

REGION OF DURHAM

**REGIONAL DEVELOPMENT CHARGE
BACKGROUND STUDY**

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Executive Summary

1. Purpose of this Background Study

- 1.1 This Background Study has been prepared pursuant to Section 10 of the *Development Charges Act, 1997* (DCA). Together with the proposed by-law, these documents are being made available to the public, as required by Section 12 of the DCA, more than two weeks prior to the public meeting of Council, which is to be held April 12, 2023, and 60 days prior to the passage of the By-law, which is to be at the June 14, 2023 Regional Council Meeting.
- 1.2 The purpose of this Background Study is to propose the replacement of By-law No. 28-2018 with the proposed by-law herein. The purpose of the public meeting and consultation activity is to obtain input on all of these matters
- 1.3 The development charges (DCs) calculated herein represent those which can be imposed for DC eligible services based on the Region's capital plans and other assumptions which are responsive to the requirements of the DCA. After receiving input at the public meeting of Council on April 12, 2023 and other consultation sessions, the completed DC background study and by-law will be received by Council for its meeting on June 14, 2023. At that time, Council will decide as to the magnitude of the charges it wishes to establish for residential, commercial, industrial and institutional development. Property tax, user rate or other funding sources will be required to finance any potential development charge-recoverable capital costs if those costs are not covered in the DCs being recommended.
- 1.4 Other decisions are also required to finalize the development charge policies and by-law, including indexing, phasing of the charge, applicability to the redevelopment of land, exemptions, and the schedule of charges by development type and geographic area.
- 1.5 The Development Charge Background Study is based on the growth forecasts contained within the current Durham Regional Official Plan, which has a 2031 planning horizon, as mandated by the original (2006) Growth Plan. However, with a review of growth that has occurred since the last Development Charge Background Study, it is anticipated it will take until 2033 to reach the Region-wide population forecast of 923,510¹ people (Growth Plan forecast of 960,000 less population associated with Northeast Pickering). Employment has also lagged, with approximately 320,600¹ jobs (approximately 92 per cent of the 2031 forecast of 350,000) anticipated by 2033.
- 1.6 This Study and the proposed DC by-law do not include GO Transit servicing requirements. The Region imposes a development charge for GO Transit purposes pursuant to By-law 86-2001, commencing December 5, 2001. This by-law has been extended by Provincial Legislation/Regulation. Ontario Regulations 446/04 and 528/06 were amended in November 2022 to extend the expiry date from the current expiry date of December 31, 2022, to December 31, 2025.

¹ Including Census undercount

1.7 This Study and the proposed by-law also do not include Regional transit servicing requirements. The Region imposed a development charge for Durham Region Transit purposes pursuant to By-law 39-2022, effective July 1, 2022. The Regional Transit Development Charge By-law establishes development charge rates (Region-wide, including Seaton), subject to annual indexing in accordance with the Statistics Canada Construction Price Index.

1.8 In addition to By-laws 28-2018, 86-2001, and 39-2022, the Region also imposes separate development charges on water and sewer services in the Seaton Community, pursuant to By-law 38-2019.

2. Bill 108 and Bill 197 – Changes to the Development Charges Act

2.1 The Provincial Government of Ontario enacted changes to the DCA through the More Homes, More Choice Act (Bill 108), which came into effect January 2020. The main changes include the following:

- DCs for the following development types are to be paid in equal annual instalments, commencing the earlier of the date of issuance of an occupancy permit or the date of first occupancy);
 - (a) Rental housing to be paid in six equal annual instalments over five years;
 - (b) Institutional development to be paid in six equal annual instalments over five years, which includes long term care homes, retirement homes, hospices, post-secondary institutions, indigenous institutes, and the Royal Canadian Legion; and,
 - (c) Non-profit housing development to be paid in twenty-one equal annual instalments over twenty years (as discussed below in section 3.1, non-profit housing developments are now exempt from paying DCs, therefore the twenty-year deferral no longer applies).
- DC rates are to be frozen at the date of site plan or zoning by-law amendment application, for applications received on or after January 1, 2020 and approval within two years of building permit issuance. DCs will be imposed as per the by-law where a building permit is issued later than two years after approval of the site plan or zoning by-law amendment application and for permits resulting from other planning approvals (e.g. plan of subdivision); and,
- allows municipalities to impose interest charges to recover the costs associated with the DC deferral and the freezing of DC rates.

2.2 The provincial government also enacted changes to the DCA through Bill 197, which came into effect September 2020. The main changes include the following

- Defined the services that are eligible for inclusion in a DC by-law;

- Removed the 10 per cent statutory deduction for all services not specifically identified in s.s. 5 (5) of the DCA (e.g. soft services); and,
- Provided statutory exemptions from payment of DCs where the development is creating additional residential dwelling units within prescribed classes of existing residential buildings or structures.

3. Bill 23 – Changes to the Development Charges Act

3.1 The provincial government enacted further changes to the DCA through the More Homes Built Faster Act (Bill 23), which came into effect November 2022. The main changes include the following:

- Required DC rates, for new by-laws passed after January 1, 2022, to be phased in over a five-year period;
- Extended the maximum length of a DC by-law from five to ten years;
- Removed Housing Services as an eligible DC service;
- Provided new statutory exemptions for affordable units, attainable units, inclusionary zoning units, and non-profit housing developments;
- Provided additional residential unit exemptions for secondary units;
- Revised the definition of capital costs to remove studies;
- Provided discounts on DC rates for rental housing developments, based on the number of bedrooms per dwelling unit;
- Prescribed a maximum interest rate for the freezing and deferral of DC payments; and,
- Required municipalities to spend or allocate 60 per cent of the monies in a DC reserve fund at the beginning of each year (for water, sewer, and services related to a highway).

It should be noted that some of the DCA amendments under the More Homes Built Faster Act require future regulations and information for implementation.

4. Region-wide vs Area-specific Development Charges

- 4.1 Most municipalities in Ontario have established uniform, municipal-wide development charges. This has been Durham's approach since 1991, with the exception of its approach to development in the areas generally known as the Seaton community (in the City of Pickering) and Carruthers Creek (in the Town of Ajax).
- 4.2 The Region implemented area-specific development charges for water supply and sanitary sewerage services for the Seaton Community. An area specific development charge by-law was imposed for Seaton in conjunction with a front-ending agreement to advance the water supply and sanitary sewerage services necessary to accommodate the development in the area and to facilitate the provision of development charge credits.
- 4.3 The rationale for separate area-specific development charges for water supply and sanitary sewerage in Carruthers Creek reflected long-standing historical financing arrangements, which facilitated the front-ending of capital works by landowners in return for development charge credits. It further allowed for the Region to collect

DCs from non-participating benefitting landowners to be transferred to the landowners who upfronted the capital works. The Carruthers Creek water supply and sanitary sewer area specific development charge by-laws have both since expired.

- 4.4 The establishment of additional area-specific development charges is not recommended. The Region will continue to apply Region-wide development charges. Section 6.9 of the Detailed Report provides additional background on the use of area-specific development charges.

5. The 2023 Development Charge Calculation and Proposed Rates

- 5.1 An annualized cash flow method was undertaken to calculate the development charges. This method considers project timing and costs adjusted for inflation, development charge credits, outstanding (unfunded) capital costs, available development charge reserve fund balances, and financing costs to determine sufficient DC revenues. This also includes indexing over the planning horizon. Details of the development charge cash flow calculations are included in Appendices E, F, G and H.
- 5.2 In consideration of the list of eligible DC services, the Region has calculated a new DC for Waste Diversion Services. The calculated charge is based on the need for an additional waste management facility to service growth in Durham. Approximately 50 per cent of the new facility will be dedicated toward waste diversion activities; therefore, only 50 per cent of the facility cost has been included in the calculation of the charge.
- 5.3 The results of the DC calculations are summarized in Table ES-1 and ES-2 for residential and non-residential development respectively. The calculated charges are based on the costing and related assumptions contained in Appendices A to H. Table ES-3 and ES-4 provide the proposed residential and non-residential rates that would be imposed on July 1, 2023, inclusive of the mandatory 80 per cent phase-in required under the More Homes Built Faster Act.
- 5.4 Tables ES-5 and ES-6 compare the proposed, phased-in, charges for the first year of the DC by-law to the current DC rates as of January 1, 2023.

**Table ES-1
Proposed Residential Development Charges
Full Calculated Rate
(per unit)**

Service Category	Single / Semi Rate	Medium Density	2 bdr apt	1 bdr apt
Water Supply ⁽¹⁾⁽²⁾	\$26,117	\$20,800	\$15,206	\$9,340
Sanitary Sewer ⁽¹⁾⁽²⁾	\$23,858	\$19,000	\$13,890	\$8,531
Regional Roads	\$26,998	\$21,501	\$15,718	\$9,654
Regional Police Services	\$977	\$778	\$569	\$349
Long Term Care	\$548	\$436	\$319	\$196
Paramedic Services	\$441	\$351	\$257	\$158
Waste Diversion	\$94	\$75	\$55	\$34
Total ⁽³⁾	\$79,033	\$62,941	\$46,014	\$28,262
Notes:				
(1) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.				
(2) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.				
(3) Additional Regional development charges exist for GO Transit and Regional Transit under By-law #86-2001 and By-law #39-2022, respectively.				

**Table ES-2
Proposed Non-Residential Development Charges
Full Calculated Rate
(\$ per square foot for Gross Floor Area)**

Service Category	Commercial	Industrial	Institutional
Water Supply ⁽¹⁾⁽²⁾	\$7.51	\$4.86	\$2.03
Sanitary Sewer ⁽¹⁾⁽²⁾	\$12.06	\$7.06	\$2.92
Regional Roads	\$21.91	\$7.59	\$16.61
Sub - Total	\$41.48	\$19.51	\$21.56
Notes:			
(1) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.			
(2) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.			

Table ES-3
Proposed Residential Development Charges with Phase In
For July 1, 2023
(per unit)

Service Category	Phase In	Single / Semi Rate	Medium Density	2 bdr apt	1 bdr apt
Water Supply ⁽¹⁾⁽²⁾	80%	\$20,894	\$16,640	\$12,165	\$7,472
Sanitary Sewer ⁽¹⁾⁽²⁾	80%	\$19,086	\$15,200	\$11,112	\$6,825
Regional Roads	80%	\$21,598	\$17,201	\$12,574	\$7,723
Regional Police Services	80%	\$782	\$622	\$455	\$279
Long Term Care	80%	\$438	\$349	\$255	\$157
Paramedic Services	80%	\$353	\$281	\$206	\$126
Waste Diversion	80%	\$75	\$60	\$44	\$27
Total ⁽³⁾		\$63,226	\$50,353	\$36,811	\$22,610

Notes:

- (1) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.
 (2) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.
 (3) Additional Regional development charges exist for GO Transit and Regional Transit under By-law #86-2001 and By-law #39-2022, respectively.

Table ES-4
Proposed Non-Residential Development Charges with Phase In
For July 1, 2023
(\$ per square foot for Gross Floor Area)

Service Category	Phase In	Commercial	Industrial	Institutional
Water Supply ⁽¹⁾⁽²⁾	80%	\$6.01	\$3.89	\$1.62
Sanitary Sewer ⁽¹⁾⁽²⁾	80%	\$9.65	\$5.65	\$2.34
Regional Roads	80%	\$17.53	\$6.07	\$13.29
Total		\$33.19	\$15.61	\$17.25

Notes:

- (1) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.
 (2) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.

**Table ES-5
Changes in Residential Development Charges
(per Single Detached/Semi Unit)**

Service Category	Current Rate as of January 1, 2023	Proposed Rate for July 1, 2023 ⁽¹⁾	\$ Increase/ (Decrease)
Water Supply ⁽²⁾⁽³⁾	\$12,342	\$20,894	\$8,552
Sanitary Sewer ⁽²⁾⁽³⁾	\$12,013	\$19,086	\$7,073
Regional Roads	\$12,119	\$21,598	\$9,479
Regional Police Services	\$936	\$782	\$(154)
Long Term Care	\$312	\$438	\$126
Paramedic Services	\$246	\$353	\$107
Waste Diversion	\$0	\$75	\$75
Sub - Total	\$37,968	\$63,226	\$25,258
GO Transit ⁽⁴⁾	\$814	\$814	\$0
Regional Transit ⁽⁴⁾	\$1,747	\$1,856	\$109
Total	\$40,529	\$65,896	\$25,367
Notes:			
(1) Mandatory phase in applied according to phase in schedule. Rates do not include annual indexing.			
(2) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.			
(3) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.			
(4) These charges are imposed under separate Development Charge by-laws but are shown in this table for the purposes of presenting a total quantum of Development Charges.			

Table ES-6
Changes in Non-Residential Development Charges
(\$ per square foot of Gross Floor Area)

Service Category	Rates as of January 1, 2023			Proposed Rate July 1, 2023 ⁽¹⁾			\$ Increase / (Decrease) per sq. ft.		
	Commercial	Industrial	Institutional	Commercial	Industrial	Institutional	Commercial	Industrial	Institutional
Water Supply ⁽²⁾⁽³⁾	\$4.59	\$3.66	\$1.11	\$6.01	\$3.89	\$1.62	\$1.42	\$0.23	\$0.51
Sanitary Sewer ⁽²⁾⁽³⁾	\$7.71	\$4.41	\$1.36	\$9.65	\$5.65	\$2.34	\$1.94	\$1.24	\$0.98
Regional Roads	\$11.16	\$4.24	\$9.40	\$17.53	\$6.07	\$13.29	\$6.37	\$1.83	\$3.89
Sub Total	\$23.46	\$12.31	\$11.87	\$33.19	\$15.61	\$17.25	\$9.73	\$3.30	\$5.38
Regional Transit ⁽⁴⁾	\$0.79	\$0.79	\$0.79	\$0.84	\$0.84	\$0.84	\$0.05	\$0.05	\$0.05
Total	<u>\$24.25</u>	<u>\$13.10</u>	<u>\$12.66</u>	<u>\$34.03</u>	<u>\$16.45</u>	<u>\$18.09</u>	<u>\$9.78</u>	<u>\$3.35</u>	<u>\$5.43</u>

Notes:

(1) Mandatory phase in applied according to phase in schedule. Rates do not include annual indexing.

(2) These charges are payable only in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.

(3) Not applicable to the Seaton area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.

(4) These charges are imposed under a separate Development Charge By-law 39-2022

6. Proposed Implementation of Development Charges

Residential Development Charge

- 6.1 It is recommended that the calculated residential development charge rates, including the required phase-in as outlined in Table ES-3, be implemented on July 1, 2023. This includes a new service category for Waste Diversion to fund the new waste management facility proposed to service growth in Durham.

Commercial Development Charge

- 6.2 It is recommended that the calculated commercial development charge, including the required phase-in, for water supply, sanitary sewerage and Regional roads (\$33.19/sq.ft.) be implemented on July 1, 2023.

Industrial Development Charge

- 6.3 It is recommended the full phased-in industrial development charge, including the required phase-in, for water supply, sanitary sewerage and Regional roads (\$15.61/sq.ft.) be implemented on July 1, 2023.

Institutional Development Charge

- 6.4 It is recommended that the full calculated institutional development charge, including the required phase-in, for water supply, sanitary sewerage and Regional roads (\$17.25/sq.ft.) be implemented on July 1, 2023.

7. Anticipated Development

- 7.1 The DCA requires that the “anticipated amount, type and location of development, for which development charges can be imposed, must be estimated”.
- 7.2 Accordingly, staff have prepared estimates of residential and non-residential development by population, dwelling unit type (e.g. single detached, apartment), employment and floor space by sector (e.g. commercial) for each service. The anticipated development forecasts are based on the growth forecasts contained within the current Durham Regional Official Plan, which has a 2031 planning horizon, as mandated by the original (2006) Growth Plan. The forecasts assume growth will occur in the manner contemplated in the Regional Official Plan, with development concentrated primarily within the Urban Areas designated in the plan. A small allowance for rural growth is also included.
- 7.3 The development over the ten-year time period of July 1, 2023 – June 30, 2033 inclusive, including the Seaton area (which is detailed in Appendix A), is highlighted in Table ES-7:

**TABLE ES-7
REGION OF DURHAM
GROWTH FORECASTS
July 1, 2023 - June 30, 2033**

TYPE OF GROWTH	INCREMENTAL AMOUNT	REFERENCE
Population Growth	161,913 Persons	Schedule 1
Household Unit Growth	69,210 Households	Schedule 1
Employment Growth ¹	58,334 Employees	Schedule 10a
Additional Non-Residential Floor Space ²	38,180,700 Square Feet	Schedule 10d

¹ Excludes No Fixed Place of Work. Includes primary and Work at Home.

² Includes primary.

8. Summary of the Capital Costs and Deductions

8.1 As part of the analysis required by the DCA, the capital forecasts providing the eligible growth related capital costs required for the anticipated development have been prepared for each service and are detailed in Appendices E to H. The services included herein include Hard Services of Water, Sewer and Roads and General Services of Regional Police, Paramedics, Long Term Care and Waste Diversion.

8.2 The capital costs eligible for Development Charge recovery by service are considered over the ten-year forecast period from 2023 to 2032. These are summarized in Table ES-8 below:

**Table ES-8
Summary of Capital Costs for all Eligible Programs
(\$2023, \$millions)**

Services	Gross Cost	Less:				Net Growth		
		Ineligible (Level of Service)	Benefit to Existing Development	Subsidy Developer Contribution/ Other ⁽¹⁾	Post Period Capacity	Total	Res	Non-Res
	\$	\$	\$	\$	\$	\$	\$	\$
Hard Services (2023-2033):								
Water	\$1,679.7	\$0.0	\$81.6	\$0.0	\$104.0	\$1,398.7	\$1,228.7	\$169.9
Sewer	\$1,811.4	\$0.0	\$74.3	\$0.0	\$481.4	\$1,251.1	\$1,001.9	\$249.2
Roads	\$2,631.6	\$0.0	\$414.1	\$92.6	\$63.7	\$2,061.2	\$1,517.9	\$543.3
Sub-total	\$6,122.7	\$0.0	\$570.0	\$92.6	\$649.1	\$4,711.0	\$3,748.5	\$962.4
General Services (2023-2033):								
Regional Police Services	\$171.5	\$0.0	\$92.6	\$0.0	\$0.0	\$78.9	\$58.4	\$20.5
Paramedic Services	\$39.0	\$3.5	\$7.5	\$0.0	\$0.0	\$28.0	\$25.0	\$3.1
Long Term Care	\$126.4	\$0.0	\$63.0	\$35.6	\$0.0	\$27.8	\$27.8	\$0.0
Waste Diversion	\$9.8	\$4.9	\$0.0	\$0.0	\$0.0	\$4.9	\$4.9	\$0.0
Sub-total	\$346.7	\$8.4	\$163.1	\$35.6	\$0.0	\$139.6	\$116.0	\$23.6
Total	\$6,469.4	\$8.4	\$733.1	\$128.2	\$649.1	\$4,850.6	\$3,864.5	\$986.0

Notes:

⁽¹⁾ Includes Capital Cost Allocations to Seaton and Federal Lands in Pickering.

8.3 Table ES-8 summarizes the total capital program considered by service, the statutorily required deductions, and the growth-related capital costs eligible for DC recovery. The total capital program within the DC Background Study totals \$6.5

billion. Approximately \$4.9 billion is eligible for DC recovery over the 10-year planning period. The balance of the program (\$1.6 billion) would be recovered from future DC (to fund post period capacity deductions), property taxes, user rates and other funding sources.

8.4 The Region intends to implement the projects set out in this Study through its annual business planning and budget process. Accordingly, the timing of some of the projects which are to be development charge funded may be modified in subsequent business plans and budgets.

9. Proposed Changes to Development Charges Policies

9.1 The DC by-law rules for exemptions, relief and adjustments for the charge are detailed in Section 6 of the Background Study and are included in the proposed by-law in Appendix K. The main proposed changes include the following:

- Adding the additional DC service of Waste Diversion;
- Broadening the definition of a bedroom to meet the area requirements of the Ontario Building Code;
- Broadening the definition of apartment building to include stacked townhouses; and,
- Reducing the timeframe for which redevelopment credits are applied from within ten years after the date of the first demolition permit to within five years.

Further changes to definitions have been proposed to better define terms and to ensure compliance with legislation.

