022	400,000	-	-	400,000	-	-	400,000	380,000	20,000
7	Catherine Street Day Park Playground Replacement & Upgrade	2025	45,600	-	-	45,600	19,000	-	26,600	25,270	1,330
8	Woodvale Park - Addition of accessible feature	2023	44,200	-	-	44,200	-	-	44,200	41,990	2,210
9	Harrietsville Park - Replace Playground and add accessible features	2024	45,600	-	-	45,600	19,000	-	26,600	25,270	1,330
10	Avon Park - Replace Playground and add accessible features	2025	45,600	-	-	45,600	19,000	-	26,600	25,270	1,330
11	Thorndale Park - Replace Playground and add accessible features	2021	37,600	-	-	37,600	15,700	-	21,900	20,805	1,095
12	Wellburn Park - Replace Playground and add accessible features	2026	45,600	-	-	45,600	19,000	-	26,600	25,270	1,330
13	Continuation of Two School Trail (approx. 400 m.)	2022	57,000	-	-	57,000	39,700	-	17,300	16,435	865
14	King Street Trail (approx. 1,500 m.)	2024-2025	114,000	-	-	114,000	79,500	-	34,500	32,775	1,725
15	Railway Trail (approx. 1,200 m.)	2023	11,400	-	-	11,400	7,900	-	3,500	3,325	175
16	Eva Street Trail Expansion	2026	57,000	-	-	57,000	39,700	-	17,300	16,435	865
17	Thorndale Park Ball Diamonds Redevelopment and enhancements	2021	61,200	-	-	61,200	36,100	-	25,100	23,845	1,255
18	Thorndale Lions Community Centre	2021-2022	3,554,500	-	-	3,554,500	1,827,400	358,530	1,368,570	1,300,142	68,429
19	Thorndale Fieldhouse Replacement & Relocation	2021	556,000	-	-	556,000	556,000	-	-	-	-
20	Senior Centre Expansion @ Flight Exec.	2022-2023	1,380,000	-	-	1,380,000	-	1,380,000	-	-	-
21	Thorndale Park - additional parking lot	2022	75,000	-	-	75,000	-	-	75,000	71,250	3,750
22	Thorndale - Dog Park	2022	36,000	-	-	36,000	28,400	-	7,600	7,220	380
23	Mill Pond Trail - fishing dock	2023	20,000	-	-	20,000	15,800	-	4,200	3,990	210
24	Mill Pond Trail - canoe/kayak dock	2023	10,000	-	-	10,000	7,900	-	2,100	1,995	105
25	ORC Soccer - Covered Player Benches	2022	25,000	-	-	25,000	19,800	-	5,200	4,940	260
26	Pedestrian Bridge - adding sun shades	2024	315,000	-	-	315,000	248,900	-	66,100	62,795	3,305
27	Expand Dorchester Tennis/Pickleball	2025-	200,000	-	-	200,000	-	-	200,000	190,000	10,000
28	Thorndale Playground - Enhancement Rubber Base	2030	50,000	-	-	50,000	39,500	-	10,500	9,975	525
29	Dorchester - Diamond 4 lighting	2023	200,000	-	-	200,000	-	-	200,000	190,000	10,000
30	Thorndale - Diamond 2 lighting	2024	200,000	-	-	200,000	-	-	200,000	190,000	10,000
31	Replace and expansion Dorchester Splash Pad	2027	225,000	-	-	225,000	201,000	-	24,000	22,800	1,200
32	Pave Valleyview Trail	2024	150,000	-	-	150,000	118,500	-	31,500	29,925	1,575



Table 5-2 Continued
Infrastructure Cost Included in the Development Charges Calculation
Parks and Recreation Services

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable	Total	Residential Share 95%	Non-Residential Share 5%
	2021-2030										
32	Pave Valleyview Trail	2024	150,000	-	-	150,000	118,500	-	31,500	29,925	1,575
33	Pave Thorndale Trail	2026	80,000	-	-	80,000	63,200	-	16,800	15,960	840
34	Pave Cromarty Trail	2030	60,000	-	-	60,000	47,400	-	12,600	11,970	630
35	Lights along Thorndale Trail	2028	150,000	-	-	150,000	118,500	-	31,500	29,925	1,575
36	FlightExec Shop Expansion	2024	225,000	-	-	225,000	-	-	225,000	213,750	11,250
37	ORC-Security System- Cameras	2022	15,000	-	-	15,000	11,900	-	3,100	2,945	155
38	Dorchester Park-Walking Trail Festival Lights Display	2022	23,000	-	-	23,000	18,200	-	4,800	4,560	240
39	Thorndale Community Centre-Generator	2025	300,000	-	-	300,000	237,000	-	63,000	59,850	3,150
40	Crosswalk at Wye Creek Trail - multi use pathway	2030	85,500	-	-	85,500	21,400	-	64,100	60,895	3,205
	Outstanding Debt & Reserve Adjustment			-	-	-	-	-	-	-	-
41	Outstanding Growth-Related Debt on Flight Exec. Centre - Principal	2021-2032	1,106,299	-	-	1,106,299	-	-	1,106,299	1,050,984	55,315
42	Outstanding Growth-Related Debt on Flight Exec. Centre - Interest (Discounted)	2021-2032	120,881	-	-	120,881	-	-	120,881	114,837	6,044
43	Outstanding Growth-Related Debt on Outdoor Recreation Complex - Principal	2021-2032	598,484	-	-	598,484	-	-	598,484	568,560	29,924
44	Outstanding Growth-Related Debt on Outdoor Recreation Complex - Interest (Discounted)	2021-2032	27,726	-	-	27,726	-	-	27,726	26,340	1,386
45	Reserve Fund Adjustment		-	-	-	-	241,821	-	(241,821)	(229,730)	(12,091)
	Total		15,303,190	-	-	15,303,190	4,177,321	2,138,530	8,987,339	8,537,972	449,367



5.2.3 Library Services (Facilities)

The Municipality provides 11,736 sq.ft. of library space. Over the past ten years, the average level of service for library facilities was 0.73 sq.ft. of space per capita which equates to an investment of \$238 per capita. This level of service provides the Municipality with a maximum D.C.-eligible amount for recovery over the 10-year forecast period of \$903,650.

The capital costs included in the D.C. relate to outstanding debt, including financing costs (discounted), related to the expansion of the Dorchester library facility. The outstanding growth-related financing costs are \$859,068. In addition, the adjusted reserve fund balance of \$213,520 has been applied to reduce the amount required to be recovered from future growth. The net growth capital cost is \$645,548.

While library usage is predominately residential based, there is some use of the facilities by non-residential users, for the purpose of research. To acknowledge this use, the growth-related capital costs have been allocated 95% residential and 5% non-residential.



Table 5-3
Infrastructure Cost Included in the Development Charges Calculation
Library Services (Facilities)

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 95%	Non- Residential Share 5%
	2021-2030										
1	Dorchester Library Expansion - Balance of Growth-Related Debt Principal	2021-2049	772,630	-	-	772,630	-	-	772,630	733,999	38,631
2	Dorchester Library Expansion Balance of Growth Related Debt - Interest (Discounted)	2021-2049	86,438	-	-	86,438	-	-	86,438	82,116	4,322
3	Reserve Fund Adjustment		-	-	-	-	213,520	-	(213,520)	(202,844)	(10,676)
	Total		859,068	-	-	859,068	213,520	-	645,548	613,271	32,277



5.2.4 Waste Diversion Services

The Municipality currently provides a total of 727 sq.ft. of eligible waste diversion facility space along with a storage & handling area that is 19,375 sq.ft. The waste diversion facilities consist of a scale house, storage facilities and office space. The current level of service over the historical 10-year period (2011-2020) provides an average of 1,482.4 sq.ft. of facility space, 0.19 vehicles and equipment items, and 0.39 other diversion related items per 1,000 population. Including facilities, vehicles and equipment, and other miscellaneous items (e.g. portable storage containers, etc.), the level of service provided is approximately \$63 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$237,860.

Based on the projected growth over the 10-year forecast period (2021-2030), several projects have been identified to expand the waste diversion service in the form of additional vehicles, new equipment, and various expansions to the existing site. The gross costs of these projects are \$3,088,400. Of this amount, deductions related to landfill (which is D.C. ineligible) of \$1,477,600, benefit to existing of \$272,600, and post period benefit of \$999,000 have been made. In addition, a deduction of \$101,426 has been made to recognize the reserve fund balance. Therefore, the net growth-related capital cost to be included in the D.C. is \$232,774.

The growth costs have been allocated 98% to residential development and 2% to non-residential development based on the allocation of residential versus non-residential properties waste diversion services are collected from.



Table 5-4
Infrastructure Cost Included in the Development Charges Calculation
Waste Diversion Services

Prj. No.	Increased Service Needs Attributable to Anticipated Development 2021-2030	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions (Ineligible - Related to Landfill)	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 98%	Non-Residential Share 2%
1	Land Expansion #1 - Approx 5 ha. purchase	2021	376,700	-	-	376,700	188,400	-	188,300	183,791	4,509
2	Land Expansion #2 - Approx 8 ha. purchase	2021	1,004,400	-	1,004,400	-	-	-	-	-	-
3	Relocate scale with new Scale house	2025	125,600	-	-	125,600	62,800	-	62,800	61,296	1,504
4	Tar & Chip paved driveway and areas - 75% Diversion	2025	30,000	-	7,500	22,500	11,300	-	11,200	10,932	268
5	New Equipment Storage & work shop facility	2030	627,800	172,600	439,500	15,700	-	-	15,700	15,324	376
6	New Recycling storage building - 100%	2030	627,800	575,300	-	52,500	-	-	52,500	51,243	1,257
7	Concrete Organics Handling & Storage Pad	2035	251,100	251,100	-	-	-	-	-	-	-
8	Quad - Unit #79 (Kawasaki Mule 2006) Replace and Upgrade to a Pick up Truck	2023-2027	45,000	-	26,200	18,800	10,100	-	8,700	8,492	208
9	Reserve Fund Adjustment		-	-	-	-	101,426	-	(101,426)	(98,997)	(2,429)
	Total		3,088,400	999,000	1,477,600	611,800	374,026	-	237,774	232,081	5,693



5.2.5 Public Works (Facilities, Fleet and Equipment)

The Municipality Operations Department utilizes 2 facilities to provide services to the Municipality. The space provided over the historical 10-year period (2011 to 2020), provides an average level of service of 2.68 sq.ft. per capita. This level of service equates to an average level of investment of \$292 per capita, which provides the Municipality with \$1,107,893 for eligible future D.C. funding over the 10-year forecast period.

The Municipality's public works fleet inventory, which currently includes 70 vehicles and equipment items, provides an average level of service of 4.5 items per 1,000 population. This level of service equates to an average level of investment of \$379 per capita, which provides the Municipality with \$1,437,016 over the 10-year forecast period.

In total, the Municipality is eligible to collect \$2,544,909 for the public works class of service.

The Municipality has identified the need to expand their current Operations Centre amounting to \$465,000. Additional vehicles and equipment items have been identified at a cost of \$1,468,800 for the forecast period to support the 10-year growth forecast. The gross costs of the Operations expansion and additional vehicles and equipment are estimated at \$1,933,800, there is no benefit to the existing deduction as all capital is incremental increases to the facilities and fleet required to service the future growth identified over the 10-year forecast period. Therefore, total amount of \$1,933,800 is to be included in the D.C. calculation.

The residential and non-residential capital cost allocation for public works of 83% residential and 17% non-residential is based on the incremental growth in population to employment for the 10-year forecast period.



Table 5-5
Infrastructure Cost Included in the Development Charges Calculation
Class of Service – Public Works

Prj. No.	Increased Service Needs Attributable to Anticipated Development 2021-2030	Service to Which Project Relates	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
1	Tandem Plow Truck	Services Related to a Highway	2022	375,000	-	-	375,000	-	-	375,000	311,250	63,750
2	Plow Truck Hoist Attachment	Services Related to a Highway	2022	30,000	-	-	30,000	-	-	30,000	24,900	5,100
3	Sidewalk Snow Plow	Services Related to a Highway	2030	128,000	-	-	128,000	-	-	128,000	106,240	21,760
4	Provision for Misc. Services Related to a Highway vehicle/equipment	Services Related to a Highway	2022-2030	500,000	-	-	500,000	-	-	500,000	415,000	85,000
5	Operations Centre expansion (2 additional bays)	Services Related to a Highway	2025-2026	465,000	-	-	465,000	-	-	465,000	385,950	79,050
6	Pick Up Truck 4X4	Parks & Recreation Services	2022	44,200	-	-	44,200	-	-	44,200	36,686	7,514
7	Front Plow and Rear Salter unit	Parks & Recreation Services	2022	18,000	-	-	18,000	-	-	18,000	14,940	3,060
8	Pick Up Truck 4X4	Parks & Recreation Services	2025	44,200	-	-	44,200	-	-	44,200	36,686	7,514
9	Utility float Trailer	Parks & Recreation Services	2021	8,000	-	-	8,000	-	-	8,000	6,640	1,360
10	Zero Turn Mower	Parks & Recreation Services	2021	16,400	-	-	16,400	-	-	16,400	13,612	2,788
11	Additional Utility Truck	Parks & Recreation Services	2026	70,000	-	-	70,000	-	-	70,000	58,100	11,900
12	Additional Tractor	Parks & Recreation Services	2026	60,000	-	-	60,000	-	-	60,000	49,800	10,200
13	Provision for additional parks & recreation vehicles and equipment	Parks & Recreation Services	2027-2030	175,000	-	-	175,000	-	-	175,000	145,250	29,750
Total				1,933,800	-	-	1,933,800	-	-	1,933,800	1,605,054	328,746



5.2.6 Growth Studies

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Municipality's capital works program. As discussed in Section 4.7, these studies have been allocated as a class of service based on each service to which the study relates.

For planning related studies (i.e. Official Plan updates), a deduction of 10% has been applied to recognize the extent to which the studies relate to non-D.C.-eligible services. All planning studies have been allocated to the class of services in the following manner:

- Services Related to a Highway – 25%;
- Water Services – 25%;
- Wastewater Services – 25%;
- Waste Diversion; - 1%
- Parks and Recreation Services – 20%;
- Fire Protection Services – 2%;
- Library Services (Facilities) – 2%.

In addition, the capital costs of D.C. Studies have been allocated across the different services based on the proportion of the total net growth-related capital costs. The following provides a breakdown of the allocation of D.C. study updates to each service:

- Services Related to a Highway – 8.6%;
- Water Services – 33.1%;
- Wastewater Services – 46.5%;
- Waste Diversion -0.2%
- Parks and Recreation Services – 8.9%;
- Fire Protection Services – 2.1%; and
- Library Services (Facilities) – 0.6%.

The 401 Corridor Study and Implementation and Municipal Design Standards is allocated one fourth each to Services Related to a Highway, Stormwater, Water, and Wastewater services. The Parks, Recreation and Facilities Master Plan is specific to Parks and Recreation Services and Library. The Bridge and Culvert Study and Donnybrook Drive Secondary Plan is allocated evenly to Services Related to a Highway



and Stormwater Service. The Fire Master Plan is specific to Fire Services. Transportation Masterplan, Roads Needs Update, Minimum Maintenance Standards are specific to Services Related to a Highway. Stormwater Masterplan is specific to Stormwater service. The Dorchester Wastewater Servicing Design is specific to Wastewater Services.

The total cost of these studies is \$1,941,300, of which \$712,475 is attributable to existing benefit. A deduction of \$18,800 has been made to recognize the portion of planning studies related to D.C.-ineligible services. In addition, the existing reserve fund balance of \$287,653 has been deducted from the calculations. The resultant net growth-related capital cost of \$922,372 has been included in the D.C. calculation.

These costs have been allocated 83% residential and 17% non-residential based on the incremental growth in population to employment for the 10-year forecast period.



Table 5-6
Infrastructure Cost Included in the Development Charges Calculation
Class of Service – Growth Studies

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Service to Which Project Relates	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions (to recognize benefit to non-D.C. services)	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
											83%	17%
	2021-2030											
1	Development Charges Study	2021		65,000	-	-	65,000	-	-	65,000	53,950	11,050
1A	Development Charges Study	2021	Waste Diversion Services	200	-	-	200	-	-	200	166	34
1B	Development Charges Study	2021	Wastewater Services	34,120	-	-	34,120	-	-	34,120	28,320	5,800
1C	Development Charges Study	2021	Water Services	15,850	-	-	15,850	-	-	15,850	13,156	2,695
1D	Development Charges Study	2021	Services Related to a Highway	6,310	-	-	6,310	-	-	6,310	5,237	1,073
1E	Development Charges Study	2021	Fire Protection Services	1,500	-	-	1,500	-	-	1,500	1,245	255
1F	Development Charges Study	2021	Library Services	460	-	-	460	-	-	460	382	78
1G	Development Charges Study	2021	Parks and Recreation Services	6,560	-	-	6,560	-	-	6,560	5,445	1,115
2	Development Charges Study	2026		65,000	-	-	65,000	-	-	65,000	53,950	11,050
2A	Development Charges Study	2026	Waste Diversion Services	200	-	-	200	-	-	200	166	34
2B	Development Charges Study	2026	Wastewater Services	34,120	-	-	34,120	-	-	34,120	28,320	5,800
2C	Development Charges Study	2026	Water Services	15,850	-	-	15,850	-	-	15,850	13,156	2,695
2D	Development Charges Study	2026	Services Related to a Highway	6,310	-	-	6,310	-	-	6,310	5,237	1,073
2E	Development Charges Study	2026	Fire Protection Services	1,500	-	-	1,500	-	-	1,500	1,245	255
2F	Development Charges Study	2026	Library Services	460	-	-	460	-	-	460	382	78
2G	Development Charges Study	2026	Parks and Recreation Services	6,560	-	-	6,560	-	-	6,560	5,445	1,115
3	Official Plan Review	2021-2022		61,500	-	6,150	55,350	27,675	-	27,675	22,970	4,705
3A	Official Plan Review	2021-2022	Waste Diversion Services	620	-	62	558	279	-	279	232	47
3B	Official Plan Review	2021-2022	Wastewater Services	15,380	-	1,538	13,842	6,921	-	6,921	5,744	1,177
3C	Official Plan Review	2021-2022	Water Services	15,380	-	1,538	13,842	6,921	-	6,921	5,744	1,177
3D	Official Plan Review	2021-2022	Services Related to a Highway	15,380	-	1,538	13,842	6,921	-	6,921	5,744	1,177
3E	Official Plan Review	2021-2022	Fire Protection Services	1,220	-	122	1,098	549	-	549	456	93
3F	Official Plan Review	2021-2022	Library Services	1,220	-	122	1,098	549	-	549	456	93
3G	Official Plan Review	2021-2022	Parks and Recreation Services	12,300	-	1,230	11,070	5,535	-	5,535	4,594	941
4	Official Plan Review	2027		65,000	-	6,500	58,500	29,250	-	29,250	24,278	4,973
4A	Official Plan Review	2027	Waste Diversion Services	650	-	65	585	293	-	293	242	50
4B	Official Plan Review	2027	Wastewater Services	16,250	-	1,625	14,625	7,313	-	7,313	6,069	1,243
4C	Official Plan Review	2027	Water Services	16,250	-	1,625	14,625	7,313	-	7,313	6,069	1,243
4D	Official Plan Review	2027	Services Related to a Highway	16,250	-	1,625	14,625	7,313	-	7,313	6,069	1,243
4E	Official Plan Review	2027	Fire Protection Services	1,300	-	130	1,170	584	-	584	486	100
4F	Official Plan Review	2027	Library Services	1,300	-	130	1,170	584	-	584	486	100
4G	Official Plan Review	2027	Parks and Recreation Services	13,000	-	1,300	11,700	5,850	-	5,850	4,856	995
5	Parks, Recreation & Facilities Master Plan	2022		65,000	-	-	65,000	32,500	-	32,500	26,975	5,525
5A	Parks, Recreation & Facilities Master Plan	2022	Parks and Recreation Services	58,500	-	-	58,500	29,250	-	29,250	24,278	4,973
5B	Parks, Recreation & Facilities Master Plan	2022	Library Services	6,500	-	-	6,500	3,250	-	3,250	2,698	553
6	Trails & Cycling Update	2024		18,500	-	-	18,500	16,700	-	1,800	1,494	306
6A	Trails & Cycling Update	2024	Parks and Recreation Services	7,400	-	-	7,400	6,700	-	700	581	119
6B	Trails & Cycling Update	2024	Services Related to a Highway	11,100	-	-	11,100	10,000	-	1,100	913	187



Table 5-6 Continued
Infrastructure Cost Included in the Development Charges Calculation
Class of Service – Growth Studies

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Service to Which Project Relates	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions (to recognize benefit to non-D.C. services)	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-2030										83%	17%
7	Trails & Cycling Update	2027		18,500	-	-	18,500	16,700	-	1,800	1,494	306
7A	Trails & Cycling Update	2027	Parks and Recreation Services	7,400	-	-	7,400	6,700	-	700	581	119
7B	Trails & Cycling Update	2027	Services Related to a Highway	11,100	-	-	11,100	10,000	-	1,100	913	187
8	Trails & Cycling Update	2030		18,500	-	-	18,500	16,700	-	1,800	1,494	306
8A	Trails & Cycling Update	2030	Parks and Recreation Services	7,400	-	-	7,400	6,700	-	700	581	119
8B	Trails & Cycling Update	2030	Services Related to a Highway	11,100	-	-	11,100	10,000	-	1,100	913	187
9	Bridge & Culvert Study	2022		15,000	-	-	15,000	13,500	-	1,500	1,245	255
9A	Bridge & Culvert Study	2022	Services Related to a Highway	13,500	-	-	13,500	12,100	-	1,400	1,162	238
9B	Bridge & Culvert Study	2022	Stormwater Service	1,500	-	-	1,500	1,400	-	100	83	17
10	Bridge & Culvert Study	2024		15,000	-	-	15,000	13,500	-	1,500	1,245	255
10A	Bridge & Culvert Study	2024	Services Related to a Highway	13,500	-	-	13,500	12,100	-	1,400	1,162	238
10B	Bridge & Culvert Study	2024	Stormwater Service	1,500	-	-	1,500	1,400	-	100	83	17
11	Bridge & Culvert Study	2026		15,000	-	-	15,000	13,500	-	1,500	1,245	255
11A	Bridge & Culvert Study	2026	Services Related to a Highway	13,500	-	-	13,500	12,100	-	1,400	1,162	238
11B	Bridge & Culvert Study	2026	Stormwater Service	1,500	-	-	1,500	1,400	-	100	83	17
12	Bridge & Culvert Study	2028		15,000	-	-	15,000	13,500	-	1,500	1,245	255
12A	Bridge & Culvert Study	2028	Services Related to a Highway	13,500	-	-	13,500	12,100	-	1,400	1,162	238
12B	Bridge & Culvert Study	2028	Stormwater Service	1,500	-	-	1,500	1,400	-	100	83	17
13	Bridge & Culvert Study	2030		15,000	-	-	15,000	13,500	-	1,500	1,245	255
13A	Bridge & Culvert Study	2030	Services Related to a Highway	13,500	-	-	13,500	12,100	-	1,400	1,162	238
13B	Bridge & Culvert Study	2030	Stormwater Service	1,500	-	-	1,500	1,400	-	100	83	17
14	401 Corridor Study Implementation	2026		60,000	-	-	60,000	15,000	-	45,000	37,350	7,650
14A	401 Corridor Study Implementation	2026	Services Related to a Highway	15,000	-	-	15,000	3,750	-	11,250	9,338	1,913
14B	401 Corridor Study Implementation	2026	Stormwater Service	15,000	-	-	15,000	3,750	-	11,250	9,338	1,913
14C	401 Corridor Study Implementation	2026	Water Services	15,000	-	-	15,000	3,750	-	11,250	9,338	1,913
14D	401 Corridor Study Implementation	2026	Wastewater Services	15,000	-	-	15,000	3,750	-	11,250	9,338	1,913
15	Municipal Design Standards	2021		61,500	-	-	61,500	30,750	-	30,750	25,523	5,228
15A	Municipal Design Standards	2021	Services Related to a Highway	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
15B	Municipal Design Standards	2021	Water Services	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
15C	Municipal Design Standards	2021	Wastewater Services	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
15D	Municipal Design Standards	2021	Stormwater Service	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
16	Municipal Design Standards	2030		61,500	-	-	61,500	30,750	-	30,750	25,523	5,228
16A	Municipal Design Standards	2030	Services Related to a Highway	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
16B	Municipal Design Standards	2030	Water Services	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
16C	Municipal Design Standards	2030	Wastewater Services	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
16D	Municipal Design Standards	2030	Stormwater Service	15,375	-	-	15,375	7,688	-	7,688	6,381	1,307
17	Donnybrook Drive Secondary Plan	2022		61,500	-	6,150	55,350	30,750	-	24,600	20,418	4,182
17A	Donnybrook Drive Secondary Plan	2022	Services Related to a Highway	43,050	-	4,305	38,745	21,525	-	17,220	14,293	2,927
17B	Donnybrook Drive Secondary Plan	2022	Stormwater Service	18,450	-	1,845	16,605	9,225	-	7,380	6,125	1,255



Table 5-6 Continued
Infrastructure Cost Included in the Development Charges Calculation
Class of Service – Growth Studies

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Service to Which Project Relates	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions (to recognize benefit to non-D.C. services)	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 83%	Non-Residential Share 17%
	2021-2030											
18	Water Wastewater Master Servicing Plan	2028		175,000	-	-	175,000	17,500	-	157,500	130,725	26,775
18A	Water Wastewater Master Servicing Plan	2028	Water Services	87,500	-	-	87,500	8,750	-	78,750	65,363	13,388
18B	Water Wastewater Master Servicing Plan	2028	Wastewater Services	87,500	-	-	87,500	8,750	-	78,750	65,363	13,388
19	Community Trails Master Plan	2023	Parks and Recreation Services	63,500	-	-	63,500	31,800	-	31,700	26,311	5,389
20	Fire Master Plan (OFM Recommendation/Requirement)	2023	Fire Protection Services	60,000	-	-	60,000	30,000	-	30,000	24,900	5,100
21	Transportation Master Plan	2022	Services Related to a Highway	51,000	-	-	51,000	25,500	-	25,500	21,165	4,335
22	Road Needs Update	2021	Services Related to a Highway	45,200	-	-	45,200	40,700	-	4,500	3,735	765
23	Road Needs Update	2026	Services Related to a Highway	100,000	-	-	100,000	90,000	-	10,000	8,300	1,700
24	Minimum Maintenance Standards (Signs)	2023	Services Related to a Highway	16,000	-	-	16,000	14,400	-	1,600	1,328	272
25	Minimum Maintenance Standards (Signs)	2028	Services Related to a Highway	16,000	-	-	16,000	14,400	-	1,600	1,328	272
26	Storm Water Master Plan	2022	Stormwater Service	75,000	-	-	75,000	37,500	-	37,500	31,125	6,375
27	Dorchester North Wastewater Servicing Design	2025	Wastewater Services	150,000	-	-	150,000	15,000	-	135,000	112,050	22,950
30	Cost Benefit Study to Service 401 Corridor Lands	2023		114,000	-	-	114,000	11,400	-	102,600	85,158	17,442
30A	Cost Benefit Study to Service 401 Corridor Lands	2023	Water Services	57,000	-	-	57,000	5,700	-	51,300	42,579	8,721
30B	Cost Benefit Study to Service 401 Corridor Lands	2023	Wastewater Services	57,000	-	-	57,000	5,700	-	51,300	42,579	8,721
31	Thorndale Water Treatment Plant Needs EA Study	2022	Water Services	200,000	-	-	200,000	70,000	-	130,000	107,900	22,100
32	Dorchester Groundwater Management Study	2021	Water Services	179,100	-	-	179,100	-	-	179,100	148,653	30,447
33	Reserve Fund Adjustment				-	-	-	287,653	-	(287,653)	(238,752)	(48,901)
	Total			1,941,300	-	18,800	1,922,500	1,000,128	-	922,372	765,569	156,803



5.3 Service Levels and 25-Year Capital Costs for Thames Centre's D.C. Calculation

This section evaluates the development-related capital requirements for Services Related to a Highway which provides costs over a 25-year period.