A summary of policy change recommendations is included in Table ES-9 which follows.

**Table ES-9
Summary of Policy Change Recommendations**

Policy	Current Treatment	Proposed Treatment
New Regional Residential Development Charge to fund new waste diversion capital infrastructure	No charge.	Introduction of a Regional development charge for growth related waste diversion capital infrastructure.
Housing Services / Housing Services Use	Commissioner of Finance has authority to defer DC payments up to 18 months for rental housing provided by non-profit or private providers.	<p>This has been removed from the proposed by-law as Bill 23 has provided a full DC exemption for non-profit housing developments. Bill 23 also provides DC discounts for rental housing developments by private providers.</p> <p>The definitions of “housing services / housing services use” has subsequently been removed from the proposed by-law.</p>
Definition of apartment building	Apartment building is defined as a residential building, or the residential portion of a mixed-use building, other than a triplex, semi-detached duplex, semi-detached triplex, townhouse or stacked townhouse, consisting of more than 3 dwelling units, which dwelling units have a common entrance to grade.	<p>The definition of apartment building is proposed to be expanded to include stacked townhouses. Stacked townhouses would therefore be charged the apartment rate, based on the number of bedrooms, as opposed to the medium density rate (which is the current practice).</p> <p>Subsequently, the reference to stacked townhouses in the definition of medium density multiples is proposed for removal. The reference related to a stacked townhouse being defined as a building, other than an apartment building, is also being proposed for removal from the definition of a stacked townhouse.</p>

Definition of a bedroom

Bedroom is defined as a habitable room, including a den, study, loft, or other similar area, but does not include a living room, a dining room, a bathroom or a kitchen.

The definition of a bedroom is proposed to be expanded to include the area specifications as per the Ontario Building Code. The area specifications proposed for inclusion are “not less than 7 m² where built-in closets are not provided, and not less than 6 m² where built-in closets are provided.”

Definition of “detached and “detached dwelling”

Not defined. However, single detached dwelling and single detached are defined as a building comprising 1 dwelling unit.

Detached and detached dwelling mean a residential building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units on that parcel of land, where no portion of the building is attached to any building on another parcel of land.

Subsequently, the definition of single-detached dwelling and single detached have been removed.

Definition of semi-detached building and semi-detached dwelling

Semi-detached building is not defined; however, semi-detached duplex is defined as one of a pair of attached duplexes, each duplex divided vertically from the other by a party wall.

Semi-detached dwelling defined as a building divided vertically (above or below ground) into and comprising 2 dwelling units.

Proposed by-law removes the definition of semi-detached duplex and replaces it with the following definition of semi-detached building:

“semi-detached building” means a building on two parcels of land, divided vertically (above or below ground) along the common lot line of the two parcels and comprising at least 1 dwelling unit and not more than 3 dwelling units on each parcel.”

Semi-detached dwelling is proposed to be redefined as “the portion of a semi-detached building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units.”

Definition of townhouse building and townhouse dwelling

Townhouse building and townhouse dwelling are not defined; however, townhouse is defined as a building, other than a plex, stacked townhouse or apartment building, containing at least 3 dwelling units, each dwelling unit separated vertically from the other by a party wall and each dwelling unit having a separate entrance to grade.

Proposed by-law removes the definition of a townhouse and includes the following definitions for townhouse building and townhouse dwelling:

“townhouse building” means a residential building, on at least 3 parcels of land divided vertically (above or below ground) along the common lot line between each of the parcels and comprising at least 1 dwelling unit and not more than 3 dwelling units on each parcel.

“townhouse dwelling” means the portion of a townhouse building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units.

Definition of stacked townhouse

Defined as a building, other than a plex, townhouse or apartment building, containing at least 3 dwelling units; each dwelling unit separated from the other vertically and/or horizontally and each dwelling unit having a separate entrance to grade.

Proposed by-law refines the definition to remove the reference to apartment building.

Definition of residential use

Defined as lands, buildings or structures used, or designed or intended for use as a home or residence of one or more individuals, and shall include, but is not limited to, a single detached dwelling, a semi-detached dwelling, a townhouse, a plex, a stacked townhouse, an apartment, an apartment building, a mobile home, a retirement residence and a

The proposed by-law refines the definition to mean lands, buildings or structures used, or designed or intended for use as a home or residence of one or more individuals, and shall include any building or structure containing dwelling units, and include but not limited to, a detached dwelling, a semi-detached dwelling, a townhouse, a plex, a stacked townhouse, an apartment, an apartment building, a mobile home, a retirement residence and a

	residential dwelling unit accessory to a non-residential use.	residential dwelling unit accessory to a non-residential use.
Definition of a duplex	Defined as a building comprising, by horizontal division, two dwelling units.	Proposed by-law refines the definition to mean a building comprising, by horizontal division, two dwelling units on one parcel of land.
Definition of garden suite	Garden suite is defined as a one-unit detached, temporary residential structure containing a bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable.	<p>This definition has been deleted from the proposed by-law as garden suites are now exempt from DCs, as per Bill 23.</p> <p>Subsequently, the reference to garden suites in the definition of “medium density multiples” has been removed.</p>
Redevelopment Credit	Redevelopment credits available within 10 years from the date the first demolition permit was issued.	Proposed change reduces the timeframe to 5 years from the date the first demolition permit was issued.
Exemption for lands vested in or leased to a university	Not included in current by-law.	<p>Proposed by-law provides a DC exemption for the following.</p> <p>“(f) 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, but only if the lands are occupied and used by the university.”</p> <p>This is now a statutory exemption as per Bill 197.</p>

Date By-law Expires	By-law will expire five years from the date it comes into force, unless it is repealed at an earlier date by a subsequent by-law.	This clause is proposed for removal from the by-law to accommodate new provincial legislation that extends the expiry of DC by-laws to 10 years.
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The following policies are unchanged:

- Provisions in the Development Charges Act that specifically exempt schools and municipal facilities from paying development charges, discretionary exemptions for places of worship, public hospitals, roof-like structures and canopies that do not have walls and agriculture use.
- The Region Share Policy for Residential Development (Appendix B), along with the Well Interference Policy (Appendix C) and the Intensification Servicing Policy (Appendix D).
- Mobile homes will continue to be charged the two-bedroom apartment development charges rate. The development charges will be refunded if the mobile home is removed within ten years of the issuance of the building permit.
- Region will continue to collect 50 per cent of water, sewer and roads residential development charge at the execution of the subdivision agreement with the remaining 50 per cent collected at the one-year anniversary or at building permit if sooner.

10. Indexing

10.1 Under the DCA, the Region "...may also provide for the indexing of development charges based on the prescribed index" (s.s.5 (1)10). Section 6, paragraph 2 requires that a development charge by-law must set out an express statement indicating how, if at all, the rules provide for the indexing of development charges.

10.2 The "prescribed index" is defined in O.Reg. 82/98 s.7 as, "The Statistics Quarterly, Construction Price Statistics, catalogue number 62-007 as the index for the purposes of paragraph of subsection 5(1) of the Act."

10.3 It is recommended that the Regional Residential and Non-residential Development Charge rates continue to be indexed annually as of July 1st of each year, in accordance with the change in the prescribed index for the most recently available annual period, ending March 31. The first indexing will occur on July 1, 2024 in order to preserve the purchasing power of the charges.

11. Consultation and Subsequent Council Approval

11.1 At this stage in the process, the Background Study and proposed Development Charge By-law are being provided for information purposes, as part of the consultation process. At such time as that process is complete and final Development Charge recommendations are made to Council, approval will be sought for:

- the 2023 Development Charge By-law; and
- the Background Study, including the growth projections, the development-related capital program, the Development Charge calculation and associated material, subject to any Addendum which may be produced prior to by-law adoption.

11.2 Consultations with the building and development industry will be held in April, 2023. The Boards of Trade and Chambers of Commerce and other business associations will also be notified of the Background Study release and will be offered contact information for further discussion. Numerous meetings were held with local area municipal staff from various departments on specific issues, as well, area municipal staff were briefed on the draft development and policy provisions in early March.

11.3 As summarized below, the public meeting of Regional Council is to be held April 12, 2023 as required by Section 12 of the DCA. Council is expected to consider approval of the by-law on June 14, 2023. The proposed by-law will come into force on July 1, 2023.

Process		Date
1.	Outreach to the development community, business associations and Area Municipal Staff	March - April 2023
2.	Meeting Notice ad placed in newspaper(s)	By March 22, 2023
3.	Proposed By-law and Background Study Available to public	March 28, 2023
4.	Statutory Public Meeting	April 12, 2023
5.	By-law Revisions (if necessary)	April - May, 2023
6.	Last day for public comments	May 5, 2023
7.	Regional Council considers adoption of background study and passage of by-law.	June 14, 2023
8.	Newspaper notice given of by-law amendment passage	By 20 days after passage
9.	Last day for by-law appeal	40 days after passage
10.	Region makes the pamphlet available	By 60 days after in force date

1.0 INTRODUCTION

1.1 Background

- 1.1.1 The Region of Durham is updating its Development Charge (DC) Background Study and By-law pending the expiry of By-law No. 28-2018 on July 1, 2023.
- 1.1.2 The purpose of the Development Charge Background Study is to establish the components of the Region's future capital expenditures which are attributable to new development and to calculate the development charge required to fund them. Growth-related capital expenditures represent the capital costs necessary to provide the increase in need for municipal services attributable to the anticipated development over the planning period (in this case, the next 10 years), net of several statutory expenditure exclusions, for which development charges cannot be imposed. These development-related capital costs are distinguished from replacement, rehabilitation or "state of good repair" items which are almost exclusively the funding responsibility of existing developments through property taxes and user rates.
- 1.1.3 Development-related expenditures are established herein in terms of the provisions of the *Development Charges Act, 1997* (DCA), as amended, including the changes which came into effect in January 2020 from the More Homes, More Choice Act (Bill 108) and the COVID-19 Economic Recovery Act (Bill 197), along with the changes in November 2022 from the More Homes Built Faster Act (Bill 23). These provisions define a calculation methodology and implementation rules which must be followed. Once the required background study is completed, Council is then in a position to determine whether it wishes to impose some, or all, of the calculated development charges on some, or all, of the anticipated development.
- 1.1.4 Thus, this Development Charge Background Study calculates the cost of new infrastructure required, by the Region, as a result of the increase in need for services to accommodate new development. The resultant charge is expressed as a dollar amount per residential unit by type and per square foot of non-residential gross floor area (GFA) by type.
- 1.1.5 This report has been prepared, in the first instance, to meet the statutory requirements applicable to the Region's Development Charge Background Study, as summarized below. In so doing, it addresses the requirement for "rules" (Section 6) as part of the proposed by-law, which has been included as part of this Background Study (Appendix K).

In addition, the study is designed to set out sufficient background on the legislation (Section 1.3), current Region DC policy (Section 2) and the basis for the calculations underlying the proposed charge, to make the exercise understandable to those involved.

Finally, it addresses post-adoption implementation requirements (Section 7) which are critical to the successful application of the new policy (Appendix E-H).

- 1.1.6 The sections in the report are further supported by appendices containing the data required to explain and substantiate the calculation of the charge.
- 1.1.7 Figure 1-1 outlines the proposed schedule to be followed with respect to the development charge by-law adoption process.
- 1.1.8 The DCA requires that a development charge background study be completed by a municipal council before passing a development charge by-law. The mandatory inclusions in such a study are set out in s.10 of the DCA and in s.8 of O.Reg. 82/98, as follows:
- a) the estimates under paragraph 1 of subsection 5(1) of the anticipated amount, type and location of development [addressed in Section 3 of this report];
 - b) the calculations under paragraphs 2 to 7 of subsection 5(1) for each service to which the development charge by-law would relate [addressed in Sections 4 and 5 of this report];
 - c) consideration of the use of more than one development charge by-law to reflect different needs for services in different areas [addressed in Section 6.9 of this report];
 - d) an examination, for each service to which the development charge by-law would relate, of the long-term capital and operating costs for capital infrastructure required for the service [addressed in Appendix I of this report];
 - e) an asset management plan prepared in accordance with subsection 10(3) of the DCA [addressed in Appendix I of this report]; and,
 - f) the following for each service to which the development charge relates:
 - 1. The total of the estimated capital costs relating to the service.
 - 2. The allocation of the costs referred to in paragraph 1 between costs that would benefit new development and costs that would benefit existing development.

3. The total of the estimated capital costs relating to the service that will be incurred during the term of the proposed development charge by-law.
4. The allocation of the costs referred to in paragraph 3 between costs that would benefit new development and costs that would benefit existing development.
5. The estimated and actual value of credits that are being carried forward relating to the service (O.Reg. 82/98 s.8) [addressed in Section 6 of this report].

**FIGURE 1-1
SCHEDULE OF KEY DEVELOPMENT CHARGE PROCESS DATES
FOR THE REGION OF DURHAM**

Process	Date
1. Outreach to the development community, business associations and Area Municipal Staff	March - April 2023
2. Meeting Notice ad placed in newspaper(s)	By March 22, 2023
3. Proposed By-law and Background Study Available to public	March 28, 2023
4. Statutory Public Meeting	April 12, 2023
5. By-law Revisions (if necessary)	April-May, 2023
6. Last day for public comments	May 5, 2023
7. Regional Council to consider adoption of background study and passage of by-law	June 14, 2023
8. Newspaper notice given of by-law amendment passage	By 20 days after passage
9. Last day for by-law appeal	40 days after passage
10. Region makes the pamphlet available	By 60 days after in force date

1.2 Conformity with Applicable Legislation and Regional Policy

- 1.2.1 The Regional Development Charge By-law has been prepared in conformity with the provisions of the Development Charges Act, 1997, The Provincial Policy Statement, 2020, the original (2006) Growth Plan for the Greater Golden Horseshoe, and the Durham Regional Official Plan.

1.3 Development Charges Act Requirements

1.3.1 Introduction

1. Development charges are payments made by new development in Durham (and other municipalities) normally at the time of building permit issuance and/or the subdivision/severance agreement. These payments are made by all such new development, unless specifically exempt by the *Development Charges Act* or the Region's Development Charges By-law.
2. These payments are made for the initial capital requirements of meeting the increase in need for services of new development anticipated over the next ten years. The specific services eligible for DC funding, as per the *Development Charges Act*, are listed in section 1.3.2.1 below.
3. "Capital" is defined in the DCA to include the municipal cost to acquire, lease, construct or improve land or facilities, including rolling stock (with a 7+ year useful life), furniture and equipment (other than computer equipment), library materials, as well as related financing costs.
4. The Region of Durham has imposed DCs throughout its history and currently does so via By-law No. 28-2018 passed June 13, 2018, with a maximum by-law term of five years from its July 1, 2018 in-force date.
5. This by-law provides for DC payments which vary with the amount and type of new development, as detailed in Section 3.
6. These charges are indexed for inflation as of July 1 each year, based on the prescribed Statistics Canada Quarterly *Construction Price Statistics* and By-law No. 28-2018.
7. The monies collected under By-law No. 28-2018 are maintained in separate reserve funds, one for each of the services involved. Most of the collections are for Water Supply, Sanitary Sewerage and Regional Roads services. Lesser development charge components are also collected for Paramedic Services, Long Term Care, and Regional Police services.
8. Each development charge paid is allocated, as a statutory requirement, to those reserve funds. It is also required that the monies only be expended for the purposes for which the DC was collected.

9. In calculating the charge, it is necessary to:
 - establish a new development forecast for population and housing, as well as for employees and floor area;
 - determine and cost the increase in need for services that such new development will require and ensure that the capital program has Council endorsement;
 - make the cost deductions required by the DCA with respect to service level, benefit to existing development, excess capacity, grants and contributions, etc.;
 - calculate development charges by type of development and document this in a background study and by-law along with associated policies; and,
 - take the study and proposed by-law through a public process, seeking Council approval thereof.
10. Development charges represent a significant capital funding source for many services and serve to provide a significant portion of funding for designated projects. The current by-law updating process is designed to identify full DC coverage for Regional services.

1.3.2 Development Charge Prerequisites

As per the DCA, the Region can impose development charges for:

1. Any of the following eligible services that pertain to services provided by the Region of Durham:
 - 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, as defined in subsection 5.1 (1);
 - Transit services other than the Toronto-York subway extension;
 - Waste diversion services;
 - Policing services;
 - Fire protection services;
 - Ambulance services;
 - Library Services;
 - Long-term care services;
 - Parks and recreation services (excluding the acquisition of land for parks);
 - Public health services;
 - Childcare and early years services;
 - Provincial Offences Act services;
 - Services related to emergency preparedness;

- Services related to airports, but only in the Regional Municipality of Waterloo; and
 - Additional services as prescribed.
2. An eligible service which will experience an increase in capital needs at least partially attributable to residential and/or non-residential development in Durham from July 1, 2023 to June 30, 2033.
 3. A service for which Regional Council has, or will (as part of the DC process), approve(d) a capital forecast, which includes capital capacity expansion projects as per paragraph 2 (exclusive of uncommitted excess capacity).
 4. Such capital capacity expansion projects not fully funded by grants, subsidies or other contributions (e.g. developer contributions).
 5. Such capital projects that involve the acquisition, lease, construction or improvement of land, buildings, including furniture and equipment, and borrowing costs (as well as library materials).
 6. Such capital projects do not include computer equipment or rolling stock with an estimated useful life of less than 7 years.
 7. Such capital costs don't serve to increase the future (per capita/employee) level of service beyond the historical average attained in Durham over the 2008-2022 period or benefit existing development.
- 1.3.3 The following tabular text (Figure 1-2) sets out the method that must be used to determine DCs. The underlining has been added to the quotations for clarification/emphasis and is not part of the statute or regulation quoted on the left side of the page. The DC calculation process is also summarized schematically in Figure 1-3 which follows.

Figure 1-2
SUMMARY OF STATUTORY DEVELOPMENT CHARGE
CALCULATION REQUIREMENTS

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>1. “The anticipated amount, type and location of development, <u>for which development charges can be imposed</u>, must be estimated.”</p> <p>s.10(2)(c.1) requires Council to consider the use of more than one DC By-law to reflect different needs from services in different area.</p>	<p>Virtually all municipalities forecast <u>all</u> development (including DC-ineligible) in the first instance. That development is used as the denominator in the DC calculation with the <u>full</u> eligible cost of servicing all such development used as the numerator. That way, growth-related servicing costs are equitably spread over <u>all</u> benefiting development, the municipality does not recover DCs from exempt development and this would ensure that the requirements of s.s.5(6)3 have been met. That is, capital costs have not been offloaded from one type of development to another.</p> <p>While consideration of the use of area-rating is a mandatory requirement of the DCA, the adoption of area specific by-laws is a choice to be made by Council.</p>
<p>2. “The increase in the need for service <u>attributable to the anticipated development</u> must be estimated for each service to which the development charge by-law would relate.”</p>	<p>This step involves estimating the additional service requirement, individually for water, wastewater, roads, etc., that is needed by the development increment in paragraph 1.</p> <p>The anticipated development in para. 1 must correspond to the service attribution in para. 2.</p> <p>This involves removing statutorily ineligible development (e.g. municipalities, schools, specified industrial expansions, specified residential intensification and other statutorily exempt public uses) and the servicing cost thereof. However, this would be very difficult to accomplish because numerous unspecified geographic locations are involved for such development, which makes the servicing cost difficult to identify.</p> <p>As a result, the total cost/total development approach outlined above is used and has the same effect on the DC quantum.</p>

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>3. “The estimate under paragraph 2 may include an increase in need only if the <u>council of the municipality has indicated that it intends to ensure that such an increase in need will be met.</u>”¹</p> <p>O.Reg. 82/98 s.3. “For the purposes of paragraph 3 of subsection 5(1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met <u>if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council</u> and the plan, forecast or similar expression of the intention of the council has been approved by the council.”</p>	<p>The capital forecast underpinning the DC calculation must be formally approved by Council in one of the ways indicated in the Regulation.</p>
<p>4. “The estimate under paragraph 2 must not include an increase that would result in <u>the level of service exceeding the average level of that service provided in the municipality</u> over the 15-year period immediately preceding the preparation of the background study required under section 10.¹</p> <p>O.Reg. 82/98 s.4(1) “For the purposes of paragraph 4 of subsection 5(1) of the Act, 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.”</p>	<p>This provision creates a “service level cap” equal to the cost of providing service to the “anticipated development,” consistent with the 15-year historical average level of service.</p> <p>Services other than those excluded in s.s.2(4), may be defined by the municipality and, in some cases, grouped into “a class of service” for purposes of reserve funds and credits (as per s.7).</p> <p>Two “level of service” considerations must be taken into account in satisfying compliance regarding the 15-year historical average level of service cap. These considerations involve “quantity” (e.g. floor space per capita) and “quality” (e.g. cost per sq ft of floor space).</p>

¹ The Act notes that the provisions may be further governed by regulations.