5.3.1 *Services Related to a Highway*

The Municipality owns and maintains 396 km of urban hard surface, rural hard surface tar and chip, and rural gravel roads. The current level of service over the historical 10-year period (2011-2020) is an average of 29.2 km per 1,000 population. This provides an average level of investment of \$12,782 per capita, resulting in a D.C.-eligible recovery amount of \$90,621,544 million over the 25-year forecast period.

With respect to future needs, the forecasted road program includes upgrades to bridges and culverts, expansions to roads and upgrading the standard of many roads to assist in servicing increased traffic volumes due to growth. The gross cost of the works is estimated at \$23,987,100. Based on the location and type of work anticipated to be undertaken, the existing benefit share related to the current population and employment of the Municipality has been identified, and deducted, in the amount of \$14,907,800. A further reduction in the amount of \$486,708 has been made to recognize the reserve fund balance. This results in a D.C. eligible amount of \$8,592,592 to be recovered over the current forecast period (2021-2045).

These costs have been allocated 84% residential and 16% non-residential based on the incremental growth in population to employment for the 25-year forecast period.



Table 5-7
Infrastructure Cost Included in the Development Charges Calculation
Services Related to a Highway

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 84%	Non-Residential Share 16%
	2021-2045										
1	Bridge and Culvert Upgrades	2021-2045	5,000,000	-	-	5,000,000	2,500,000	-	2,500,000	2,100,000	400,000
2	Rebecca Rd. (Thorndale Business Park Improvements)	2025-2030	188,000	-	-	188,000	94,000	-	94,000	78,960	15,040
3	Fairview Rd. (Dundas to Thorndale Road) Upgrade from Rural Tar and Chip to Rural Asphalt	2028-2031	7,741,000	-	-	7,741,000	6,579,900	-	1,161,100	975,324	185,776
4	Traffic Signals	2021-2037	313,600	-	-	313,600	15,700	-	297,900	250,236	47,664
5	Mill Rd. (Donnybrook to Christie) Upgrade from Rural Tar & Chip hard surface to Urban Asphalt - 1.67 km	2026	574,000	-	-	574,000	252,600	-	321,400	269,976	51,424
6	Christie (Mill to Wheeler) Upgrade from Rural Tar and Chip hard surface to Urban Asphalt - 0.25km	2026	85,500	-	-	85,500	37,600	-	47,900	40,236	7,664
7	Thorndale Rd. (Nissouri-Brooker) County road intersection improvements	2028-2037	285,000	-	-	285,000	-	-	285,000	239,400	45,600
8	Harris Street (Catherine St. - Minnie St.) - Upgrade from Rural Tar and Chip to Urban Asphalt	2026-2035	550,000	-	-	550,000	242,000	-	308,000	258,720	49,280
9	North Street (Minnie St. to North Limit) Upgrade from Rural Tar and Chip to Urban Asphalt	2021-2029	650,000	-	-	650,000	286,000	-	364,000	305,760	58,240
10	Minnie Street (Clara St. to Harris St.) Upgrade from Rural Tar and Chip to Urban Asphalt	2021-2028	900,000	-	-	900,000	396,000	-	504,000	423,360	80,640
11	Clara Street (Ida Street to Marion) Upgrade from Rural Tar and Chip to Urban Asphalt	2030-2040	700,000	-	-	700,000	308,000	-	392,000	329,280	62,720
12	Marion Street (Clara - Hwy 73) Upgrade from Rural Tar and Chip to Rural Asphalt	2023-2035	1,826,087	-	-	1,826,087	1,022,600	-	803,487	674,929	128,558
13	Marion Street (Shaw to Clara) Upgrade from Rural Tar and Chip to Urban Asphalt	2023-2035	2,173,913	-	-	2,173,913	1,217,400	-	956,513	803,471	153,042
14	Richmond Street (Marion to Gore Road) Upgrade from Rural Tar & Chip to Rural Asphalt	2030-2040	1,200,000	-	-	1,200,000	948,000	-	252,000	211,680	40,320
15	Harris Road (Hamilton to Donnybrook) Upgrade from Rural Tar & Chip to Rural Asphalt	2030-2040	1,800,000	-	-	1,800,000	1,008,000	-	792,000	665,280	126,720
16	Reserve Fund Adjustment		-	-	-	-	486,708	-	(486,708)	(408,835)	(77,873)
	Total		23,987,100	-	-	23,987,100	15,394,508	-	8,592,592	7,217,777	1,374,815



5.4 Service Levels and Buildout Capital Costs for Thames Centre's D.C. Calculation

This section evaluates the development-related capital requirements for water and wastewater services with capital costs identified over the buildout forecast.

5.4.1 Water Services

Water Facilities

The Municipality engaged GM BluePlan Engineering to undertake a Water and Wastewater Master Plan in 2019. The capital works required to service future growth were identified in master plan for Dorchester and Thorndale. As the study was provided in 2019, the costs have been inflated to current values for purposes of the D.C. study. As well, adjustments to some capital costs have been made to reflect revised budgets and/or actual tender costs. The capital projects provide for new municipal wells, high lift pump upgrades, storage expansions and other growth-related works to support the growth in the areas of Dorchester and Thorndale. In total, the gross capital cost for these works is \$28,419,000. Benefit to existing amounts totalling \$2,855,800, post period amounts of \$11,498,200, and the reserve fund balance of \$1,960,346 have been deducted from the calculations. Therefore, the net growth capital cost of \$12,104,564 has been included in the D.C.

Water Distribution

The Water and Wastewater Master Plan also provided the water distribution systems capital projects required to service growth in Dorchester and Thorndale. Similar to the facility projects, the costs associated with the distribution system have been inflated from those identified in the master plan to current values. The total gross capital cost estimated for water distribution is \$34.1 million, including outstanding credits related to D.C.-eligible works undertaken by a developing landowner. These works include various new watermains, extensions, and/or upgrades to service growth. A deduction in the amount of \$5,607,500 has been made to represent the existing benefit and \$11,374,800 has been deducted for portions of projects that are required to be funded by the developing landowners based on the local service policy. Therefore, the net growth-related capital cost of \$17,117,700 has been included in the D.C. calculations.



These costs are shared between residential and non-residential based on the population to employment ratio over the forecast period, resulting in 86% being allocated to residential development and 14% being allocated to non-residential development.



Table 5-8
Infrastructure Costs Included in the Development Charges Calculation
Water Services - Facilities

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Masterplan ID	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 86%	Non-Residential Share 14%
	2021-Urban Buildout											
	Dorchester											
1	Maximize Dorchester Water Treatment Facility Supply	W-D-SUP-01	2023	1,220,000	108,000	-	1,112,000	976,000	-	136,000	116,960	19,040
2	New Dorchester Groundwater Supply	W-D-SUP-02 (a)	2026-2045+	10,966,400	4,757,900	-	6,208,500	219,300	-	5,989,200	5,150,712	838,488
3	Shallow Wells Expanded Supply (Additional 600 cubic metres per day)	W-D-SUP-02 (b)	2021	433,600	182,400	-	251,200	21,700	-	229,500	197,370	32,130
4	Dorchester HLP Upgrades	W-D-BPS-01	2032	1,220,000	-	-	1,220,000	427,000	-	793,000	681,980	111,020
	Thorndale											
5	Maximize Thorndale WTF Supply	W-T-SUP-01	2030	1,160,000	407,800	-	752,200	406,000	-	346,200	297,732	48,468
6	New Thorndale Groundwater Supply and Treatment Plant Replacement/Expansion	W-T-SUP-02	2026-2045+	11,400,000	6,042,100	-	5,357,900	228,000	-	5,129,900	4,411,714	718,186
7	Thorndale Reservoir Upgrade	W-T-RES-01	2025	859,000	-	-	859,000	171,800	-	687,200	590,992	96,208
8	Thorndale HLP Upgrades	W-T-BPS-01	2024-2025	1,160,000	-	-	1,160,000	406,000	-	754,000	648,440	105,560
9	Reserve Fund Adjustment			-	-	-	-	1,960,346	-	(1,960,346)	(1,685,898)	(274,448)
	Total			28,419,000	11,498,200	-	16,920,800	4,816,146	-	12,104,654	10,410,002	1,694,652



Table 5-9
Infrastructure Costs Included in the Development Charges Calculation
Water Services – Distribution System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-Urban Buildout											86%	14%
	Dorchester												
1	Dorchester Watermain - Spine Trunk Upgrade on Dorchester Rd. (South of Byron Ave.)	W-D-WM-01	450m of existing 250mm DI watermain (built in 1976) to be replaced by 300mm PVC watermain	2026-2031	1,062,000	-	-	1,062,000	849,600	-	212,400	182,664	29,736
2	Dorchester Watermain - Spine Trunk Upgrade on Dorchester Rd. (River Bank)	W-D-WM-02	190m of existing 250mm DI watermain (built in 1976 - 1987) to be replaced by 300mm PVC watermain	2026-2031	460,000	-	-	460,000	368,000	-	92,000	79,120	12,880
3	Dorchester Watermain - Spine Trunk Upgrade on Catherine St. and Minnie Rd. (North Section)	W-D-WM-03	390m of existing 250mm DI and PVC watermain (built in 1990 - 1992) to be replaced by 300mm PVC watermain following Catherine St. + Minnie St. alignment	2030	1,534,000	-	-	1,534,000	1,227,200	-	306,800	263,848	42,952
4	Dorchester Watermain - North St. Upgrade	W-D-WM-04	360m of existing 150mm CI watermain (built in 1956) on North Street and Minnie Street to be replaced by 200mm PVC watermain.	2030	718,000	-	-	718,000	502,600	-	215,400	185,244	30,156
5	Dorchester Watermain - Northeast Loop	W-D-WM-05	590m of 300mm proposed PVC watermain on North St.mto complete loop	2030	737,000	-	-	737,000	-	589,600	147,400	126,764	20,636
6	Dorchester Watermain - Northeast Loop	W-D-WM-05	130m of 150mm proposed PVC watermain on Village Gate Dr.	2030	438,000	-	-	438,000	-	438,000	-	-	-
7	Dorchester Watermain - Marion St. Upgrade	W-D-WM-06	100m of existing 150mm PVC watermain to be replaced by C2400mm PVC watermain	2030	198,000	-	-	198,000	23,800	-	174,200	149,812	24,388
8	Dorchester Watermain - Marion St. Upgrade	W-D-WM-06	220m of proposed 300mm PVC watermain.	2030	436,000	-	-	436,000	21,800	-	414,200	356,212	57,988
9	Dorchester Watermain - West Trunk at the Development 22	W-D-WM-08-ALT1	Newly proposed West Trunk - 620m of proposed 300mm PVC watermain at Development 22.	2030	1,152,000	-	-	1,152,000	23,000	-	1,129,000	970,940	158,060
10	Dorchester Watermain - West Trunk river crossing at Development 22.	W-D-WM-09-ALT1	Newly proposed West Trunk - 140m of proposed 300mm PVC watermain river crossing.	2030	406,000	-	-	406,000	8,100	-	397,900	342,194	55,706
11	Dorchester Watermain - West Trunk at Development 22.	W-D-WM-10-ALT1	Newly proposed West Trunk - 270m of proposed 300mm PVC watermain at Development 22.	2021-2025	273,000	-	-	273,000	5,500	-	267,500	230,050	37,450
12	Dorchester Watermain - West Trunk at Development 22.	W-D-WM-10-ALT1	110m of existing 150mm PVC watermain to be replaced by 300mm PVC watermain	2021-2025	190,000	-	-	190,000	133,000	-	57,000	49,020	7,980



Table 5-9 continued
Infrastructure Costs Included in the Development Charges Calculation
Water Services – Distribution System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
2021-Urban Buildout													
13	Dorchester Watermain - West Trunk on Christie Dr.	W-D-WM-11	Newly proposed West Trunk - Total of 980m of 300mm PVC watermain along Christie Dr. including 870m of proposed 300mm PVC watermain and 110m of existing 150mm PVC watermain to be replaced by 300mm PVC watermain	2026	1,959,000	-	-	1,959,000	-	-	1,959,000	1,684,740	274,260
14	Dorchester Watermain - West Trunk on Harris Rd. and Hamilton Rd.	W-D-WM-12	Newly proposed West Trunk - 1080m of proposed 300mm PVC watermain along Harris Rd. and Hamilton Rd.	2028	1,868,000	-	-	1,868,000	37,400	-	1,830,600	1,574,316	256,284
15	Dorchester Watermain - West Trunk at Mill Ct. Loop	W-D-WM-13	Newly proposed West Trunk - 800m of proposed 200mm PVC watermain on Mill Ct to complete loop	2023	1,590,000	-	-	1,590,000	-	1,272,000	318,000	273,480	44,520
16	Dorchester Watermain - Catherine St. East Section Upgrade	W-D-WM-14	1020m of existing 250mm DI watermain (built in 1983) to be replaced by 300mm PVC watermain on Catherine St.	2035	2,382,000	-	-	2,382,000	-	1,905,600	476,400	409,704	66,696
17	Dorchester Watermain - Catherine St. West Section Upgrade	W-D-WM-15	1390m of existing 200mm PVC watermain (built in 1973 - 2013) to be replaced by 300mm PVC watermain on Catherine St.	2035	3,343,000	-	-	3,343,000	-	2,674,400	668,600	574,996	93,604
18	Dorchester Watermain - Northwest Industrial Lands Upgrade	W-D-WM-16	1260m of existing 200mm DI & PVC watermain (built in 1978 - 2013) to be replaced by 300mm PVC watermain	2035	2,603,000	-	-	2,603,000	-	2,082,400	520,600	447,716	72,884
19	Dorchester Watermain - Hamilton Rd. Extension	W-D-WM-17	350m of proposed 200mm PVC watermain along Hamilton Rd.	2030	696,000	-	-	696,000	-	696,000	-	-	-
20	Dorchester Watermain - Benefit to Existing System	W-D-WM-18	370m of proposed 200mm PVC watermain along Mill Rd.	2030	736,000	-	-	736,000	736,000	-	-	-	-
21	Outstanding Growth-Related Credit related to Dorchester Watermain - West Trunk at the Development 25	W-D-WM-07	Newly proposed West Trunk - 660m of proposed 300mm PVC watermain at Development 25.	2030	150,000	-	-	150,000	-	-	150,000	129,000	21,000
Thorndale													
22	Thorndale Watermain - Thorndale Rd. Upgrade	W-T-WM-01	350m of existing PVC watermain on Thorndale Rd. (built in 1987) to be replaced by 300mm PVC watermain	2028	933,000	-	-	933,000	746,400	-	186,600	160,476	26,124
23	Thorndale Watermain - South Trunk at Monteith Lands	W-T-WM-02	540m of proposed 300mm PVC watermain at Monteith Lands to complete south trunk.	2024	1,024,000	-	-	1,024,000	-	819,200	204,800	176,128	28,672
24	Thorndale Watermain - South Trunk Meadowbrook Ln. Upgrade	W-T-WM-03	440m of existing 150mm PVC watermain on Meadowbrook Ln.(built in 1990) to be replaced by 300mm PVC watermain	2024	905,000	-	-	905,000	633,500	-	271,500	233,490	38,010
25	Thorndale Watermain - South Trunk at Foxborough Subdivision Oversizing Component Only	W-T-WM-04	280m of proposed 300mm PVC watermain at Foxborough Subdivision to complete south trunk.	2023	90,000	-	-	90,000	-	-	90,000	77,400	12,600



Table 5-9 Continued
Infrastructure Costs Included in the Development Charges Calculation
Water Services – Distribution System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-Urban Buildout											86%	14%
26	Thorndale Watermain - South Trunk at Railway Crossing	W-T-WM-05	410m of proposed 300mm PVC watermain at railway crossing to complete south trunk (includes directional drilling)	2023	2,063,000	-	-	2,063,000	-	-	2,063,000	1,774,180	288,820
27	Thorndale Watermain - South Trunk at Rosewood Subdivision	W-T-WM-06	390m of proposed 300mm PVC watermain at Rosewood Subdivision to complete south trunk.	2023	616,000	-	-	616,000	-	-	616,000	529,760	86,240
28	Thorndale Watermain - Subtrunk at Rosewood	W-T-WM-07	680m of proposed 300mm PVC watermain at Rosewood Subdivision.	2023	1,122,000	-	-	1,122,000	-	897,600	224,400	192,984	31,416
29	Thorndale Watermain Upgrade - Gerald Pkwy. Upgrade	W-T-WM-08	590m of existing 200mm PVC watermain (built in 2010) on Gerald Pkwy. to be replaced by 300mm PVC watermain.	2023-2025	1,190,000	-	-	1,190,000	107,100	-	1,082,900	931,294	151,606
30	Thorndale Watermain Upgrade - Industrial Lands Loop	W-T-WM-09	590m of 300mm watermain to connect Ideal Dr. and Gerald Pkwy. to complete loop	2023-2025	1,176,000	-	-	1,176,000	-	-	1,176,000	1,011,360	164,640
31	Thorndale Watermain Upgrade - Industrial Lands Upgrade	W-T-WM-10	1020m of existing 200mm PVC watermain (built in 2010) on Thorndale Rd. and Ideal Dr. to be replaced by 300mm PVC watermain.	2023-2025	2,050,000	-	-	2,050,000	184,500	-	1,865,500	1,604,330	261,170
	Total				34,100,000	-	-	34,100,000	5,607,500	11,374,800	17,117,700	14,721,222	2,396,478



5.4.2 Wastewater Services

Wastewater Facilities

Similar to water services, the Water and Wastewater Master Plan, undertaken by GM BluePlan Engineering identified the capital needs for future expansions to both the Dorchester and Thorndale wastewater treatment plants, and pumping stations requirements. This work has been estimated to cost approximately \$38.87 million. In addition, the outstanding growth-related debt, including financing costs (discounted) for the Dorchester Phase 1 treatment plant expansion and the pump station 3 expansion and forcemain, have been included at a cost of \$7,726,176. Deductions to the gross cost have been made to recognize the benefit to existing development of \$2.58 million, \$15.94 million to recognize post period growth and \$613,000 related to contributions by developing landowners required as per the local service policy. In addition to the deductions mentioned, \$746,221 has been deducted to reflect the balance in the reserve fund. Therefore, the net growth capital cost of \$26,713,755 has been included in the D.C.

Wastewater Collection

The capital works required to service growth in the wastewater collection system were identified in the water and wastewater master plan. Similar to water, costs have been updated to reflect current values, revised budgets and/or actual tender costs. The total gross capital cost estimated for wastewater collection is \$81,084,500. These works include various new trunk sewers, sewer extensions and/or upgrades, forcemains. Deductions of \$56.96 million related to existing benefit, \$2.31 million related to post period growth benefit and \$1.8 million to recognize requirements of developing landowners as per the local service policy, have been made. These deductions result in a net growth-related capital cost of \$20,013,150 which has been included in the D.C. calculations.

These costs are shared between residential and non-residential based on the population to employment ratio over the forecast period, resulting in 86% being allocated to residential development and 14% being allocated to non-residential development



Table 5-10
Infrastructure Costs Included in the Development Charges
Wastewater Services - Facilities

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 86%	Non-Residential Share 14%
	2021-Urban Buildout											
	Dorchester											
1	Dorchester WWTP Phase 2 Design and EA	WW-D-TP-01B	2025-2026	500,000	-	-	500,000	25,000	-	475,000	408,500	66,500
2	Dorchester WWTP Phase 2 Construction	WW-D-TP-01B	2027-2028	5,130,000	-	-	5,130,000	256,500	-	4,873,500	4,191,210	682,290
3	Dorchester WWTP Phase 3 Design and EA	WW-D-TP-01B	2034-2035	500,000	500,000	-	-	25,000	-	(25,000)	(21,500)	(3,500)
4	Dorchester WWTP Phase 3 Construction	WW-D-TP-01B	2036-2037	5,130,000	5,130,000	-	-	256,500	-	(256,500)	(220,590)	(35,910)
5	North Dorchester New Development SPS	WW-D-SPS-01B	2030	5,400,000	1,734,600	-	3,665,400	270,000	-	3,395,400	2,920,044	475,356
6	North Dorchester Northwest SPS	WW-D-SPS-02	2030-2035	648,000	-	-	648,000	129,600	-	518,400	445,824	72,576
7	North Dorchester Northeast SPS	WW-D-SPS-03	2032	138,000	-	-	138,000	6,900	-	131,100	112,746	18,354
8	South Dorchester SPS	WW-D-SPS-04	2026	1,130,000	-	-	1,130,000	56,500	-	1,073,500	923,210	150,290
9	Southeast Dorchester SPS	WW-D-SPS-05B	2037	613,000	-	-	613,000	-	613,000	-	-	-
10	Dorchester SPS Upgrades	WW-D-SPS-06B	2037	11,480,000	2,890,200	-	8,589,800	1,148,000	-	7,441,800	6,399,948	1,041,852
11	Dorchester WWTP Expansion Phase 1 - Growth Related Portion of Principal	WW-D-TP-01B	2021-2031	3,750,000	-	-	3,750,000	-	-	3,750,000	3,225,000	525,000
12	Dorchester WWTP Expansion Phase 1 - Growth Related portion of Interest (Discounted)	WW-D-TP-01B	2021-2031	120,996	-	-	120,996	-	-	120,996	104,057	16,939
13	Dorchester PS3 Expansion and Forecmain- Growth related portion of Principal	WW-D-SPS-07B	2021-2031	3,734,678	-	-	3,734,678	-	-	3,734,678	3,211,823	522,855
14	Dorchester PS3 Expansion and Forecmain-Growth related portion of Interest (Discounted)	WW-D-SPS-07B	2021-2031	120,502	-	-	120,502	-	-	120,502	103,632	16,870
	Thorndale											
15	Thorndale Treatment Plant Upgrades (includes SPS)	WW-T-TP-01B	2025-2026	8,201,100	5,684,400	-	2,516,700	410,100	-	2,106,600	1,811,676	294,924
16	Reserve Fund Adjustment			-	-	-	-	746,221		(746,221)	(641,750)	(104,471)
	Total			46,596,276	15,939,200	-	30,657,076	3,330,321	613,000	26,713,755	22,973,829	3,739,926



Table 5-11 Continued
Infrastructure Costs Included in the Development Charges
Wastewater Services – Collection System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-Urban Buildout											86%	14%
	Dorchester												
1	North Dorchester New Development forcemain	WW-D-FM-01	New forcemain needed to support new development SPS for development blocks North of CN rail in North Dorchester	2030	1,418,500	-	-	1,418,500	70,900	-	1,347,600	1,158,936	188,664
2	Dorchester Road forcemain extension	WW-D-FM-02	New forcemain from Dorchester Road bridge forcemain to Dorchester road gravity sewers needed to support new development SPS for development blocks North of CN rail in North Dorchester	2026	415,100	-	-	415,100	20,800	-	394,300	339,098	55,202
3	Dorchester Road forcemain extension	WW-D-FM-03	New forcemain from Dorchester Road bridge forcemain to Byron Ave trunk sewers needed to support new development SPS for development blocks North of CN rail in North Dorchester	2026	1,013,700	963,000	-	50,700	50,700	-	-	-	-
4	North Dorchester Northwest forcemain	WW-D-FM-04	New forcemain needed to support northwest development SPS for development blocks South of CN rail and West of Dorchester Road Bridge in North Dorchester	2030	1,695,600	-	-	1,695,600	1,356,500	-	339,100	291,626	47,474
5	North Dorchester Northeast forcemain	WW-D-FM-05	New forcemain needed to support northeast SPS for existing development South of CN rail and East of Dorchester Road Bridge in North Dorchester	2037	1,349,000	-	-	1,349,000	1,281,600	-	67,400	57,964	9,436
6	South Dorchester forcemain	WW-D-FM-06	New forcemain needed to support south SPS for existing development South of river in South Dorchester	2037	2,854,200	-	-	2,854,200	2,711,500	-	142,700	122,722	19,978
7	Southeast Dorchester forcemain	WW-D-FM-07	New forcemain needed to support southeast SPS for existing development East of serviced developments and North of Hamilton Road in South Dorchester	2040	879,200	-	-	879,200	-	879,200	-	-	-
8	Dorchester SPS forcemain	WW-D-FM-08	New forcemain needed to support Dorchester WWTP SPS for all existing and growth developments in Dorchester.	2030	2,453,900	-	-	2,453,900	245,400	-	2,208,500	1,899,310	309,190
9	PS3 forcemain	WW-D-FM-09	Twinned forcemains needed to support PS3 for all development in Southeast Dorchester	2035	2,026,300	-	-	2,026,300	-	-	2,026,300	1,742,618	283,682
10	New Development SPS West Sewers	WW-D-SS-01B	New sanitary sewer required for development blocks going to new Development SPS in North Dorchester.	2026	558,800	-	-	558,800	-	558,800	-	-	-
11	New Development SPS East Sewers	WW-D-SS-02	New sanitary sewer required for development blocks going to new Development SPS in North Dorchester.	2030	811,900	811,900	-	-	-	-	-	-	-



Table 5-11 Continued
Infrastructure Costs Included in the Development Charges
Wastewater Services – Collection System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-Urban Buildout											86%	14%
12	PS3 West Sewers	WW-D-SS-03	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2023	1,743,500	-	-	1,743,500	34,900	-	1,708,600	1,469,396	239,204
13	PS3 West Sewers	WW-D-SS-04	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2037	143,700	-	-	143,700	2,900	-	140,800	121,088	19,712
14	Christie Drive and new Development sewer	WW-D-SS-05B-ALT-1	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2026	642,000	-	-	642,000	12,800	-	629,200	541,112	88,088
15	Rath-Harris Municipal Drain Crossing	WW-D-SS-06B-ALT-1	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2026	943,000	517,400	-	425,600	18,900	-	406,700	349,762	56,938
16	New development sewer	WW-D-SS-07B-ALT-1	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2026	2,272,600	17,900	-	2,254,700	45,500	-	2,209,200	1,899,912	309,288
17	Sewer East of PS3	WW-D-SS-09	New sanitary sewer to accommodate growth flows east of PS3 in Dorchester	2030	1,349,000	-	-	1,349,000	-	-	1,349,000	1,160,140	188,860
18	Sewer East of PS3	WW-D-SS-10	New sanitary sewer to accommodate growth flows east of PS3 in Dorchester	2030	116,300	-	-	116,300	-	-	116,300	100,018	16,282
19	Christie Drive and new Development sewer	WW-D-SS-11B	New sanitary sewer required for development blocks going to PS3 in Dorchester.	2026	720,700	-	-	720,700	-	360,350	360,350	309,901	50,449
20	Clara Street sewer	WW-D-SS-12	New sanitary sewer to accommodate growth Northeast of New development SPS in North Dorchester	2035	1,003,500	-	-	1,003,500	100,400	-	903,100	776,666	126,434
21	Marion Street sewer	WW-D-SS-13	New sanitary sewer to accommodate growth Northeast of New development SPS in North Dorchester	2035	390,000	-	-	390,000	39,000	-	351,000	301,860	49,140
22	North Street to Clara Street sewer	WW-D-SS-14	New sanitary sewer to accommodate growth Northeast of New development SPS in North Dorchester	2035	764,000	-	-	764,000	76,400	-	687,600	591,336	96,264
23	North Street Sewer	WW-D-SS-15	New sanitary sewer to accommodate growth Northeast of New development SPS in North Dorchester	2035	569,000	-	-	569,000	-	-	569,000	489,340	79,660
24	Richmond Street Sewer	WW-D-SS-16	New sanitary sewer to accommodate growth Northeast of New development SPS in North Dorchester	2037	587,300	-	-	587,300	11,700	-	575,600	495,016	80,584
25	Hamilton Road to Christie Drive sewer	WW-D-SS-17	New sanitary sewer to accommodate growth flows east of PS3 in Dorchester	2030	1,744,700	-	-	1,744,700	174,500	-	1,570,200	1,350,372	219,828
26	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-01B)	WW-D-SS-18	New sanitary sewers to benefit existing unserviced within North Dorchester (WW-D-SPS- 01B catchment)	2030	11,910,500	-	-	11,910,500	11,910,500	-	-	-	-
27	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-02)	WW-D-SS-19	New sanitary sewers to benefit existing unserviced within North Dorchester (WW-D-SPS- 02 catchment)	2035	8,958,300	-	-	8,958,300	8,958,300	-	-	-	-



Table 5-9 Continued
Infrastructure Costs Included in the Development Charges
Wastewater Services – Collection System

Prj. No.	Increased Service Needs Attributable to Anticipated Development	Master Plan ID	Description	Timing (year)	Gross Capital Cost Estimate (2021\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential D.C. Recoverable Cost		
									Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2021-Urban Buildout											86%	14%
28	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-03)	WW-D-SS-20	New sanitary sewers to benefit existing unserved within North Dorchester (WW-D-SPS- 03 catchment)	2026	1,866,700	-	-	1,866,700	1,866,700	-	-	-	-
29	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-04)	WW-D-SS-21	New sanitary sewers to benefit existing unserved within South Dorchester (WW-D-SPS- 04 catchment)	2032	8,418,900	-	-	8,418,900	8,418,900	-	-	-	-
30	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-06B)	WW-D-SS-22	New sanitary sewers to benefit existing unserved within South Dorchester (WW-D-SPS- 06B catchment)	2026	13,022,300	-	-	13,022,300	13,022,300	-	-	-	-
31	Sewers for Municipal Servicing Replacing Private Sewage Systems (SPS-07B)	WW-D-SS-23	New sanitary sewers to benefit existing unserved within North Dorchester (WW-D-SPS- 07B catchment)	2036	3,617,100	-	-	3,617,100	3,617,100	-	-	-	-
	Thorndale												
32	Gerald Parkway sewer upgrades	WW-T-SS-01	Sewer upgrades along Gerald Parkway to accommodate growth flows in West Thorndale	2023	387,700	-	-	387,700	7,800	-	379,900	326,714	53,186
33	King Street sewer	WW-T-SS-02	King Street sewer from CN rail to Lions Lane to accommodate East Thorndale growth flows	2021	492,300	-	-	492,300	9,800	-	482,500	414,950	67,550
34a	King Street sewer	WW-T-SS-03	King Street sewer from Lions Lane to Fairview Avenue to accommodate East Thorndale growth flows	2021	507,800	-	-	507,800	101,600	-	406,200	349,332	56,868
34b	King Street sewer	WW-T-SS-04	King Street sewer from Fairview Avenue to Monteith to accommodate East Thorndale growth flows	2030	451,000	-	-	451,000	90,200	-	360,800	310,288	50,512
35	King Street sewer	WW-T-SS-04	King Street sewer from Wye Creek to existing sewers to accommodate existing development flows	2030	593,000	-	-	593,000	474,400	-	118,600	101,996	16,604
36	King Street sewer	WW-T-SS-05	King Street sewer under Wye Creek to accommodate existing development flows	2030	813,000	-	-	813,000	650,400	-	162,600	139,836	22,764
37	King Street sewer	WW-T-SS-06	King Street sewer from Harrison Street to before Wye Creek to accommodate existing development flows	2030	266,800	-	-	266,800	266,800	-	-	-	-
38	Sewers for Existing Unserved within Thorndale	WW-T-SS-07	New sanitary sewers to benefit existing unserved within Thorndale	2035	1,313,600	-	-	1,313,600	1,313,600	-	-	-	-
	Total				81,084,500	2,310,200	-	78,774,300	56,962,800	1,798,350	20,013,150	17,211,309	2,801,841



Chapter 6

D.C. Calculation



6. D.C. Calculation

Table 6-1 calculates the proposed uniform D.C.s to be imposed for Urban services based upon a buildout horizon (wastewater and water). Table 6-2 calculates the proposed uniform D.C. to be imposed on anticipated development in the Municipality for Municipal-wide services over a 25-year planning horizon. Table 6-3 calculates the proposed uniform D.C. to be imposed on anticipated development in the Municipality for Municipal-wide services over a 10-year planning horizon.

The calculation for residential development is generated on a per capita basis and is based upon five forms of housing types (singles and semi-detached, apartments 2+ bedrooms, apartments bachelor and 1 bedroom, nursing homes, and all other multiples). The non-residential D.C. has been calculated on a per sq.ft. of G.F.A. basis for all types of non-residential development (industrial, commercial, and institutional).

The D.C.-eligible costs for each service component were developed in Chapter 5 for all Municipal services and classes of services, based on their proposed capital programs.

For the residential calculations, the total cost is divided by the “gross” (new resident) population to determine the per capita amount. The eligible-D.C. cost calculations set out in Chapter 5 are based on the net anticipated population increase (the forecast new unit population less the anticipated decline in existing units). The cost per capita is then multiplied by the average occupancy of the new units (Appendix A, Schedule 5) to calculate the charge in Tables 6-1, 6-2, and 6-3.

With respect to non-residential development, the total costs in the uniform charge allocated to non-residential development (based on need for service) have been divided by the anticipated development over the planning period to calculate a cost per sq.ft. of G.F.A.

Table 6-4 summarizes the total D.C. that is applicable for Municipal-wide services and Table 6-5 summarizes the gross capital expenditures and sources of revenue for works to be undertaken during the 5-year life of the by-law.



Table 6-1
Municipality of Thames Centre
Development Charge Calculation
Urban Services and Classes of Services
2021 to Urban Buildout

SERVICE/CLASS	2021\$ D.C.-Eligible Cost		2021\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
1. <u>Wastewater Services</u>				
1.1 Treatment plants, pumping stations	22,973,829	3,739,926	8,668	4.10
1.2 Sewers	17,211,309	2,801,841	6,494	3.07
	40,185,138	6,541,767	15,162	7.17
2. <u>Water Services</u>				
2.1 Treatment plants, supply, pumping stations and storage	10,410,002	1,694,652	3,928	1.86
2.2 Distribution systems	14,721,222	2,396,478	5,555	2.62
	25,131,224	4,091,130	9,483	4.48
TOTAL	\$65,316,363	\$10,632,896	\$24,645	\$11.65
D.C.-Eligible Capital Cost	\$65,316,363	\$10,632,896		
Buildout Gross Population/GFA Growth (sq.ft.)	8,640	912,600		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$7,559.76	\$11.65		
By Residential Unit Type	P.P.U.			
Single and Semi-Detached Dwelling	3.260	\$24,645		
Other Multiples	2.126	\$16,072		
Apartments - 2 Bedrooms +	2.029	\$15,339		
Apartments - Bachelor and 1 Bedroom	1.279	\$9,669		
Nursing Home Bedroom Units	1.100	\$8,316		

Table 6-2
Municipality of Thames Centre
Development Charge Calculation
Municipal-wide Services and Classes of Services
2021 to 2045

SERVICE/CLASS	2021\$ D.C.-Eligible Cost		2021\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
3. <u>Services Related to a Highway</u>				
3.1 Roads and Related Infrastructure	7,217,777	1,374,815	2,938	1.14
	7,217,777	1,374,815	2,938	1.14
TOTAL	\$7,217,777	\$1,374,815	\$2,938	\$1.14
D.C.-Eligible Capital Cost	\$7,217,777	\$1,374,815		
25-Year Gross Population/GFA Growth (sq.ft.)	8,009	1,208,000		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$901.21	\$1.14		
By Residential Unit Type	P.P.U.			
Single and Semi-Detached Dwelling	3.260	\$2,938		
Other Multiples	2.126	\$1,916		
Apartments - 2 Bedrooms +	2.029	\$1,829		
Apartments - Bachelor and 1 Bedroom	1.279	\$1,153		
Nursing Home Bedroom Units	1.100	\$991		



Table 6-3
Municipality of Thames Centre
Development Charge Calculation
Municipal-wide Services and Classes of Services
2021 to 2030

SERVICE/CLASS	2021\$ D.C.-Eligible Cost		2021\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
4. <u>Public Works</u>				
4.1 Services Related to a Highway	1,243,340	254,660	899	0.33
4.2 Water Services	-	-	-	-
4.3 Wastewater Services	-	-	-	-
4.4 Parks and Recreation Services	361,714	74,086	262	0.10
	1,605,054	328,746	1,161	0.43
5. <u>Fire Protection Services</u>				
5.1 Fire facilities, vehicles, equipment & gear	1,710,028	350,247	1,237	0.46
	1,710,028	350,247	1,237	0.46
6. <u>Parks and Recreation Services</u>				
6.1 Park development, amenities, trails and recreation facilities	8,537,972	449,367	6,175	0.58
	8,537,972	449,367	6,175	0.58
7. <u>Library Services</u>				
7.1 Library facilities	613,271	32,277	444	0.04
	613,271	32,277	444	0.04
8. <u>Growth Studies</u>				
8.1 Water Services	328,636	67,311	238	0.09
8.2 Wastewater Services	233,366	47,798	169	0.06
8.3 Stormwater Services	45,557	9,331	33	0.01
8.4 Services Related to a Highway	77,933	15,962	56	0.02
8.5 Waste Diversion Services	526	108	-	-
8.6 Fire Protection Services	21,432	4,390	16	0.01
8.7 Library Services	3,356	687	2	-
8.8 Parks and Recreation Services	54,762	11,216	40	0.01
	765,569	156,803	554	0.20
9. <u>Waste Diversion</u>				
9.1 Waste diversion facilities, vehicles, equipment and other	232,081	5,693	168	0.01
	232,081	5,693	168	0.01
TOTAL	\$13,463,975	\$1,323,133	\$9,739	\$1.72
D.C.-Eligible Capital Cost	\$13,463,975	\$1,323,133		
10-Year Gross Population/GFA Growth (sq.ft.)	4,507	772,400		
Cost Per Capita/Non-Residential GFA (sq.ft.)	\$2,987.35	\$1.72		
By Residential Unit Type	P.P.U.			
Single and Semi-Detached Dwelling	3.260	\$9,739		
Other Multiples	2.126	\$6,351		
Apartments - 2 Bedrooms +	2.029	\$6,061		
Apartments - Bachelor and 1 Bedroom	1.279	\$3,821		
Nursing Home Bedroom Units	1.100	\$3,286		



Table 6-4
Municipality of Thames Centre
Development Charge Calculation
Total All Services and Classes of Services

	2021\$ D.C.-Eligible Cost		2021\$ D.C.-Eligible Cost	
	Residential	Non-Residential	S.D.U.	per sq.ft.
	\$	\$	\$	\$
Urban-wide Services/Classes Build out	65,316,363	10,632,896	24,645	11.65
Municipal-wide Services/Classes 25 Year	7,217,777	1,374,815	2,938	1.14
Municipal-wide Services/Classes 10 Year	13,463,975	1,323,133	9,739	1.72
TOTAL	85,998,115	13,330,844	37,322	14.51



Table 6-5
Municipality of Thames Centre
Gross Expenditure and Sources of Revenue Summary
For Costs to be Incurred over the Life of the By-law

Service/Class	Total Gross Cost	Sources of Financing					
		Tax Base or Other Non-D.C. Source			Post D.C. Period Benefit	D.C. Reserve Fund	
		Other Deductions	Benefit to Existing	Other Funding		Residential	Non-Residential
1. Wastewater Services							
1.1 Treatment plants, pumping stations	4,350,550	0	217,550	0	2,842,200	1,110,088	180,712
1.2 Sewers	1,000,100	0	111,400	0	0	764,282	124,418
2. Water Services							
2.1 Treatment plants, supply, pumping stations and storage	3,672,600	0	1,575,500	0	290,400	1,553,762	252,938
2.2 Distribution systems	12,289,000	0	1,063,600	2,988,800	0	7,083,476	1,153,124
3. Services Related to a Highway							
3.1 Roads and Related Infrastructure	2,970,257	0	1,443,596	0	0	1,282,395	244,266
4. Public Works							
4.1 Services Related to a Highway	3,637,500	0	0	0	0	3,019,125	618,375
4.2 Water Services	0	0	0	0	0	0	0
4.3 Wastewater Services	0	0	0	0	0	0	0
4.4 Parks and Recreation Services	130,800	0	0	0	0	108,564	22,236
5. Fire Protection Services							
5.1 Fire facilities, vehicles, equipment & gear	1,406,667	0	1,125,333	0	0	233,507	47,827
6. Parks and Recreation Services							
6.1 Park development, amenities, trails and recreation facilities	6,223,200	0	1,418,800	400,000	0	4,184,180	220,220
7. Library Services							
7.1 Library facilities	0	0	0	0	0	0	0
8. Growth Studies							
8.1 Water Services	107,465	1,538	20,309	0	0	71,063	14,555
8.2 Wastewater Services	269,225	1,538	35,309	0	0	192,874	39,504
8.3 Stormwater Services	94,950	1,845	48,125	0	0	37,333	7,647
8.4 Services Related to a Highway	218,805	5,843	140,934	0	0	59,784	12,245
8.5 Waste Diversion Services	750	62	279	0	0	339	70
8.6 Fire Protection Services	62,590	122	30,549	0	0	26,493	5,426
8.7 Library Services	8,180	122	3,799	0	0	3,535	724
8.8 Parks and Recreation Services	147,760	1,230	73,285	0	0	60,793	12,452
9. Waste Diversion							
9.1 Waste diversion facilities, vehicles, equipment and other	1,563,700	1,027,620	268,560	0	0	261,114	6,406
Total Expenditures & Revenues	\$38,154,098	\$1,039,920	\$7,576,927	\$3,388,800	\$3,132,600	\$20,052,708	\$2,963,144



Chapter 7

D.C. Policy Recommendations and D.C. By-law Rules



7. D.C. Policy Recommendations and D.C. By-law Rules

7.1 Introduction

Subsection 5 (1) 9 states that rules must be developed:

“to determine if a development charge is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection (6).”

Paragraph 10 of the section goes on to state that the rules may provide for exemptions, phasing in and/or indexing of D.C.s.

Subsection 5 (6) establishes the following restrictions on the rules:

- the total of all D.C.s that would be imposed on anticipated development must not exceed the capital costs determined under subsection 5 (1) 2-8 for all services involved;
- if the rules expressly identify a type of development, they must not provide for it to pay D.C.s that exceed the capital costs that arise from the increase in the need for service for that type of development; however, this requirement does not relate to any particular development; and
- if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development.

With respect to “the rules,” section 6 states that a D.C. by-law must expressly address the matters referred to above re subsection 5 (1) paragraphs 9 and 10, as well as how the rules apply to the redevelopment of land.

The rules provided are based on the Municipality’s existing policies; with consideration for the changes to the D.C.A. resulting from Bills 108, 197, and 213. However, there are items under consideration at this time and these may be refined prior to adoption of the by-law.



7.2 D.C. By-law Structure

It is recommended that:

- classes of services be established for growth studies and public works;
- the Municipality use a uniform Municipal-wide D.C. calculation for all services and classes of services except water and wastewater services;
- the Municipality use a uniform Urban-wide D.C. calculations for water and wastewater services; and
- one D.C. by-law be used for all services and classes of services referenced above.

7.3 D.C. By-law Rules

The following subsections set out the recommended rules governing the calculation, payment and collection of D.C.s in accordance with section 6 of the D.C.A.

It is recommended that the following sections provide the basis for the D.C.s.:

7.3.1 Payment in any Particular Case

In accordance with the D.C.A., subsection 2 (2), a D.C. be calculated, payable, and collected where the development requires one or more of the following:

- “(a) the passing of a zoning by-law or of an amendment to a zoning by-law under section 34 of the *Planning Act*;
- (b) the approval of a minor variance under section 45 of the *Planning Act*;
- (c) a conveyance of land to which a by-law passed under subsection 50 (7) of the *Planning Act* applies;
- (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
- (e) a consent under section 53 of the *Planning Act*;
- (f) the approval of a description under section 9 of the *Condominium Act, 1998*; or



- (g) the issuing of a permit under the *Building Code Act, 1992* in relation to a building or structure.”

7.3.2 Determination of the Amount of the Charge

The following conventions be adopted:

- 1) Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous decade. Costs allocated to non-residential uses will be assigned based on the amount of square feet of G.F.A. constructed for eligible uses (i.e. industrial, commercial, and institutional).
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, e.g.
 - for growth studies, public works, and fire services the costs have been based on a population to employment growth ratio 83%/17% for residential and non-residential, respectively, over the 10-year forecast period;
 - for parks and recreation services and library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector;
 - for costs related to waste diversion services, a growth ratio of 98%/2% for residential and non-residential, respectively, has been based on the allocation of residential versus non-residential properties waste diversion services are collected from, over the 10-year forecast period;
 - for services related to a highway, an 84% residential/16% non-residential share has been utilized based on the ratio of anticipated population to employment growth over the 25-year forecast period ; and
 - for water and wastewater services an 86% residential/14% non-residential allocation has been made based on population to employment growth over the urban buildout forecast period.



7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition and replacement of a building or structure on the same site, or the conversion from one principal use to another, the developer shall be allowed a credit equivalent to:

- 1) the number of dwelling units demolished/converted multiplied by the relevant D.C.s when the D.C.s are calculated with respect to the redevelopment;
- 2) the G.F.A. of the building demolished/converted multiplied by the relevant D.C.s when the D.C.s are calculated with respect to the redevelopment.

The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

7.3.4 Exemptions (full or partial)

- a) Statutory exemptions (full exemption):
 - industrial building additions of up to and including 50% of the existing G.F.A. (defined in O. Reg. 82/98, section 1) of the building; for industrial building additions that exceed 50% of the existing G.F.A., only the portion of the addition in excess of 50% is subject to D.C.s (subsection 4 (3) of the D.C.A.);
 - buildings or structures owned by and used for the purposes of any municipality, local board, or Board of Education (section 3);
 - residential development in existing buildings: development that results only in the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in section 2 of O. Reg. 82/98);
 - residential development in new dwellings: development that includes the creation of up to one additional dwelling units (based on prescribed limits set out in section 2 of O. Reg. 82/98); and
 - land vested in or leased to a university that receives regular and ongoing operating funds from the government for the purposes of post-secondary education is exempt from development charges imposed under the Development Charges Act, 1997 if the development in respect of which



development charges would otherwise be payable is intended to be occupied and used by the university.

b) Discretionary exemptions:

- Full Exemption:
 - hospital under the Public Hospitals Act;
 - a college of applied arts and technology established pursuant to the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c.M. 19, and used for teaching related purposes on lands owned by and used for the purposes of the College;
 - a cemetery or place of worship; and
 - non-residential farm building constructed for bona fide farm uses.
- Partial Exemption:
 - Industrial Development shall be exempt from the Municipal-wide services component of the D.C. but will be imposed the urban services, where the development takes place in the urban boundaries.

7.3.5 Phasing in

No provisions for phasing in the D.C. are provided in the D.C. by-law.

7.3.6 Timing of Collection

The D.C.s for all services and classes are payable upon issuance of a building permit for each dwelling unit, building, or structure, subject to early or late payment agreements entered into by the Municipality and an owner under s. 27 of the D.C.A.

Commencing January 1, 2020, rental housing and institutional developments will pay D.C.s in six equal annual payments commencing at occupancy. Non-profit housing developments will pay D.C.s in 21 equal annual payments. Moreover, the D.C. amount for all developments occurring within 2 years of a Site Plan or Zoning By-law Amendment planning approval (for applications submitted after January 1, 2020), shall be determined based on the D.C. in effect on the day of the applicable Site Plan or Zoning By-law Amendment application.



Instalment payments and payments determined at the time of Site Plan or Zoning By-law Amendment application are subject to annual interest charges calculated based on the Municipality's D.C. Interest Rate Policy, as may be amended from time to time.

7.3.7 Indexing

Indexing of the D.C.s shall be implemented on a mandatory basis annually commencing on January 1, 2023 and each anniversary date thereafter, in accordance with the Statistics Canada Quarterly, Non-Residential Building "Construction Price Statistics" (Table 18-10-0135-01)¹ for the most recent year-over-year.

7.3.8 The Applicable Areas

The charges developed herein provide for varying charges within the Municipality, as follows:

- all Municipal-wide services – the full residential and non-residential charge will be imposed on all lands within the Municipality; and
- water and wastewater services – the full residential and non-residential charges will be imposed on lands in the urban serviced boundaries.

7.4 Other D.C. By-law Provisions

It is recommended that:

7.4.1 Categories of Services/Classes of Services for Reserve Fund and Credit Purposes

The Municipality's D.C. collections are currently reserved in eight separate reserve funds: Services related to a highway, fire protection services, indoor and outdoor recreation services, library services, waste diversion, administration, water services, and wastewater services.

¹ O. Reg. 82/98 referenced "The Statistics Canada Quarterly, Construction Price Statistics, catalogue number 62-007" as the index source. Since implementation, Statistics Canada has modified this index twice and the above-noted index is the most current. The draft by-law provided herein refers to O. Reg. 82/98 to ensure traceability should this index continue to be modified over time.



It is recommended that the Municipality rename the “Indoor and Outdoor Recreation” reserve fund to “Parks and Recreation Services” to align with the eligible service definitions as per the D.C.A., as amended. Further it is recommended that the Municipality rename the Administration reserve funds to “Growth Studies” and that a new reserve fund be created for “Public Works” related to the classes of services required under the D.C.A., as amended.

Appendix D outlines the reserve fund policies that the Municipality is required to follow as per the D.C.A.

7.4.2 By-law In-force Date

A by-law under the D.C.A. comes into force on the day after which the by-law is passed by Council.

7.4.3 Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing

The minimum interest rate is the Bank of Canada rate on the day on which the by-law comes into force (as per section 11 of O. Reg. 82/98).

7.4.4 Area Rating

As noted earlier, Bill 73 has introduced two new sections where Council must consider the use of area specific charges:

1. Section 2 (9) of the D.C.A. now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated (note that at this time, no municipalities or services are prescribed by the regulations).
2. Section 10 (2) c.1 of the D.C.A. requires that “the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas.”

In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area rated. The second item requires Council to consider the use of area rating.



At present, the Municipality's by-law provides for water and wastewater services to be imposed on an area-specific (urban) basis. All other Municipal services are recovered based on a uniform, Municipal-wide basis. There have been several reasons why area-specific charges for these services have not been imposed:

1. All Municipal services, with the exception of water and wastewater, all other services require that the average 10-year service standard be calculated. This average service standard, multiplied by growth in the Municipality, establishes an upper ceiling on the amount of funds that can be collected from all developing landowners. Section 4 (4) of O. Reg. 82/98 provides that "if a development charge by-law applies to a part of the municipality, the level of service and average level of service cannot exceed that which would be determined if the by-law applied to the whole municipality." Put in layman terms, the average service standard multiplied by the growth within the specific area would establish an area-specific ceiling which would significantly reduce the total revenue recoverable for the Municipality, hence potentially resulting in D.C. revenue shortfalls and impacts on property taxes.
2. Extending on item 1, attempting to impose an area charge potentially causes equity issues in transitioning from a Municipal-wide approach to an area-specific approach. For example, if all services were now built (and funded) within Area A (which is 75% built out) and this was funded with some revenues from Areas B and C, moving to an area rating approach would see Area A contribute no funds to the costs of services in Areas B and C. The D.C.s would be lower in Area A (as all services are now funded) and higher in Areas B and C. As well, funding shortfalls may then potentially encourage the municipality to provide less services to Areas B and C due to reduced revenue.
3. Many services provided (roads, parks, recreation facilities, library) are not restricted to one specific area and are often used by all residents. For example, arenas located in different parts of the Municipality will be used by residents from all areas depending on the programming of the facility (i.e. a public skate is available each night, but at a different arena; hence usage of any one facility at any given time is based on programming availability).
4. Water and wastewater services are not currently provided to all areas of the Municipality.



For the reasons noted above, it is recommended that Council continue the approach of providing all services/classes of services on a uniform Municipal-wide basis, other than water and wastewater services. Further, it is recommended that Council continue the approach of providing water and wastewater services on a uniform urban-wide basis.

7.5 Other Recommendations

It is recommended that Council:

“Whenever appropriate, request that grants, subsidies and other contributions be clearly designated by the donor as being to the benefit of existing development or new development, as applicable;”

“Adopt the assumptions contained herein as an ‘anticipation’ with respect to capital grants, subsidies and other contributions;”

“Classes of services be established for growth studies and public works;”

“Continue the D.C. approach to calculate all services/classes of services, except water and wastewater services on a uniform Municipal-wide basis;”

“Continue the D.C. approach to calculate water and wastewater services on a uniform urban-wide basis;”

“Approve the capital project listing set out in Chapter 5 of the D.C.s Background Study dated December 27, 2021 subject to further annual review during the capital budget process;”

“Approve the D.C.s Background Study dated December 27, 2021, as amended (if applicable);”

“Determine that no further public meeting is required;” and

“Approve the D.C. By-law as set out in Appendix G.”



Chapter 8

By-law Implementation



8. By-law Implementation

8.1 Public Consultation Process

8.1.1 Introduction

This chapter addresses the mandatory, formal public consultation process (section 8.1.2), as well as the optional, informal consultation process (section 8.1.3). The latter is designed to seek the co-operation and participation of those involved, in order to produce the most suitable policy. Section 8.1.4 addresses the anticipated impact of the D.C. on development from a generic viewpoint.

8.1.2 Public Meeting of Council

Section 12 of the D.C.A. indicates that before passing a D.C. by-law, Council must hold at least one public meeting, giving at least twenty (20) clear days' notice thereof, in accordance with the regulation. Council must also ensure that the proposed by-law and background report are made available to the public at least two weeks prior to the (first) meeting.

Any person who attends such a meeting may make representations related to the proposed by-law.

If a proposed by-law is changed following such a meeting, Council must determine whether a further meeting (under this section) is necessary (i.e. if the proposed by-law which is proposed for adoption has been changed in any respect, Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made, is final and not subject to review by a Court or the Ontario Land Tribunal (formerly the Local Planning Appeal Tribunal (LPAT) and Ontario Municipal Board (O.M.B.)).