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>s.s.4(2) addresses the service level in an excluded geographic area where a service is not provided.</p> <p>s.s.4(4) limits the service level in part of a municipality to the level otherwise applicable to the full municipality.</p> <p>s.s.4(3) modifies the service level cap where a higher level is required by another Act.</p>	<p>This provision potentially affects area-specific charges.</p>
<p>O.Reg. 206/04 amended s.4 of O.Reg. 82/98 by adding the following subsection:</p> <p>“(1.1) In determining the <u>quality</u> of a service under subsection (1), the <u>replacement cost</u> of municipal capital works, exclusive of any allowance for depreciation, shall be the amount used.</p>	<p>The Regulation clarifies that the quality level of service measure is to be based on the undepreciated replacement cost of municipal capital works.</p>
<p>5. “The increase in the need for service attributable to the anticipated development must be <u>reduced</u> by the part of that increase that can be met <u>using the municipality’s excess capacity, other than</u> excess capacity that the council of the municipality has indicated an intention would be paid for by new development.”¹</p> <p>O.Reg. 82/98 s.5. “For the purposes of paragraph 5 of subsection 5(1) of the Act, excess capacity is uncommitted excess capacity unless, either before or at the time the excess capacity was created, the <u>council</u> of the</p>	<p>“Uncommitted excess capacity” is available capacity that obviates (part of) the need for new projects. It is different than “Post Period Capacity,” which is <u>not</u> needed by development during the planning period and is provided for the use of subsequent development, e.g. post-2032 development, which can be required to fund it through future DCs.</p> <p>The Regulation explains the circumstances under which (part of) the cost of “committed excess capacity,” (e.g. infrastructure in the ground from prior DC by-laws or otherwise), can be recovered via future DCs.</p>

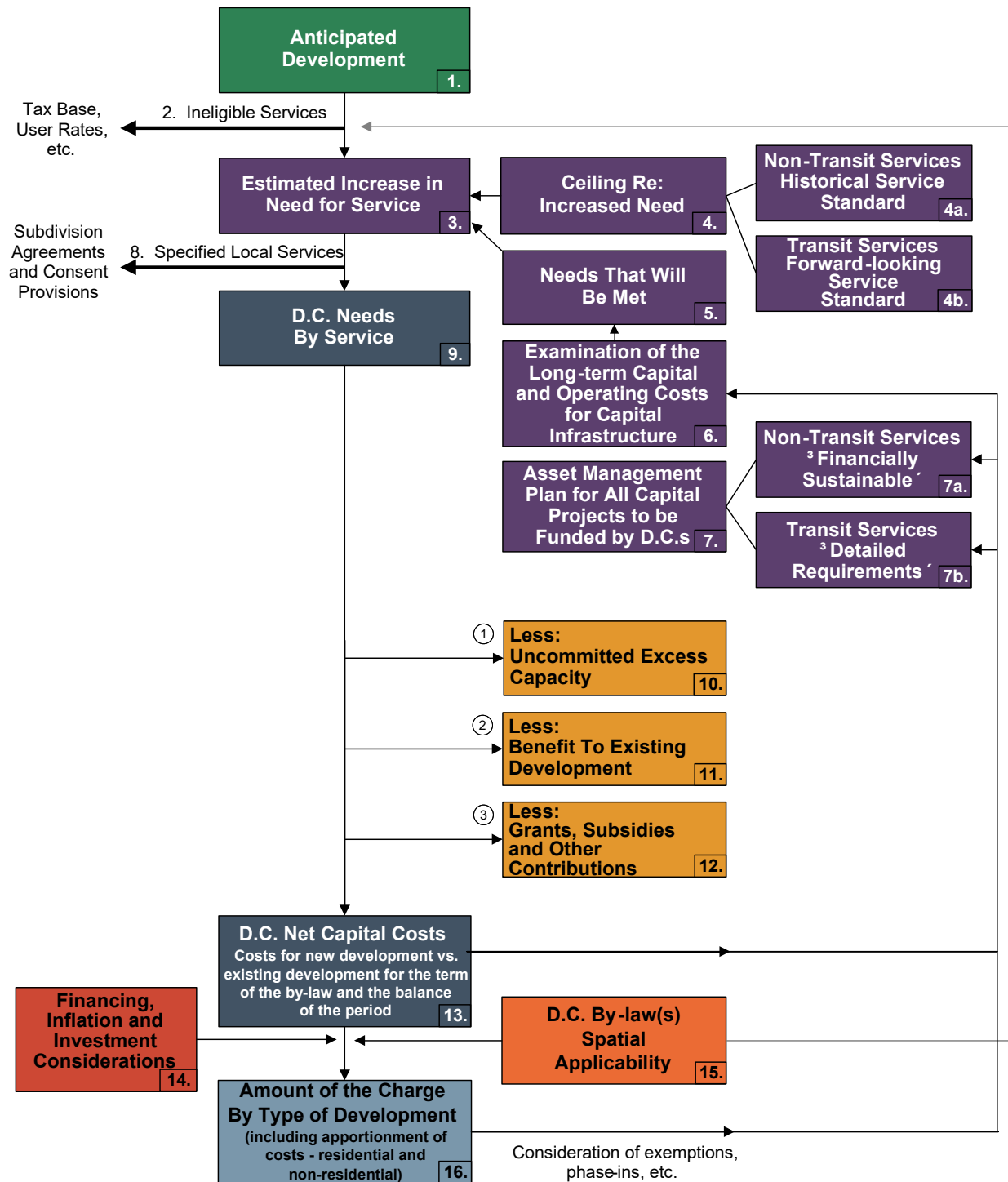
s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>municipality <u>expressed a clear intention that the excess capacity would be paid for by development charges</u> or other similar charges.”</p>	
<p>6. “The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would <u>benefit existing development</u>.”¹</p> <p>Note: no regulatory clarification has been provided.</p>	<p>Existing development benefits from:</p> <ul style="list-style-type: none"> • the repair or unexpanded replacement of existing assets; • an increase in average service level or existing operational efficiency; • the elimination of a chronic servicing problem not created by growth; • providing services where none previously existed (e.g. water service).
<p>7. “The <u>capital costs</u> necessary to provide the increased services must be estimated. The capital costs <u>must be reduced by the reductions set out in subsection (2)</u>. What is included as a capital cost is set out in subsection (3).”¹</p> <p>O.Reg. 82/98 s. 6 indicates that:</p> <p>“Unless the person making the grant, subsidy, etc., was specific as to how it is to be applied, the contribution is to be shared between growth and non-growth project components in proportion to the way in which the costs were allocated in s.s.5(1)6.”</p> <p>s.s.5(3) defines capital costs to include:</p> <ul style="list-style-type: none"> • the acquisition or lease of (an interest in) land; • construction, improvement, acquisition or lease (capital component only) costs for buildings/structures/facil 	<p>These costs exclude “local services” related to a plan of subdivision or a consent approval, to be installed or paid for by the owner (s.s.2(5)).</p> <p>Includes debt payments related to previously constructed growth-related works.</p> <p>s.s.5(2) refers to capital grants, subsidies and other contributions made to a municipality <u>or that Council anticipates</u> will be made in <u>respect of the capital costs</u>.</p>

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>ities;</p> <ul style="list-style-type: none"> • 7+ year useful life rolling stock; • FFE, other than computer equipment; • library materials; and • interest on related borrowings. 	
<p>9. “Rules <u>must be</u> 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).”</p> <p>s.s.5(6):</p> <p>“The rules developed under paragraph 9 of subsection (1) to determine if a development charge is payable in any particular case and to determine <u>the amount of the charge are subject to the following restrictions:</u></p> <ol style="list-style-type: none"> 1. The rules must be such that the total of the development charges that would be imposed upon the anticipated development is less than or equal to the capital costs determined under paragraphs 2 to 8 of subsection (1) <u>for all the services to which the development charge by-law relates.</u> 2. If the rules expressly identify a type of development <u>they must not provide for the type of development to pay development charges that exceed the capital costs, determined under</u> 	<p>These are mandatory DC by-law inclusions as to how the charge is to be applied to development types and circumstances.</p> <p>There are three over-riding tests to be met by the DC by-law.</p> <p>A municipality cannot collect more than the calculated cost for each service (if the amount of development and resultant revenue outpaces the forecast, it is addressed via a reserve fund deduction in the DC calculation in the next round or other appropriate means).</p> <p>A municipality cannot offload the cost of servicing one type of development onto another type (e.g. Industrial servicing costs cannot be transferred to residential development and single detached unit servicing costs cannot be transferred to apartments).</p>

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p><u>paragraphs 2 to 8 of subsection (1)</u>, that arise from the increase in the need for services attributable to the type of development.</p> <p>However, it is <u>not necessary that the amount of the development charge for a particular development be limited to the increase in capital costs, if any, that are attributable to that particular development.</u></p> <p>3. If the development charge by-law will exempt a type of development, phase in a development charge, or otherwise provide for a type of development to have a lower development charge than is allowed, <u>the rules for determining development charges may not provide for any resulting shortfall to be made up through higher development charges for other development.</u>”</p> <p>4. . In the case of a development charge by-law passed on or after the day subsection 5 (6) of Schedule 3 to the More Homes Built Faster Act, 2022 comes into force, the rules must provide that,</p> <p style="padding-left: 40px;">i. any development charge imposed during the first year that the by-law is in force is no more than 80 per cent of the maximum development charge that could otherwise be charged in accordance with this section,</p> <p style="padding-left: 40px;">ii. any development charge imposed during the second year that the by-law</p>	<p>It is not necessary that the <u>average</u> municipal-wide per unit servicing costs funded by the DC reflect the needs of any <u>particular</u> development project.</p> <p>Paragraphs 3 and 4 provide further clarification on the inability of the by-law to offload cost recovery from one type of development to another, in this case from exempt or discounted development to non-exempt development. This also applies to the mandatory phase-in of DCs under the first 4-years of a by-law.</p>

s.s.5(1) of the DCA (and associated Regulations)	Commentary
<p>is in force is no more than 85 per cent of the maximum development charge that could otherwise be charged in accordance with this section,</p> <p>iii. any development charge imposed during the third year that the by-law is in force is no more than 90 per cent of the maximum development charge that could otherwise be charged in accordance with this section, and</p> <p>iv. any development charge imposed during the fourth year that the by-law is in force is no more than 95 per cent of the maximum development charge that could otherwise be charged in accordance with this section”</p>	
<p>10. “The rules <u>may provide</u> for full or partial exemptions for types of development and for the phasing in of development charges. The rules <u>may also provide</u> for the indexing of development charges based on the prescribed index.”</p>	<p>There are optional by-law inclusions such as authority to set rules on discretionary exemptions, phasing in of DCs and indexing of DCs.</p>

Figure 1-3
The Process of Calculating a development charge under the DCA, 1997



2.0 CURRENT REGION OF DURHAM POLICY

2.1 Introduction

This section summarizes the Region's current development charge policy set out in Region-wide development charge by-law No. 28-2018, as amended.

2.2 Summary of By-law No. 28-2018

2.2.1 Regional Council passed By-law No. 28-2018 on June 13, 2018. This by-law imposed development charges for eight services against four types of residential development (single / semi-detached, medium density multiples, 2 bedroom + apartments and one bedroom or smaller apartments) and three non-residential uses (commercial, institutional and industrial). Three of the eight residential services have since been removed due to changes in the DCA (Bill 108 and Bill 23), namely Development Related Studies, Health and Social Services and Housing Services.

2.2.2 The initial charges in 2018 and the current charges as of January 1, 2023, are shown on Tables 2-1, 2-2 and 2-3.

2.2.3 Residential and non-residential development charges were indexed annually on July 1 of each year based on the changes in the Statistics Canada Quarterly, Construction Price Statistics, Catalogue Number 62-007 (s.24).

2.2.4 This by-law applies to all lands in Durham except for the Seaton lands (for water and sewerage services only), subject to a number of exemptions, both statutory and voluntary. The statutory exemptions are standard and relate to residential intensification, industrial expansion, and defined institutional uses.

The voluntary exemptions established by the Region include:

- a) agricultural uses and farm buildings;
- b) places of worship;
- c) public hospitals receiving aid under the Public Hospitals Act, R.S.O. 1990, c. P.40, excluding such buildings or structures or parts thereof used, designed or intended for use primarily for or in connection with a commercial purpose;
- d) any part of a building or structure used for the parking of motor vehicles, excluding parking spaces for display of motor vehicles for sale or lease or parking spaces associated with the servicing of motor vehicles; and,
- e) free standing roof-like structures and canopies that do not have exterior walls.

**Table 2-1
Region of Durham Residential Development Charges
Per Single Detached Unit – By-law No. 28-2018**

	July 1, 2018 Rate \$/Single Detached Unit	January 1, 2023 Rate \$/Single Detached Unit
Water Supply ⁽¹⁾⁽²⁾	\$9,420	\$12,342
Sanitary Sewerage ⁽¹⁾⁽²⁾	9,170	12,013
Regional Roads	9,250	12,119
Regional Police Services	715	936
Long Term Care	19	312
Paramedic Services	170	246
Housing Services	387	-
Health and Social Services	123	-
Development Related Studies	19	-
Subtotal	<u>\$29,274</u>	<u>\$37,968</u>
GO Transit ⁽³⁾	723	814
Regional Transit ⁽³⁾	<u>1,143</u>	<u>1,747</u>
Total	<u>\$31,139</u>	<u>\$40,529</u>

Notes:

- (1) These charges are only payable in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.
- (2) Not applicable to the Seaton Area as defined in Appendix A of the Background Study and schedule F of the proposed by-law.
- (3) Additional Regional development charges exist for GO Transit and Regional Transit under By-law #86-2001 and By-law #39-2022 respectively.

**Table 2-2
Region of Durham Residential Development Charges
per Unit Type – By-law No. 28-2018**

<u>Service Category</u>	<u>July 1 2018⁽¹⁾</u> \$	<u>January 1 2023⁽²⁾</u> \$
Single / Semi Detached	31,139	40,529
Medium Density Multiple	25,081	32,603
2 Bedroom Apt and Larger	18,124	23,546
1 Bedroom Apt and Smaller	11,784	15,278

Notes:

- (1) Includes Regional development charges for GO Transit and Regional Transit under By-law 86-2001 and 81-2017 respectively.
- (2) Includes Regional development charges for GO Transit and Regional Transit under By-law 86-2001 and 39-2022 respectively.

**Table 2-3
Region of Durham Non - Residential Development Charges
\$ per square foot of Gross Floor Area– By-law No. 28-2018**

Commercial		
<u>Service Category</u>	<u>July 1 2018</u>	<u>Jan. 1 2023</u>
Water Supply ⁽¹⁾⁽²⁾	\$3.51	\$4.59
Sanitary Sewerage ⁽¹⁾⁽²⁾	5.88	7.71
Regional Roads	8.54	11.16
Regional Transit	0.54 ⁽⁴⁾	0.79 ⁽⁵⁾
Total	<u>\$18.47</u>	<u>\$24.25</u>
Industrial ⁽³⁾		
<u>Service Category</u>	<u>July 1 2018</u>	<u>Jan. 1 2023</u>
Water Supply ⁽¹⁾⁽²⁾	\$2.80	\$3.66
Sanitary Sewerage ⁽¹⁾⁽²⁾	3.38	4.41
Regional Roads	3.24	4.24
Regional Transit	0.54 ⁽⁴⁾	0.79 ⁽⁵⁾
Total	<u>\$9.96</u>	<u>\$13.10</u>
Institutional		
<u>Service Category</u>	<u>July 1 2018</u>	<u>Jan. 1 2023</u>
Water Supply ⁽¹⁾⁽²⁾	\$0.86	\$1.11
Sanitary Sewerage ⁽¹⁾⁽²⁾	1.05	1.36
Regional Roads	7.18	9.40
Regional Transit	0.54 ⁽⁴⁾	0.79 ⁽⁵⁾
Total	<u>\$9.63</u>	<u>\$12.66</u>
Notes:		
(1) These charges are only payable in areas where the services are, or will be, available in an area designated for the particular service in the Region's Official Plan.		
(2) Not applicable to the Seaton Area as defined in Appendix A of the Background Study and Schedule F of the proposed by-law.		
(3) Industrial development charges phased in pursuant to By-law 28-2018.		
(4) Regional Transit development charges under By-law 81-2017.		
(5) Regional Transit development charges under By-law 39-2022.		

2.2.5 Development charges are payable at the time of building permit issuance with two exceptions. The first exception applies to the water supply, sanitary sewerage, and Regional roads DC components which are payable immediately upon the parties entering into a subdivision agreement based on the proposed number and type of dwelling units in the plan. This exception does not apply to high density or condominium blocks within a plan. The by-law provides that an owner, who is required to pay the water supply, sanitary sewerage and Regional roads charges at the time of subdivision agreement, may enter into an agreement with the Region to pay 50 per cent of the applicable charge at

execution of subdivision agreement and the remaining 50 per cent on the earlier of the one year anniversary of the execution of the subdivision agreement or at building permit (s.20 (3)).

The other exception applies in instances where, other than described above, the Region and landowner enter into an agreement specifying a different payment schedule (s.20(5)).

2.2.6 Section 18 of the by-law sets out the Region's development charge policy with respect to redevelopment. Where a demolition permit has been or will be issued within ten years prior to the date of payment of development charges or converted from one principal use to another, the DCs otherwise payable will be reduced as follows:

- a) in the case of residential building or the residential portion of a mixed use building, by the number and type of dwelling uses to be demolished or converted times the applicable charge;
- b) in the case of a non-residential building or the non-residential portion of a mixed use building, by the gross floor area to be demolished or converted times the applicable charge.

2.3 Changes to the Development Charges Act, 1997: More Homes, More Choice Act (Bill 108) and the COVID-19 Economic Recovery Act (Bill 197)

2.3.1 On May 2, 2019, the Province introduced Bill 108 (More Homes, More Choice Act), which proposed changes to the DCA. 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. On January 1, 2020, the following provisions were proclaimed:

- A DC for rental housing and institutional developments will be paid in six equal annual installments, with the first payment commencing on the date of occupancy. A DC for non-profit housing developments will be paid in 21 equal annual installments (as discussed below in section 2.5, non-profit housing developments are now exempt from paying DCs, therefore the twenty-year deferral no longer applies). A municipality may charge interest on the installments. Any unpaid DC amounts may be added to the property and collected as taxes.
- The determination of the DC for all developments occurring within two years of a Site Plan or Zoning By-law Amendment planning approval shall be determined based on the DCs in effect on the date the planning application was submitted. These provisions only apply to Site Plan and Zoning By-law Amendment planning applications received on or after January 1, 2020. Developments arising from planning application approvals not fitting these criteria, or if the building permit arising from these planning approvals is issued two-years or more after the planning

application approval, the DC is determined based on the provisions of the DC by-law.

2.3.2 In early 2020, the Province released Bill 197 (COVID-19 Economic Recovery Act), an omnibus bill amending numerous statutes, including the DCA and Planning Act. This Bill also revised some of the proposed amendments included in the More Homes, More Choice Act. The COVID-19 Economic Recovery Act received Royal Assent on July 21, 2020 and was proclaimed on September 18, 2020. The following provides a summary of the additional changes to the DCA that are now in effect:

2.3.3 List of DC Eligible Services

- The DCA previously defined ineligible services for DCs. The amendments to the DCA now defined the services that are eligible for inclusion in a DC by-law. The list of services eligible for inclusion in a DC by-law is listed in section 1.3.2.1 above.

2.3.4 Removal of Statutory 10 per cent Reduction

- The DCA previously required a 10 per cent statutory deduction for all services not specifically identified in s.s. 5 (5) of the DCA (e.g. soft services). This had the effect of categorizing DC eligible services into two groups, e.g. 90 per cent DC recoverable services, and 100 per cent DC recoverable services. The amendments to the DCA remove the 10 per cent statutory deduction for soft services.

2.3.5 Classes of DC Services

- As noted above, the DCA categorized services generally into two categories. The amended DCA repealed these provisions and provided the following:
 - A DC 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 DC 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 DCA
 - A class of service set out in the DC by-law is deemed to be a single service with respect to reserve funds, use of monies, and credits.

2.3.6 Statutory Exemptions

- The DCA provides for statutory exemptions from payment of DCs where the development is creating additional residential dwelling units within prescribed classes of existing residential buildings or structures. This statutory exemption has been expanded to include secondary residential dwelling units, in prescribed classes, that are ancillary to existing residential buildings. Furthermore, additional statutory exemptions are provided for the creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to new dwellings.

2.3.7 Transition

- Services, other than those described in paragraphs 1 to 10 of subsection 2 (4) of the DCA (e.g. soft services) within an existing DC by-law can remain in effect, even if the by-law expires, until the earlier of the day the by-law is repealed, the day the municipality passes a Community Benefits Charge by-law under subsection 37 (2) of the Planning Act, or the specified date. The specified date is September 18, 2022.

2.4 Changes to the Development Charges Act, 1997: Better for People, Smarter for Business Act, 2020

2.4.1 On December 8, 2020, the Better for People, Smarter for Business Act, 2020 received Royal Assent. One of the changes of this Act amended the Ministry of Training, Colleges and Universities Act by exempting the developments of land intended for use by a university that receives operating funds from the Government from the payment of DCs. As a result, this mandatory exemption is included in the Region's draft DC by-laws.

2.5 Changes to the Development Charges Act, 1997: More Homes, Built Faster Act, 2022 (Bill 23)

2.5.1 The More Homes Built Faster Act received Royal Assent on November 28, 2022. This Act amends several pieces of legislation including the Planning Act and the DCA. Some provisions contained in the Act require future regulations and information for implementation. The following provides a summary of the amendments to the DCA:

2.5.2 Additional Residential Unit Exemption

- The rules for these exemptions are now provided in the DCA, rather than the regulations, and are summarized as follows:
 - Exemption for residential units in existing rental residential buildings – for rental residential buildings with four or more residential units, the greater of one unit or 1 per cent of the existing residential units will be exempt from DCs;

- Exemption for additional residential units in existing and new residential buildings – the following developments will be exempt from a DC:
 - A second unit in a detached, semi-detached, or rowhouse if all buildings and ancillary structures cumulatively contain no more than one residential unit;
 - A third unit in a detached, semi-detached, or rowhouse if no buildings or ancillary structures contain any residential units; and,
 - One residential unit in a building or structure ancillary to a detached, semi-detached, or rowhouse on a parcel of urban land, if the detached, semi-detached, or rowhouse contains no more than two residential units and no other buildings or ancillary structures contain any residential units.

2.5.3 Removal of Housing Services as an Eligible DC Service

- Housing services is removed as an eligible service. Municipalities with by-laws that include a charge for housing services can no longer collect for this service.

2.5.4 New Statutory Exemptions for Affordable Units, Attainable Units, Inclusionary Zoning Units, and Non-Profit Housing developments

- Affordable units, attainable units, inclusionary zoning units and non-profit housing developments are exempt from the payment of DCs, as follows:
 - Affordable Rental Units: Where rent is no more than 80 per cent of the average market rent as defined by a new bulletin to be published by the Ministry of Municipal Affairs and Housing.
 - Affordable Owned Units: Where the price of the unit is no more than 80 per cent of the average purchase price as defined by a new bulletin to be published by the Ministry of Municipal Affairs and Housing.
 - Attainable Units: Excludes affordable units and rental units; will be defined as prescribed development or class of development and sold to a person who is at “arm’s length” from the seller.
 - Note: for affordable and attainable units, the municipality shall enter into an agreement that ensures the unit remains affordable or attainable for 25 years.
 - Inclusionary Zoning Units: Affordable housing units required under inclusionary zoning by-laws are exempt from a DC.
 - Non-Profit Housing: Non-profit housing units are exempt from DCs and DC instalment payments due after November 28, 2022.

2.5.5 Historical Level of Service extended to 15-year period instead of the historical 10-year period

- Prior to Royal Assent, the increase in need for service was limited by the average historical level of service calculated over the 10-year period preceding the preparation of the DC background study. This average is now extended to the historical 15-year period.

2.5.6 Revised Definition of Capital Costs

- The definition of capital costs has been revised to remove studies. Further, the regulations to the Act may, in the future, prescribe services for which land or an interest in land will be restricted. As at the time of writing, no services have been prescribed.

2.5.7 Mandatory Phase-in of a DC

- For all DC by-laws passed after January 1, 2022, the charge must be phased-in annually over the first five years the by-law is in force, as follows:
 - Year 1 – 80 per cent of the maximum charge;
 - Year 2 – 85 per cent of the maximum charge;
 - Year 3 – 90 per cent of the maximum charge;
 - Year 4 – 95 per cent of the maximum charge; and
 - Year 5 to expiry – 100 per cent of the maximum charge.

2.5.8 DC By-law Expiry

- A DC by-law now expires ten years after the day it comes into force, unless the by-law provides for an earlier expiry or repeal date. This extends the by-law's life from what use to be a maximum of five years.

2.5.9 Installment Payments

- Non-profit housing development has been removed from the instalment payment section of the DCA under Section 26.1, as these units are now fully exempt from the payment of a DC.

2.5.10 Rental Housing Discount

- The DC payable for rental housing development will be reduced based on the number of bedrooms in each unit as follows:
 - Three or more bedrooms – 25 per cent reduction;
 - Two bedrooms – 20 per cent reduction; and
 - All other bedroom quantities – 15 per cent reduction.

2.5.11 Maximum Interest Rate for Instalments and Determination of Charge for Eligible Site Plan and Zoning By-law Amendment Applications

- No maximum interest rate was previously prescribed, which allowed municipalities to choose the interest rate to impose. As per Bill 23, the maximum interest rate is set at the average prime rate plus 1 per cent. This maximum interest rate provision would apply to all instalment payments and eligible site plan and zoning by-law amendment applications occurring after November 28, 2022.

2.5.12 Requirement to Allocate Funds Received

- Annually, beginning in 2023, municipalities will be required to spend or allocate at least 60 per cent of the monies in a reserve fund at the beginning of the year for water services, wastewater services, and services related to a highway. Other services may be prescribed by the regulation.

2.6 Summary of Other Regional Development Charge By-laws

- 2.6.1 In addition to By-law 28-2018, the Region also imposes Development Charges under three other by-laws:
- By-law No.38-2019 – Area specific development charges for the Seaton Community for the Water Supply and Sanitary Sewerage Services
 - By-law No. 86-2001 – Region-wide residential development charge for GO Transit Services; and,
 - By-law No. 39-2022 – Region-wide development charges for Regional Transit Services.

It is not intended that these by-laws be amended or repealed as part of this Background Study. However, By-laws No. 39-2022 and No. 86-2001 will be amended in order to ensure that the policies within these by-laws align with the new Region-wide DC by-law. The public meeting dealing with the amendments will be held on April 12, 2023, with Council approval anticipated on June 14, 2023. Separate DC Background Studies are being prepared for these amendments and will be submitted concurrently with this Background Study.

The Seaton Development Charge By-law does not expire until July 1, 2024 and will be renewed at a future date.

3.0 DURHAM'S DEVELOPMENT FORECAST 2023-2033

3.1 Requirements of the Act

- 3.1.1 Subsection 5(1) of the DCA sets out the method that must be used to determine development charges. The first step states that:

“The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.”

Steps 2 and 5 go on to refer to “the increase in need for service attributable to the anticipated development ...”. Thus, the estimate of anticipated development is an important starting point to the DC calculation process.

The requirement of the Act is to create a development forecast, which refers to residential, commercial, industrial and institutional development. Such development generates increased service needs, via its occupancy and use, which is measured in terms of households, population, and employment. This chapter therefore addresses both the anticipated increase in development and the users thereof. It covers all forms of development, whether or not they are included in the schedule of DCs, in order to avoid transferring the servicing cost responsibility of exempt development to non-exempt development.

The Act requires that the amount, type and location of development be estimated. “Timing” is not referenced, other than indirectly, in section 8 (1) para. 3 of O.Reg. 82/98, where capital costs to be incurred during the term of the proposed development charge by-law, must be set out. The development forecast period was established as mid-2023 to mid-2033.

3.2 Summary of the Development Anticipated: mid-2023 to mid-2033

3.2.1 Appendix A provides the growth forecast and its basis in detail. This chapter provides a summary thereof, as follows:

**Table 3-1
Anticipated Residential Development Growth**

	Mid-year 2023-2028			Mid-year 2023-2033		
	Seaton	Balance of Region Without Seaton	Regional Total	Seaton	Balance of Region without Seaton	Regional Total
Population Growth	18,147	61,268	79,415	37,260	124,653	161,913
Unit Growth						
Total Dwelling Unit Growth	6,288	27,685	33,973	12,829	56,381	69,210
Single and Semi Detached	2,529	11,562	14,091	5,126	22,826	27,952
Medium Density Multiple	2,581	6,230	8,811	5,551	13,597	19,148
Apartments	1,178	9,219	10,397	2,152	18,582	20,734
Institutional	-	674	674	-	1,376	1,376

Source: Schedule 1 and Schedule 2 in Appendix A

3.2.2 Based on Census tabulations, the average occupancy of new housing units in Durham during the first twenty years of existence is expected to average 3.286 persons per unit for single and semi-detached dwellings, 2.617 for attached/

multiples and 1.175-1.913 for small and large apartment units, respectively (See Schedule 8b in Appendix A).

3.2.3 When the increase in housing units over the two planning periods is converted to standard (single detached) equivalent (SDE) units, the following totals result:

**Table 3-2
Anticipated SDE Unit Increase**

Purpose	Mid-year 2023-2028 # of SDE units			Mid-year 2023-2033 # of SDE units		
	Seaton	Balance of Region without Seaton	Regional Total	Seaton	Balance of Region without Seaton	Regional Total
Roads and General	5,171	21,354	26,525	10,620	43,396	54,016
Water and Sewer	5,171	20,437	25,608	10,620	41,578	52,198

Source: Schedule 2c in Appendix A

3.2.4 Employment growth in the Region is anticipated as follows:

**Table 3-3
Anticipated Employment Growth
(excluding primary, work at home & no fixed place of work)**

Category	Mid-year 2023-2028 # of Jobs			Mid-year 2023-2033 # of Jobs		
	Seaton	Balance of Region without Seaton	Regional Total	Seaton	Balance of Region without Seaton	Regional Total
Industrial	1,782	6,247	8,029	3,441	12,075	15,516
Commercial	2,410	8,514	10,924	4,652	18,167	22,819
Institutional	652	5,726	6,378	1,271	12,252	13,523
Total	4,844	20,487	25,331	9,364	42,494	51,858

Source: Schedule 10d in Appendix A

3.2.5 Non-residential floor area (in sq. ft.) in the Region is expected to increase as follows:

**Table 3-4
Anticipated Non-residential Floor Space Increase (sq. ft.)
(excluding primary)**

Category	2023-2028 Sq. Ft.			2023-2033 Sq. Ft.		
	Seaton	Balance of Region without Seaton	Regional Total	Seaton	Balance of Region without Seaton	Regional Total
Industrial	1,960,200	8,205,700	10,165,900	3,785,100	15,614,800	19,399,900
Commercial	964,000	3,667,200	4,631,200	1,860,800	7,823,100	9,683,900
Institutional	430,300	3,775,600	4,205,900	838,900	8,084,000	8,922,900
Total	3,354,500	15,648,500	19,003,000	6,484,800	31,521,900	38,006,700

Source: Schedule 10d in Appendix A

4.0 THE RESULTANT INCREASE IN THE NEED FOR SERVICE

4.1 Introduction

4.1.1 This chapter addresses the requirements of s.s.5(1) of the DCA with respect to the establishment of the need for service which underpins the development charge calculation, in accordance with the broad requirements in section 1.3.

4.2 Services Involved

4.2.1 Table 4-1 lists the full range of eligible service categories as defined in DCA. Local roads, water, sanitary sewerage services are covered separately under subdivision agreements and related means (as are other local services). Services which are potentially eligible for inclusion in the Regional development charge are indicated with a “✓”.

4.3 The Increase in the Need for Service

4.3.1 The development charge 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, s.s.5(1)3, which requires that Regional Council indicate that it intends to ensure that such an increase in need will be met, it suggests that a project-specific expression of need would be most appropriate.

4.3.2 Some of the need for services generated by additional development consists of local services related to a plan of subdivision, a consent, site plan or other form of development approval. As such, it will be provided as a condition of such development approvals, rather than as part of the development charge program.

TABLE 4-1
CATEGORIES OF MUNICIPAL SERVICES
TO BE ADDRESSED AS PART OF THE CALCULATION

CATEGORIES OF MUNICIPAL SERVICES	ELIGIBILITY FOR INCLUSION IN THE DC CALCULATION (✓=Upper Tier)	SERVICE COMPONENTS	MAXIMUM POTENTIAL DC RECOVERY %
1. Water supply services, including distribution and treatment services	✓ ✓ ✓/Dev Agreements ✓	1.1 Treatment plants 1.2 Distribution systems 1.3 Local systems 1.4 Vehicles and equipment ¹	100 100 0 100
2. Waste water services, including sewers and treatment services	✓ ✓ ✓/Dev Agreements ✓	2.1 Treatment plants 2.2 Sewage trunks 2.3 Local systems 2.4 Vehicles and equipment ¹	100 100 0 100
3. Stormwater Drainage and Control Services	Lower Tier/Municipal Act Dev. Agreements Dev. Agreements	3.1 Main channels and drainage trunks 3.2 Channel connections 3.3 Retention/detention ponds	0-100 0 0
4. Services Related to a Highway	✓/Lower Tier Dev. Agreements ✓/ Lower Tier Lower Tier ✓/Lower Tier Lower Tier/Dev Agreements ✓/Lower Tier ✓/Lower Tier ✓/Lower Tier	4.1 Arterial roads 4.2 Collector roads 4.3 Bridges, Culverts and Roundabouts 4.4 Local municipal roads 4.5 Traffic signals 4.6 Sidewalks and streetlights 4.7 Active Transportation 4.8 Works Yard 4.9 Rolling stock ¹	100 100 100 0 100 0-100 100 100 100
5. Electrical Power Services	N/A N/A N/A	5.1 Electrical substations 5.2 Electrical distribution system 5.3 Electrical system rolling stock ¹	N/A N/A N/A
6. Transit Services	✓ ✓	6.1 Transit vehicles ¹ & facilities 6.2 Other transit infrastructure	100 100
7. Waste Diversion Services	✓ ✓	7.1 Waste diversion facilities 7.2 Waste diversion vehicles and equipment ¹	100 100
8. Policing Services	✓ ✓ ✓	8.1 Police detachments 8.2 Police rolling stock ¹ 8.3 Small equipment and gear	100 100 100
9. Fire Protection Services	Lower Tier Lower Tier Lower Tier	9.1 Fire stations 9.2 Fire Vehicles ¹ 9.3 Fire Equipment and gear	100 100 100
10. Ambulance Services	✓ ✓ ✓	10.1 Ambulance station space 10.2 Vehicles ¹ 10.3 Small equipment and gear	100 100 100

CATEGORIES OF MUNICIPAL SERVICES	ELIGIBILITY FOR INCLUSION IN THE DC CALCULATION (✓=Upper Tier)	SERVICE COMPONENTS	MAXIMUM POTENTIAL DC RECOVERY %
11. Services provided by a board within the meaning of the Public Libraries Act	Lower Tier Lower Tier Lower Tier	11.1 Public library space (incl. furniture and equipment) 11.2 Library vehicles ¹ 11.3 Library materials	100 100 100
12. Services Related to Long-Term Care	✓ ✓	12.1 Long-Term Care space 12.2 Vehicles ¹	100 100
13. Parks and Recreation Services	Lower Tier Lower Tier Lower Tier Lower Tier	13.1 Acquisition of land for parks, woodlots and E.S.A.s 13.2 Development of municipal parks 13.3 Parks rolling stock and yards 13.4 Facilities, such as arenas, indoor pools, fitness facilities, community centres, etc. 13.5 Recreation vehicles and equipment ¹	0 100 100 100 100
14. Services Related to Public Health	✓ ✓	14.1 Public Health department space 14.2 Public Health department vehicles ¹	100 100
15. Child Care and Early Years Programs and Services within the meaning of Part VI of the Child Care and Early Years Act, 2014 and any related services.	✓ ✓	15.1 Childcare space 15.2 Vehicles ¹	100 100
16. Services related to proceedings under the Provincial Offences Act, including by-law enforcement services and municipally administered court services	✓ ✓	16.1 P.O.A. space, including by-law enforcement and municipally administered court services 16.2 Vehicles ¹	100 100
17. Services Related to Emergency Preparedness	✓ ✓	17.1 Emergency Preparedness Space 17.2 Equipment	100 100
18. Services Related to Airports	N/A Ineligible	18.1 Airports (in the Regional Municipality of Waterloo) 18.2 Other Airports	100 100
19. Other	✓	19.1 Interest on money borrowed to pay for growth-related capital	100

¹ with a 7+ year useful life

4.3.3 The Region has established specific policy guidelines concerning the Regional share of local services, in terms of which development-related requirements are incorporated in the development charge calculation vs. being a separate and independent requirement of development agreements, over and above the payment of the development charge. Guidelines as to the developer's local servicing requirements outside of development charges are set out in Appendix B.

4.4 Capital Cost Estimates

4.4.1 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.

4.4.3 Potential capital costs are set out in s.s.5 (3) of the DCA.

4.4.3 In addition, the development charge background study is required to present the following cost allocation for each service involved: costs benefiting new development vs. existing development, with respect to costs incurred during the term of the by-law vs. the balance of the planning period. This information is provided on a project and service-specific basis in Appendices E to H.

4.4.4 The capital costs determined in Appendices E to H, in accordance with s.s.5(1) of the DCA, reference projects as part of defining the increase in the need for service. It is anticipated that a number of such projects will evolve over time in response to the specific needs of new development. As a result, the cost, timing and nature of such projects may be altered as part of the Region's annual capital budget process. It is intended that development charge draws will be made for such projects, based on the development-related percentages which have been identified. In some instances, an allowance for improvements has been made where the total capital program could not be accurately identified.

4.4.5 Growth-related costs which are specifically designated as benefiting development beyond 2032 are expected to be recovered in subsequent DC by-laws, once the DC planning period extends beyond 2032, based on Council's approval of the 2023 Background Study and this recommendation which forms part of it.

4.5 Credits Carried Forward

4.5.1 Section 8 para. 5 of O.Reg. 82/98 indicates that a development charge background study must set out, "the estimated value of credits that are being carried forward relating to the service." As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with respect to future service needs. The Region of Durham has an agreement with respect to sanitary sewerage works with the West Whitby Landowners Group and the outstanding credits totalling \$9.0 million have been accounted in the Sanitary Sewerage ten-year capital program in Appendix G. The Region also has an agreement with the Seaton Landowners Group and the outstanding credits for Regional Roads is

\$165.9 million and have been accounted in the Regional Roads ten-year capital program in Appendix E.

4.6 Eligible Debt and Committed Excess Capacity

4.6.1 Section 66 of the DCA states that for the purposes of establishing a development charge by-law, a debt incurred with respect to an eligible service may be included as a capital cost, subject to any limitations or reductions in the Act.

4.6.2 In order for such costs to be eligible, two conditions must apply. First, they must have funded excess capacity which is able to meet service needs attributable to the anticipated development. Second, the excess capacity must be “committed,” that is, either before or at the time it was created, Regional Council must have expressed a clear intention that it would be paid for by development charges or other similar charges. The primary focus of this development charge calculation is on capital costs yet to be incurred. However, there are instances where the cost of projects not yet fully funded have been included. Provision has been made in the calculation for financing costs to be incurred by the Region for development charge cost components as part of the cash flow calculation methodology which was used.