8.1.3 Other Consultation Activity

There are three broad groupings of the public who are generally the most concerned with Municipality D.C. policy:



1. The first grouping is the residential development community, consisting of land developers and builders, who are typically responsible for generating the majority of the D.C. revenues. Others, such as realtors, are directly impacted by D.C. policy. They are, therefore, potentially interested in all aspects of the charge, particularly the quantum by unit type, projects to be funded by the D.C. and the timing thereof, and Municipal policy with respect to development agreements, D.C. credits, and front-ending requirements.
2. The second public grouping embraces the public at large and includes taxpayer coalition groups and others interested in public policy.
3. The third grouping is the industrial/commercial/institutional development sector, consisting of land developers and major owners or organizations with significant construction plans, such as hotels, entertainment complexes, shopping centres, offices, industrial buildings, and institutions. Also involved are organizations such as Industry Associations, the Chamber of Commerce, the Board of Trade, and the Economic Development Agencies, who are all potentially interested in Municipal D.C. policy. Their primary concern is frequently with the quantum of the charge, G.F.A. exclusions such as basements, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

8.2 Anticipated Impact of the Charge on Development

The establishment of sound D.C. policy often requires the achievement of an acceptable balance between two competing realities. The first is that high non-residential D.C.s can, to some degree, represent a barrier to increased economic activity and sustained industrial/commercial growth, particularly for capital intensive uses. Also, in many cases, increased residential D.C.s can ultimately be expected to be recovered via higher housing prices and can impact project feasibility in some cases (e.g. rental apartments).

On the other hand, D.C.s or other Municipal capital funding sources need to be obtained in order to help ensure that the necessary infrastructure and amenities are installed. The timely installation of such works is a key initiative in providing adequate service levels and in facilitating strong economic growth, investment, and wealth generation.



8.3 Implementation Requirements

8.3.1 *Introduction*

Once the Municipality has calculated the charge, prepared the complete background study, carried out the public process, and passed a new by-law, the emphasis shifts to implementation matters. These include notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions, and finally the collection of revenues and funding of projects.

The sections that follow present an overview of the requirements in each case.

8.3.2 *Notice of Passage*

In accordance with section 13 of the D.C.A., when a D.C. by-law is passed, the Municipal clerk shall give written notice of the passing and of the last day for appealing the by-law (the day that is 40 days after the day it was passed). Such notice must be given no later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice).

Section 10 of O. Reg. 82/98 further defines the notice requirements which are summarized as follows:

- notice may be given by publication in a newspaper which is (in the clerk's opinion) of sufficient circulation to give the public reasonable notice, or by personal service, fax or mail to every owner of land in the area to which the by-law relates;
- subsection 10 (4) lists the persons/organizations who must be given notice; and
- subsection 10 (5) lists the eight items that the notice must cover.

8.3.3 *By-law Pamphlet*

In addition to the “notice” information, the Municipality must prepare a “pamphlet” explaining each D.C. by-law in force, setting out:

- a description of the general purpose of the D.C.s;
- the “rules” for determining if a charge is payable in a particular case and for determining the amount of the charge;



- the services to which the D.C.s relate; and
- a description of the general purpose of the Treasurer's statement and where it may be received by the public.

Where a by-law is not appealed to the O.L.T., the pamphlet must be readied within 60 days after the by-law comes into force. Later dates apply to appealed by-laws.

The Municipality must give one copy of the most recent pamphlet without charge to any person who requests one.

8.3.4 Appeals

Sections 13 to 19 of the D.C.A. set out the requirements relative to making and processing a D.C. by-law appeal and O.L.T. hearing in response to an appeal. Any person or organization may appeal a D.C. by-law to the O.L.T. by filing a notice of appeal with the Municipal clerk, setting out the objection to the by-law and the reasons supporting the objection. This must be done by the last day for appealing the by-law, which is 40 days after the by-law is passed.

The Municipality is carrying out a public consultation process, in order to address the issues that come forward as part of that process, thereby avoiding or reducing the need for an appeal to be made.

8.3.5 Complaints

A person required to pay a D.C., or his agent, may complain to the Municipal Council imposing the charge that:

- the amount of the charge was incorrectly determined;
- the reduction to be used against the D.C. was incorrectly determined; or
- there was an error in the application of the D.C.

Sections 20 to 25 of the D.C.A. set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a D.C. (or any part of it) is payable. A complainant may appeal the decision of Municipal Council to the O.L.T.



8.3.6 Credits

Sections 38 to 41 of the D.C.A. set out a number of credit requirements, which apply where a Municipality agrees to allow a person to perform work in the future that relates to a service in the D.C. by-law.

These credits would be used to reduce the amount of D.C.s to be paid. The value of the credit is limited to the reasonable cost of the work which does not exceed the average level of service. The credit applies only to the service to which the work relates unless the Municipality agrees to expand the credit to other services for which a D.C. is payable.

8.3.7 Front-Ending Agreements

The Municipality and one or more landowners may enter into a front-ending agreement that provides for the costs of a project which will benefit an area in the Municipality to which the D.C. by-law applies. Such an agreement can provide for the costs to be borne by one or more parties to the agreement who are, in turn, reimbursed in future by persons who develop land defined in the agreement.

Part III of the D.C.A. (sections 44 to 58) addresses front-ending agreements and removes some of the obstacles to their use which were contained in the D.C.A., 1989. Accordingly, the Municipality assesses whether this mechanism is appropriate for its use, as part of funding projects prior to Municipal funds being available.

8.3.8 Severance and Subdivision Agreement Conditions

Section 59 of the D.C.A. prevents a municipality from imposing, directly or indirectly, a charge related to development or a requirement to construct a service related to development, by way of a condition or agreement under section 51 or section 53 of the *Planning Act*, except for:

- “local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under section 51 of the *Planning Act*,” and
- “local services to be installed or paid for by the owner as a condition of approval under section 53 of the *Planning Act*.”



It is also noted that subsection 59 (4) of the D.C.A. requires that the municipal approval authority for a draft plan of subdivision under subsection 51 (31) of the *Planning Act*, use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the D.C.s related to the development, at the time the land is transferred.

In this regard, if the Municipality in question is a commenting agency, in order to comply with subsection 59 (4) of the D.C.A. it would need to provide to the approval authority, information regarding the applicable Municipal D.C.s related to the site.

If the Municipality is an approval authority for the purposes of section 51 of the *Planning Act*, it would be responsible to ensure that it collects information from all entities that can impose a D.C.

The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.



Appendices



Appendix A

Background Information on Residential and Non- Residential Growth Forecast



Schedule 1 Municipality of Thames Centre Residential Growth Forecast Summary

Year		Population (Including Census Undercount) ^[1]	Excluding Census Undercount			Housing Units						Persons Per Unit (P.P.U.): Total Population/ Total Households
			Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi- Detached	Multiple Dwellings ^[2]	Apartments ^[3]	Other	Total Households	Equivalent Institutional Households	
Historical	Mid 2006	13,540	13,085	70	13,015	4,215	80	125	165	4,585	64	2.854
	Mid 2011	13,450	13,000	5	12,995	4,367	72	109	178	4,726	5	2.751
	Mid 2016	13,650	13,191	11	13,180	4,530	80	160	160	4,930	10	2.676
Forecast	Mid 2021	14,630	14,141	12	14,129	4,885	80	193	160	5,318	11	2.659
	Mid 2031	18,550	17,931	15	17,916	6,163	201	240	160	6,764	14	2.651
	Mid 2046	21,966	21,231	18	21,213	6,943	457	479	160	8,039	16	2.641
	Buildout	23,142	22,368	19	22,349	7,274	517	525	160	8,476	17	2.639
Incremental	Mid 2006 - Mid 2011	-90	-85	-65	-20	152	-8	-16	13	141	-59	
	Mid 2011 - Mid 2016	200	191	6	185	163	8	51	-18	204	5	
	Mid 2016 - Mid 2021	980	950	1	949	355	0	33	0	388	1	
	Mid 2021 - Mid 2031	3,920	3,790	3	3,787	1,278	121	47	0	1,446	3	
	Mid 2021 - Mid 2046	7,336	7,090	6	7,084	2,058	377	286	0	2,721	5	
	Mid 2021 - Buildout	8,512	8,227	7	8,220	2,389	437	332	0	3,158	6	

^[1] Census undercount estimated at approximately 2.3%.

^[2] Includes townhouses and apartments in duplexes.

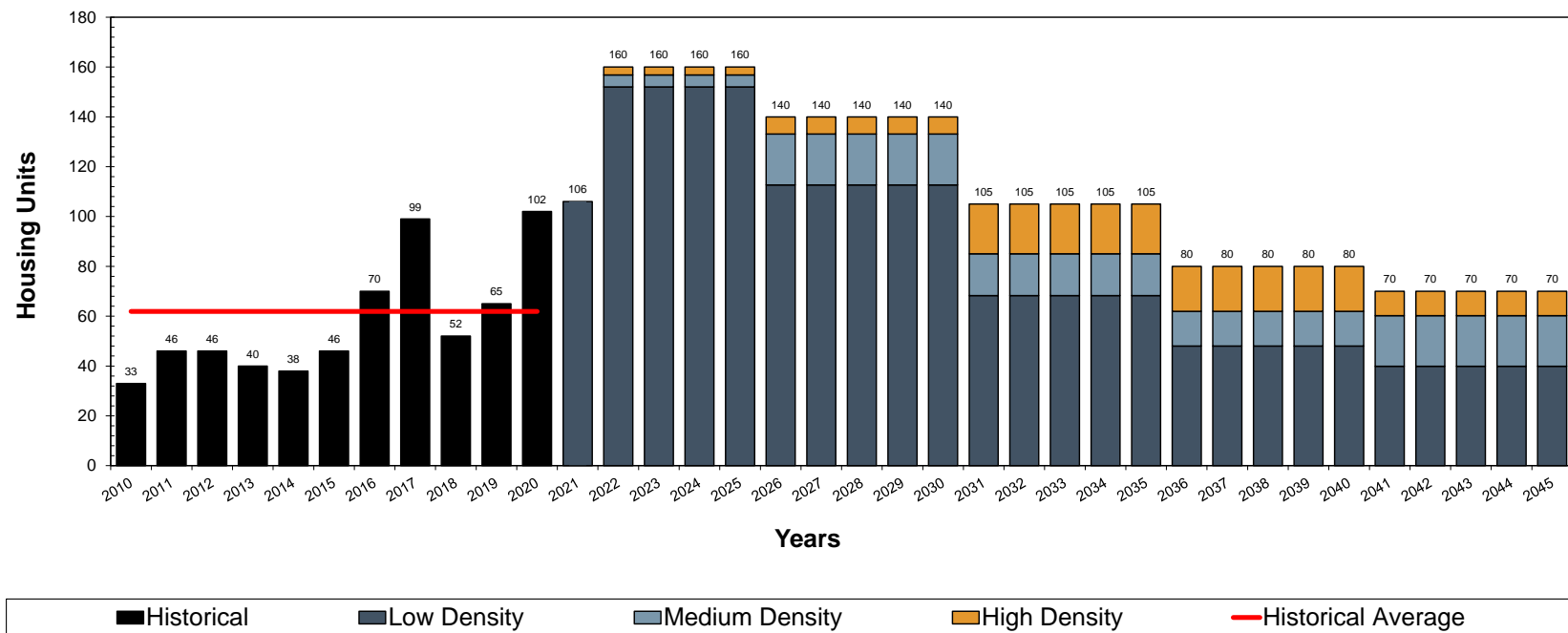
^[3] Includes bachelor, 1-bedroom, and 2-bedroom+ apartment units.

Note: Population including the Census undercount has been rounded.

Source: Derived from the Middlesex County Housing Allocation Memo prepared by Watson & Associates Economists Ltd, December 11, 2021. Buildout based on water and wastewater servicing capacity and designated vacant urban land supply provided by the Municipality of Thames Centre.



Figure A-1
Municipality of Thames Centre
Annual Housing Forecast ^[1]



^[1] Growth forecast represents calendar year.

Source: Historical housing activity derived from building permits from the Municipality of Thames Centre.



Schedule 2
Municipality of Thames Centre
Estimate of the Anticipated Amount, Type and Location of
Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Single & Semi-Detached	Multiples ^[1]	Apartments ^[2]	Total Residential Units	Gross Population In New Units	Existing Unit Population Change	Net Population Increase, Excluding Institutional	Institutional Population	Net Population Including Institutional
Dorchester	2021 - 2031	667	106	42	815	2,471	(323)	2,148	2	2,150
	2021 - 2046	1,282	358	256	1,897	5,382	(414)	4,968	4	4,972
	2021 - Buildout	1,571	415	299	2,285	6,518	(482)	6,036	5	6,041
Thorndale	2021 - 2031	542	15	5	562	1,808	(96)	1,712	1	1,714
	2021 - 2046	602	19	30	651	2,054	(123)	1,931	2	1,933
	2021 - Buildout	617	22	33	672	2,115	(142)	1,973	2	1,975
Urban	2021 - 2031	1,209	121	47	1,377	4,279	(419)	3,860	3	3,864
	2021 - 2046	1,884	377	286	2,547	7,436	(537)	6,899	6	6,905
	2021 - Buildout	2,188	437	332	2,957	8,633	(624)	8,009	7	8,016
Rural	2021 - 2031	69	-	-	69	225	(298)	(73)	-	(73)
	2021 - 2046	174	-	-	174	567	(382)	185	-	185
	2021 - Buildout	201	-	-	201	655	(444)	211	-	211
Municipality of Thames Centre	2021 - 2031	1,278	121	47	1,446	4,504	(717)	3,787	3	3,790
	2021 - 2046	2,058	377	286	2,721	8,003	(919)	7,084	6	7,090
	2021 - Buildout	2,389	437	332	3,158	9,288	(1,068)	8,220	7	8,227

[1] Includes townhouses and apartments in duplexes.

[2] Includes accessory apartments, bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.

Source: Derived from the Middlesex County Housing Allocations Memo prepared by Watson & Associates Economists Ltd., December 11, 2020. Buildout forecast based on water and wastewater servicing capacity identified in Water and Wastewater Master Plan Update by GM BluePlan, 2019.



Schedule 3 Municipality of Thames Centre Current Year Growth Forecast Mid 2016 to Mid 2021

		Population
Mid 2016 Population		13,191
Occupants of New Housing Units, Mid 2016 to Mid 2021	Units (2)	388
	multiplied by P.P.U. (3)	3.054
	gross population increase	1,185
Occupants of New Equivalent Institutional Units, Mid 2016 to Mid 2021	Units	1
	multiplied by P.P.U. (3)	1.100
	gross population increase	1
Decline in Housing Unit Occupancy, Mid 2016 to Mid 2021	Units (4)	4,930
	multiplied by P.P.U. decline rate (5)	-0.048
	total decline in population	-236
Population Estimate to Mid 2021		14,141
Net Population Increase, Mid 2016 to Mid 2021		950

(1) 2016 population based on Statistics Canada Census unadjusted for Census undercount.

(2) Estimated residential units constructed, Mid-2016 to the beginning of the growth period assuming a six-month lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.178	91%	2.908
<i>Multiples (6)</i>	2.308	0%	0.000
<i>Apartments (7)</i>	1.721	9%	0.146
Total		100%	3.054

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

(4) 2016 households taken from Statistics Canada Census.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 4a Municipality of Thames Centre 10 Year Growth Forecast Mid 2021 to Mid 2031

		Population
Mid 2021 Population		14,141
Occupants of New Housing Units, Mid 2021 to Mid 2031	<i>Units (2)</i>	1,446
	<i>multiplied by P.P.U. (3)</i>	3,115
	<i>gross population increase</i>	4,504
Occupants of New Equivalent Institutional Units, Mid 2021 to Mid 2031	<i>Units</i>	3
	<i>multiplied by P.P.U. (3)</i>	1,100
	<i>gross population increase</i>	3
Decline in Housing Unit Occupancy, Mid 2021 to Mid 2031	<i>Units (4)</i>	5,318
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.135
	<i>total decline in population</i>	-717
Population Estimate to Mid 2031		17,931
<i>Net Population Increase, Mid 2021 to Mid 2031</i>		<i>3,790</i>

(1) Mid 2021 Population based on:

2016 Population (13,191) + Mid 2016 to Mid 2021 estimated housing units to beginning of forecast period $(388 \times 3.054 = 1,185) + (1 \times 1.1 = 1) + (4,930 \times -0.048 = -236) = 14,141$

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.260	88%	2.880
<i>Multiples (6)</i>	2.126	8%	0.179
<i>Apartments (7)</i>	1.718	3%	0.056
<i>one bedroom or less</i>	1.279		
<i>two bedrooms or more</i>	2.029		
Total		100%	3.115

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2021 households based upon 2016 Census (4,930 units) + Mid 2016 to Mid 2021 unit estimate (388 units) = 5,318 units.

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 4b Municipality of Thames Centre 25-Year Growth Forecast Mid 2021 to Mid 2046

		Population
Mid 2021 Population		14,141
Occupants of New Housing Units, Mid 2021 to Mid 2046	Units (2)	2,721
	multiplied by P.P.U. (3)	2.941
	gross population increase	8,003
Occupants of New Equivalent Institutional Units, Mid 2021 to Mid 2046	Units	5
	multiplied by P.P.U. (3)	1.100
	gross population increase	6
Decline in Housing Unit Occupancy, Mid 2021 to Mid 2046	Units (4)	5,318
	multiplied by P.P.U. decline rate (5)	-0.173
	total decline in population	-919
Population Estimate to Mid 2046		21,231
Net Population Increase, Mid 2021 to Mid 2046		7,090

(1) Mid 2021 Population based on:

2016 Population (13,191) + Mid 2016 to Mid 2021 estimated housing units to beginning of forecast period $(388 \times 1,185) + (4,930 \times -0.0477 = -235) = 14,141$

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.260	76%	2.466
<i>Multiples (6)</i>	2.126	14%	0.294
<i>Apartments (7)</i>	1.718	11%	0.181
<i>one bedroom or less</i>	1.279		
<i>two bedrooms or more</i>	2.029		
Total		100%	2.941

¹ Persons per unit based on Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2021 households based upon 4,930 (2016 Census) + 388 (Mid 2016 to Mid 2021 unit estimate) = 5,318

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 5 Municipality of Thames Centre Buildout Growth Forecast

			Population
Mid 2021 Population			14,141
Occupants of New Housing Units, Mid 2021 to Buildout	Units (2)	3,158	
	<i>multiplied by P.P.U. (3)</i>	2,941	
	<i>gross population increase</i>	9,288	9,288
Occupants of New Equivalent Institutional Units, Mid 2021 to Buildout	Units	6	
	<i>multiplied by P.P.U. (3)</i>	1,100	
	<i>gross population increase</i>	7	7
Decline in Housing Unit Occupancy, Mid 2021 to Buildout	Units (4)	5,318	
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.201	
	<i>total decline in population</i>	-1,068	-1,068
Population Estimate to Buildout			22,368
Net Population Increase, Mid 2021 to Buildout			8,227

(1) Mid 2021 Population based on:

2016 Population (13,191) + Mid 2016 to Mid 2021 estimated housing units to beginning of forecast period (388 x 1,185) + (4,930 x -0.0477 = -235) = 14,141

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

(3) Average number of persons per unit (P.P.U.) is assumed to be:

Structural Type	Persons Per Unit ¹ (P.P.U.)	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.260	76%	2.466
<i>Multiples (6)</i>	2.126	14%	0.294
<i>Apartments (7)</i>	1.718	11%	0.181
<i>one bedroom or less</i> 1,279			
<i>two bedrooms or more</i> 2,029			
Total		100%	2.941

¹ Persons per unit based on Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Mid 2021 households based upon 4,930 (2016 Census) + 388 (Mid 2016 to Mid 2021 unit estimate) = 5,318

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhouses and apartments in duplexes.

(7) Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Numbers may not add to totals due to rounding.



Schedule 6
Municipality of Thames Centre
Summary of Vacant Land Supply Housing Potential as of 2021

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ^[1]	Apartments ^[2]	Total
Registered Not Built	39	-	-	39
<i>% Breakdown</i>	100%	0%	0%	100%
Draft Plans Approved	923	-	-	923
<i>% Breakdown</i>	100%	0%	0%	100%
Application Under Review	285	545	-	830
<i>% Breakdown</i>	34%	66%	0%	100%
Vacant lands designated for Residential	640	-	-	640
<i>% Breakdown</i>	100%	0%	0%	100%
Additional Intensification	71	-	-	71
<i>% Breakdown</i>	100%	0%	0%	100%
Total	1,958	545	-	2,503
<i>% Breakdown</i>	78%	22%	0%	100%

^[1] Includes townhouses and apartments in duplexes.

^[2] Includes bachelor, 1-bedroom and 2-bedroom+ apartment units.

Note: Total housing may vary from buildout identified in Schedule 1 and Schedule 2.

Source: Municipality of Thames Centre Planning and Development Services summarized by Watson & Associates Economists Ltd., 2021.



Schedule 6a
Municipality of Thames Centre
Summary of Vacant Land Supply Housing Potential as of 2021
Total Urban Areas

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ^[1]	Apartments ^[2]	Total
Registered Not Built	39	-	-	39
% Breakdown	100%	0%	0%	100%
Draft Plan Approved	917	-	-	917
% Breakdown	100%	0%	0%	100%
Application Under Review	285	545	-	830
% Breakdown	34%	66%	0%	100%
Vacant Lands Designated for Residential	640	-	-	640
% Breakdown	100%	0%	0%	100%
Additional Intensification	41	-	-	41
% Breakdown	100%	0%	0%	100%
Total	1,922	545	-	2,467
% Breakdown	78%	22%	0%	100%

^[1] Includes townhouses and apartments in duplexes.

^[2] Includes bachelor, 1-bedroom and 2-bedroom+ apartment units.

Note: Total housing may vary from buildout identified in Schedule 1 and Schedule 2.

Source: Municipality of Thames Centre Planning and Development Services summarized by Watson & Associates Economists Ltd., 2021.



Schedule 6b
Municipality of Thames Centre
Summary of Vacant Land Supply Housing Potential as of 2021
Rural

Stage of Development	Density Type			
	Singles & Semi-Detached	Multiples ^[1]	Apartments ^[2]	Total
Registered Not Built	-	-	-	-
<i>% Breakdown</i>				
Draft Plan Approved	6	-	-	6
<i>% Breakdown</i>	100%	0%	0%	100%
Application Under Review	-	-	-	-
<i>% Breakdown</i>				
Vacant Lands Designated for Residential	-	-	-	-
<i>% Breakdown</i>				
Additional Intensification	30	-	-	30
<i>% Breakdown</i>	100%	0%	0%	100%
Total	36	-	-	36
<i>% Breakdown</i>	100%	0%	0%	100%

[1] Includes townhouses and apartments in duplexes.

[2] Includes bachelor, 1-bedroom and 2-bedroom+ apartment units.

Note: Total housing may vary from buildout identified in Schedule 1 and Schedule 2.

Source: Municipality of Thames Centre Planning and Development Services summarized by Watson & Associates Economists Ltd., 2021.



Schedule 7
Municipality of Thames Centre
Historical Residential Building Permits
Years 2011 to 2020

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ^[1]	Apartments ^[2]	Total
2011	46	0	0	46
2012	43	0	3	46
2013	34	0	6	40
2014	35	0	3	38
2015	39	0	7	46
Sub-total	197	0	19	216
Average (2011 - 2015)	39	0	4	43
% Breakdown	91.2%	0.0%	8.8%	100.0%
2016	60	0	10	70
2017	76	0	23	99
2018	52	0	0	52
2019	65	0	0	65
2020	102	0	0	102
Sub-total	355	0	33	388
Average (2016 - 2020)	71	0	7	78
% Breakdown	91.5%	0.0%	8.5%	100.0%
2011 - 2020				
Total	552	0	52	604
Average	55	0	5	60
% Breakdown	91.4%	0.0%	8.6%	100.0%

[1] Includes townhouses and apartments in duplexes.

[2] Includes bachelor, 1-bedroom and 2-bedroom+ apartment units.

Source: Municipality of Thames Centre Planning and Development Services summarized by Watson & Associates Economists Ltd., 2021.



Schedule 8a

Municipality of Thames Centre

Person Per Unit by Age and Type of Dwelling

(2016 Census)

Age of Dwelling	Singles and Semi-Detached						25 Year Average	25 Year Average Adjusted ^[1]
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	-	3.237	-	3.178		
6-10	-	-	-	3.000	-	3.022		
11-15	-	-	-	3.440	-	3.417		
16-20	-	-	-	2.878	-	2.889	3.126	3.260
20-25	-	-	-	2.851	2.917	2.883		
25-35	-	-	-	2.825	-	2.860		
35+	-	1.182	1.987	2.652	3.422	2.603		
Total	-	1.000	2.000	2.807	3.528	2.774		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	-	-	3.098	-	3.104
6-10	-	-	-	2.917	-	2.900
11-15	-	-	-	3.358	-	3.235
16-20	-	-	-	2.824	-	2.750
20-25	-	-	-	2.833	2.917	2.662
25-35	-	-	1.867	2.770	-	2.685
35+	-	1.158	1.849	2.667	3.643	2.549
Total	-	1.167	1.807	2.789	3.651	2.680

^[1] Adjusted based on 2001-2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.



Schedule 8b Middlesex County Person Per Unit by Age and Type of Dwelling (2016 Census)

Age of Dwelling	Multiples ^[1]						25 Year Average	25 Year Average Adjusted ^[3]
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	-	1.810	2.481	-	2.308		
6-10	-	-	1.725	2.324	-	2.124		
11-15	-	1.333	1.688	2.401	-	2.081		
16-20	-	-	1.690	2.575	-	2.296	2.202	2.126
20-25	-	-	1.813	2.725	3.364	2.491		
25-35	-	1.571	1.982	2.778	-	2.601		
35+	-	1.313	1.846	2.717	2.952	2.370		
Total	-	1.328	1.827	2.666	3.269	2.383		

Age of Dwelling	Apartments ^[2]						25 Year Average	25 Year Average Adjusted ^[3]
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total		
1-5	-	1.329	1.940	2.914	-	1.721		
6-10	-	1.299	1.944	2.609	-	1.686		
11-15	-	1.331	1.977	2.118	-	1.733		
16-20	-	1.227	2.118	3.000	-	1.837	1.744	1.718
20-25	-	1.193	1.875	3.125	-	1.687		
25-35	0.778	1.221	1.877	2.678	-	1.635		
35+	1.077	1.175	1.898	2.641	2.240	1.582		
Total	1.060	1.206	1.914	2.685	2.074	1.630		

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	1.350	1.928	2.980	4.373	2.602
6-10	-	1.301	1.908	3.081	4.393	2.716
11-15	-	1.331	1.857	3.048	4.227	2.722
16-20	-	1.245	1.963	2.911	3.821	2.567
20-25	-	1.215	1.863	2.828	3.579	2.433
25-35	1.000	1.229	1.895	2.794	3.498	2.402
35+	1.115	1.201	1.851	2.594	3.296	2.217
Total	1.152	1.225	1.871	2.742	3.620	2.360

^[1] Includes townhouses and apartments in duplexes.