4.7 Council’s Assurance

4.7.1 In order for an increase in need for service to be included in the DC calculation, Regional Council must indicate “... that it intends to ensure that such an increase in need will be met” (s.s.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 s.3). Council approval is sought for the full capital program requirement in this Background Study.

5.0 DCA CALCULATION REQUIREMENTS

5.1 Introduction

5.1.1 Subsection 5(1) of the DCA sets out the method that must be used to determine development charges. This method specifically calls for four different types of deductions to be made from municipal servicing costs which relate to the need for eligible services attributable to new development anticipated over the planning period. These are:

- level of service cap;
- uncommitted excess capacity;
- benefit to existing development; and,
- grants, subsidies and other contributions.

5.1.2 Two other calculation deductions are addressed herein as being implicit requirements. These are:

- post-period capacity;
- uncommitted DC reserve fund balances.

The basis for, and nature of, each of these DC calculation deductions is outlined below.

5.2 Level of Service Cap

5.2.1 Paragraph 4 of subsection 5(1) of the DCA states that the estimate of the increase in the need for service attributable to the anticipated development, made under paragraph 2 must not include an increase that would result in the level of service exceeding the average level provided in the Region over the 15-year period preceding the preparation of the background study.

5.2.2 s.s.4(3) of O.Reg. 82/98 provides for an exception, such that:

“If the average level of service determined is lower than the standard level of service required under another Act, the standard level of service required under the other Act may be deemed ... to be the average level of service.” This applied to water and sanitary sewer services for the Region.

Section 4 of the Regulation also provides that:

- both the quantity and quality of a service shall be taken into account in determining the average level of service.

5.2.3 A commonly-used quantity measure is units per capita (e.g. lane kms, square feet, m³ capacity, hectares, etc.), while quality is to be primarily measured in terms of replacement costs or cost per unit.

These level of service calculations are referenced in Appendices E to H. They are based on a variety of measures, reflecting the nature of the service involved. In most cases, these measures incorporate a quantity (inputs) level of service measure, relating to service provided per development unit benefiting. The “development units benefiting” from the capital expenditures are sometimes the blended numbers of population, employees, etc.

5.2.4 This approach has the advantage of enabling an increase in development (population and/or employees) to be translated directly into the additional service requirement and the cost associated therewith. In this regard, employment represents one part of the non-residential requirement and further represents a surrogate for the servicing needs of customers, visitors and suppliers.

Population alone is used as the denominator in the case of services which are exclusively or almost entirely of benefit to residential development.

5.2.5 Variations on this theme are employed in the case of engineered services which are more highly subject to statutory and Ministry of Environment controls and to costs which vary with the physical engineered requirements of individual development and servicing circumstances.

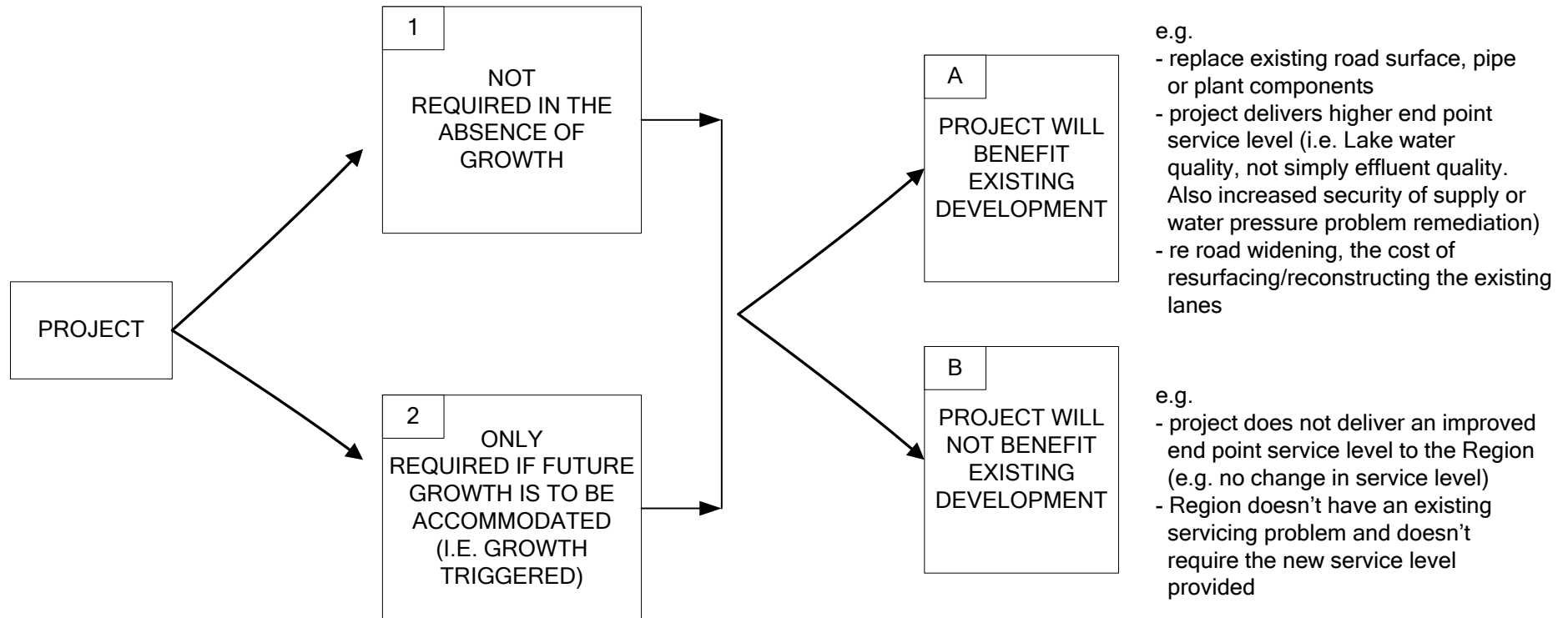
5.3 Uncommitted Excess Capacity

- 5.3.1 Paragraph 5 of s.s.5(1) of the DCA requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Region's "excess capacity", other than excess capacity which is "committed", e.g. where Council has previously indicated a clear intention that it would be paid for by DCs or other similar charges, before or at the time it was created (s.5 of O.Reg. 82/98).
- 5.3.2 "Excess capacity" is undefined in the Act, 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 "excess capacity" from the future increase in the need for service, occurs 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 capacity is already available, then that widening would not be included as an increase in need, in the first instance. Another potential consideration is the relationship between the 2022 actual level of service and the fifteen-year historical average and/or an operational review of the capacity functioning of a particular facility or service.

5.4 Benefit to Existing Development

- 5.4.1 Within a municipal-wide DC regime, benefit to existing development is typically established on a municipal-wide basis, without reference to the nature of the servicing gains or losses on a finer geographic basis. For example, road service level is typically measured based on overall volume/capacity or overall lane km/capita, without detailed reference to service capacity improvements or deficiencies that may be produced in some areas.
- 5.4.2 Figure 5-1 provides a basic outline of the circumstances in which some form of benefit to existing development deduction is normally made.

FIGURE 5-1
BENEFIT TO EXISTING DEVELOPMENT OPTIONS



5.5 Grants, Subsidies and Other Contributions

5.5.1 s.s.5(1)7 of the DCA requires that the capital costs must be reduced by the reductions set out in subsection (2).

s.s.5(2) states that:

“The capital costs, determined under para. 7 of subsection (1), must be reduced, in accordance with the regulations, to adjust for capital grants, subsidies and other contributions made to a municipality or that the Council of the municipality anticipates will be made in respect of the capital costs.”

5.5.2 Section 6 of O.Reg. 82/98 indicates that any such grant, subsidy or other contribution (including developer contributions) must be used to reduce the s.s.5(1)7 capital costs in the same proportion as the increase in need was reduced under s.s.5(1), para. 6, unless at the time it was made, the person making it expressed a clear intention that all or part be used to benefit existing or new development. In the latter case, a deduction to capital costs must be made, but only to the extent that the funds were intended to benefit new development.

5.5.3 Any grants, subsidies, developer and other contributions anticipated have been reflected in Appendices E to H, in accordance with the provisions of the Act and Regulation.

5.6 Post-period Capacity

5.6.1 This is a term and a concept which is not specifically referenced in the DCA. It refers to development-related servicing capacity which has been added to a project and is not required by development anticipated over the Region’s planning period, which will clearly benefit development in a subsequent planning period and should therefore be (partially) funded by such development, in this case post 2032 development.

5.6.2 For example if a sewage treatment plant is specifically sized to accommodate development beyond 2032, then the DC recovery of an appropriate portion of that cost should be deferred, such that it is funded by the development that ultimately benefits from it. This requirement is implicit in s.s.5(1)2 of the DCA, which requires the charge to be based on “the increase in the need for service attributable to the anticipated development...”, in this case, 2023 – 2033. However, in the case of facilities which have not been significantly and explicitly oversized, no post-period capacity deduction is provided. Also, any deduction that is made is generally calculated on an incremental rather than average cost basis.

5.7 DC Reserve Fund Balances

5.7.1 There is no explicit requirement under the DCA calculation method set out in s.s.5(1) to net the outstanding reserve fund balance as part of making the DC

calculation; however, s.35 does restrict the way in which the funds are used in future, e.g.

“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).”

- 5.7.2 The uncommitted balance of the Region’s DC reserve funds (as of March 1, 2023) have been netted from the cash flow calculations for all services.
- 5.7.3 This deduction is made in the case of these services, in that the DC calculation is geared to funding a large group of development-related works that are being implemented over the long term. While these works are also broadly subject to service level caps, each DC calculation is designed to fund an appropriate share of the overall program of works, over a “moving” long term period. Previous DC collections are, in effect, applicable only to projects they have been applied against. The calculation involves updating cost estimates and project descriptions, removing completed works and netting reserve fund balances, each time a new DC is established. This makes netting the reserve fund balance an appropriate and necessary part of the calculation for these kinds of services.

5.8 DC Calculation Methodology

- 5.8.1 The most common method of calculating a development charge is simply to divide the net residential development-related cost by the gross increase in population or single detached equivalent housing units. “Gross population” is used, in that it relates directly to the number of new housing units that will be subject to the charge. This approach implicitly assumes that an appropriate match will occur over time between DC receipts and expenditure requirements.
- 5.8.2 A more technical calculation method involves a cash flow approach. This method annualizes the expenditures to be DC funded as well as the amount of development expected to be subject to the charge. A development charge is calculated, based on appropriate indexing and interest assumptions, which is just sufficient to fund the expenditure cash flow. This approach has been adopted in Appendices E to H and involved the following steps:
- (a) Calculate net growth-related capital costs as per s.s.5(1) of the DCA;
 - (b) Divide those costs between those attributable to residential vs. non-residential development, service by service;
 - (c) Where applicable, start the DC cash flow calculation with the most recently available residential DC reserve fund balance for the service involved;
 - (d) Subtract the net growth-related capital expenditures expected to be incurred for that service, during the year involved;

- (e) Subtract any other costs to be incurred during that year, such as DC credits, unfunded capital, debt charges, etc.;
- (f) Calculate the number of single detached equivalent units (“SDU”) expected to pay DCs in that year (e.g. one apartment unit is less than one SDU because it has a lower occupancy and accordingly pays a lower DC);
- (g) Run the calculation model on an iterative basis, using different DC quantum assumptions until the closing reserve fund balance in the final year of the planning period is nil;
- (h) Calculate the expected DC revenues for that year (SDU’s multiplied by the DC) and add them to the balance. Add any other applicable revenues;
- (i) Calculate the DC reserve fund closing balance for that year before interest;
- (j) Calculate interest earnings/costs expected to be incurred during that year as the average of the opening and closing reserve fund balances times an annual rate of interest;
- (k) Add the interest earned or subtract the interest cost, in order to arrive at the closing balance for that year and repeat the calculation for the next (and subsequent) years in sequence. However, for each new year, inflate the capital expenditures involved other than in the case of debenture debt or other payments which may be fixed;
- (l) Also inflate the development charge rate using the same index used for capital expenditure inflation; and,
- (m) Repeat with necessary adjustments for the non-residential DC calculation.

6.0 DEVELOPMENT CHARGE RULES

6.1 Introduction

6.1.1 s.s.5(1)9 of the DCA 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 development charges.

6.1.2 s.s.5(6) establishes the following restrictions on the rules:

- the total of all DCs that would be imposed on anticipated development must not exceed the capital costs determined under 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 DCs 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.

6.1.3 In order to address this requirement, the following conventions have been adopted:

- The costs of residential uses have been assigned to different types of residential units based on the average occupancy for each housing type constructed during the first 20 years of occupancy.
- Costs are allocated to residential and non-residential uses based upon a number of factors, as may be suited to the circumstances of each individual service.

If the rules provide for a type of development to have a lower development charge than is allowed, the rules for determining development charges may not provide for any resulting shortfall to be made up via other type of development.

6.1.4 With respect to “the rules”, Section 6 of the DCA states that a DC by-law must expressly address the matters referred to above re s.s.5(1) para. 9 and 10, as well as how the rules apply to the redevelopment of land.

6.2 Redevelopment Credits

6.2.1 Section 6, para. 3 of the DCA indicates that a development charge by-law must set out, “How the rules referred to in paragraph 1 [those for determining if a development charge is payable in any particular case and for determining the amount of the charge] apply to the redevelopment of land.”

6.2.2 In order to facilitate redevelopment, section 18 of By-law 28-2018 provides for a development charge credit to be applied in the amount of the applicable development charges within the current by-law.

6.2.3 The current by-law (No. 28-2018) contains a 10-year timeframe for which redevelopment credits can be used. This timeframe represents the time from the date when a demolition permit is issued, or when a development is converted, to the date when the subsequent redevelopment occurs. The proposed DC by-law reduces this timeframe to five years.

6.3 Discretionary Exemptions

- 6.3.1 The proposed by-law maintains discretionary exemptions for non-residential development such as places of worship, agricultural uses, public hospitals, parking structures and roof-like and canopy structures. It also includes new extensions to exemptions beyond those required in the DCA, specifically for industrial development expansions.
- 6.3.2 As per the requirement in the Development Charges Act (DCA), Durham currently applies a 50 per cent expansion exemption for industrial developments based on the original gross floor area of the building and only if the expansion is attached to the existing structure. The proposed by-law would reset the existing gross floor area of the building with the by-law in-force date. Moreover, the 50 per cent exemption would apply to all industrial buildings on the property and would not be limited to an expansion attached to an existing building. This would include the Region reserving the right to collect DCs if the building is severed from the land within ten years of building permit issuance, by requiring the landowner to enter into a DC deferral payment agreement.
- 6.3.3 The current statutory DC exemption for additional units within and ancillary to residential dwellings applies to existing and new residential units. The current legislation surrounding the exemption of additional dwellings units is provided in section 2.5.

6.4 Application of Non-Residential Development Charge

- 6.4.1 No changes are being proposed to the way non-residential development charges are being applied. The Region will continue to impose three separate non-residential DC rates by use (e.g. commercial, industrial, and institutional).

6.5 Application of Residential Development Charge

- 6.5.1 The proposed by-law includes a new residential charge for Waste Diversion services. Waste Diversion is an eligible DC service area as per the COVID-19 Economic Recovery Act. The inclusion of a Waste Diversion DC reflects the need for a new waste management facility to service growth in Durham. As the facility is also intended to perform functions outside of waste diversion, only the waste diversion portion of the building has been included in the charge.
- 6.5.2 The current DC by-law defines a bedroom as “a habitable room, including a den, study, loft, or other similar area, but does not include a living room, a dining room, a bathroom or a kitchen”. The proposed DC by-law further clarifies the definition to include the area requirements (in m²) of a bedroom within the Ontario Building Code Act.
- 6.5.3 The current DC by-law defines an apartment building as a residential building, or the residential portion of a mixed-use building, other than a triplex, semi-detached duplex, semi-detached triplex, townhouse or stacked townhouse, consisting of more than 3 dwelling units, which dwelling units have a common

entrance to grade. The proposed DC by-law expands the definition to include stacked townhouses.

- 6.5.4 The current DC by-law includes a definition for “single detached” and “single detached dwelling”. The proposed DC by-law removes these definitions and includes definitions for “detached and detached dwelling”. This change was included to better align the Regional DC By-law with legislation included in The More Homes Built Faster Act. The proposed DC by-law defines detached and detached dwelling as a residential building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units on that parcel of land, where no portion of the building is attached to any building on another parcel of land.
- 6.5.5 The proposed DC by-law includes a new definition for semi-detached building, which means a building on two parcels of land, divided vertically (above or below ground) along the common lot line of the two parcels and comprising at least 1 dwelling unit and not more than 3 dwelling units on each parcel. The current DC by-law provides a definition for semi-detached duplex, which has been replaced by the definition for semi-detached building. The definition of semi-detached dwelling has also been redefined to better align with the new semi-detached building definition. Semi-detached dwelling is proposed to be redefined as “the portion of a semi-detached building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units”.
- 6.5.6 The proposed by-law also includes a new exemption for 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, but only if the lands are occupied and used by the university. This is now a statutory exemption as per the Better for People, Smarter for Business Act amendments to the Ministry of Training, Colleges and Universities Act.

6.6 Region Share Policy

- 6.6.1 The Region Share Policy (Appendix B) provides the guidelines for the payment by the Region for capital works from development charges (not user rates or property taxes) where the capital works required by the Region are not of sole benefit to the landowner (e.g. internal Regional roads, a sanitary sewerage or a watermain which is oversized relative to that development’s needs). These capital works are necessary to allow “upstream” development and efficient servicing. There are no recommended changes to the existing policy. An allowance is included in the water, sewer, and roads ten-year capital programs for the Regional share of these capital works. There are no recommended changes to this practice.

6.7 Well Interference Policy

6.7.1 The Regional Well Interference Policy (Appendix C) provides relief to residents in situations where their private well has potentially been negatively impacted by the construction of Regional services. The current policy has been Regional practice since 1999. Similar practices existed, in various forms, prior to 1999.

6.7.2 The existing Regional Well Interference Policy uses Development Charge revenue to:

- provide a temporary supply of water during construction of Regional Services to the affected homeowner unless the resident is unwilling to cooperate with the Region's investigation into the well interference claim, as determined by the Commissioner of Works;
- construct watermains and water services to homes that have been or will potentially be negatively impacted by development; and,
- construct new wells as an alternative method of addressing impacted property owners that reside outside the water supply area or where it is not economically feasible to extend water services to the affected property.

These costs are funded 100 per cent from water supply development charges based on estimated activity levels.

6.8 Intensification Servicing Policy

6.8.1 The current Regional Official Plan requires that urban areas within the "Built Boundary" be planned to accommodate a minimum 40 per cent of all residential development occurring annually through intensification within built-up areas. Overall servicing of this intensification has been included in the water supply and sanitary sewerage analyses contained in Appendix F and Appendix G. However, intensification-type developments across the Region can occur on specific locations at a density beyond the average estimated for a broader area, as was considered in establishing these capital forecasts.

6.8.2 In 2013, Regional Council approved the Intensification Servicing Policy (Appendix D) to address servicing requirements specific to intensification development. Since the intensification related development charge works are site or area specific and cannot be predicted with any certainty in advance, it was recommended that a development charge component for such works be included to support intensification and a policy was created to provide access to these allowances.

6.8.3 The existing policy created a sanitary sewerage development intensification allowance within the development charge and the capital program. There is no intensification allowance within the water supply capital program as capacity issues for water supply services did not exist in the sample of recent intensification projects that Regional staff considered.

6.8.4 Under the current Development Charges policy, developers can apply to use the funds, provided that certain criteria are met:

- located within the built-up area;
- must require DC work that is not already included in Appendix G; and
- all local services are funded by the developer.

Council approval was required for all expenditures from this sanitary sewerage development intensification allowance.

6.8.5 There were no developments from 2013 to 2022 that required major sanitary sewerage capital works, that were not already included in the DC study, and therefore there were no applications for this funding.

6.8.6 Staff are recommending that this policy continue in order to provide assistance to residential intensification projects that require substantial Regional capital works (due to the specific location and the infrastructure constraints of the development) that has not been included in the sanitary sewer DC capital program. Additionally, the recent enactment of the More Homes, Built Faster Act may trigger more intensification projects in the future.

6.8.7 The proposed policy remains the same as approved in 2018.

6.9 Region-wide vs. Area-specific Charges

6.9.1 The DCA historically has provided the opportunity for a municipality to impose municipal-wide charges or area specific charges. Sections 2(7) and 2(8) of the DCA provide that a development charge by-law may apply to the entire municipality or only part of it and more than one development charge by-law may apply to the same area.

6.9.2 Amendments to the DCA now require municipalities to consider the application of Region-wide vs. Area-specific application of development charges.

s.10(2)(c.1) requires Council to consider the use of more than one DC By-law to reflect different needs from services in different areas

6.9.3 Most municipalities in Ontario have established uniform, municipal-wide development charges. This has been Durham's approach since 1991, with the exception of its approach to the Seaton Community in the City of Pickering and the Carruthers Creek area in the Town of Ajax.

6.9.4 When area-specific charges are used, it is generally to underpin master servicing and front-end financing arrangements, particularly in the case of stormwater management, collector/minor arterial roads and/or feeder mains and sanitary trunk sewers.

- 6.9.5 The Region established area-specific charges for water and sanitary sewerage in the case of the Seaton Community consistent with the front-ending agreements that are required to advance the water and sewer infrastructure works in order to accommodate development in Seaton. Under the DCA, the Region plans to provide DC credits to those developers entering into such front-ending agreements.
- 6.9.6 The rationale for separate area-specific charges for water and wastewater in Carruthers Creek reflects long-standing historical front end financing arrangements. The Carruthers Creek water supply and sanitary sewer area specific development charge by-laws have both since expired.
- 6.9.7 There is no justification for the establishment of additional area-specific development charges at this time. The recommendation is to continue to apply Region-wide development charges based on the following:
- The fifteen-year service level from all applicable services across the Region can be included to establish an upper ceiling on the amount of funds which can be collected. If a development charge by-law applied to only a part of the municipality, the level of service cannot exceed that which would be determined if the by-law applied to the whole municipality. As such, when applied to forecast growth within the specific area, it would establish an area specific level of service ceiling which would significantly reduce the total revenue recoverable for the Region, potentially resulting in DC revenue shortfalls and impacts on property taxes and user rates.
 - Region-wide DCs ensure a consistent approach to financing the entire cost associated with growth-related capital projects. For example, user rates and property taxes are required to finance the share of growth-related capital projects not recoverable by DCs and all associated operating costs. Therefore, the use of area specific development charges results in a share of growth-related capital costs being recovered from a specific area, with the remaining capital costs of the projects (e.g. non-DC recoverable share) and the associated operating costs with those new assets being recovered from uniform user rates and property taxes, applied to the entire Region.
 - Attempting to impose an area-specific DC potentially causes equity issues in transitioning from a Region-wide approach to an area specific approach. An area municipality that is less developed and becomes subject to an area specific development charge, could face a significant increase in DC rates, as the municipality will not benefit from drawing on the Regional pool of DC funding and may have contributed Regional DCs to fund capital required to support development in other communities. Whereas another municipality that has experienced significant growth, which required substantial capital investments, benefitted from the capital investments being financed by Regional DCs. The implementation of area specific development charges could result in varying Regional DCs across municipalities, which may impact the ability to attract investment into their communities.

- As a result of its municipal structure, Regional services are available across the Region, used often by all residents and are not restricted to one specific geographic area. The use of a Region-wide DC approach reflects these system-wide benefits of service and more closely aligns with the funding principles of service provision (e.g. uniform Region-wide water and wastewater rates, property tax rates, etc.).

6.9.8 It is for these reasons that the Region has maintained its approach to calculate the development charges on a uniform Region-wide basis for all services, except for those subject to the Seaton front-ending agreement where an area specific development charge by-law facilitates the upfront of capital by landowners in return for development charge credits.

6.10 DC Indexing

6.10.1 Subsection 5(1)9 of the DCA requires that rules must be developed to determine a number of things and they "... may also provide for the indexing of development charges based on the prescribed index" (s.s.5(1)10). Section 6, para. 2 requires that a DC by-law must set out an express statement indicating how, if at all, the rules provide for the indexing of development charges.

6.10.2 The "prescribed index" is defined in O.Reg. 82/98 s.7 as, "The Statistics Quarterly, Construction Price Statistics, catalogue number 62-007 as the index for the purposes of paragraph 10 of subsection 5(1) of the Act." Note that this catalogue is updated from time to time and can currently be found in Table 18-10-0276-02 through Statistics Canada. Section 24 of the Region's existing DC by-law further specifies that such indexing is to occur on July 1 of each year based on data for the most recently available period ending March 31.

6.10.3 It is necessary that the Region's DC be indexed to ensure that there is sufficient funding for the works that the development charges have been calculated to cover, as the cost of those works to be constructed in future years increases with inflation.

6.10.4 Based on the use of the cash flow method of calculating the Region's DC, limited advantage is involved in indexing the charge more frequently than once per year. Any cash flow improvement is translated into reduced interest costs or increased reserve fund earnings and a commensurately lower DC. As a result, it is recommended that the Region continue with its annual indexing practice, commencing July 1, 2024.

6.11 Collection Policy

6.11.1 Residential Collection Timing

Under the Region's current DC By-law No. 28-2018, Regional Water Supply, Sanitary Sewerage and Regional Roads Development Charges for plans of subdivision are payable in full upon signing of a subdivision agreement or, at the option of the developer:

- a) 50 percent upon execution of the subdivision agreement with a letter of credit to be posted for 55 percent of the total development charges at the execution of the subdivision agreement;
- b) the balance on the first anniversary date of the subdivision agreement or as building permits are issued, whichever occurs first; and,
- c) Charges for all other services are payable at building permit issuance.

6.12 Timing of Collection

6.12.1 A development charge that is applicable under section 5 of the DCA shall be calculated and payable:

- where a permit is required under the Building Code Act in relation to a building or structure, the owner shall pay the DC prior to the issuance of a permit or prior to the commencement of development or redevelopment as the case may be;
- where a building permit is issued within 2 years of approval of a Site Plan or Zoning By-law Amendment, for an application submitted after December 31, 2019, the DC will be determined based on charges in effect at the time of planning application submission;
- where a building permit is required for a market-rate rental housing or institutional development, the first installment is payable on the date of occupancy, with annual installments on the anniversary date each year thereafter for 5 years; and
- despite the above, Council, from time to time and at any time, may enter into agreements providing for all or any part of a DC to be paid before or after it would otherwise be payable.

7.0 IMPLEMENTATION

7.1 The By-law Adoption Process

7.1.1 The Region's proposed DC by-law is included in Appendix K.

7.1.2 Section 12 of the DCA indicates that before passing a development charge by-law, Council must hold at least one public meeting, giving at least 20 clear days' notice thereof, in accordance with the Regulation. Council must also ensure that the proposed DC by-law and background study 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.

- 7.1.3 If a proposed DC by-law is changed following such a meeting, the Council must determine whether a further meeting (under this section) is necessary (e.g. if the proposed by-law which is proposed for adoption has been changed in any respect, the 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 (OLT).
- 7.1.4 The Region's 2023 development charge consultation process has included outreach to the GTA and Durham chapters of BILD. Regional staff have met with local municipal staff to review an overview of the growth forecast and potential policy changes.

7.2 Long Term Capital and Operating Cost Examination / Asset Management

7.2.1 Long Term Capital and Operating Cost Examination

Subsection 10(2)(c) of the Act requires that a DC Background Study include an examination of the long term capital and operating costs for capital infrastructure required for each service to which the development charge by-law would relate.

The capital costs include those required to initially put the necessary infrastructure in place, including the cost share to be absorbed by existing development (benefit to existing development, existing DC reserve fund balances and exemptions) as well as new development (calculated development charges, as well as future development charges from post period capacity). In addition, the estimated cost of capital repairs, upgrades and ultimately asset replacement, over time should be set out.

Operating costs also need to be estimated, largely in order to verify the financial feasibility of the capital program. While this analysis is less applicable to water, sewer and road works, which are in many cases, non-discretionary, than it is to some of the 'soft' services, it nevertheless represents a Background Study requirement.

Appendix I contains Durham's Long-Term Capital and Operating Cost examination.

7.2.2 Asset Management

Subsections 10(2)(c.2) and 10(3) of the Act requires that a DC Background Study include an asset management plan. The scope of the asset management plan must deal with all assets whose capital costs are proposed to be funded under the development charge by-law. Moreover, the asset management plan must demonstrate that all the assets contained in the scope of this plan are financially sustainable over their full life cycle. While detailed asset management plan requirements are prescribed for Transit Services, there are no such requirements for non-Transit Services. As such municipalities are provided with discretion in

demonstrating a broad level asset management plan that provides for the long-term investment in an asset over its entire useful life.

The Region has undertaken an Asset Management Plan dated June 2022, which has been approved by Regional Council (Report# 2022-COW-14). The plan addresses all of the services contained in the DC Background Study and is concerned only with existing assets (e.g. does not include expansionary assets within the DC Background study). As a result, this DC Background study must include an asset management plan for the assets in the ten-year forecast. Appendix I contains Durham's asset management plan with respect to these assets. Based on this asset management plan, the assets proposed to be funded under the development charge by-law are deemed to be financially sustainable over their full life cycle.

7.3 Potential Economic Impact on Development

- 7.3.1 One of the important considerations in the circumstance where a significant increase is proposed in the development charge, is the potential economic impact that such an increase may have upon the Region's future residential and non-residential development prospects.
- 7.3.2 Appendix J presents a summary of relevant DC comparisons and related material.

7.4 By-law Implementation

- 7.4.1 Once the Region has calculated the charge, prepared the complete Background Study, carried out the public process and passed a new DC by-law, the emphasis shifts to implementation matters. These include transitional arrangements, notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and funding of projects. The following section overviews requirements in each case.
- 7.4.2 In accordance with s.13 of the DCA, when a DC 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 (e.g. as of the day of newspaper publication and the mailing of the notices).

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;
- s.s.10(4) lists the persons/organizations who must be given individual notice;
- s.s.10(5) lists the eight items which the notice must cover.

7.4.3 In addition to the “notice” information, the Region must prepare a “pamphlet” explaining each development charge by-law in force, setting out:

- a description of the general purpose of the development charges;
- 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 development charge relates; and
- a general 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 Ontario Land Tribunal (OLT), the pamphlet must be readied within 60 days after the by-law comes into force. Later dates apply to appealed by-laws.

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

7.4.4 Sections 13-19 of the DCA set out requirements relative to the making and processing of a DC by-law appeal and hearing in response to an appeal. Any person or organization may appeal a DC by-law to the OLT by filing with the municipal clerk a notice of appeal, 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.

7.4.5 Over and above the right of appeal, a person required to pay a development charge, or his agent, may “complain” to Regional Council imposing the charge that:

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

Sections 20-25 of the DCA set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a DC (or any part of it) is payable. A complainant may appeal the decision of Regional Council on their complaint to the OLT.

7.4.6 The Region and one or more landowners may enter into a front-ending agreement, which provides for the funding of the costs of a project, which will benefit an area in the Region to which the DC 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 DCA (Sections 44-57) addresses front-ending agreements.

7.4.7 Section 59 of the DCA 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 s.51 or s.53 of the *Planning Act*, except for:

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

“local services to be installed or paid for by the owner as a condition of approval under Section 53 of the *Planning Act*.”

Appendix B sets out Durham’s “Region Share Policy”, which defines local services.

- 7.4.8 It is also noted that s.s.59(4) of the DCA requires that the Region use its *Planning Act* power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the development charges related to the development, at the time the land is transferred.

Appendix A

Anticipated Development, 2023-2033

1.1 Introduction

This Appendix presents the background information used to develop the anticipated amount, type and location of development for which development charges can be imposed.

The forecast for the 2023 Development Charge Background Study is an update of the previous Development Charge Studies completed in 2013 and 2018. The Development Charge Background Studies have been based on the growth forecasts contained within the current Durham Regional Official Plan, which has a 2031 planning horizon, as mandated by the original (2006) Growth Plan. However, with a review of growth that has occurred since the last Development Charge Background Study, it is anticipated it will take until 2033 to reach the Region-wide population forecast of 923,510 people (Growth Plan forecast of 960,000 less population associated with Northeast Pickering).¹ Employment has also lagged, with approximately 320,600 jobs (approximately 92 per cent of the 2031 forecast of 350,000) anticipated by 2033.

The forecasts assume growth will occur in the manner contemplated in the Regional Official Plan, with development concentrated primarily within the Urban Areas designated in the plan. A small allowance for rural growth is also included.

The 2023 Development Charge Background Study is based on a population and employment forecast interval from mid 2023 to mid 2033.

Approach for Seaton Development

It is recognized that the development of the Seaton Community (refer to Figure A-1) has been planned in accordance with the former Central Pickering Development Plan (CPDP) and what is being implemented by the City of Pickering through its Neighbourhood Plans.

The Regional development charge for Water Supply and Sanitary Sewerage is calculated based on the capital needs over the next 10 years, excluding Seaton. The Region set in place area-specific charges for water supply and sanitary sewerage facilities for the Seaton Community, as a front-ending agreement was required to advance the water supply and sewerage infrastructure works to accommodate

¹ Including the net Census undercount estimated at 103.79%.

development there. As such, the development forecasts are summarized with and without the forecasts for the Seaton community.

Water supply and sanitary sewerage is planned on a local system basis and the requirements are specifically related to development in Seaton. Under this approach, developers/builders in the Seaton area pay the water and sewer development charges outlined in the Seaton Area Specific Development Charge By-law, as opposed to the Regional water supply and sanitary sewerage development charge rates contained in the Regional Residential and Non-residential Development Charge By-law.

All other Development Charge eligible services (e.g. Regional Roads, Police Services, Paramedic Services, etc.) are calculated on a Region-wide basis. Development forecasts for these services include the entire Region.

Greenbelt Removals are not Included in the Growth Forecast

To achieve their objective of advancing housing supply, the province approved the removal of 1,820 hectares (4,500 acres) of land from the Greenbelt Plan area in Durham Region in December 2022. The locations include:

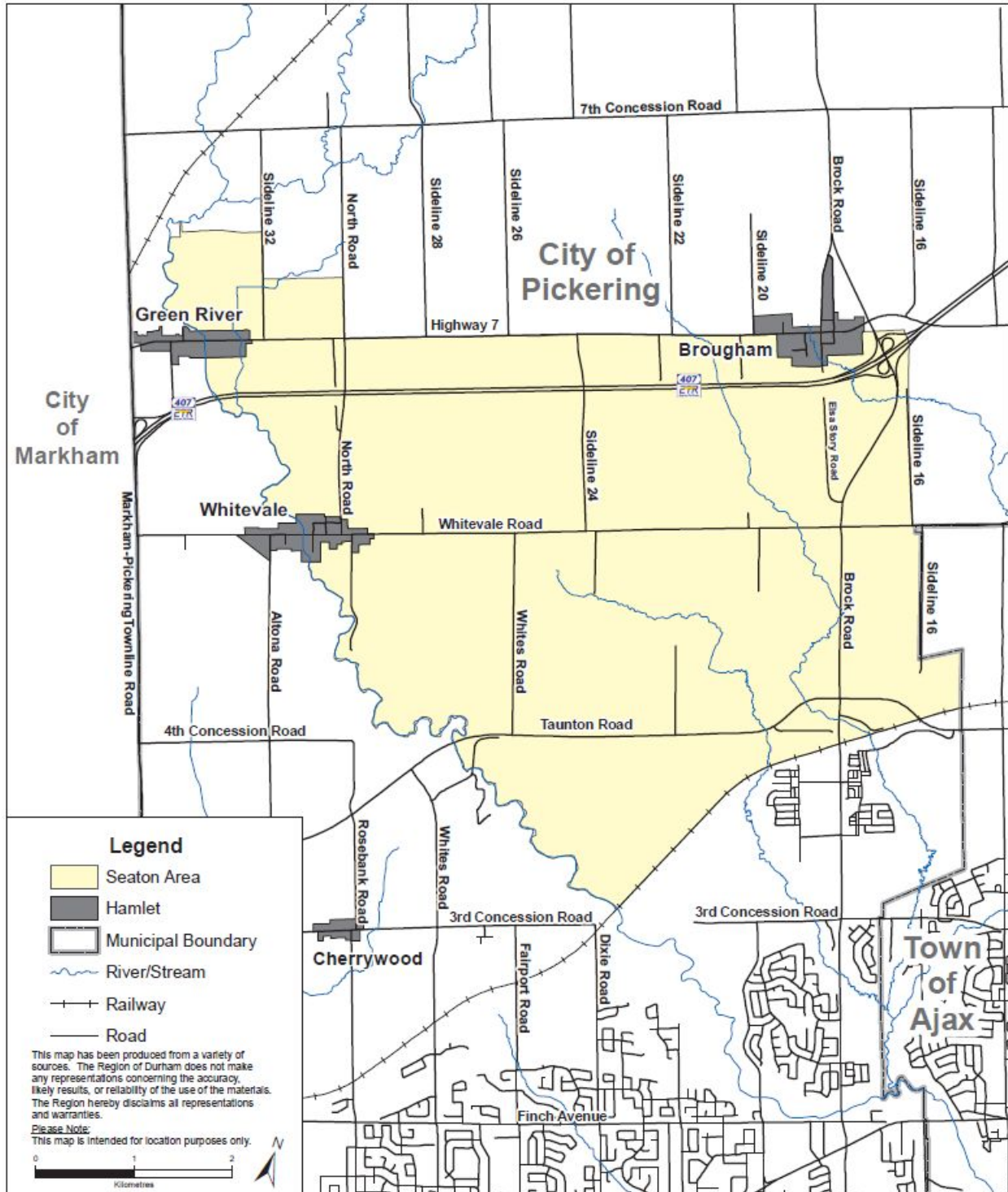
- In the City of Pickering – lands located south of Highway 407, west of West Duffins Creek and north of the CP Belleville rail line, and east of York-Durham Line, known as the Duffins Rouge Agricultural Preserve (1,736 ha/4,289 ac);
- In the Town of Ajax – lands located on the south side of Kingston Road East, north of Highway 401 and west of Lake Ridge Road, at 765 and 775 Kingston Road East (52 ha/128 ac); and
- In the Municipality of Clarington – lands located at the northeast corner of Nash Road and Hancock Road, west of Highway 418 (35 ha/86 ac).

Population and employment have not been assigned to the Greenbelt Removal areas within this DC Background Study. Work is ongoing to determine the ultimate infrastructure and servicing requirements for these areas, particularly the Pickering lands, as it is anticipated that this area could accommodate up to 75,000 people. Separate agreements to ensure that proponents will fully fund the necessary infrastructure upfront, as stipulated by the province, are ongoing.

Housing Targets by the Province

Through the 2022 Budget, the provincial government introduced a target of 1.5 million new homes to be built across the province over the next ten years. Twenty-nine lower and single-tier municipalities in southern Ontario with a population projected to be over 100,000 by 2031 have been assigned municipal housing targets. The Region's five lakeshore municipalities of Pickering, Ajax, Whitby, Oshawa and Clarington have each been assigned municipal housing targets. Municipalities are required to respond by March 2023 by way of a municipal housing pledge to work to achieve the assigned targets.