^[2] Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

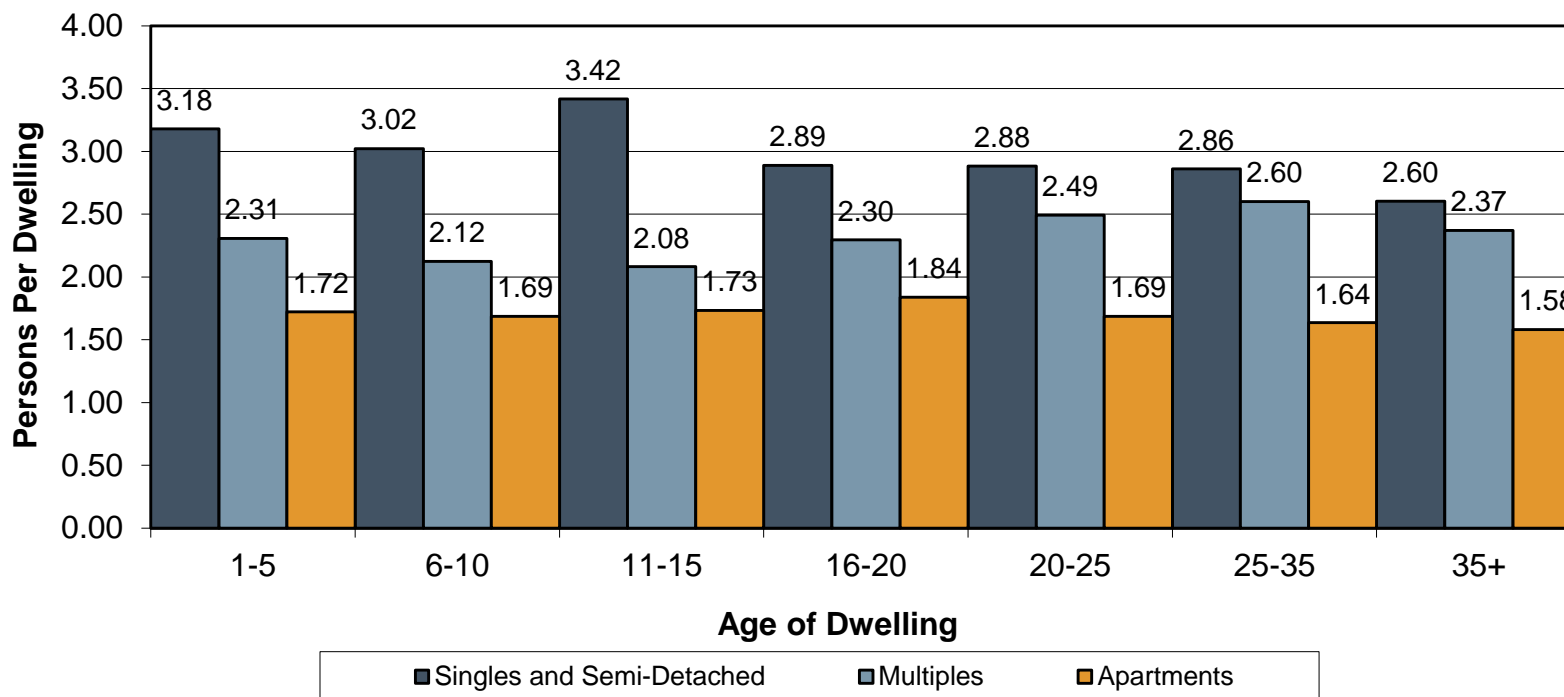
^[3] Adjusted based on 2001-2016 historical trends.

Note: Does not include Statistics Canada data classified as 'Other'

P.P.U. Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population.



Schedule 9
Municipality of Thames Centre
Person Per Unit Structural Type and Age of Dwelling
(2016 Census)



Multiple and Apartment P.P.U.s are based on Middlesex County.



Schedule 10a
Municipality of Thames Centre
Employment Forecast, 2021 to Buildout

Period	Population	Activity Rate						Employment					
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	13,085	0.020	0.080	0.094	0.067	0.025	0.287	260	1,045	1,233	883	330	3,750
Mid 2011	13,000	0.015	0.059	0.077	0.088	0.038	0.276	195	770	998	1,138	490	3,590
Mid 2016	13,191	0.027	0.069	0.088	0.095	0.028	0.306	350	905	1,158	1,253	365	4,030
Mid 2021	14,141	0.025	0.069	0.108	0.105	0.028	0.334	350	970	1,526	1,478	392	4,716
Mid 2031	17,931	0.022	0.070	0.099	0.101	0.031	0.324	400	1,255	1,775	1,817	556	5,803
Mid 2046	21,231	0.020	0.080	0.085	0.100	0.036	0.322	425	1,698	1,801	2,129	774	6,827
Buildout	22,368	0.020	0.082	0.081	0.099	0.036	0.318	450	1,834	1,810	2,212	805	7,111
Incremental Change													
Mid 2006 - Mid 2011	-85	-0.005	-0.021	-0.017	0.020	0.012	-0.010	-65	-275	-235	255	160	-160
Mid 2011 - Mid 2016	191	0.012	0.009	0.011	0.007	-0.010	0.029	155	135	160	115	-125	440
Mid 2016 - Mid 2021	950	-0.002	0.000	0.020	0.010	0.000	0.028	0	65	369	226	27	686
Mid 2021 - Mid 2031	3,790	-0.002	0.001	-0.009	-0.003	0.003	-0.010	50	285	249	339	164	1,087
Mid 2021 - Mid 2046	7,090	-0.005	0.011	-0.023	-0.004	0.009	-0.012	75	728	275	651	382	2,111
Mid 2021 - Buildout	8,227	-0.005	0.013	-0.027	-0.006	0.008	-0.016	100	864	284	734	413	2,395
Annual Average													
Mid 2006 - Mid 2011	-17	-0.001	-0.004	-0.003	0.004	0.002	-0.002	-13	-55	-47	51	32	-32
Mid 2011 - Mid 2016	38	0.002	0.002	0.002	0.001	-0.002	0.006	31	27	32	23	-25	88
Mid 2016 - Mid 2021	190	0.000	0.000	0.004	0.002	0.000	0.006	0	13	74	45	5	137
Mid 2021 - Mid 2031	379	0.000	0.000	-0.001	0.000	0.000	-0.001	5	29	25	34	16	109
Mid 2021 - Mid 2046	284	0.000	0.000	-0.001	0.000	0.000	0.000	3	29	11	26	15	84
Mid 2021 - Buildout	284	0.000	0.000	-0.001	0.000	0.000	-0.001	3	30	10	25	14	83

Source: Buildout forecast based on water and wastewater servicing capacity and designated vacant urban land supply provided by the Municipality of Thames Centre. Employment forecast prepared by Watson & Associates Economists Ltd., 2021.



Schedule 10b
Municipality of Thames Centre
Employment and Gross Floor Area (G.F.A.) Forecast, 2021 to Buildout

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) ^[1]				
		Primary ^[2]	Industrial	Commercial/ Population Related	Institutional ^[3]	Total	Primary	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	13,085	260	1,233	883	330	2,705					
Mid 2011	13,000	195	998	1,138	490	2,820					
Mid 2016	13,191	350	1,158	1,253	365	3,125					
Mid 2021	14,141	350	1,526	1,478	391	3,745					
Mid 2031	17,931	400	1,775	1,817	553	4,545					
Mid 2046	21,231	425	1,801	2,129	770	5,125					
Buildout	22,368	450	1,810	2,212	801	5,273					
Incremental Change											
Mid 2006 - Mid 2011	-85	-65	-235	255	160	115					
Mid 2011 - Mid 2016	191	155	160	115	-125	305					
Mid 2016 - Mid 2021	950	0	369	226	26	620					
Mid 2021 - Mid 2031	3,790	50	249	339	162	800	150,000	323,700	186,500	112,200	772,400
Mid 2021 - Mid 2046	7,090	75	275	651	379	1,380	225,000	357,500	358,100	263,400	1,204,000
Mid 2021 - Buildout	8,227	100	284	734	410	1,528	300,000	369,200	403,700	285,100	1,358,000
Annual Average											
Mid 2006 - Mid 2011	-17	-13	-47	51	32	23					
Mid 2011 - Mid 2016	38	31	32	23	-25	61					
Mid 2016 - Mid 2021	190	0	74	45	5	124					
Mid 2021 - Mid 2031	379	5	25	34	16	80	15,000	32,370	18,650	11,220	77,240
Mid 2021 - Mid 2046	284	3	11	26	15	55	9,000	14,300	14,324	10,536	48,160
Mid 2021 - Buildout	284	3	10	25	14	53	10,345	12,731	13,921	9,831	46,828

^[1] Square Foot Per Employee Assumptions

^[1] Square Foot Per Employee Assumptions
Primary 3,000
Industrial 1,300
Commercial/Population-Related 500
Institutional 695

^[2] Primary industry includes bona-fide and non bona-fide farming which can include cannabis growing operation related employment.

^[3] Forecast institutional employment and gross floor area has been adjusted downward to account for employment associated with nursing home care units.

Note: Numbers may not add precisely due to rounding.

Source: Buildout forecast based on water and wastewater servicing capacity and designated vacant urban land supply provided by the Municipality of Thames Centre. Employment forecast prepared by Watson & Associates Economists Ltd., 2021.



Schedule 10c
Municipality of Thames Centre
Estimate of the Anticipated Amount, Type and Location of
Non-Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Primary G.F.A. S.F. ^{[1],[2]}	Industrial G.F.A. S.F. ^[1]	Commercial G.F.A. S.F. ^[1]	Institutional G.F.A. S.F. ^{[1],[3]}	Total Non-Residential G.F.A. S.F.	Employment Increase ^[4]
Dorchester	2021 - 2031	-	42,900	159,000	100,400	302,300	467
	2021 - 2046	-	48,100	301,400	236,300	585,800	925
	2021 - Buildout	-	49,400	338,800	255,200	643,400	1,021
Thorndale	2021 - 2031	-	175,500	18,700	11,800	206,000	186
	2021 - 2046	-	193,700	35,200	27,100	256,000	252
	2021 - Buildout	-	200,200	39,100	29,900	269,200	268
Urban	2021 - 2031	-	218,400	177,700	112,200	508,300	653
	2021 - 2046	-	241,800	336,600	263,400	841,800	1,177
	2021 - Buildout	-	249,600	377,900	285,100	912,600	1,289
Rural	2021 - 2031	150,000	105,300	8,800	-	264,100	147
	2021 - 2046	225,000	115,700	21,500	-	362,200	203
	2021 - Buildout	300,000	119,600	25,800	-	445,400	239
Municipality of Thames Centre	2021 - 2031	150,000	323,700	186,500	112,200	772,400	800
	2021 - 2046	225,000	357,500	358,100	263,400	1,204,000	1,380
	2021 - Buildout	300,000	369,200	403,700	285,100	1,358,000	1,528

^[1] Square Foot Per Employee Assumptions

Primary	3,000
Industrial	1,300
Commercial/Population-Related	500
Institutional	695

^[2] Primary industry includes bona-fide and non bona-fide farming which can include cannabis growing operation related employment.

^[3] Forecast institutional employment and gross floor area has been adjusted downward to account for employment associated with nursing home units.

^[4] Employment Increase does not include No Fixed Place of Work.

Source: Thames Centre forecast derived from Middlesex County Housing Allocations Report prepared by Watson & Associates Economists Ltd., 2021. Buildout based on Water and Wastewater servicing capacity and designated vacant urban land supply provided by the Municipality of Thames Centre.

*Reflects Mid 2021 to Buildout forecast period.



Schedule 11
Municipality of Thames Centre
Non-Residential Construction Value
Years 2007 to 2016
(000's 2018 \$)

YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	7,675	1,272	1,513	10,461	1,734	1,514	0	3,249	102	12	757	871	9,512	2,798	2,270	14,580
2008	2,411	743	0	3,154	1,026	160	0	1,186	8,151	121	0	8,272	11,588	1,024	0	12,612
2009	30,534	1,249	0	31,782	1,608	534	10,961	13,103	0	6	0	6	32,142	1,789	10,961	44,892
2010	8,980	1,878	0	10,858	468	201	669	1,338	0	36	2,230	2,266	9,449	2,114	2,899	14,462
2012	8,799	1,033	590	10,422	268	781	0	1,049	0	0	0	0	9,067	1,815	590	11,471
2013	1,991	863	316	3,170	3,130	682	0	3,811	0	0	0	0	5,121	1,544	316	6,981
2014	2,466	1,257	413	4,136	9,020	739	1,445	11,203	269	0	0	269	11,756	1,996	1,858	15,609
2015	3,297	579	1,296	5,172	340	309	0	649	0	2	0	2	3,637	890	1,296	5,823
2016	9,163	858	1,357	11,379	810	11	1,181	2,002	0	61	865	926	9,973	930	3,403	14,306
Subtotal	85,693	9,981	5,485	101,159	19,459	5,282	15,126	39,867	8,523	237	3,851	12,611	113,674	15,499	24,463	153,636
Percent of Total	85%	10%	5%	100%	49%	13%	38%	100%	68%	2%	31%	100%	74%	10%	16%	100%
Average	8,569	998	914	10,116	1,946	528	3,025	3,987	2,841	39	1,284	1,802	11,367	1,550	2,718	15,364
2007 - 2011 Period Total				66,880				21,152				11,414				99,446
2007 - 2011 Average				13,376				4,230				2,283				19,889
% Breakdown				67.3%				21.3%				11.5%				100.0%
2012 - 2016 Period Total				34,279				18,715				1,197				54,190
2012 - 2016 Average				6,856				3,743				239				10,838
% Breakdown				63.3%				34.5%				2.2%				100.0%
2007 - 2016 Period Total				101,159				39,867				12,611				153,636
2007 - 2016 Average				10,116				3,987				1,261				15,364
% Breakdown				65.8%				25.9%				8.2%				100.0%

Note: Inflated to year-end 2017 (January, 2018) dollars using Reed Construction Cost Index.

Source: Statistics Canada Publication, 64-001-XIB



Schedule 12

Municipality of Thames Centre

Employment to Population Ratio by Major Employment Sector, 2006 to 2016

NAICS		Year			Change		Comments
		2006	2011	2016	06-11	11-16	
Employment by industry							
	<u>Primary Industry Employment</u>						Categories which relate to local land-based resources
11	Agriculture, forestry, fishing and hunting	640	430	695	-210	265	
21	Mining and oil and gas extraction	30	0	10	-30	10	
Sub-total		670	430	705	-240	275	
<u>Industrial and Other Employment</u>							
22	Utilities	0	0	0	0	0	Categories which relate primarily to industrial land supply and demand
23	Construction	350	260	375	-90	115	
31-33	Manufacturing	620	395	405	-225	10	
41	Wholesale trade	215	330	275	115	-55	
48-49	Transportation and warehousing	230	195	205	-35	10	
56	Administrative and support	48	20	60	-28	40	
Sub-total		1,463	1,200	1,320	-263	120	
<u>Population Related Employment</u>							
44-45	Retail trade	270	360	405	90	45	Categories which relate primarily to population growth within the municipality
51	Information and cultural industries	25	30	15	5	-15	
52	Finance and insurance	100	120	100	20	-20	
53	Real estate and rental and leasing	50	50	50	0	0	
54	Professional, scientific and technical services	150	345	180	195	-165	
55	Management of companies and enterprises	0	0	0	0	0	
56	Administrative and support	48	20	60	-28	40	
71	Arts, entertainment and recreation	125	95	145	-30	50	
72	Accommodation and food services	170	130	270	-40	140	
81	Other services (except public administration)	280	240	325	-40	85	
Sub-total		1,218	1,390	1,550	173	160	
<u>Institutional</u>							
61	Educational services	205	200	185	-5	-15	
62	Health care and social assistance	130	225	160	95	-65	
91	Public administration	65	145	110	80	-35	
Sub-total		400	570	455	170	-115	
Total Employment		3,750	3,590	4,030	-160	440	
Population		13,085	13,000	13,191	-85	191	
<u>Employment to Population Ratio</u>							
Industrial and Other Employment		0.11	0.09	0.10	-0.02	0.01	
Population Related Employment		0.09	0.11	0.12	0.01	0.01	
Institutional Employment		0.03	0.04	0.03	0.01	-0.01	
Primary Industry Employment		0.05	0.03	0.05	-0.02	0.02	
Total		0.29	0.28	0.31	-0.01	0.03	

Note: 2006-2016 employment figures are classified by the North American Industry Classification System (NAICS) Code.

Source: Statistics Canada Employment by Place of Work.



Appendix B

Level of Service



Appendix B: Level of Service

SUMMARY OF SERVICE STANDARDS AS PER DEVELOPMENT CHARGES ACT, 1997, AS AMENDED							
Service Category	Sub-Component	10 Year Average Service Standard					Maximum Ceiling LOS
		Cost (per capita)	Quantity (per capita)		Quality (per capita)		
Service Related to a Highway	Services Related to a Highway - Roads	\$12,781.60	0.0292	km of roadways	437,726	per km	90,621,544
Public Works	Public Works - Facilities	\$292.32	2.6755	sq.ft. of building area	109	per sq.ft.	1,107,893
	Public Works - Vehicles & Equipment	\$379.16	0.0045	No. of vehicles and equipment	84,258	per vehicle	1,437,016
Fire Protection Services	Fire Protection Services - Facilities	\$278.42	1.0640	sq.ft. of building area	262	per sq.ft.	1,055,212
	Fire Protection Services - Vehicles & Equipment	\$551.81	0.0008	No. of vehicles	689,763	per vehicle	2,091,360
	Fire Protection Services - Small Equipment and Gear	\$94.33	0.0245	No. of equipment and gear	3,850	per item	357,511
Parks & Recreation Services	Parks and Recreation Services - Parkland Development	\$1,556.28	0.0194	Acres of Parkland	80,221	per acre	5,898,301
	Parks and Recreation Services - Outdoor Recreation and Park Amenities	\$340.82	0.0050	No. of parkland amenities	68,164	per amenity	1,291,708
	Parks and Recreation Services - Trails	\$31.97	0.8357	Linear Metres of Paths and Trails	38	per linear m	121,166
	Parks and Recreation Services - Recreation Facilities	\$2,363.16	9.6376	sq.ft. of building area	245	per sq.ft.	8,956,376
Library Services	Library Services - Facilities	\$238.43	0.7340	sq.ft. of building area	325	per sq.ft.	903,650
Waste Diversion Services	Waste Diversion - Facilities - Recycling/Reuse	\$14.07	1.4824	sq.ft. of building area	9	per sq.ft.	53,325
	Waste Diversion - Vehicles & Equipment	\$36.38	0.0002	No. of vehicles and equipment	191,474	per vehicle	137,880
	Waste Diversion - Other	\$12.31	0.0004	No. of items	31,564	per item	46,655



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Services Related to a Highway - Roads
Unit Measure: km of roadways

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/km)
Rural Gravel	203	203	203	203	203	203	203	181	181	177	\$339,000
Rural Hard surface - Tar and Chip	125	125	125	125	125	125	125	165	165	169	\$400,000
Rural Hard - Asphalt	-	-	-	-	-	-	-	-	-	-	\$715,000
Urban Hard surface	55	55	55	55	55	55	55	49	50	50	\$900,000
Total	384	384	384	384	384	384	384	395	396	396	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0295	0.0295	0.0294	0.0294	0.0295	0.0291	0.0287	0.0291	0.0289	0.0286

10 Year Average	2011-2020
Quantity Standard	0.0292
Quality Standard	\$437,726
Service Standard	\$12,782

D.C. Amount (before deductions)	25 Year
Forecast Population	7,090
\$ per Capita	\$12,782
Eligible Amount	\$90,621,544



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Class of Service: Public Works - Facilities
Unit Measure: sq.ft. of building area

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Storage Shed-Thorndale (160 King Street)	1,600	1,600	-	-	-	-	-	-	-	-	\$75	\$88
Operations Equipment Depot/Office-Thorndale (17198 Thorndale Road)	4,350	4,350	-	-	-	-	-	-	-	-	\$169	\$191
Salt Shed-Thorndale (17198 Thorndale Road)	1,800	1,800	-	-	-	-	-	-	-	-	\$97	\$112
Operations Equipment Depot/Office-Dorchester (5130 Hamilton Road)	5,600	5,600	-	-	-	-	-	-	-	-	\$208	\$234
Salt Shed-Dorchester (5130 Hamilton Road)	3,000	3,000	-	-	-	-	-	-	-	-	\$84	\$98
Environmental Services Works Centre (130 Thames Street)	800	800	-	-	-	-	-	-	-	-	\$84	\$98
Operations Centre (4475 Trafalgar Road)	-	-	25,600	25,600	25,600	25,600	25,600	25,600	25,600	25,600	\$89	\$103
Salt Dome (4475 Trafalgar Road)	-	-	14,610	14,610	14,610	14,610	14,610	14,610	14,610	14,610	\$89	\$103
Total	17,150	17,150	40,210	40,210	40,210	40,210	40,210	40,210	40,210	40,210		

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	1.3192	1.3172	3.0860	3.0867	3.0914	3.0483	3.0115	2.9597	2.9342	2.9003

10 Year Average	2011-2020
Quantity Standard	2.6755
Quality Standard	\$109
Service Standard	\$292

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$292
Eligible Amount	\$1,107,893



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Class of Service:

Public Works - Vehicles & Equipment

Unit Measure:

No. of vehicles and equipment

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Vehicle)
Grader - Volvo	1	1	-	-	-	-	-	-	-	-	\$367,200
Sterling Tandem Plow Truck	1	-	-	-	-	-	-	-	-	-	\$301,000
Loader - Articulated	1	1	-	-	-	-	-	-	-	-	\$266,800
Volvo Tandem Plow Truck	1	1	1	1	-	-	-	-	-	-	\$301,000
2015 West Star Tandem	-	-	-	-	1	1	1	1	1	1	\$328,400
Grader - Champion	1	1	-	-	-	-	-	-	-	-	\$367,200
2020 Gravity Tilt Trailer	-	-	-	-	-	-	-	-	-	1	\$7,600
Crew Cab Service Truck - Single	1	1	1	1	1	-	-	-	-	-	\$166,500
Unit 23 2016 International Workstar	-	-	-	-	-	1	1	1	1	1	\$328,400
Sterling Tandem Plow Truck	1	1	1	1	1	1	1	-	-	-	\$301,000
2018 Freightliner 114SD Tandem Plow Truck	-	-	-	-	-	-	-	1	1	1	\$338,400
GMC Sierra 1/2 Ton Pick Up	1	1	-	-	-	-	-	-	-	-	\$40,000
Ford Pick Up 1/2 Ton 4X4	1	1	1	1	1	1	1	-	-	-	\$40,000
2018 Dodge RAM 1500	-	-	-	-	-	-	-	1	1	1	\$338,400
Cat Loader	1	1	1	1	1	1	1	-	-	-	\$266,800
2018 CAT 938M Loader	-	-	-	-	-	-	-	1	1	1	\$564,700
2009 International Plow Truck	1	1	1	1	1	1	1	1	1	1	\$345,500
2010 International Plow Truck	1	1	1	1	1	1	1	1	1	1	\$320,400
Pothole Patcher / Pavement Edger (attachment)	-	1	1	1	1	1	1	1	1	1	\$8,700
2010 International Plow Truck	1	1	1	1	1	1	1	1	1	1	\$207,500
2009 Ford F-350 Truck / Artic Sander Plow	1	1	1	1	1	1	-	-	-	-	\$89,400
2017 Dodge Ram 3500 Utility Truck	-	-	-	-	-	-	1	1	1	1	\$89,400
2010 Ford Ranger	1	1	1	1	1	1	1	1	1	1	\$31,400
Brush Chipper	1	1	1	1	1	1	1	1	1	1	\$39,900
2010 Holland Tractor	1	1	1	1	1	1	1	1	1	1	\$294,200
9' Rear Blade -(attachment)	1	1	1	1	1	1	1	1	1	1	\$4,700
Coleman Equipment Loader/Wheel Weight (attachment)	1	1	1	1	1	1	1	1	1	1	\$22,100
Reversing Fan for Tractor (attachment)	-	1	1	1	1	1	1	1	1	1	\$8,000
2008 Power Washer	1	1	1	1	1	1	1	1	1	1	\$18,600
Gravel Retriever Attachment for Grader	1	1	1	1	1	1	1	1	1	1	\$25,400
Volvo Grader	1	1	1	1	1	1	1	-	-	-	\$372,900
2018 CAT 140M3 Grader	-	-	-	-	-	-	-	1	1	1	\$564,700
2011 Hotsy Power Washer	1	1	1	1	1	1	1	1	1	1	\$12,700



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Class of Service:

Public Works - Vehicles & Equipment

Unit Measure:

No. of vehicles and equipment

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Vehicle)
2012 Freightliner M2112V	-	1	1	1	1	1	1	1	1	1	\$286,200
2013 Front End Loader	-	1	1	1	1	1	1	1	1	1	\$6,400
2013 F150	-	-	1	1	1	1	1	1	1	1	\$50,900
2013 John Deere Grader	-	-	1	1	1	1	1	1	1	1	\$393,400
2015 Chevrolet Silverado	-	-	-	-	1	1	1	1	1	1	\$49,300
Sidewalk Plow Unit #86	-	-	-	-	-	-	-	-	-	1	\$128,400
Laser Level	1	1	1	1	1	1	1	1	1	1	\$16,000
Misc Tools/Equipments	1	1	1	1	1	1	1	1	1	1	\$384,300
Communication Equipment Roads	1	1	1	1	1	1	1	1	1	1	\$281,700
Ford Escape SUV	1	1	1	1	1	1	1	-	-	-	\$33,400
2019 Dodge RAM 1500	-	-	-	-	-	-	-	1	1	1	\$401,700
GPS Unit - SOKIA	-	-	-	-	-	-	-	-	1	1	\$21,100
2016 Chevy Silverado	-	-	-	-	-	1	1	1	1	1	\$50,200
2010 GMC Savana Cargo Truck	1	1	1	1	1	1	1	-	-	-	\$34,600
2019 Dodge RAM 1500	-	-	-	-	-	-	-	1	1	1	\$40,300
2015 Chevrolet Silverado	-	-	-	-	1	1	1	1	1	1	\$49,300
2020 Chevrolet Silverado	-	-	-	-	-	-	-	-	-	1	\$35,031
2021 Chevrolet Silverado											\$35,031
2021 Chevrolet Silverado											\$35,031
Jeep Patriot 4X4	1	1	1	1	1	1	1	1	-	-	\$32,000
2019 Dodge RAM 1500	-	-	-	-	-	-	-	-	1	1	\$40,300
2020 Chevrolet Silverado	-	-	-	-	-	-	-	-	-	1	\$37,900
2016 John Deere Side Discharge Mower	-	-	-	-	-	1	1	1	1	1	\$13,700
J.D. Side mower	-	-	-	-	-	-	1	1	1	1	\$17,400
2019 Kubota Side Discharge Mower	-	-	-	-	-	-	-	-	-	1	\$16,400
2012 John Deere Side Discharge Mower	-	-	-	-	-	1	1	1	1	1	\$40,000
2017 Toro Side Discharge Mower	-	-	-	-	-	-	1	1	1	1	\$301,000
Ford Pick Up 1/2 Ton 4X2	1	-	-	-	-	-	-	-	-	-	\$45,600
2003 Dodge Dakota	1	1	1	1	1	1	1	1	-	-	\$40,000
2019 Land Pride Seeder	-	-	-	-	-	-	-	-	1	1	\$38,500
2019 Kubota RTV	-	-	-	-	-	-	-	-	-	1	\$35,100
AMT Gator	1	1	1	1	-	-	-	-	-	-	\$14,300
2014 Kioti	-	-	-	1	1	1	1	1	1	1	\$14,300



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Class of Service:

Public Works - Vehicles & Equipment

Unit Measure:

No. of vehicles and equipment

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Vehicle)
1997 Kubota Tractor - Agricultural	1	1	1	1	1	1	1	1	1	1	\$86,800
2005 Kioti Tractor - Agricultural	1	1	1	1	1	1	1	1	1	1	\$86,800
Tractor - Agricultural	1	-	-	-	-	-	-	-	-	-	\$86,800
Ice Resurfacer	1	1	1	1	1	1	1	1	1	-	\$93,500
2000 Competition Trailer	1	1	1	1	1	1	1	1	1	1	\$2,000
2007 Ford Pick Up 1/2 Ton 4X4	1	1	1	1	1	1	1	-	-	-	\$38,200
2019 Dodge RAM 1500	-	-	-	-	-	-	-	1	1	1	\$43,400
Trailer	1	1	1	1	1	1	1	1	1	1	\$66,700
Onan HBI C Generator	1	1	1	1	1	1	1	1	1	1	\$28,100
GMC Sierra 1/2 Ton Pick Up	1	1	1	1	1	1	1	1	1	1	\$45,600
Stage Trailer	1	1	1	1	1	1	1	1	-	-	\$86,800
2019 Event Trailer	-	-	-	-	-	-	-	-	1	1	\$33,100
Front Pan Mower	1	1	1	1	-	-	-	-	-	-	\$8,100
Patriot Tow Behind Mower	-	-	-	-	1	1	1	1	1	1	\$11,600
2010 Ford F150 Pick Up Truck	1	1	1	1	1	1	1	-	-	-	\$44,600
2019 Dodge RAM 1500	-	-	-	-	-	-	-	1	1	1	\$40,300
Olympia Ice Resurfacer	1	1	1	1	1	1	1	1	1		\$119,700
2011 Sure-Trac Trailer	1	1	1	1	1	1	1	1	1	1	\$4,500
2013 International Terrastar Truck	-	1	1	1	1	1	1	1	1	1	\$77,500
2012 John Deere Compact Tractor	-	1	1	1	1	1	1	1	1	1	\$47,700
Trail Groomer (attachment)	-	1	1	1	1	1	1	1	1	1	\$4,400
Backhoe-Serial# 400993 (attachment)	-	1	1	1	1	1	1	1	1	1	\$10,900
2013 F150	-	-	1	1	1	1	1	1	1	1	\$48,500
2013 F150	-	1	1	1	1	1	1	1	1	1	\$48,500
2014 Utility Trailer	-	-	-	1	1	1	1	1	1	1	\$8,900
2015 Dakota Top Dresser	-	-	-	-	1	1	1	1	1	1	\$21,100
2020 Action Landscaping Trailer	-	-	-	-	-	-	-	-	-	1	\$8,800
2020 Olympia Ice Resurfacer	-	-	-	-	-	-	-	-	1	1	\$111,700
Aerodator/Roller	1	1	1	1	1	1	1	1	1	1	\$3,000



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Class of Service:

Public Works - Vehicles & Equipment

Unit Measure:

No. of vehicles and equipment

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Vehicle)
Snow Blower	1	1	1	1	1	1	1	1	1	1	\$8,200
Tru Play Drag	1	1	1	1	1	1	1	1	1	1	\$4,600
Total	49	55	54	56	58	61	63	63	65	70	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0038	0.0042	0.0041	0.0043	0.0045	0.0046	0.0047	0.0046	0.0047	0.0050

10 Year Average	2011-2020
Quantity Standard	0.0045
Quality Standard	\$84,258
Service Standard	\$379

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$379
Eligible Amount	\$1,437,016



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Fire Protection Services - Facilities
Unit Measure: sq.ft. of building area

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Thorndale Station - 160 King Street	4,800	4,800	4,800	4,800	4,800	4,800	4,800	-	-	-	\$228	\$268
Dorchester Station - Dorchester Road	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$223	\$265
Thorndale Station - 17198 Thorndale Road	-	-	-	-	-	-	-	8,988	8,988	8,988	\$211	\$249
Storage Shed- 17198 Thorndale Road	-	-	-	-	-	-	-	360	360	360	\$97	\$117
Total	12,800	12,800	12,800	12,800	12,800	12,800	12,800	17,348	17,348	17,348		

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.9846	0.9831	0.9823	0.9826	0.9841	0.9704	0.9587	1.2769	1.2659	1.2513

10 Year Average	2011-2020
Quantity Standard	1.0640
Quality Standard	\$262
Service Standard	\$278

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$278
Eligible Amount	\$1,055,212



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Fire Protection Services - Vehicles & Equipment
Unit Measure: No. of vehicles

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
77 Van Fire Truck	1	-	-	-	-	-	-	-	-	-
07 Pumper Fire Truck (ID #101)	1	1	1	1	1	1	1	1	1	1
03 Rescue Fire Truck (ID #102)	1	1	1	1	1	1	1	1	1	1
90 Fire Truck (ID #204)	1	1	1	1	-	-	-	-	-	-
2015 International Work Star Tanker (ID # 204)	-	-	-	-	1	1	1	1	1	1
87 Fire Truck (ID #202)	1	1	1	1	1	1	-	-	-	-
2017 Spartan Metro Star Pumper/Tanker (ID#202)	-	-	-	-	-	-	1	1	1	1
91 Fire Tanker (ID #104)	1	1	1	1	1	1	1	1	1	1
97 Foam Truck (ID #105)	1	1	1	1	1	1	1			
Unit #105 - 2017 Ford F550 Rescue/ Brush Truck								1	1	1
99 Fire Truck (ID #106)	1	1	1	1	1	1	1	1	1	1
10 Contender Tanker Truck (ID #205)	1	1	1	1	1	1	1	1	1	1
12 E-One Pumper/Engine (ID #206)	1	1	1	1	1	1	1	1	1	1
12 Int'l Vacuum Tanker Truck (ID #108)	1	1	1	1	1	1	1	1	1	1
Total	11	10	10	10	10	10	10	10	10	10

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007

10 Year Average	2011-2020
Quantity Standard	0.0008
Quality Standard	\$689,763
Service Standard	\$552

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$552
Eligible Amount	\$2,091,360



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Fire Protection Services - Small Equipment and Gear
Unit Measure: No. of equipment and gear

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/item)
Firefighter Gear (Dorchester)	33	35	35	35	35	35	35	35	35	35	\$7,400
Firefighter Gear (Thorndale)	25	25	25	25	25	25	25	25	25	25	\$7,400
Defibrillator	4	4	4	4	4	4	4	4	4	4	\$2,000
Portable Generators	3	3	3	3	3	3	3	3	3	3	\$4,000
Air Bags-large	4	4	4	4	4	4	4	-	-	-	\$3,500
Air Bags - small	4	4	4	4	4	4	4	4	4	4	\$2,500
Extrication Equipment Spreader-Thorndale	1	1	1	1	1	1	1	1	1	1	\$10,000
Extrication Equipment Cutter-Thorndale	1	1	1	1	1	1	1	1	1	1	\$10,000
Extrication Equipment Hydraulic Unit-Thorndale	1	1	1	1	1	1	1	1	1	1	\$12,000
Extrication Equipment Ram-Thorndale	1	1	1	1	1	1	1	1	1	1	\$8,500
Stabilization Equipment - Thorndale	1	1	1	1	1	1	1	1	1	1	\$11,400
Extrication Equipment Spreader-Dorchester	1	1	1	1	1	1	1	1	1	1	\$10,000
Extrication Equipment Cutter-Dorchester	1	1	1	1	1	1	1	1	1	1	\$10,000
Extrication Equipment Hydraulic Unit-Dorchester	1	1	1	1	1	1	1	1	1	1	\$12,000
Extrication Equipment Ram-Dorchester	1	1	1	1	1	1	1	1	1	1	\$8,500
Stabilization Equipment - Dorchester	1	1	1	1	1	1	1	1	1	1	\$11,400
SCBA - Thorndale	10	10	12	12	12	12	12	12	12	12	\$9,000
SCBA -Dorchester	16	16	18	18	18	18	18	18	18	18	\$9,000
SCBA Cylinders - Thorndale	41	41	38	38	38	38	38	38	38	38	\$1,600
SCBA Cylinders - Dorchester	34	34	32	32	32	32	32	32	32	32	\$1,600
SCBA Fill Station - Thorndale	-	-	-	-	-	-	-	-	-	1	\$67,000
SCBA Fill Station - Dorchester	1	1	1	1	1	1	1	1	1	1	\$67,000
Portable Pumps Thorndale	2	2	2	2	2	2	2	2	2	2	\$4,500
Portable Pumps -Dorchester	1	1	1	1	1	1	1	1	1	1	\$4,500
Thermal Imaging Cameras - Thorndale	1	1	1	1	1	1	1	1	1	2	\$10,000
Thermal Imaging Cameras - Dorchester	1	1	1	1	1	1	1	1	1	2	\$10,000
Ice Rescue Equipment - Thorndale	3	3	3	3	3	3	3	3	3	3	\$2,500
Ice Rescue Equipment -Dorchester	5	5	5	5	5	5	5	5	5	5	\$2,500
Foam Skid Unit	1	1	1	1	1	1	1	-	-	-	\$16,400
Dry Hydrants	-	4	4	4	4	4	4	4	4	4	\$6,125
Base Unit -Thorndale	1	1	1	1	1	1	1	1	1	1	\$1,400
Base Unit -Dorchester	1	1	1	1	1	1	1	1	1	1	\$1,400
Mobile - Radios in Vehicles	10	10	10	10	10	10	10	10	10	10	\$1,000
Portable Radios -Thorndale	17	17	17	17	17	17	17	17	17	18	\$1,500



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Fire Protection Services - Small Equipment and Gear
Unit Measure: No. of equipment and gear

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/item)
Portable Radios -Dorchester	29	29	29	29	29	29	29	29	29	30	\$1,500
Pagers - Thorndale	27	27	27	27	27	27	27	27	27	27	\$700
Pagers - Dorchester	37	37	37	37	37	37	37	37	37	37	\$700
Total	321	327	326	326	326	326	326	321	321	326	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0247	0.0251	0.0250	0.0250	0.0251	0.0247	0.0244	0.0236	0.0234	0.0235

10 Year Average	2011-2020
Quantity Standard	0.0245
Quality Standard	\$3,850
Service Standard	\$94

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$94
Eligible Amount	\$357,511



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Parks and Recreation Services - Parkland Development
Unit Measure: Acres of Parkland

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Acre)
Dorchester Community Park (Park/Ball Diamonds)	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	\$80,200
Catherine Street Day Park	17.35	17.35	17.35	17.35	17.35	17.35	17.35	17.35	17.35	17.35	\$80,200
Mill Pond Park (UTRCA)	22.53	22.53	22.53	22.53	22.53	22.53	22.53	22.53	22.53	22.53	\$80,200
Mill Pond Park (UTRCA)	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	\$80,200
Mill Pond Park (UTRCA)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	\$80,200
Mill Pond Park (UTRCA)	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	9.22	\$80,200
Mill Pond Park (UTRCA)	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	\$80,200
Valleyview Park	9.00	10.92	10.92	10.92	10.92	10.92	10.92	10.92	10.92	10.92	\$80,200
Avon Park	1.26	-	-	-	-	-	-	-	-	-	\$80,200
Avon Park	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	\$80,200
Putnam Hall / Park	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	\$80,200
Crampton Park	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	\$80,200
Harrietsville / Mossley Park	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	\$80,200
Thorndale Community Centre / Park	28.38	28.38	28.38	28.38	28.38	28.38	28.38	28.38	28.38	28.38	\$80,200
Wellburn Park	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	\$80,200
Wellburn Park / Ball Diamond	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	\$80,200
Lions Fishing Hole	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	\$80,200
Crocker Park	14.21	14.21	14.21	14.21	14.21	14.21	14.21	14.21	14.21	14.21	\$80,200
Outdoor Soccer Complex / Field of Dreams	58.63	58.63	58.63	58.63	58.63	58.63	58.63	58.63	58.63	58.63	\$80,200
Tamarack Park / Toboggan Hill (UTRCA)	29.47	29.47	29.47	29.47	29.47	29.47	29.47	29.47	29.47	29.47	\$80,200
Cresswell Parkette	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	\$80,200
Reid Parkette	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	\$80,200
Thames River Lot	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$80,200
Woodvale Park	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	\$80,200
Forest Grove Park	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$80,200
Wye Creek Park	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	\$80,200
Tree Park - Trails of Wye Creek Subdivision	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$80,200
Total	256.93	257.59	257.59	257.59	257.59	257.59	257.59	257.59	257.59	257.59	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0198	0.0198	0.0198	0.0198	0.0198	0.0195	0.0193	0.0190	0.0188	0.0186

10 Year Average	2011-2020
Quantity Standard	0.0194
Quality Standard	\$80,221
Service Standard	\$1,556

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$1,556



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Parks and Recreation Services - Outdoor Recreation and Park Amenities
Unit Measure: No. of parkland amenities

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/item)
Ball Diamonds	14	14	14	14	14	14	14	14	14	14	\$67,400
Hardball Diamonds	2	2	2	2	2	2	2	2	2	2	\$67,400
Tennis Courts	6	6	6	6	6	6	5	5	5	5	\$30,300
Pickle Ball Courts	-	-	-	-	-	-	2	2	2	2	\$25,000
Basketball Courts (Thorndale and Wellburn)	2	2	2	2	2	2	2	2	2	2	\$13,300
Mini Soccer Pitches	10	12	12	12	12	12	12	12	12	12	\$42,100
Full Soccer Pitches	7	10	10	10	10	10	10	10	10	10	\$42,100
Pavillons	4	4	4	4	4	4	4	4	4	4	\$28,600
Skateboard Park - Dorchester	1	1	1	1	1	1	1	1	1	1	\$60,100
Skateboard Park - Thorndale	1	1	1	1	1	1	1	1	1	1	\$60,100
Playground Equipment - Dorchester	5	5	5	5	5	5	5	5	6	6	\$100,000
Playground Equipment - Thorndale	2	2	2	2	2	2	2	2	2	2	\$100,000
Playground Equipment - Avon	1	1	1	1	1	1	1	1	1	1	\$33,400
Playground Equipment - Wellburn	1	1	1	1	1	1	1	1	1	1	\$33,400
Playground Equipment - Harrietsville	1	1	1	1	1	1	1	1	1	1	\$33,400
Dorchester Outdoor Pool	1	1	1	1	1	1	1	1	1	1	\$953,000
Dorchester Splash Pad	1	1	1	1	1	1	1	1	1	1	\$201,000
Dorchester Wading Pool	1	1	1	1	1	1	1	1	1	1	\$49,400
Portable Structure (day camp program/storage)	1	1	1	1	1	1	1	1	1	1	\$25,400
Thorndale Splash Pad	-	1	1	1	1	1	1	1	1	1	\$45,600
Total	61	67	67	67	67	67	68	68	69	69	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.0047	0.0051	0.0051	0.0051	0.0052	0.0051	0.0051	0.0050	0.0050	0.0050

10 Year Average	2011-2020
Quantity Standard	0.0050
Quality Standard	\$68,164
Service Standard	\$341

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$341
Eligible Amount	\$1,291,708



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Parks and Recreation Services - Trails
Unit Measure: Linear Metres of Paths and Trails

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/ Linear Metre)
Natural Trail - Mill Pond - metre	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	3,522	\$21
Walkways - metre	555	555	555	555	555	555	555	555	555	555	\$21
Pedestrian Bridge - metre	75	75	75	75	75	75	75	75	75	75	\$1,520
Stairs - linear metre	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$100
Chip & Dust - metre	3,464	3,464	3,464	3,464	3,464	3,464	8,464	8,464	8,464	13,964	\$21
Total	8,616	8,616	8,616	8,616	8,616	8,616	13,616	13,616	13,616	19,116	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.66	0.66	0.66	0.66	0.66	0.65	1.02	1.00	0.99	1.38

10 Year Average	2011-2020
Quantity Standard	0.8357
Quality Standard	\$38
Service Standard	\$32

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$32
Eligible Amount	\$121,166



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Parks and Recreation Services - Recreation Facilities
Unit Measure: sq.ft. of building area

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Catherine Street Hall	6,006	-	-	-	-	-	-	-	-	-	\$242	\$272
Mill Pond stg/workshop/rented offices	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	\$189	\$213
Dorchester Park Concession Booth and Washrooms	825	825	825	825	825	825	825	825	1,225	1,225	\$211	\$226
Flight Exec Arena	85,300	85,300	85,300	85,300	85,300	85,300	85,300	85,300	85,300	85,300	\$259	\$291
Dorchester Park Pool House	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	\$43	\$52
Dorchester Park Splashpad Equipment Building	223	223	223	223	223	223	223	223	223	223	\$154	\$226
Dorchester Park Storage Shed	2,130	2,130	2,130	2,130	2,130	2,130	2,130	2,130	2,130	2,130	\$14	\$20
Dorchester Park Wading Pool Building	48	48	48	48	48	48	48	48	48	48	\$154	\$167
Dorchester Senior Centre	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	3,842	\$210	\$237
VON Centre	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	2,704	\$210	\$237
Harrietsville/Mossley Park Concession Booth and Washrooms	362	362	362	362	362	362	362	362	362	362	\$249	\$153
Avon Community Centre	4,314	-	-	-	-	-	-	-	-	-	\$134	\$153
Putnam Community Centre	3,220	-	-	-	-	-	-	-	-	-	\$209	\$235
Modular Railroad Club Building	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313	\$81	\$94
Thorndale Lions Community Centre	8,450	8,450	8,450	8,450	8,450	8,450	8,450	8,450	8,450	8,450	\$141	\$155
Thorndale Park Storage	350	350	350	350	350	350	350	350	350	350	\$198	\$218
Thorndale Poultry Bldg/Storage	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	1,752	\$13	\$19
Thorndale Progress Building	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	\$75	\$88
Wellburn Community Park White building (concession)	228	228	228	228	228	228	228	228	228	228	\$192	\$206
Thorndale Park Spalshpad Equipment building	-	223	223	223	223	223	223	223	223	223	\$154	\$175
Storage Shed- 17198 Thorndale Road	-	-	1,800	1,800	1,800	1,800	1,800	1,440	1,440	1,440	\$97	\$112
Total	138,451	125,135	126,935	126,935	126,935	126,935	126,935	126,575	126,974	126,974		

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	10.6501	9.6110	9.7417	9.7440	9.7589	9.6228	9.5068	9.3165	9.2655	9.1586

10 Year Average	2011-2020
Quantity Standard	9.6376
Quality Standard	\$245
Service Standard	\$2,363

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$2,363
Eligible Amount	\$8,956,376



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Library Services - Facilities
Unit Measure: sq.ft. of building area

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Thorndale	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	\$267	\$327
Dorchester	3,864	3,864	3,864	3,864	3,864	8,036	8,036	8,036	8,036	8,036	\$267	\$327
Harrietsville	343	-	-	-	-	-	-	-	-	-	\$133	\$166
Putnam	455	-	-	-	-	-	-	-	-	-	\$133	\$166
Avon	495	-	-	-	-	-	-	-	-	-	\$133	\$166
Total	8,857	7,564	7,564	7,564	7,564	11,736	11,736	11,736	11,736	11,736		

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.6813	0.5810	0.5805	0.5806	0.5815	0.8897	0.8790	0.8638	0.8564	0.8465

10 Year Average	2011-2020
Quantity Standard	0.7340
Quality Standard	\$325
Service Standard	\$238

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$238
Eligible Amount	\$903,650



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Waste Diversion - Facilities - Recycling/Reuse
Unit Measure: sq.ft. of building area

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Bld'g Value (\$/sq.ft.)	Value/sq.ft. with land, site works, etc.
Concrete Block - Crawler Storage/Office (40 m ²) (25% diversion based on Crawler usage)	108	108	108	108	108	108	108	108	108	108	\$218	\$245
Scale (60 ft) & Scale House (9 m ²) (approx 15% diversion usage)	15	15	15	15	15	15	15	15	15	15	\$3,000	\$3,313
Steel Pole Shed - backhoe storage (75m ²) (75% diversion based on backhoe usage)	-	-	-	-	-	-	-	605	605	605	\$74	\$87
Waste Diversion storage & handling area 1,800 m ² Gravel Surface (Land only)	19,375	19,375	19,375	19,375	19,375	19,375	19,375	19,375	19,375	19,375	\$0	\$5
Total Eligible Portion of Facilities	19,497	19,497	19,497	19,497	19,497	19,497	19,497	20,102	20,102	20,102		

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	1.4998	1.4975	1.4963	1.4967	1.4990	1.4781	1.4602	1.4796	1.4669	1.4500

10 Year Average	2011-2020
Quantity Standard	1.4824
Quality Standard	\$9
Service Standard	\$14

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$14
Eligible Amount	\$53,325



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Waste Diversion - Vehicles & Equipment
Unit Measure: No. of vehicles and equipment

Description	Unit ID	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/Vehicle)
Crawler - Unit #64 (2002 CAT 963C) (25% of time usage for diversion)	#064	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$275,000
Quad - Unit #79 (Kawasaki Mule 2006) (25% of time usage for diversion)	#079	-	-	-	-	-	0.25	0.25	0.25	0.25	0.25	\$10,100
Halton Recycling Collection Truck (Used 100% for collection of recyclables)		1.00	1.00	1.00	-	-	-	-	-	-	-	\$314,000
Miller Waste Recycling Collection Truck (5 day per week collection of recyclables)		-	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$340,000
Weigh Scales		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$72,200
Backhoe - Unit #80 (1997 Case 590SL) (75% of the time used for diversion)	#080	-	-	-	-	-	-	-	0.75	0.75	0.75	\$39,000
Total Eligible Portion of Facilities		2.25	2.25	2.25	2.25	2.25	2.50	2.50	3.25	3.25	3.25	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.00017	0.00017	0.00017	0.00017	0.00017	0.00019	0.00019	0.00024	0.00024	0.00023

10 Year Average	2011-2020
Quantity Standard	0.00019
Quality Standard	\$191,474
Service Standard	\$36

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$36
Eligible Amount	\$137,880



**Municipality of Thames Centre
Service Standard Calculation Sheet**

Service: Waste Diversion - Other
Unit Measure: No. of items

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 Value (\$/item)
Porta John - Rental (15% Diversion usage)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$1,100
Portable Storage Containers (8x12 sq.ft.) Cardboard, WEEE, Drywall Bins (Diversion)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	\$3,200
Portable Storage Containers (8x20 sq.ft.) Tires (Diversion)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$6,600
Access Road - Gravel (380 m length x 7.2 m width)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$147,000
Total Eligible Portion of Facilities	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	

Population	13,000	13,020	13,030	13,027	13,007	13,191	13,352	13,586	13,704	13,864
Per Capita Standard	0.00040	0.00040	0.00040	0.00040	0.00040	0.00039	0.00039	0.00038	0.00038	0.00037

10 Year Average	2011-2020
Quantity Standard	0.00039
Quality Standard	\$31,564
Service Standard	\$12

D.C. Amount (before deductions)	10 Year
Forecast Population	3,790
\$ per Capita	\$12
Eligible Amount	\$46,655



Appendix C

Long-Term Capital and Operating Cost Examination



Appendix C: Long-Term Capital and Operating Cost Examination

Municipality of Thames Centre Annual Capital and Operating Cost Impact

As a requirement of the *Development Charges Act, 1997*, as amended, under subsection 10 (2) (c), an analysis must be undertaken to assess the long-term capital and operating cost impacts for the capital infrastructure projects identified within the development charge. As part of this analysis, it was deemed necessary to isolate the incremental operating expenditures directly associated with these capital projects, factor in cost savings attributable to economies of scale or cost sharing where applicable and prorate the cost on a per unit basis (i.e. sq.ft. of building space, per vehicle, etc.). This was undertaken through a review of the Municipality's approved 2020 Financial Information Return (F.I.R.).

In addition to the operational impacts, over time the initial capital projects will require replacement. This replacement of capital is often referred to as lifecycle cost. By definition, lifecycle costs are all the costs which are incurred during the life of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The method selected for lifecycle costing is the sinking fund method which provides that money will be contributed annually and invested, so that those funds will grow over time to equal the amount required for future replacement. The following factors were utilized to calculate the annual replacement cost of the capital projects (annual contribution = factor X capital asset cost) and are based on an annual growth rate of 2% (net of inflation) over the average useful life of the asset:

Table C-1 depicts the annual operating impact resulting from the proposed gross capital projects at the time they are all in place. It is important to note that, while Municipal program expenditures will increase with growth in population, the costs associated with the new infrastructure (i.e. facilities) would be delayed until the time these works are in place.



Table C-1
Municipality of Thames Centre
Lifecycle Cost Factors and Average Useful Lives

Asset	Lifecycle Cost Factors	
	Average Useful Life	Factor
Water and Wastewater Infrastructure	87	0.004347498
Facilities	50	0.011823210
Services Related to a Highway	30	0.024649922
Parkland Development	30	0.024649922
Vehicles & Equipment	15	0.057825472
Small Equipment & Gear	10	0.091326528

Table C-2 depicts the annual operating impact resulting from the proposed gross capital projects at the time they are all in place. It is important to note that, while Municipal program expenditures will increase with growth in population, the costs associated with the new infrastructure (i.e. facilities) would be delayed until the time these works are in place.



Table C-2
Municipality of Thames Centre
Operating and Capital Expenditure Impacts for Future Capital Expenditures

SERVICE/CLASS OF SERVICE	GROSS COST LESS BENEFIT TO EXISTING	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
1. Wastewater Services				
1.1 Treatment plants, pumping stations	43,265,955	1,880,767	153,590	2,034,357
1.2 Sewers	24,121,700	1,385,613	488,802	1,874,415
2. Water Services				
2.1 Treatment plants, supply, pumping stations and storage	23,602,854	364,077	769,132	1,133,209
2.2 Distribution systems	28,492,500	1,621,095	261,906	1,883,001
3. Services Related to a Highway				
3.1 Roads and Related Infrastructure	8,592,592	484,305	1,524,431	2,008,736
4. Public Works				
4.1 Services Related to a Highway	1,498,000	168,986	379,853	548,838
4.2 Water Services	-	-	-	-
4.3 Wastewater Services	-	-	-	-
4.4 Parks and Recreation Services	435,800	49,161	110,507	159,669
5. Fire Protection Services				
5.1 Fire facilities, vehicles, equipment & gear	2,060,275	128,288	392,323	520,611
6. Parks and Recreation Services				
6.1 Park development, amenities, trails and recreation facilities	11,125,869	566,456	719,759	1,286,215
7. Library Services				
7.1 Library facilities	645,548	-	39,589	39,589
8. Growth Studies				
8.1 Water Services	522,591	-	-	-
8.2 Wastewater Services	372,011	-	-	-
8.3 Stormwater Services	73,850	-	-	-
8.4 Services Related to a Highway	130,646	-	-	-
8.5 Waste Diversion Services	958	-	-	-
8.6 Fire Protection Services	34,127	-	-	-
8.7 Library Services	34,127	-	-	-
8.8 Parks and Recreation Services	5,557	-	-	-
9. Waste Diversion				
9.1 Waste diversion facilities, vehicles, equipment and other	2,714,374	110,773	150,510	261,283
Total	147,729,334	6,759,521	4,990,404	11,749,925



Appendix D

D.C. Reserve Fund Policy



Appendix D: D.C. Reserve Fund Policy

D.1 Legislative Requirements

The *Development Charges Act, 1997*, as amended (D.C.A.) requires development charge (D.C.) collections (and associated interest) to be placed in separate reserve funds. Sections 33 through 36 of the D.C.A. provide the following regarding reserve fund establishment and use:

- A municipality shall establish a reserve fund for each service to which the D.C. by-law relates; section 7, however, allows services to be grouped into categories of services for reserve fund (and credit) purposes and for classes of services to be established.
- The municipality shall pay each D.C. it collects into a reserve fund or funds to which the charge relates.
- The money in a reserve fund shall be spent only for the “capital costs” determined through the legislated calculation process (as per subsection 5 (1) 2-8).
- Money may be borrowed from the fund but must be paid back with interest (O. Reg. 82/98, subsection 11 (1) defines this as Bank of Canada rate either on the day the by-law comes into force or, if specified in the by-law, the first business day of each quarter).
- D.C. reserve funds may not be consolidated with other municipal reserve funds for investment purposes and may only be used as an interim financing source for capital undertakings for which D.C.s may be spent (section 37).