Figure A-1
Durham Region
Map of Seaton Area



**Schedule 1
Durham Region
Residential Growth Forecast Summary**

Year	Population (Including Census Undercount) ¹	Excluding Census Undercount			Housing Units						Person 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	582,510	561,258	5,163	556,095	142,690	24,940	26,565	465	194,660	4,694	2.883
	Mid 2011	631,150	608,124	6,514	601,610	156,411	29,477	27,482	376	213,746	5,922	2.845
	Mid 2016	670,320	645,862	6,372	639,490	164,650	33,115	29,740	400	227,905	5,793	2.834
	Mid 2021	723,380	696,992	5,632	691,360	173,700	36,245	32,730	385	243,060	4,793	2.868
Forecast	Mid 2023	755,460	727,899	5,882	722,017	177,647	39,624	38,086	400	255,757	5,006	2.846
	Mid 2028	837,880	807,314	6,674	800,640	191,738	48,435	48,483	400	289,056	5,680	2.793
	Mid 2033	923,510	889,812	7,498	882,314	205,599	58,772	58,820	400	323,591	6,382	2.750
Incremental	Mid 2011 - Mid 2016	39,170	37,738	-142	37,880	8,239	3,638	2,258	24	14,159	-129	
	Mid 2016 - Mid 2021	53,060	51,130	-740	51,870	9,050	3,130	2,990	-15	15,155	-1,000	
	Mid 2021 - Mid 2023	32,080	30,907	250	30,657	3,947	3,379	5,356	15	12,697	213	
	Mid 2023 - Mid 2028	82,420	79,415	792	78,623	14,091	8,811	10,397	0	33,299	674	
	Mid 2023 - Mid 2033	168,050	161,913	1,616	160,297	27,952	19,148	20,734	0	67,834	1,376	

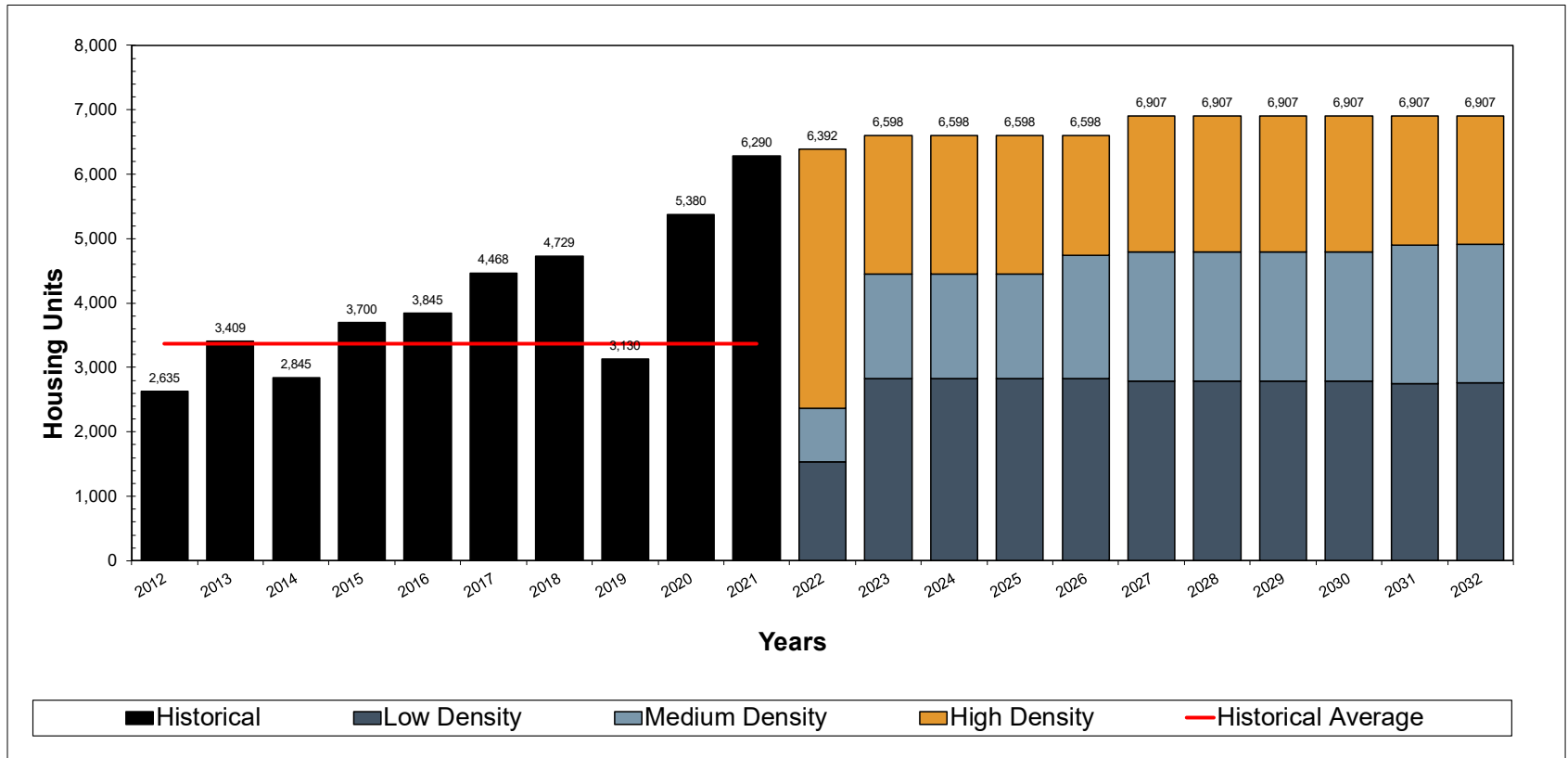
Source : Watson & Associates Economists Ltd., 2023

¹ Census undercount estimated at approximately 3.8%. Note: Population including the undercount has been rounded.

² Includes townhouses and apartments in duplexes.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Figure A-1
Durham Region
Annual Housing Forecast



Source: Historical housing activity derived from Statistics Canada building permit data for 2012 to 2019. 2020 and 2021 from Durham Region.

¹ Growth forecast represents calendar year.

Schedule 2
Durham Region
Estimate of the Anticipated Amount, Type and Location of Residential Development for Which Development Charges can be Imposed by Area Municipality

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
Town of Ajax	2023 - 2028	409	666	2,467	3,542	7,354	-1,417	5,937	143	6,080
	2023 - 2033	788	1,458	5,032	7,278	15,122	-2,999	12,123	293	12,416
Township of Brock	2023 - 2028	320	5	84	409	1,093	-143	950	15	965
	2023 - 2033	625	11	171	807	2,150	-285	1,865	30	1,895
Municipality of Clarington	2023 - 2028	3,266	1,683	1,447	6,396	16,392	-1,126	15,266	115	15,381
	2023 - 2033	6,492	3,682	2,844	13,018	33,391	-2,256	31,135	235	31,370
City of Oshawa	2023 - 2028	2,950	1,886	1,523	6,359	16,636	-1,954	14,682	198	14,880
	2023 - 2033	5,887	4,087	3,038	13,012	34,002	-3,830	30,172	406	30,578
City of Pickering Including Seaton	2023 - 2028	3,149	2,893	3,115	9,157	24,666	-1,100	23,566	113	23,679
	2023 - 2033	6,235	6,239	6,118	18,592	50,152	-2,185	47,967	230	48,197
City of Pickering Excluding Seaton	2023 - 2028	620	312	1,937	2,869	6,494	-1,075	5,419	113	5,532
	2023 - 2033	1,109	688	3,966	5,763	12,859	-2,152	10,707	230	10,937
Township of Scugog	2023 - 2028	435	27	68	530	1,420	-239	1,181	25	1,206
	2023 - 2033	861	59	137	1,057	2,830	-481	2,349	50	2,399
Township of Uxbridge	2023 - 2028	391	53	51	495	1,472	-241	1,231	25	1,256
	2023 - 2033	765	115	104	984	2,917	-488	2,429	50	2,479
Town of Whitby	2023 - 2028	3,171	1,598	1,642	6,411	17,350	-1,540	15,810	158	15,968
	2023 - 2033	6,299	3,497	3,290	13,086	35,310	-3,053	32,257	322	32,579
Durham Region Excluding Seaton	2023 - 2028	11,562	6,230	9,219	27,011	68,211	-7,735	60,476	792	61,268
	2023 - 2033	22,826	13,597	18,582	55,005	138,581	-15,544	123,037	1,616	124,653
Durham Region Including Seaton	2023 - 2028	14,091	8,811	10,397	33,299	86,383	-7,760	78,623	792	79,415
	2023 - 2033	27,952	19,148	20,734	67,834	175,874	-15,577	160,297	1,616	161,913

Source : Watson & Associates Economists Ltd., 2023

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.

Schedule 2b
Durham Region
Estimate of the Anticipated Amount, Type and Location of Residential Development for Which Development
Charges can be Imposed by Urban/Rural Areas

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
Urban Areas Including Seaton	2023 - 2028	13,175	8,811	10,397	32,383	83,503	-7,225	76,278	792	77,070
	2023 - 2033	26,134	19,148	20,734	66,016	170,154	-14,499	155,655	1,616	157,271
Urban Areas Excluding Seaton	2023 - 2028	10,646	6,230	9,219	26,095	65,331	-7,200	58,131	792	58,923
	2023 - 2033	21,008	13,597	18,582	53,187	132,861	-14,466	118,395	1,616	120,011
Rural Areas	2023 - 2028	916	0	0	916	2,880	-535	2,345	0	2,345
	2023 - 2033	1,818	0	0	1,818	5,720	-1,078	4,642	0	4,642
Durham Region Excluding Seaton	2023 - 2028	11,562	6,230	9,219	27,011	68,211	-7,735	60,476	792	61,268
	2023 - 2033	22,826	13,597	18,582	55,005	138,581	-15,544	123,037	1,616	124,653
Durham Region Including Seaton	2023 - 2028	14,091	8,811	10,397	33,299	86,383	-7,760	78,623	792	79,415
	2023 - 2033	27,952	19,148	20,734	67,834	175,874	-15,577	160,297	1,616	161,913

Source : Watson & Associates Economists Ltd., 2023

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.

Schedule 2c
Durham Region
Estimate of the Anticipated Standard Detached Equivalent Amount and Location of Residential Development for
Which Development Charges can be Imposed by Urban/Rural Areas

WITH SEATON			
Period	Total Units	Standard Equivalent Units	
		Roads & General	Water & Sewer
2023-24	6,733	5,238	5,054
2024-25	6,733	5,238	5,054
2025-26	6,733	5,238	5,054
2026-27	6,733	5,326	5,142
2027-28	7,042	5,485	5,304
2028-29	7,049	5,487	5,306
2029-30	7,047	5,487	5,306
2030-31	7,047	5,487	5,306
2031-32	7,047	5,515	5,336
2032-33	7,047	5,515	5,336
2023-28	33,974	26,525	25,608
2028-33	35,237	27,491	26,590
2023-33	69,211	54,016	52,198

WITHOUT SEATON			
Period	Total Units	Standard Equivalent Units	
		Roads & General	Water & Sewer
2023-24	5,506	4,230	4,046
2024-25	5,506	4,230	4,046
2025-26	5,506	4,230	4,046
2026-27	5,454	4,267	4,083
2027-28	5,714	4,397	4,216
2028-29	5,751	4,406	4,225
2029-30	5,749	4,406	4,225
2030-31	5,749	4,406	4,225
2031-32	5,724	4,412	4,233
2032-33	5,723	4,412	4,233
2023-28	27,686	21,354	20,437
2028-33	28,696	22,042	21,141
2023-33	56,382	43,396	41,578

Note: Numbers may not add to totals due to rounding. Total and Standard Equivalent Units include institutional dwellings.

Source: Watson & Associates Economists Ltd., 2023.

**Schedule 3
Durham Region
Current Year Growth Forecast, Mid-2021 to Mid-2023**

		Population
Mid 2021 Population		696,992
Occupants of New Housing Units, Mid 2021 to Mid 2023	<i>Units (2)</i>	12,697
	<i>multiplied by P.P.U. (3)</i>	2.399
	<i>gross population increase</i>	30,457
		30,457
Occupants of New Equivalent Institutional Units, Mid 2021 to Mid 2023	<i>Units</i>	213
	<i>multiplied by P.P.U. (3)</i>	1.175
	<i>gross population increase</i>	250
		250
Decline in Housing Unit Occupancy, Mid 2021 to Mid 2023	<i>Units (4)</i>	243,060
	<i>multiplied by P.P.U. incline rate (5)</i>	0.001
	<i>total incline in population</i>	200
		200
Population Estimate to Mid 2023		727,899
Net Population Increase, Mid 2021 to Mid 2023		30,907

- (1) 2021 population based on Statistics Canada Census unadjusted for Census undercount.
- (2) Estimated residential units constructed, Mid-2021 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>	3.496	31%	1.087
<i>Multiples (6)</i>	2.635	27%	0.701
<i>Apartments (7)</i>	1.448	42%	0.611
Total		100%	2.399

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

- (4) 2021 households taken from Statistics Canada Census.
- (5) The Region's P.P.U. overall is declining, however, the average P.P.U. in existing households is anticipated to increase between 2021 and 2023 as the occupants of existing dwellings turnover to accommodate growing demand from families.
- (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 4
Durham Region
Five-Year Growth Forecast, Mid-2023 to Mid-2028**

		Population
Mid 2023 Population		727,899
Occupants of New Housing Units, Mid 2023 to Mid 2028	<i>Units (2)</i>	33,299
	<i>multiplied by P.P.U. (3)</i>	2,594
	<i>gross population increase</i>	86,383
Occupants of New Equivalent Institutional Units, Mid 2023 to Mid 2028	<i>Units</i>	674
	<i>multiplied by P.P.U. (3)</i>	1,175
	<i>gross population increase</i>	792
Incline in Housing Unit Occupancy, Mid 2023 to Mid 2028	<i>Units (4)</i>	255,757
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.030
	<i>total decline in population</i>	-7,760
Population Estimate to Mid 2028		807,314
Net Population Increase, Mid 2023 to Mid 2028		79,415

(1) Mid 2023 Population based on:

2021 Population (696,992) + Late 2021 to Mid 2023 estimated housing units to beginning of forecast period (12,697 x 2.399 = 30,457) + (213 x 1.1749 = 250) + (243,060 x 0.001 = 200) = 727,899

(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>	3.286	42%	1.391
<i>Multiples (6)</i>	2.617	26%	0.693
<i>Apartments (7)</i>	1.636	31%	0.511
<i>one bedroom or less</i>	1.175		
<i>two bedrooms or more</i>	1.913		
Total		100%	2.594

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database. Institutional P.P.U. specified by Durham Region.

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

(4) Mid 2023 households based upon 2016 Census (243,060 units) + Mid 2016 to Mid 2023 unit estimate (12,697 units) = 255,757 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 5
Durham Region
Ten-Year Growth Forecast, Mid-2023 to Mid-2033**

		Population
Mid 2023 Population		727,899
Occupants of New Housing Units, Mid 2023 to Mid 2033	<i>Units (2)</i>	67,834
	<i>multiplied by P.P.U. (3)</i>	2,593
	<i>gross population increase</i>	175,874
Occupants of New Equivalent Institutional Units, Mid 2023 to Mid 2033	<i>Units</i>	1,376
	<i>multiplied by P.P.U. (3)</i>	1,175
	<i>gross population increase</i>	1,616
Incline in Housing Unit Occupancy, Mid 2023 to Mid 2033	<i>Units (4)</i>	255,757
	<i>multiplied by P.P.U. decline rate (5)</i>	-0.061
	<i>total decline in population</i>	-15,577
Population Estimate to Mid 2033		889,812
Net Population Increase, Mid 2023 to Mid 2033		161,913

(1) Mid 2023 Population based on:

2021 Population (696,992) + Late 2021 to Mid 2023 estimated housing units to beginning of forecast period (12,697 x 2.399 = 30,457) + (213 x 1.1749 = 250) + (243,060 x 0.001 = 200) = 727,899

(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>	3.286	41%	1.354
<i>Multiples (6)</i>	2.617	28%	0.739
<i>Apartments (7)</i>	1.636	31%	0.500
<i>one bedroom or less</i>	1.175		
<i>two bedrooms or more</i>	1.913		
Total		100%	2.593

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database. Institutional P.P.U. specified by Durham Region.

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

(4) Mid 2023 households based upon 2016 Census (243,060 units) + Mid 2016 to Mid 2023 unit estimate (12,697 units) = 255,757 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 6
Durham Region
Historical Residential Building Permits
Years 2012 to 2021

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2012	2,022	395	218	2,635
2013	1,586	380	1,443	3,409
2014	1,900	590	355	2,845
2015	1,862	510	1,328	3,700
2016	1,856	891	1,098	3,845
Sub-total	9,226	2,766	4,442	16,434
Average (2012 - 2016)	1,845	553	888	3,287
% Breakdown	56.1%	16.8%	27.0%	100.0%
2017	1,829	1,490	1,149	4,468
2018	1,349	1,530	1,850	4,729
2019	1,765	977	388	3,130
2020	1,748	1,423	2,209	5,380
2021	2,409	2,557	1,324	6,290
Sub-total	9,100	7,977	6,920	23,997
Average (2017 - 2021)	1,820	1,595	1,384	4,799
% Breakdown	37.9%	33.2%	28.8%	100.0%
2012 - 2021				
Total	18,326	10,743	11,362	40,431
Average	1,833	1,074	1,136	4,043
% Breakdown	45.3%	26.6%	28.1%	100.0%

Source: Historical housing activity derived from Statistics Canada building permit data for 2012 to 2019. 2020 and 2021 from Durham Region.

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 7
Durham Region
Person Per Unit by Age and Type of Dwelling
(2016 Census)**

Age of Dwelling	Singles and Semi-Detached						25 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	2.149	3.446	4.933	3.496	
6-10	-	1.615	2.076	3.491	4.628	3.534	
11-15	-	1.737	1.954	3.359	4.525	3.410	
16-20	-	-	1.904	3.236	4.339	3.262	
20-25	-	1.417	1.978	3.183	4.313	3.260	3.286
25-35	-	1.606	1.929	3.002	4.072	3.067	
35+	-	1.492	1.900	2.651	3.797	2.613	
Total	3.750	1.550	1.931	3.024	4.216	3.035	

Age of Dwelling	Multiples ¹						25 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.400	1.947	2.801	-	2.635	
6-10	-	1.333	1.694	2.957	-	2.760	
11-15	-	1.533	1.707	2.794	4.818	2.728	
16-20	-	1.400	2.060	2.690	4.360	2.607	
20-25	-	1.360	1.968	2.805	4.696	2.671	2.617
25-35	-	1.235	2.060	2.944	4.074	2.822	
35+	0.429	1.296	1.916	2.688	3.625	2.462	
Total	1.000	1.320	1.915	2.794	4.042	2.628	

Age of Dwelling	Apartments ²						25 Year Average Adjusted ³
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.113	1.713	-	-	1.448	
6-10	-	1.161	1.576	2.621	-	1.548	
11-15	-	1.215	1.593	3.276	-	1.715	
16-20	-	1.236	1.829	3.222	-	1.821	
20-25	-	1.168	1.835	2.687	-	1.680	1.636
25-35	-	1.181	1.807	2.576	-	1.705	
35+	1.333	1.200	1.871	2.675	3.452	1.802	
Total	1.370	1.189	1.824	2.693	3.592	1.746	

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	1.500	1.226	1.904	3.306	4.888	3.158
6-10	-	1.259	1.810	3.380	4.626	3.248
11-15	-	1.374	1.799	3.262	4.535	3.224
16-20	-	1.331	1.909	3.143	4.347	3.044
20-25	-	1.208	1.893	3.105	4.344	2.906
25-35	-	1.218	1.878	2.988	4.059	2.878
35+	1.447	1.252	1.889	2.657	3.740	2.440
Total	1.607	1.249	1.880	2.981	4.183	2.806

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

³ Weighted P.P.U. by applying area municipal average adjusted P.P.U.s where appropriate, to form a Durham Region P.P.U. by structure type. Adjusted P.P.U.s based on 2001 to 2016 historical trends.

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

Note: The analysis was conducted before the 2021 Statistics Canada data release.

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

Schedule 8a
Durham Region
Person Per Unit Structural Type by Area Municipality
(2016 Census)

Area Municipality	Singles and Semi-Detached	Multiples ¹	Apartments ²
Town of Ajax	3.715	2.951	1.568
Township of Brock ³	2.955	2.640	1.602
Municipality of Clarington	3.068	2.539	1.451
City of Oshawa	3.168	2.489	1.705
City of Pickering	3.561	2.743	1.771
Township of Scugog ³	2.851	2.640	1.602
Township of Uxbridge ³	3.199	2.640	1.602
Town of Whitby	3.397	2.483	1.589

Note: P.P.U.s do not include the Census Undercount.

Note: The analysis was conducted before the 2021 Statistics Canada data release.

¹ Includes townhouses and apartments in duplexes.

² Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

³ Multiples and Apartments P.P.U.s from Durham Region

Source: Watson & Associates Economists Ltd., 2023.