Annually, the Treasurer of the municipality is required to provide Council with a financial statement related to the D.C. by-law(s) and reserve funds. This statement must be made available to the public and may be requested to be forwarded to the Minister of Municipal Affairs and Housing. The D.C.A. does not prescribe how the statement is to be made available to the public. We would recommend that a resolution of Council make the statement available on the municipality’s website or upon request.

Subsection 43 (2) and O. Reg. 82/98 prescribe the information that must be included in the Treasurer’s statement, as follows:

- opening balance;



- closing balance;
- description of each service and/or service category for which the reserve fund was established (including a list of services within a service category);
- transactions for the year (e.g. collections, draws) including each asset's capital costs to be funded from the D.C. reserve fund and the manner for funding the capital costs not funded under the D.C. by-law (i.e. non-D.C. recoverable cost share and post-period D.C. recoverable cost share);
- for projects financed by D.C.s, the amount spent on the project from the D.C. reserve fund and the amount and source of any other monies spent on the project;
- amounts borrowed, purpose of the borrowing, and interest accrued during previous year;
- amount and source of money used by the municipality to repay municipal obligations to the D.C. reserve fund;
- list of credits by service or service category (outstanding at the beginning of the year, given in the year, and outstanding at the end of the year by the holder);
- for credits granted under section 14 of the previous D.C.A., a schedule identifying the value of credits recognized by the municipality, the service to which it applies and the source of funding used to finance the credit; and
- a statement as to compliance with subsection 59 (1) of the D.C.A., whereby the municipality shall not impose, directly or indirectly, a charge related to a development or a requirement to construct a service related to development, except as permitted by the D.C.A. or another Act.

Based upon the above, Figure 1 and Attachments 1 and 2, set out the format for which annual reporting to Council should be provided.

D.2 D.C. Reserve Fund Application

Section 35 of the D.C.A. states that:

“The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5(1).”

This provision clearly establishes that reserve funds collected for a specific service are only to be used for that service, or to be used as a source of interim financing of capital undertakings for which a D.C. may be spent.



Figure D-1
Municipality of Thames Centre
Annual Treasurer's Statement of Development Charge Reserve Funds

Description	Services to which the Development Charge Relates									Total
	Services Related to a Highway	Public Works	Water Services	Wastewater Services	Fire Protection Services	Parks and Recreation Services	Library Services	Growth Studies	Waste Diversion	
Opening Balance, January 1, _____										0
<u>Plus:</u>										
Development Charge Collections										0
Accrued Interest										0
Repayment of Monies Borrowed from Fund and Associated Interest ¹										0
Sub-Total	0	0	0	0	0	0	0	0	0	0
<u>Less:</u>										
Amount Transferred to Capital (or Other) Funds ²										0
Amounts Refunded										0
Amounts Loaned to Other D.C. Service Category for Interim Financing										0
Credits ³										0
Sub-Total	0	0	0	0	0	0	0	0	0	0
Closing Balance, December 31, _____	0	0	0	0	0	0	0	0	0	0

¹ Source of funds used to repay the D.C. reserve fund

² See Attachment 1 for details

³ See Attachment 2 for details

The Municipality is compliant with s.s. 59.1 (1) of the *Development Charges Act*, whereby charges are not directly or indirectly imposed on development nor has a requirement to construct a service related to development been imposed, except as permitted by the *Development Charges Act* or another Act.



Figure D-2a
Municipality of Thames Centre
Attachment 1
Annual Treasurer's Statement of Development Charge Reserve Funds
Amount Transferred to Capital (or Other) Funds – Capital Fund Transactions

Capital Fund Transactions	Gross Capital Cost	D.C. Recoverable Cost Share					Non-D.C. Recoverable Cost Share				
		D.C. Forecast Period			Post D.C. Forecast Period		Other Reserve/Reserve Fund Draws	Tax Supported Operating Fund Contributions	Rate Supported Operating Fund Contributions	Debt Financing	Grants, Subsidies Other Contributions
		D.C. Reserve Fund Draw	D.C. Debt Financing	Grants, Subsidies Other Contributions	Post-Period Benefit/Capacity Interim Financing	Grants, Subsidies Other Contributions					
<u>Services Related to a Highway</u>											
Capital Cost A											
Capital Cost B											
Capital Cost C											
Sub-Total - Services Related to Highways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>Water Services</u>											
Capital Cost D											
Capital Cost E											
Capital Cost F											
Sub-Total - Water	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<u>Wastewater Services</u>											
Capital Cost G											
Capital Cost H											
Capital Cost I											
Sub-Total - Wastewater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0



Figure D-2b
Municipality of Thames Centre
Attachment 1
Annual Treasurer's Statement of Development Charge Reserve Funds
Amount Transferred to Operating (or Other) Funds - Operating Fund Transactions

Operating Fund Transactions	Annual Debt Repayment Amount	D.C. Reserve Fund Draw		Post D.C. Forecast Period			Non-D.C. Recoverable Cost Share		
		Principal	Interest	Principal	Interest	Source	Principal	Interest	Source
<u>Services Related to a Highway</u>									
Capital Cost J									
Capital Cost K									
Capital Cost L									
Sub-Total - Services Related to a Highway	\$0	\$0	\$0	\$0	\$0		\$0	\$0	
<u>Water Services</u>									
Capital Cost M									
Capital Cost N									
Capital Cost O									
Sub-Total - Water	\$0	\$0	\$0	\$0	\$0		\$0	\$0	
<u>Wastewater Services</u>									
Capital Cost P									
Capital Cost Q									
Capital Cost R									
Sub-Total - Wastewater	\$0	\$0	\$0	\$0	\$0		\$0	\$0	



Figure D-3
Municipality of Thames Centre
Attachment 2
Annual Treasurer's Statement of Development Charge Reserve Funds
Statement of Credit Holder Transactions

Credit Holder	Applicable D.C. Reserve Fund	Credit Balance Outstanding Beginning of Year _____	Additional Credits Granted During Year	Credits Used by Holder During Year	Credit Balance Outstanding End of Year _____
Credit Holder A					
Credit Holder B					
Credit Holder C					
Credit Holder D					
Credit Holder E					
Credit Holder F					



Appendix E

Local Service Policy



Appendix E: Local Service Policy

Municipality of Thames Centre

Recommended General Policy Guidelines on Development Charge and Local Service Funding for Services Related to a Highway, Stormwater Management, Parkland Development, Water, and Sanitary Sewer Works

This Appendix sets out the Municipality's General Policy Guidelines on Development Charges (D.C.) and local service funding for Services Related to a Highway, Stormwater Management, Parkland Development, and Underground Linear Services. The guidelines outline, in general terms, the size and nature of engineered infrastructure that is included in the study as a development charge project, versus infrastructure that is considered as a local service, to be emplaced separately by landowners, pursuant to a development agreement.

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

A. SERVICES RELATED TO A HIGHWAY

A highway and services related to a highway are intended for the transportation of people and goods via many different modes including, but not limited to passenger automobiles, commercial vehicles, transit vehicles, bicycles and pedestrians. The highway shall consist of all land and associated infrastructure built to support (or service) this movement of people and goods regardless of the mode of transportation employed, thereby achieving a complete street. A complete street is the concept whereby a highway is planned, designed, operated and maintained to enable pedestrians, cyclists and motorists to safely and comfortably be moved, thereby allowing for the efficient movement of persons and goods.



The associated infrastructure to achieve this concept shall include, but is not limited to: road pavement structure and curbs; grade separation/bridge structures (for any vehicles, railways and/or pedestrians); grading, drainage and retaining wall features; culvert structures; storm water drainage systems; utilities; traffic control systems; signage; gateway features; street furniture; active transportation facilities (e.g. sidewalks, bike lanes, multi-use trails which interconnect the transportation network, etc.); roadway illumination systems; boulevard and median surfaces (e.g. sod & topsoil, paving, etc.); street trees and landscaping; parking lanes & lay-bys; (excluding on-street parking in the downtown) and driveway entrances; noise attenuation systems; railings and safety barriers.

A.1. Local and Collector Roads (including land)

- A.1.1 Collector roads Internal to development or on roads adjacent to or within the immediate traffic impact area - Direct developer responsibility under s.59 of the D.C.A. (as a local service).
- A.1.2 Collector Roads External to Development, inclusive of all land and associated infrastructure – if needed to support a specific development or required to link with the area to which the plan relates, direct developer responsibility under s.59 of the D.C.A.; otherwise, included in D.C. calculation to the extent permitted under s.5(1) of the D.C.A. (dependent on local circumstances).
- A.1.3 Stream crossing and rail crossing road works, excluding underground utilities but including all other works within lands to be dedicated to the Thames Centre or rail corridors - include in D.C. calculation to the extent permitted under s.5(1) of the D.C.A. (dependent on local circumstances).
- A.1.4 All local roads are considered to be the developer's responsibility.

A.2. Arterial Roads

- A.2.1 New, widened, extended or upgraded arterial roads, inclusive of all associated infrastructure: Included as part of road costing funded through D.C.A., s.5(1).



- A.2.2 Land acquisition for arterial roads on existing rights-of-way to achieve a complete street: dedication under the Planning Act provisions (s. 41, 51 and s. 53) through development lands; in area with limited development: included in D.C.'s.
- A.2.3 Land acquisition for arterial roads on new rights-of-way to achieve a complete street: dedication, where possible, under the Planning Act provisions (s. 51 and s. 53) through development lands up to the ROW specified in the Official Plan.
- A.2.4 Land acquisition beyond normal dedication requirements to achieve transportation corridors as services related to highways including grade separation infrastructure for the movement of pedestrians, cyclists, public transit and/or railway vehicles: included in D.C.'s.

A.3. Traffic Control Systems, Signals and Intersection Improvements

- A.3.1 On new arterial roads and arterial road improvements unrelated to a specific development: included as part of road costing funded through D.C.'s.
- A.3.2 On non-arterial roads, or for any private site entrances or entrances to specific development: direct developer responsibility under s.59 of D.C.A. (as a local service).
- A.3.3 On arterial or collector road intersections with County roads: include in Region D.C.'s or in certain circumstances, may be a direct developer responsibility.
- A.3.4 Intersection improvements, new or modified signalization, signal timing & optimization plans, area traffic studies for highways attributed to growth and unrelated to a specific development: included in D.C. calculation as permitted under s.5(1) of the D.C.A.

A.4. Streetlights

- A.4.1 Streetlights on new arterial roads and existing arterial road improvements: considered part of the complete street and included as part of the road costing funded through D.C.'s or in exceptional circumstances, may be



direct developer responsibility through local service provisions (s.59 of D.C.A.).

A.4.2 Streetlights on non-arterial roads internal to development: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).

A.4.3 Streetlights on non-arterial roads external to development, needed to support a specific development or required to link with the area to which the plan relates: considered part of the complete street and included as a direct developer responsibility under s. 59 of the D.C.A. (as a local service).

A.5. Sidewalks

A.5.1. Sidewalks on M.T.O. and county roads – Include in area municipal D.C. or, in exceptional circumstances, may be local improvement or direct developer responsibility through local service provisions (s.59 of D.C.A.).

A.5.2. Sidewalks on area municipal roads - Linked to collector road funding source in item 1.

A.5.3. Other sidewalks external to development (which are a local service within the area to which the plan relates) - Direct developer responsibility as a local service provision (under s.59 of D.C.A.)

A.6. Bike Routes/Bike Lanes/Bike Paths/Multi-Use Trails/Naturalized Walkways

A.6.1 Sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within arterial roads, County roads and provincial highway corridors: considered part of the complete street and included in D.C.'s, or, in exceptional circumstances, may be direct developer responsibility through local service provisions (s.59 of D.C.A.).

A.6.2 Sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within or linking to non-arterial road corridors internal to development: considered part of the complete street and include in D.C.'s.



A.6.3 Other sidewalks, multi-use trails, cycle tracks, and bike lanes, inclusive of all required infrastructure, located within non-arterial road corridors external to development and needed to support a specific development or required to link with the area to which the plan relates: direct developer responsibility under s.59 of D.C.A. (as a local service).

A.6.4 Multi-use trails (not associated with a road), inclusive of all land and required infrastructure, which go beyond the function of a (parkland) recreational trail and form part of the municipality's active transportation network for cycling and/or walking: included in D.C.'s

A.7. Noise Abatement Measures

A.7.1 Noise abatement measures external and internal to development where it is related to, or a requirement of a specific development: direct developer responsibility under s.59 of D.C.A. (as a local service).

A.7.2 Noise abatement measures on new arterial roads and arterial road improvements abutting an existing community and unrelated to a specific development: included as part of road costing funded through D.C.'s.

A.8. Land Acquisition for Easements

A.8 Easement costs external to subdivisions shall be included in D.C. calculation

B. PARKLAND DEVELOPMENT

B.1. Recreational Trails

B.1.1 Recreational trails (Multi-use trails) that do not form part of the municipality's active transportation network, and their associated infrastructure (landscaping, bridges, trail surface, etc.), is included in area municipal parkland D.C.'s.

B.2. Parkland

B.2.1 Parkland Development for Community Parks, District Parks, Neighbourhood Parks and Village Squares: direct developer responsibility



to provide at base condition, as defined by the Municipality's Engineering and Parks Standards, as a local service provision.

B.2.2 Program facilities, amenities, and furniture, within parkland are included in D.C.'s.

B.3. Landscape Buffer Blocks, Features, Cul-de-Sac Islands, Berms, Grade Transition Areas, Walkway Connections to Adjacent Arterial Roads, Open Space, Etc.

B.3.1 The cost of developing all landscape buffer blocks, landscape features, cul-de-sac islands, berms, grade transition areas, walkway connections to adjacent arterial roads, open space and other remnant pieces of land conveyed to the municipality shall be a direct developer responsibility as a local service. Such costs include but are not limited to:

- pre-grading, sodding or seeding, supply and installation of amended topsoil, (to the Municipality's required depth), landscape features, perimeter fencing and amenities and all planting.
- Perimeter fencing to the Municipal standard located on the public property side of the property line adjacent land uses (such as but limited to arterial roads) as directed by the Municipality.

B.4. Natural Heritage System (N.H.S.)

N.H.S. includes engineered and in situ stream corridors, natural buffers for woodlots, wetland remnants, etc. as well as subwatersheds within the boundaries of the Municipality.

Direct developer responsibility as a local service provision including but not limited to the following:

B.4.1 Riparian planting and landscaping requirements (as required by the Municipality, Conservation Authority or other authorities having jurisdiction) as a result of creation of, or construction within in the N.H.S. and associated buffers.



B.4.2 Perimeter fencing of the N.H.S. to the Municipal standard located on the public property side of the property line adjacent land uses (residential, industrial, commercial) as required by the Municipality.

B.4.3 All works to be in conformance with the Municipality's "Restoration Framework" for stream corridors, natural buffers and subwatershed areas as directed by the approved studies and reports related to the Secondary Plan that development occurs in.

B.5. Infrastructure Assets Constructed by Developers

B.5.1 All infrastructure assets constructed by Developers must be designed in accordance with the current Engineering and Parks Standards unless otherwise specified.

B.5.2 All infrastructure assets shall be conveyed in accordance with the current Engineering and Parks Standards unless otherwise specified.

B.5.3 Any Parks and Open Space infrastructure assets approved to be built by the developer on behalf of the Municipality shall be in accordance with the current Engineering and Parks Standards unless otherwise specified.

C. UNDERGROUND SERVICES AND STORMWATER MANAGEMENT, WATER AND WASTEWATER FACILITIES.

Underground services (linear infrastructure for stormwater, water, and sanitary services) within the road allowance are not included in the cost of road infrastructure and are treated separately.

The responsibility for such services as well as stormwater management, water and wastewater facilities, which are undertaken as part of new developments or redevelopments, will be determined by the following principles.

C.1. Storm Water Management

C.1.1. Providing new or upgraded stormwater facilities for quality and/or quantity management, including downstream erosion works, inclusive of land and all associated features such as landscaping or fencing required for a



specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.1.2 Providing erosion works, inclusive of all restoration requirements required for a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.1.3. Oversizing of stormwater management works for development external to developments will be subject to best efforts clauses identified in development agreements.

C.2. Water Services

C.2.1. Permanent water supply infrastructure, treatment plants, pumping stations, pressure control chambers, chlorination/sampling stations, and storage facilities associated with overall community municipal service and multiple developments, to be included within the D.C.

C.2.2. Providing temporary or permanent water booster, reservoirs, storage facilities, and any other water facility, required for a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.2.3. Underground water services internal to a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.2.4. Marginal costs of watermain exceeding 250mm internal to a specific development which benefits upstream or downstream developments (i.e. oversizing as identified in Municipality's plans/studies or as directed by Municipality) to be included within the D.C.

C.2.5 External service connections from existing underground services to a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.2.6 External cost of watermain involving pipe sizes exceeding 250mm, associated with overall community municipal service and multiple developments, to be included within the D.C.



C.2.6. Connections to trunk mains and pumping stations to service specific areas, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.3. Wastewater Services

C.3.1. Permanent wastewater treatment plants, pumping stations, storage facilities and forcemains associated with overall community municipal service and multiple developments, to be included within the D.C.

C.3.2. Providing temporary or permanent storage facilities, sanitary pumping stations, forcemains, noise and odour control abatement measures and any other wastewater facility required for a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.3.3. Underground wastewater services internal to a specific development, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.3.4. Marginal costs of sanitary sewers exceeding 250mm internal to a specific development which benefits upstream or downstream developments (i.e. oversizing as identified in Municipality's plans/studies or as directed by Municipality) to be included within the D.C.

C.3.5. Providing any required external service connections from existing underground services to a specific development; direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.3.6. External cost of sanitary sewers involving pipe sizes equal to or exceeding 250mm, to be included in the D.C.

C.3.7. Connections to trunk mains and pumping stations to service specific areas, direct developer responsibility through local service provisions (s. 59 of D.C.A.).

C.3.8. External cost of sanitary sewers involving pipe sizes equal to or exceeding 250mm, associated with overall community municipal service and multiple developments, to be included within the D.C.



Appendix F

Asset Management Plan



Appendix F: Asset Management Plan

The recent changes to the Development Charges Act, 1997, as amended (D.C.A.) (new subsection 10 (2) (c.2)) require that the background study must include an asset management plan (A.M.P.) related to new infrastructure. Section 10 (3) of the D.C.A. provides:

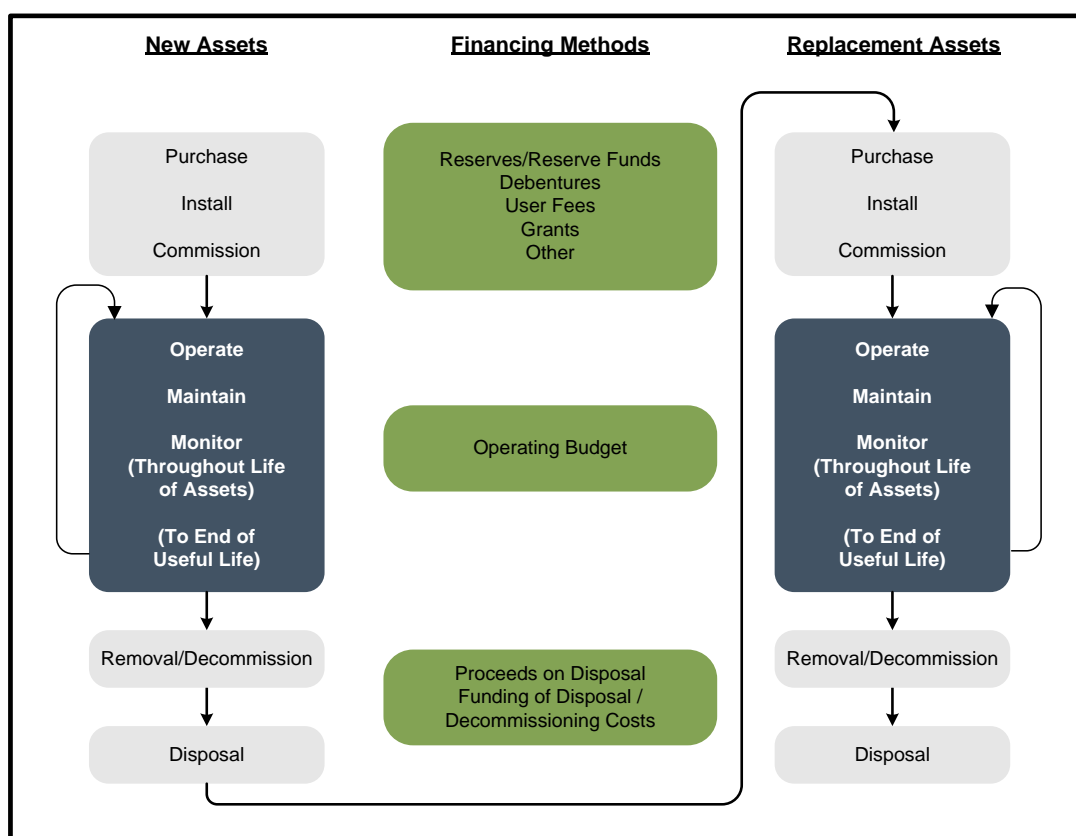
“The asset management plan shall,

- (a) deal with all assets whose capital costs are proposed to be funded under the development charge by-law;
- (b) demonstrate that all the assets mentioned in clause (a) are financially sustainable over their full life cycle;
- (c) contain any other information that is prescribed; and
- (d) be prepared in the prescribed manner.”

In regard to the above, section 8 of the regulations was amended to include subsections (2), (3), and (4) which set out specific detailed requirements for transit (only). For all services except transit, there are no prescribed requirements at this time, thus requiring the municipality to define the approach to include in the background study.

At a broad level, the A.M.P. provides for the long-term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth-related works, the majority of capital costs will be funded by the development charge (D.C.). Non-growth-related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program-related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.

It should be noted that with the recent passing of the *Infrastructure for Jobs and Prosperity Act* (I.J.P.A.) municipalities are now required to complete A.M.P.s, based on certain criteria, which are to be completed by 2022 for core municipal services and 2024 for all other services. The amendments to the D.C.A. do not require municipalities to complete these A.M.P.s (required under I.J.P.A.) for the D.C. background study, rather the D.C.A. requires that the D.C. background study include information to show the assets to be funded by the D.C. are sustainable over their full lifecycle.



In 2012, the Province developed Building Together: Guide for municipal asset management plans which outlines the key elements for an A.M.P., as follows:

State of local infrastructure: asset types, quantities, age, condition, financial accounting valuation and replacement cost valuation.

Desired levels of service: defines levels of service through performance measures and discusses any external trends or issues that may affect expected levels of service or the municipality's ability to meet them (for example, new accessibility standards, climate change impacts).

Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Financing strategy: having a financial plan is critical for putting an A.M.P. into action. By having a strong financial plan, municipalities can also demonstrate that they have



made a concerted effort to integrate the A.M.P. with financial planning and municipal budgeting and are making full use of all available infrastructure financing tools.

In accordance with the Infrastructure for Jobs and Prosperity Act (I.J.P.A.) the Municipality completed an Asset Management Policy in 2019. The Municipality is undertaking an update to their Asset Management Plan to meet the requirements of Infrastructure for Jobs and Prosperity Act; however, the updated plan is not complete as at the time of writing this background study. As a result, the asset management requirement for the D.C. must be undertaken in the absence of this information.

In recognition to the schematic above, the following table (presented in 2021\$) has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. Due to the timing of the A.M.P. currently underway, not all capital costs included in the D.C. have been included in the Municipality's A.M.P. yet. Hence the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets

1. The non-D.C. recoverable portion of the projects that will require financing from municipal financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing.
2. Lifecycle costs for the 2021 D.C. capital works have been presented based on a sinking fund basis. The assets have been considered over their estimated useful lives.
3. Incremental operating costs for the D.C. services (only) have been included.
4. The resultant total annualized expenditures are \$21.88 million.
5. Consideration was given to the potential new taxation and user fee revenues which will be generated as a result of new growth. These revenues will be available to finance the expenditures above. The new operating revenues are \$7.4 million. This amount, totalled with the existing operating revenues of \$21.5 million, provide annual revenues of \$28.9 million by the end of the period.



6. In consideration of the above, the capital plan is deemed to be financially sustainable.

**Municipality of Thames Centre
Asset Management – Future Expenditures and Associated Revenues
2021 \$**

	2040 (Total)
Expenditures (Annualized)	
Annual Debt Payment on Non-Growth Related Capital ¹	6,480,749
Annual Debt Payment on Post Period Capital ²	1,467,706
Annual Lifecycle	\$8,936,663
Incremental Operating Costs (for D.C. Services)	\$4,990,404
Total Expenditures	\$21,875,522
Revenue (Annualized)	
Total Existing Revenue ⁴	\$21,516,718
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)	\$7,383,463
Total Revenues	\$28,900,181

¹ Non-Growth Related component of Projects including 10% mandatory deduction on soft services

² Interim Debt Financing for Post Period Benefit

³ All infrastructure costs included in Area Specific by-laws have

⁴ As per Sch. 10 of FIR



Appendix G

Proposed D.C. By-law



The Corporation of the Municipality of Thames Centre

By-law Number xx-2022

A by-law to establish development charges for the Corporation of the Municipality of Thames Centre and to repeal By-law 69-2018

WHEREAS subsection 2(1) of the Development Charges Act, 1997 c. 27 (hereinafter called “the Act”) provides that the council of a municipality may pass By-laws for the imposition of development charges against land for increased capital costs required because of the need for services arising from development in the area to which the by-law applies;

AND WHEREAS the Council of The Corporation of the Municipality of Thames Centre (“the Municipality”) has given Notice in accordance with Section 12 of the Development Charges Act, 1997, of its intention to pass a by-law under Section 2 of the said Act;

AND WHEREAS the Council of the Municipality has heard all persons who applied to be heard no matter whether in objection to, or in support of, the development charge proposal at a public meeting held on February 14, 2022;

AND WHEREAS the Council of the Municipality had before it a report entitled Development Charges Background Study dated December 27, 2021 prepared by Watson & Associates Economists Ltd., wherein it is indicated that the development of any land within the Municipality will increase the need for services as defined herein;

AND WHEREAS the Council of the Municipality on March 7, 2022 approved the applicable Development Charges Background Study, dated December 27, 2021, in which certain recommendations were made relating to the establishment of a development charge policy for the Municipality of Thames Centre pursuant to the Development Charges Act, 1997;

AND WHEREAS the Council of the Municipality on March 7, 2022 determined that no additional public meeting was required.



**NOW THEREFORE THE COUNCIL OF THE MUNICIPALITY OF THAMES CENTRE
ENACTS AS FOLLOWS:**

1. DEFINITIONS

In this by-law:

- (1) “Act” means the Development Charges Act, S.O. 1997, c. 27, as amended;
- (2) “Accessory Use” means where used to describe a building, or structure that the building, or structure is naturally and normally incidental, subordinate in purpose or floor area or both, and exclusively devoted to a principal use, building, or structure, but is not an ancillary dwelling;
- (3) “Ancillary dwelling,” means a residential building that would be ancillary to a detached dwelling, semi-detached dwelling, or row dwelling and includes an accessory dwelling;
- (4) “Agricultural use” means a bona fide farming operation;
- (5) “Apartment dwelling” means a dwelling unit in a building containing a non-residential use and/or more than four dwelling units in a residential building, including a stacked townhouse and a stand-alone additional residential unit, but does not include a row dwelling, back-to-back townhouse dwelling, nursing home, long term care home, retirement home, semi-detached dwelling or single detached dwelling or the residential portion of a live/work unit;
- (6) “Back-to-back townhouse dwelling” means a building containing more than two dwelling units separated vertically by a common wall, including a rear common wall, which do not have rear yards;
- (7) “Bedroom” means a habitable room larger than seven square metres, including a den, study, or other similar area, but does not include a living room, dining room or kitchen;
- (8) “Board of education” means a board defined in s.s. 1(1) of the Education Act;



- (9) “Bona fide farm uses” means the proposed development will qualify as a farm business operating with a valid Farm Business Registration Number issued by the Ontario Ministry of Agriculture, Food and Rural Affairs and be assessed in the Farmland Realty Tax Class by the Ontario Property Assessment Corporation;
- (10) “Building Code Act” means the Building Code Act, R.S.O. 1990, c.B.-13, as amended;
- (11) “Cannabis” means:
 - (a) a cannabis plant;
 - (b) any part of a cannabis plant, including the phytocannabinoids produced by, or found in, such a plant regardless of whether that part has been processed or not;
 - (c) any substance or mixture of substances that contains or has on it any part of such a plant; and
 - (d) any substance that is identical to any phytocannabinoid produced by, or found in, such a plant, regardless of how the substance was obtained.
- (12) Cannabis plant” means a plant that belongs to the genus cannabis;
- (13) “Cannabis production facilities” means a building, or part thereof, designed, used, or intended to be used for one or more of the following: growing, production, processing, harvesting, testing, alteration, destruction, storage, packaging, shipment, or distribution of cannabis where a licensed, permit or authorization has been issued under applicable federal law and does not include, but is not limited to such buildings as a greenhouse and agricultural building associated with the use. It does not include a building or part thereof solely designed, used, or intended to be used for retail sales of cannabis;
- (14) “Capital cost” means costs incurred or proposed to be incurred by the municipality or a local board thereof directly or by others on behalf of, and as authorized by, the municipality or local board, including:



- (a) to acquire land or an interest in land, including a leasehold interest;
 - (b) to improve land;
 - (c) to acquire, lease, construct or improve buildings and structures;
 - (d) to acquire, lease, construct or improve facilities including,
 - (i) rolling stock with an estimated useful life of seven years or more,
 - (ii) furniture and equipment, other than computer equipment, and
 - (iii) materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act, R.S.O. 1990, c.P.-44; and
 - (e) to undertake studies in connection with any of the matters referred to in clauses (a) to (d);
 - (f) to complete the development charge background study under Section 10 of the Act;
 - (g) interest on money borrowed to pay for costs in (a) to (d);
- required for provision of services designated in this by-law within or outside the municipality.
- (15) “Class” means a grouping of services combined to create a single service for the purposes of this By-law and as provided in section 7 of the Development Charges Act, 1997;
 - (16) “Council” means the Council of The Corporation of the Municipality of Thames Centre;
 - (17) “Development” means any activity or proposed activity in respect of land that requires one or more of the actions referred to in section 6 of this by-law and including the redevelopment of land or the redevelopment, expansion, extension or alteration of a use, building or structure except



interior alterations to an existing building or structure which do not change or intensify the use of land;

- (18) “Development charge” means a charge imposed pursuant to this by-law;
- (19) Detached dwelling unit” has the same meaning as a “single detached dwelling unit” for the purposes of this by-law;
- (20) “Dwelling unit” means a room or suite of rooms used, or designed or intended for use by, one person or persons living together, in which culinary and sanitary facilities are provided for the exclusive use of such person or persons, including time share units;
- (21) “Farm building” means that part of a bona fide farm operation encompassing barns, silos and other ancillary development to an agricultural use, but excluding a residential use;
- (22) “Grade” means the average level of finished ground adjoining a building or structure at all exterior walls;
- (23) “Gross floor area” means the total floor area measured between the outside of exterior walls, or between the outside of exterior walls and the centre line of party walls dividing the building from another building, of all floors above the average level of finished ground adjoining the building at its exterior walls;
- (24) “Growth Studies” means any and all studies carried out by the municipality that are with respect to eligible services for which a development charge by-law may be imposed under the Development Charges Act, 1997;
- (25) “Industrial” means lands, buildings or structures, or portions thereof, used, designed or intended for use for production, compounding, processing, packaging, crating, bottling, or assembly ("manufacturing") of raw goods or semi-processed goods or materials, research and development relating thereto, warehousing or bulk storage of goods, and includes office uses and the sale of commodities to the general public (if the retail sales are at the site where the manufacturing takes place) where such uses are accessory to an industrial use, and includes cannabis production facilities,



but does not include the sale of commodities to the general public through a warehouse club or retail warehouse and does not include self-storage or mini-storage facilities;

- (26) “Institutional development” means development of a building or structure intended for use:
- (i) as a long-term care home within the meaning of subsection 2 (1) of the Long-Term Care Homes Act, 2007;
 - (ii) as a retirement home within the meaning of subsection 2 (1) of the Retirement Homes Act, 2010;
 - (iii) by any of the following post-secondary institutions for the objects of the institution:
 - a. a university in Ontario that receives direct, regular, and ongoing operating funding from the Government of Ontario,
 - b. a college or university federated or affiliated with a university described in subclause (1), or
 - c. an Indigenous Institute prescribed for the purposes of section 6 of the Indigenous Institutes Act, 2017;
 - (iv) as a memorial home, clubhouse, or athletic grounds by an Ontario branch of the Royal Canadian Legion; or
 - (v) as a hospice to provide end of life care.
- (27) “Interest rate” means the annual rate of interest calculated as per the Municipality’s D.C. Interest Policy #CP- B-1.1 and approved by Council, as may be revised from time to time;
- (28) “Live/work unit” means a unit which contains separate residential and non-residential areas intended for both residential and non-residential uses concurrently, and shares a common wall or floor with direct access between the residential and non-residential areas;



- (29) “Local board” means a public utility commission, public library board, local board of health, or any other board, commission, committee or body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes of the municipality or any part or parts thereof;
- (30) “Local services” means those services or facilities which are under the jurisdiction of the municipality and are related to a plan of subdivision or within the area to which the plan relates, required as a condition of approval under s.51 of the Planning Act, or as a condition of approval under s.53 of the Planning Act;
- (31) “Lot” means a parcel of land capable of being conveyed lawfully without any approval under the Planning Act or successor thereto which meets the minimum lot area requirements under the Municipality’s zoning by-law;
- (32) “Multiple dwelling” means all dwellings other than single-detached, semi-detached and apartment unit dwellings and includes but is not limited to back-to-back townhouses, stacked townhouses and the residential portion of a live/work unit;
- (33) “Municipality” means The Corporation of the Municipality of Thames Centre;
- (34) “Non-profit housing development” means development of a building or structure intended for use as residential premises by:
 - (i) a corporation without share capital to which the Corporations Act applies, that is in good standing under that Act and whose primary object is to provide housing;
 - (ii) a corporation without share capital to which the Canada Not-for-profit Corporations Act applies, that is in good standing under that Act and whose primary object is to provide housing; or
 - (iii) a non-profit housing co-operative that is in good standing under the Co-operative Corporations Act, or any successor legislation;



- (35) “Non-residential uses” means a building or structure used for other than a residential use;
- (36) “Nursing Home” means a building wherein lodging, meals, personal care, nursing services, and medical care and treatment may be provided for gain or profit or as a charitable public service and includes a rest home or a convalescent home, as licensed under the Nursing Homes Act, as amended from time to time, but does not include a hotel/motel, hospice, emergency care establishment or hospital as defined herein.
- (37) “Owner” means the owner of land or a person who has made application for an approval for the development of land upon which a development charge is imposed;
- (38) “Place of Worship” means a Building, or any part thereof, owned and occupied by a church or religious organization used for religious services, ceremonies or other religious practices, or for the purposes of a the burial or entombment of the remains of deceased individuals and which is which is or would be classified as exempt from taxation in accordance with paragraph 3 of subsection 3(1) of the Assessment Act, R.S.O. 1990, Chapter A.31, but does not include a Building or any part thereof , owned by a church or religious organization and used for any other purpose including without limiting the generality of the foregoing any uses which generate revenue for the church or religious organization;
- (39) “Planning Act” means the Planning Act, R.S.O. 1990, c.P.-13, as amended;
- (40) “Primary dwelling unit” means the largest dwelling unit in which the residential use of the lot is conducted;
- (41) “Regulation” means any regulation made pursuant to the Act;
- (42) “Rental housing” means development of a building or structure with four or more dwelling units all of which are intended for use as rented residential premises;



- (43) “Residential uses” means lands, buildings or structures or portions thereof used, or designed or intended for use as a home or residence of one or more individuals, and shall include a single detached dwelling, a semi-detached dwelling, a multiple dwelling, an apartment dwelling, and the residential portion of a mixed-use building or structure;
- (44) “Retirement Lodge or Retirement Home” means a residence providing accommodation primarily for persons or couples over 60 years of age where each private bedroom or living unit has a separate private bathroom and separate entrance from a common hall but where common facilities for the preparation and consumption of food are provided, and common lounges, recreation rooms and medical care facilities may also be provided;
- (45) “Semi-detached dwelling” means a building divided vertically into two dwelling units each of which has a separate entrance and access to grade;
- (46) “Services” means services set out in Schedule “A” to this By-law;
- (47) “Single detached dwelling” means a completely detached building containing only one dwelling unit.
- (48) “Stacked townhouse dwelling” means a building containing two or more dwelling units where each dwelling unit is separated horizontally and/or vertically from another dwelling unit by a common wall or floor;
- (49) “Stand-alone Additional Residential Dwelling Unit” means one single stand-alone dwelling unit that is subordinate to the primary dwelling unit on a lot and does not exceed 40% of the gross floor area of the primary dwelling unit but in no case may be larger than 80 square metres;

2. Designation of Services and Classes of Services

2.1. The categories of services and classes of services for which development charges are imposed under this By-law are as follows:

- (a) Services Related to a Highway;
- (b) Public Works;



- (c) Fire Protection Services;
- (d) Parks and Recreation Services;
- (e) Library Services ;
- (f) Growth Studies;
- (g) Water Services;
- (h) Wastewater Services; and
- (i) Waste Diversion Services.

2.2. The components of the services and classes of services designated in section 2.1 are described in Schedule A.

3. AMOUNT OF CHARGES

The development charge with respect to the uses of any land, building or structure shall be calculated as follows:

Residential

- a) The development charges set out in Schedule B shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed-use building or structure, on the residential uses in the mixed-use building or structure, including the residential component of a live/work unit, according to the type of residential unit, and calculated with respect to each of the services according to the type of residential use.

Non-Residential

- b) The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures, and, in the case of a mixed-use building or structure, on the non-residential uses in the mixed-use building or structure, including the non-residential component of a live/work unit, and calculated with respect to each of the services according to the total floor area of the non-residential use.



4. TIME OF CALCULATION AND PAYMENT OF DEVELOPMENT CHARGES

- (1) Development charges imposed under this By-law are calculated, payable, and collected in accordance with sections 26, 26.1 and 26.2 of the Act, unless the development charge is to be calculated or paid at a different time pursuant to subsections (2) through (4) herein or in accordance with the terms of an agreement entered into between the Municipality and the owner under subsection 27(1) of the Act.
- (2) Notwithstanding subsection (1), development charges for rental housing and institutional developments are due and payable in 6 equal annual payments commencing with the first installment payable on the earlier of the date the first occupancy permit is granted or the date of first occupancy, and each subsequent installment, including interest calculated in accordance with the development charge interest policy #CP-B-1.1, continuing on the anniversary of that date.
- (3) Notwithstanding subsections (1), development charges for non-profit housing developments are due and payable in 21 equal annual payments commencing with the first installment payable on the earlier of the date the first occupancy permit is granted or the date of first occupancy, and each subsequent installment, including interest calculated in accordance with the development charge interest policy #CP-B-1.1, continuing on the anniversary of that date.
- (4) Where the development of land results from the approval of a site plan or zoning by-law amendment application received on or after January 1, 2020, and the approval of the application occurred within two years of building permit issuance, the development charges under section 3 shall be calculated on the rates set out in Schedule "B" on the date of the planning application, including interest as provided in the Municipality's Council approved D.C. Interest Policy #CP-B-1.1, as may be revised from time to time. Where both planning applications apply, development charges under section 3 shall be calculated on the rates in effect on the day of the later planning application, including interest as provided in the Municipality's Council approved D.C. Interest Policy #CP-B-1.1, as may be revised from time to time.



- (5) Despite subsection (1), Council, from time to time and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable, in accordance with section 27 (1) of the Act.

5. PHASE-IN OF DEVELOPMENT CHARGES

The development charges imposed pursuant to this by-law are not being phased-in and are payable in full, subject to the exemptions herein, from the effective date of this by-law.

6. APPLICABLE LANDS

- (1) Subject to subsection 6(2), 6(3), and Section 7, this by-law applies to all lands in the municipality, whether or not the land or use is exempt from taxation under Section 3 of the Assessment Act, R.S.O. 1990, c.A.-31.
- (2) Development Charges as per this by-law shall not apply to land that is owned by and used for the purposes of:
 - (a) a board of education;
 - (b) any municipality or local board thereof;
 - (c) hospital under the Public Hospitals Act;
 - (d) a college of applied arts and technology established pursuant to the Ministry of Training, Colleges and Universities Act, R.S.O. 1990, c.M. 19, and used for teaching related purposes on lands owned by and used for the purposes of the College;
 - (e) a cemetery or place of worship;
 - (f) a non-residential farm building constructed for bona fide farm uses;
or
 - (g) land vested in or leased to a university that receives regular and ongoing operating funds from the government for the purposes of post-secondary education is exempt from development charges imposed under the Development Charges Act, 1997 if the development in respect of which development charges would otherwise be payable is intended to be occupied and used by the university.



- (3) Municipal-wide Development Charges as per this by-law shall not apply to industrial development however, urban water and wastewater services Development Charges will apply to industrial development developed within the urban service boundaries.

7. RULES WITH RESPECT TO EXEMPTIONS FOR INTENSIFICATION OF EXISTING HOUSING

- (1) Notwithstanding Section 6 above, no development charge shall be imposed with respect to developments or portions of developments as follows:
 - (a) the enlargement of an existing residential dwelling unit;
 - (b) permit the creation of up to two additional dwelling units in existing dwellings as the following table sets out:



Item	Name of Class of Existing Residential Building	Description of Class of Existing Residential Buildings	Maximum number of Additional Dwelling Units	Restrictions
1	Existing single detached dwellings	Existing residential buildings, each of which contains a single dwelling unit, which are not attached to other buildings.	Two	The total gross floor area of the additional dwelling unit or units must be less than or equal to the gross floor area of the dwelling unit already in the building.
2	Existing semi-detached dwellings or row dwellings	Existing residential buildings, each of which contains a single dwelling unit, which have one or two vertical walls, but no other parts, attached to other buildings.	One	The gross floor area of the additional dwelling unit must be less than or equal to the gross floor area of the dwelling unit already in the building.
3	Existing rental residential buildings	Existing residential rental buildings, each of which contains four or more dwelling units.	Greater of one and 1% of the existing units in the building	None.
4	Other existing residential buildings	An existing residential building not in another class of residential building described in this table.	One	The gross floor area of the additional dwelling unit must be less than or equal to the gross floor area of the smallest dwelling unit already in the building

- (c) permit the creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to dwellings, subject to the following restrictions:



Item	Name of Class of Proposed New Residential Buildings	Description of Class of Proposed New Residential Buildings	Restrictions
1	Proposed new detached dwellings	Proposed new residential buildings that would not be attached to other buildings and that are permitted to contain a second dwelling unit, which being either of the two dwelling units, if the units have the same gross floor area, or the small of the dwelling units.	<p>The proposed new detached dwelling must only contain two dwelling units.</p> <p>The proposed new detached dwelling must be located on a parcel of land on which no other detached dwelling, semi-detached dwelling, or row dwelling would be located.</p>
2	Proposed new semi-detached dwellings or row dwellings	Proposed new residential buildings that have one or two vertical walks, but no other parts, attached to other buildings and that are permitted to contain a second dwelling unit, which being either of the two dwelling units, if the units have the same gross floor area, or the small of the dwelling units.	<p>The proposed new semi-detached dwelling or row dwelling must only contain two dwelling units.</p> <p>The proposed new semi-detached dwelling or row dwelling must be located on a parcel of land on which no other detached dwelling, semi-detached dwelling, or row dwelling would be located.</p>
3	Proposed new residential buildings that would be ancillary to a proposed new detached dwelling, semi-detached dwelling, or row dwelling	Proposed new residential buildings that would be ancillary to a proposed new detached dwelling, semi-detached dwelling, or row dwelling and that are permitted to contain a single dwelling unit.	<p>The proposed new detached dwelling, semi-detached dwelling, or row dwelling, to which the proposed new residential building would be ancillary, must only contain one dwelling unit.</p> <p>The gross floor area of the dwelling unit in the proposed new residential building must be equal to or less than the gross floor area of the detached dwelling, semi-detached dwelling, or row dwelling to which the proposed new residential building is ancillary.</p>

- (2) Notwithstanding subsection 7(1)(b), development charges shall be calculated and collected in accordance with Schedule “B” where the total residential gross floor area of the additional one or two dwelling units is



greater than the total gross floor area of the existing single detached dwelling unit.

- (3) Notwithstanding subsection 7(1)(d), development charges shall be calculated and collected in accordance with Schedule “B” where the additional dwelling unit has a residential gross floor area greater than,
- (a) in the case of semi-detached house or multiple dwelling, the gross floor area of the existing dwelling unit, and
 - (b) in the case of any other residential building, the residential gross floor area of the smallest existing dwelling unit.

8. DEVELOPMENT CHARGES IMPOSED

- (1) Subject to subsection (2), development charges shall be calculated and collected in accordance with the provisions of this by-law and be imposed on land to be developed for residential and non-residential uses, where the development requires:
- (a) the passing of a zoning by-law or an amendment thereto under Section 34 of the Planning Act;
 - (b) the approval of a minor variance under Section 45 of the Planning Act;
 - (c) a conveyance of land to which a by-law passed under subsection 50(7) of the Planning Act applies;
 - (d) the approval of a plan of subdivision under Section 51 of the Planning Act;
 - (e) a consent under Section 53 of the Planning Act;
 - (f) the approval of a description under Section 50 of the Condominium Act, R.S.O. 1990, c.C.-26; or
 - (g) the issuing of a permit under the Building Code Act, in relation to a building or structure.



- (2) Subsection (1) shall not apply in respect to:
 - (a) local services installed or paid for by the owner within a plan of subdivision or within the area to which the plan relates, as a condition of approval under Section 51 of the Planning Act;
 - (b) local services installed or paid for by the owner as a condition of approval under Section 53 of the Planning Act.

9. LOCAL SERVICE INSTALLATION

Nothing in this by-law prevents Council from requiring, as a condition of an agreement under Section 51 or 53 of the Planning Act, that the owner, at his or her own expense, shall install or pay for such local services, within the Plan of Subdivision or within the area to which the plan relates, as Council may require.

10. MULTIPLE CHARGES

- (1) Where two or more of the actions described in subsection 8(1) are required before land to which a development charge applies can be developed, only one development charge shall be calculated and collected in accordance with the provisions of this by-law.
- (2) Notwithstanding subsection (1), if two or more of the actions described in subsection 8(1) occur at different times, and if the subsequent action has the effect of increasing the need for municipal services as set out in Schedule "A", an additional development charge on the additional residential units and additional gross floor area shall be calculated and collected in accordance with the provisions of this by-law.

11. SERVICES IN LIEU

- (1) Council may authorize an owner, through an agreement under Section 38 of the Act, to substitute such part of the development charge applicable to the owner's development as may be specified in the agreement, by the provision at the sole expense of the owner, of services in lieu. Such agreement shall further specify that where the owner provides services in lieu, in accordance with the agreement, Council shall give to the owner a credit against the development charge in accordance with the agreement



provisions and the provisions of Section 39 of the Act, equal to the reasonable cost to the owner of providing the services in lieu. In no case shall the agreement provide for a credit that exceeds the total development charge payable by an owner to the municipality in respect of the development to which the agreement relates.

- (2) In any agreement under subsection (1), Council may also give a further credit to the owner equal to the reasonable cost of providing services in addition to, or of a greater size or capacity, than would be required under this by-law.
- (3) The credit provided for in subsection (2) shall not be charged to any development charge reserve fund.

12. RULES WITH RESPECT TO RE-DEVELOPMENT

In the case of the demolition of all or part of a residential or non-residential building or structure:

- (1) a credit shall be allowed, provided that the land was improved by occupied structures (or structures capable of occupancy) within the five years prior to the issuance of the building permit, and the building permit has been issued for the development or redevelopment within five years from the date the demolition permit has been issued; and
- (2) if a development or redevelopment involves the demolition of and replacement of a residential building or structure, a credit shall be allowed equivalent to the number of dwelling units demolished multiplied by the applicable residential development charge in place at the time the development charge is payable.
- (3) if a development or redevelopment involves the demolition of and replacement of a non-residential building or structure, a credit shall be allowed equivalent to the gross floor area demolished multiplied by the applicable non-residential development charge in place at the time the development charge is payable.



A credit can, in no case, exceed the amount of the development charge that would otherwise be payable, and no credit is available if the existing land use is exempt under this by-law.

13. TIMING OF CALCULATION AND PAYMENT

- (1) Where a permit is required under the Building Code Act in relation to a building or structure, the owner shall pay the development charge prior to the issuance of a permit or prior to the commencement of development or redevelopment as the case may be; and
- (2) Despite above, Council, from time to time, and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable.

14. RESERVE FUNDS

- (1) Monies received from payment of development charges under this by-law shall be maintained in nine separate reserve funds as follows: services related to a highway; library; growth studies; fire protection; parks and recreation, public works, waste diversion, water and wastewater.
- (2) Monies received for the payment of development charges shall be used only in accordance with the provisions of Section 35 of the Act.
- (3) Where any development charge, or part thereof, remains unpaid after the due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.
- (4) Where any unpaid development charges are collected as taxes under subsection (3), the monies so collected shall be credited to the development charge reserve funds referred to in subsection (1).
- (5) The Treasurer of the Municipality shall, in each year, furnish to Council a statement in respect of the reserve funds established hereunder for the prior year, containing the information set out in Section 12 of O. Reg. 82/98.



15. BY-LAW AMENDMENT OR APPEAL

- (1) Where this by-law or any development charge prescribed there under is amended or repealed either by order of the Ontario Municipal Board or by resolution of the Municipal Council, the Municipal Treasurer shall calculate forthwith the amount of any overpayment to be refunded as a result of said amendment or repeal.
- (2) Refunds that are required to be paid under subsection (1) shall be paid with interest to be calculated as follows:
 - (a) Interest shall be calculated from the date on which the overpayment was collected to the date on which the refund is paid;
 - (b) The Bank of Canada interest rate in effect on the date of enactment of this by-law shall be used.
- (3) Refunds that are required to be paid under subsection (1) shall include the interest owed under this section.

16. BY-LAW INDEXING

The development charges set out in Schedule “B” to this by-law shall be adjusted annually as of January 1st of each year commencing January 1, 2023, without amendment to the by-law, in accordance with the most recent twelve month change in the Statistics Canada Quarterly, “Construction Price Statistics”.

17. SEVERABILITY

In the event any provision, or part thereof, of this by-law is found by a court of competent jurisdiction to be ultra vires, such provision, or part thereof, shall be deemed to be severed, and the remaining portion of such provision and all other provisions of this by-law shall remain in full force and effect.

18. HEADINGS FOR REFERENCE ONLY

The headings inserted in this by-law are for convenience of reference only and shall not affect the construction of interpretation of this by-law.



19. BY-LAW REGISTRATION

A certified copy of this by-law may be registered on title to any land to which this by-law applies.

20. BY-LAW ADMINISTRATION

This by-law shall be administered by the Municipal Treasurer.

21. SCHEDULES TO THE BY-LAW

The following Schedules to this by-law form an integral part of this by-law:

Schedule “A” - Schedule of Designated Municipal Services

Schedule “B” - Schedule of Municipal Development Charges

Schedule “C” - Map of Urban Serviced Areas

22. BY-LAW 69-2018

By-law 69-2018 is hereby repealed on the date this by-law comes into effect.

23. DATE BY-LAW EFFECTIVE

This By-law shall come into force and effect on the day following the day of its approval by Council.

24. SHORT TITLE

This by-law may be cited as the “Municipality of Thames Centre Development Charge By-law, 2022.”



Passed by the Council this 7th day of March, 2022.

MAYOR

CLERK



**Schedule “A”
To By-law XX-2022**

Components of Services and Classes of Services Designated in Subsection 2.1

Urban Area D.C.-Eligible Services:

- Water Services
 - Treatment Facilities and Storage
 - Distribution System
- Wastewater Services
 - Treatment Facilities and Storage
 - Collection System

Municipal-wide D.C.-Eligible Services:

- Services Related to a Highway
 - Roads and Related
- Fire Protection Services
 - Fire Facilities
 - Fire Vehicles
 - Fire Fighter Equipment
- Parks and Recreation Services
 - Parkland Development, Outdoor Recreation and Park Amenities & Trails
 - Recreation Facilities
- Library Services
 - Library Facilities
- Waste Diversion Services
 - Waste Diversion Facilities
 - Waste Diversion Vehicles and Equipment
 - Waste Diversion Other



Schedule “A” To By-law XX-2022 Components of Services and Classes of Services Designated in Subsection 2.1

Municipal-wide D.C.-Eligible Classes of Services:

- Growth Studies:
 - Services Related to a Highway
 - Fire Protection Services
 - Library Services
 - Parks and Recreation Services
 - Waste Diversion Services
 - Water Services
 - Wastewater Services
 - Stormwater Services
- Public Works:
 - Facilities
 - Services Related to a Highway
 - Parks and Recreation Services
 - Vehicles and Equipment
 - Services Related to a Highway
 - Parks and Recreation Services



Schedule B
By-law XX-2022
Schedule of Development Charges

Service/Class of Service	RESIDENTIAL					NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Nursing Home Bedroom Units	(per sq.ft. of Gross Floor Area)
Municipal Wide Services/Class of Service:						
Services Related to a Highway	2,938	1,916	1,829	1,153	991	1.14
Public Works	1,161	757	723	455	392	0.43
Fire Protection Services	1,237	807	770	485	417	0.46
Parks and Recreation Services	6,175	4,027	3,844	2,423	2,084	0.58
Library Services	444	290	276	174	150	0.04
Growth Studies	554	361	345	217	187	0.20
Waste Diversion	168	110	105	66	57	0.01
Total Municipal Wide Services/Class of Services	12,677	8,268	7,892	4,973	4,278	2.86
Urban Services						
Wastewater Services	15,162	9,888	9,437	5,949	5,116	7.17
Water Services	9,483	6,184	5,902	3,720	3,200	4.48
Total Urban Services	24,645	16,072	15,339	9,669	8,316	11.65
GRAND TOTAL RURAL AREA	12,677	8,268	7,892	4,973	4,278	2.86
GRAND TOTAL URBAN AREA	37,322	24,340	23,231	14,642	12,594	14.51



**Schedule “C”
To By-law XX-2022
Map of Urban Service Areas**