Schedule 8b
Durham Region
Person Per Unit as a Share of Single-Detached Units
(2016 Census)

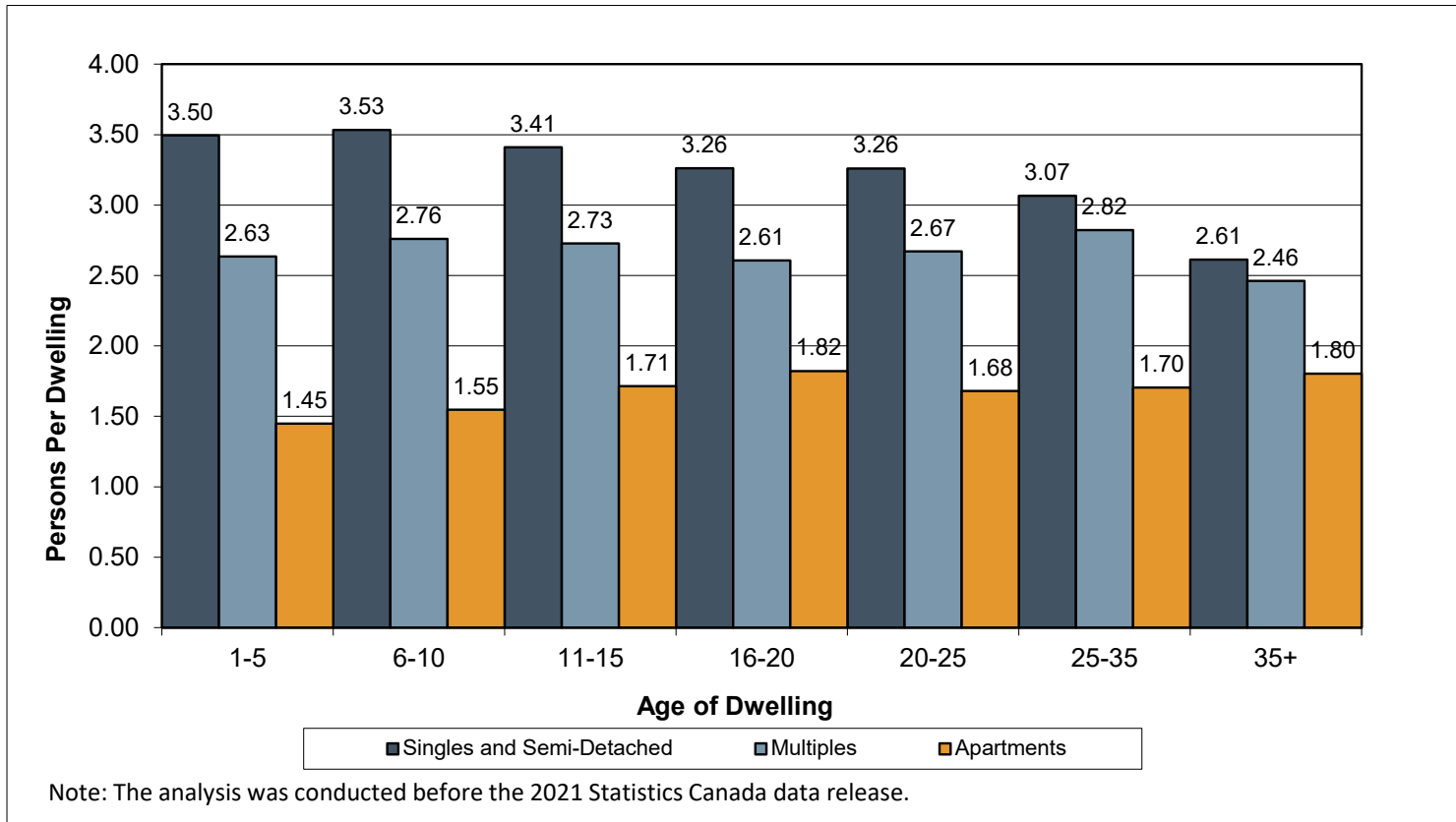
AVERAGE NUMBER OF PERSONS PER UNIT BY TYPE		
FOR DWELLING UNITS AGED 1-20 YEARS		
DWELLING UNIT DENSITY	PERSONS PER UNIT	% OF SINGLE DETACHED
Low Density (Single and Semi Detached)	3.286	100.00%
Medium Density (Attached/Multiple)	2.617	79.64%
Apartment (Bachelor/One Bedroom)	1.175	35.76%
Apartment (Two bedroom and greater)	1.913	58.22%

Note: P.P.U.s do not include the Census Undercount.

Note: The analysis was conducted before the 2021 Statistics Canada data release.

Source: Watson & Associates Economists Ltd., 2023.

Schedule 9
Durham Region
Person Per Unit Structural Type and Age of Dwelling
(2016 Census)



Schedule 10a
Durham Region
Employment Forecast, 2023 to 2033

Period	Population	Activity Rate								Employment								Employment Total (Excluding Work at Home and N.F.P.O.W.)
		Primary	Work at Home	Industrial	Commercial / Population Related	Institutional	Total	N.F.P.O.W. ¹	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional ²	Total	N.F.P.O.W. ¹	Total Employment (Including N.F.P.O.W.)	
Mid 2006	561,258	0.003	0.033	0.107	0.126	0.071	0.339	0.037	0.376	1,565	18,465	59,898	70,553	39,625	190,105	20,691	210,796	171,640
Mid 2011	608,124	0.002	0.031	0.079	0.121	0.077	0.312	0.038	0.350	1,425	19,105	48,323	73,623	47,070	189,545	23,278	212,823	170,440
Mid 2016	645,862	0.003	0.034	0.074	0.119	0.076	0.305	0.041	0.346	1,920	21,850	47,563	76,863	49,020	197,215	26,370	223,585	175,365
Mid 2023	727,899	0.003	0.034	0.073	0.121	0.077	0.308	0.041	0.349	2,073	24,932	53,359	87,744	56,147	224,255	29,787	254,042	199,323
Mid 2028	807,314	0.003	0.034	0.076	0.122	0.078	0.313	0.042	0.355	2,116	27,459	61,388	98,668	63,043	252,674	33,881	286,555	225,215
Mid 2033	889,812	0.002	0.034	0.077	0.124	0.079	0.318	0.043	0.360	2,160	30,263	68,875	110,563	70,728	282,589	37,987	320,576	252,326
Incremental Change																		
Mid 2006 - Mid 2011	46,866	0.000	-0.001	-0.027	-0.005	0.007	-0.027	0.001	-0.026	-140	640	-11,575	3,070	7,445	-560	2,587	2,027	-1,200
Mid 2011 - Mid 2016	37,738	0.0006	0.0024	-0.0058	-0.0021	-0.0015	-0.0063	0.0026	-0.0038	495	2,745	-760	3,240	1,950	7,670	3,092	10,762	4,925
Mid 2016 - Mid 2023	82,037	-0.0001	0.0004	-0.0003	0.0015	0.0012	0.0027	0.0001	0.0028	153	3,082	5,797	10,882	7,127	27,040	3,417	30,457	23,958
Mid 2023 - Mid 2028	79,415	-0.0002	-0.0002	0.0027	0.0017	0.0010	0.0049	0.0010	0.0059	43	2,527	8,029	10,924	6,896	28,419	4,094	32,513	25,892
Mid 2023 - Mid 2033	161,913	-0.0004	-0.0002	0.0041	0.0037	0.0024	0.0095	0.0018	0.0113	87	5,331	15,516	22,819	14,581	58,334	8,200	66,534	53,003
Annual Average																		
Mid 2006 - Mid 2011	9,373	-0.00009	-0.00030	-0.00545	-0.00093	0.00136	-0.00540	0.00028	-0.00512	-28	128	-2,315	614	1,489	-112	517	405	-240
Mid 2011 - Mid 2016	7,548	0.0001	0.0005	-0.0012	-0.0004	-0.0003	-0.0013	0.0005	-0.0008	99	549	-152	648	390	1,534	618	2,152	985
Mid 2016 - Mid 2023	41,019	-0.0001	0.0002	-0.0002	0.0008	0.0006	0.0014	0.0000	0.0014	77	1,541	2,898	5,441	3,564	13,520	1,709	15,229	11,979
Mid 2023 - Mid 2028	15,883	-0.00005	-0.00005	0.00055	0.00033	0.00019	0.00098	0.00021	0.00119	9	505	1,606	2,185	1,379	5,684	819	6,503	5,178
Mid 2023 - Mid 2033	16,191	-0.00004	-0.00002	0.00041	0.00037	0.00024	0.00095	0.00018	0.00113	9	533	1,552	2,282	1,458	5,833	820	6,653	5,300

Note: Analysis completed before the release of the 2021 Statistics Canada Census Employment data by place of work.

Source : Watson & Associates Economists Ltd., 2023

¹ Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

² Forecast institutional employment has not been adjusted downward in this Schedule. This table reflects total employment.

**Schedule 10b
Durham Region
Employment and Gross Floor Area (G.F.A.) Forecast, 2023 to 2033**

Period	Population	Employment						Gross Floor Area in Square Feet (Estimated) ¹				
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional ²	Total	Primary	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	561,258	1,565	18,465	59,898	70,553	39,625	190,105					
Mid 2011	608,124	1,425	19,105	48,323	73,623	47,070	189,545					
Mid 2016	645,862	1,920	21,850	47,563	76,863	49,020	197,215					
Mid 2023	727,899	2,073	24,932	53,359	87,744	56,147	224,255					
Mid 2028	807,314	2,116	27,459	61,388	98,668	62,525	252,156					
Mid 2033	889,812	2,160	30,263	68,875	110,563	69,670	281,531					
Incremental Change												
Mid 2006 - Mid 2011	46,866	-140	640	-11,575	3,070	7,445	-560					
Mid 2011 - Mid 2016	37,738	495	2,745	-760	3,240	1,950	7,670					
Mid 2016 - Mid 2023	82,037	153	3,082	5,797	10,882	7,127	27,040					
Mid 2023 - Mid 2028	79,415	43	2,527	8,029	10,924	6,378	27,901	86,000	10,165,900	4,631,200	4,205,900	19,089,000
Mid 2023 - Mid 2033	161,913	87	5,331	15,516	22,819	13,523	57,276	174,000	19,399,900	9,683,900	8,922,900	38,180,700
Annual Average												
Mid 2006 - Mid 2011	9,373	-28	128	-2,315	614	1,489	-112					
Mid 2011 - Mid 2016	7,548	99	549	-152	648	390	1,534					
Mid 2016 - Mid 2023	41,019	77	1,541	2,898	5,441	3,564	13,520					
Mid 2023 - Mid 2028	15,883	9	505	1,606	2,185	1,276	5,580	17,200	2,033,180	926,240	841,180	3,817,800
Mid 2023 - Mid 2033	16,191	9	533	1,552	2,282	1,352	5,728	17,400	1,939,990	968,390	892,290	3,818,070

Source : Watson & Associates Economists Ltd., 2023

¹ Square Foot Per Employee

Primary	2,000
Industrial	1,250
Commercial	420
Institutional	660

* Reflects Mid 2022 to Mid 2033 forecast period

² Forecast institutional employment and gross floor area has been adjusted downward to account for employment associated with special care units.

Note: Numbers may not add to totals due to rounding. Square Foot Per Employee Assumed calculated using area municipal weighting and have been rounded.

Schedule 10c
Durham Region

Estimate of the Anticipated Amount, Type and Location of Non-Residential Development for Which Development Charges can be Imposed by Area Municipality

Development Location	Timing	Primary G.F.A. S.F. ¹	Industrial G.F.A. S.F. ¹	Commercial G.F.A. S.F. ¹	Institutional G.F.A. S.F. ^{1 2}	Total Non-Residential G.F.A. S.F.	Employment Increase ³
Town of Ajax	2023 - 2028	-	842,100	1,044,700	349,500	2,236,300	3,690
	2023 - 2033	-	1,570,200	2,201,100	735,100	4,506,400	7,602
Township of Brock	2023 - 2028	22,000	61,600	38,700	36,900	159,200	197
	2023 - 2033	36,000	106,400	80,100	75,200	297,700	386
Municipality of Clarington	2023 - 2028	6,000	2,793,400	721,800	927,200	4,448,400	5,009
	2023 - 2033	20,000	5,285,900	1,532,300	1,990,700	8,828,900	10,209
City of Oshawa	2023 - 2033	-	1,478,800	708,500	986,500	3,173,800	4,301
	2023 - Buildout	-	2,608,900	1,570,800	2,093,000	6,272,700	9,043
City of Pickering Including Seaton	2023 - 2028	-	2,663,100	1,086,800	617,300	4,367,200	6,003
	2023 - 2033	-	5,345,700	2,154,900	1,309,700	8,810,300	12,071
City of Pickering Excluding Seaton	2023 - 2028	-	702,900	122,800	187,300	1,013,000	1,159
	2023 - 2033	-	1,560,600	294,100	471,100	2,325,800	2,707
Township of Scugog	2023 - 2028	24,000	75,600	62,100	40,200	201,900	265
	2023 - 2033	48,000	102,200	117,500	81,200	348,900	481
Township of Uxbridge	2023 - 2028	20,000	98,000	52,700	34,300	205,000	249
	2023 - 2033	38,000	126,000	105,800	66,600	336,400	445
Town of Whitby	2023 - 2028	14,000	2,153,300	915,900	1,214,000	4,297,200	5,660
	2023 - 2033	32,000	4,254,600	1,921,400	2,571,400	8,779,400	11,708
Durham Region Excluding Seaton	2023 - 2028	86,000	8,205,700	3,667,200	3,775,900	15,734,800	20,530
	2023 - 2033	174,000	15,614,800	7,823,100	8,084,300	31,696,200	42,581
Durham Region Including Seaton	2023 - 2028	86,000	10,165,900	4,631,200	4,205,900	19,089,000	25,374
	2023 - 2033	174,000	19,399,900	9,683,900	8,922,900	38,180,700	51,945

Source : Watson & Associates Economists Ltd., 2023

¹ Region-wide weighted square feet per employee assumptions:
 Primary 2,000
 Industrial 1,250
 Commercial 420
 Institutional 660

² Forecast institutional employment and gross floor area has been adjusted downward to account for employment associated with special care units.

³ Employment Increase does not include Work at Home or No Fixed Place of Work Employment.

Note: Numbers may not add to totals due to rounding. Square Foot Per Employee Assumed calculated using area municipal weighting and have been rounded.

Schedule 10d
Durham Region

Estimate of the Anticipated Amount, Type and Location of Non-Residential Development for Which Development Charges can be Imposed by Urban/Rural Areas

Development Location	Timing	Primary G.F.A. S.F. ¹	Industrial G.F.A. S.F. ¹	Commercial G.F.A. S.F. ¹	Institutional G.F.A. S.F. ^{1 2}	Total Non-Residential G.F.A. S.F.	Employment				
							Primary	Industrial	Commercial	Institutional	Total Employment ³
Urban Areas Including Seaton ¹	2023 - 2028	-	9,803,000	4,480,100	4,205,900	18,489,000	-	7,768	10,585	6,378	24,731
	2028 - 2033	-	9,122,400	4,909,800	4,717,000	18,749,200	-	7,406	11,574	7,145	26,125
	2023 - 2033	-	18,925,400	9,389,900	8,922,900	37,238,200	-	15,174	22,159	13,523	50,856
Urban Areas Excluding Seaton ²	2023 - 2028	-	7,842,800	3,516,100	3,775,600	15,134,500	-	5,986	8,175	5,726	19,887
	2028 - 2033	-	7,297,500	4,013,000	4,308,400	15,618,900	-	5,747	9,332	6,526	21,605
	2023 - 2033	-	15,140,300	7,529,100	8,084,000	30,753,400	-	11,733	17,507	12,252	41,492
Rural Areas	2023 - 2028	86,000	362,900	151,100	-	600,000	43	261	339	-	643
	2028 - 2033	88,000	111,600	142,900	-	342,500	44	81	321	-	446
	2023 - 2033	174,000	474,500	294,000	-	942,500	87	342	660	-	1,089
Durham Region Excluding Seaton	2023 - 2028	86,000	8,205,700	3,667,200	3,775,600	15,734,500	43	6,247	8,514	5,726	20,530
	2028 - 2033	88,000	7,409,100	4,155,900	4,308,400	15,961,400	44	5,828	9,653	6,526	22,051
	2023 - 2033	174,000	15,614,800	7,823,100	8,084,000	31,695,900	87	12,075	18,167	12,252	42,581
Durham Region Including Seaton	2023 - 2028	86,000	10,165,900	4,631,200	4,205,900	19,089,000	43	8,029	10,924	6,378	25,374
	2028 - 2033	88,000	9,234,000	5,052,700	4,717,000	19,091,700	44	7,487	11,895	7,145	26,571
	2023 - 2033	174,000	19,399,900	9,683,900	8,922,900	38,180,700	87	15,516	22,819	13,523	51,945

Source : Watson & Associates Economists Ltd., 2023

¹ Region-wide square feet per employee assumptions:
 Primary 2,000
 Industrial 1,250
 Commercial 420
 Institutional 660

² Forecast institutional employment and gross floor area has been adjusted downward to account for employment associated with special care units.

³ Employment Increase does not include Work at Home or No Fixed Place of Work Employment.

Note: Numbers may not add to totals due to rounding. Square Foot Per Employee Assumed calculated using area municipal weighting and have been rounded.

Schedule 11
Durham Region
GFA Assumptions by Area Municipality (Square Foot Per Employee)

Municipality	Primary	Industrial	Commercial	Institutional
Town of Ajax	2,000	1,200	425	660
Township of Brock	2,000	1,400	450	660
Municipality of Clarington	2,000	1,400	450	660
City of Oshawa	2,000	1,300	425	660
City of Pickering Less Seaton	2,000	1,200	425	660
Seaton	2,000	1,100	400	660
Township of Scugog	2,000	1,400	450	660
Township of Uxbridge	2,000	1,400	450	660
Town of Whitby	2,000	1,300	425	660

Source: Watson & Associates Economists Ltd., 2023.

Schedule 12
Durham Region
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	<i>Agriculture, forestry, fishing and hunting</i>	2,765	2,325	2,650	-440	325	
21	<i>Mining and oil and gas extraction</i>	210	135	370	-75	235	
	Sub-total	2,975	2,460	3,020	-515	560	
	<u>Industrial and Other Employment</u>						Categories which relate primarily to industrial land supply and demand
22	<i>Utilities</i>	8,960	9,825	8,935	865	-890	
23	<i>Construction</i>	6,290	6,145	8,300	-145	2,155	
31-33	<i>Manufacturing</i>	30,605	19,930	17,745	-10,675	-2,185	
41	<i>Wholesale trade</i>	7,790	7,820	6,440	30	-1,380	
48-49	<i>Transportation and warehousing</i>	6,600	5,975	7,265	-625	1,290	
56	<i>Administrative and support</i>	3,733	3,480	3,725	-253	245	
	Sub-total	63,978	53,175	52,410	-10,803	-765	
	<u>Population Related Employment</u>						Categories which relate primarily to population growth within the municipality
44-45	<i>Retail trade</i>	28,300	29,460	29,805	1,160	345	
51	<i>Information and cultural industries</i>	2,755	3,745	3,425	990	-320	
52	<i>Finance and insurance</i>	5,350	6,310	6,540	960	230	
53	<i>Real estate and rental and leasing</i>	3,935	3,945	3,885	10	-60	
54	<i>Professional, scientific and technical services</i>	9,920	10,445	12,125	525	1,680	
55	<i>Management of companies and enterprises</i>	125	175	250	50	75	
56	<i>Administrative and support</i>	3,733	3,480	3,725	-253	245	
71	<i>Arts, entertainment and recreation</i>	4,580	5,060	5,385	480	325	
72	<i>Accommodation and food services</i>	12,875	13,065	15,915	190	2,850	
81	<i>Other services (except public administration)</i>	9,100	8,550	9,030	-550	480	
	Sub-total	80,673	84,235	90,085	3,563	5,850	
	<u>Institutional</u>						
61	<i>Educational services</i>	14,800	16,650	17,650	1,850	1,000	
62	<i>Health care and social assistance</i>	19,170	22,340	24,315	3,170	1,975	
91	<i>Public administration</i>	8,510	10,685	9,735	2,175	-950	
	Sub-total	42,480	49,675	51,700	7,195	2,025	
	Total Employment	190,105	189,545	197,215	-560	7,670	
	Population	608,124	645,862	696,992	37,738	51,130	
	<u>Employment to Population Ratio</u>						
	Industrial and Other Employment	0.11	0.08	0.08	-0.02	-0.01	
	Population Related Employment	0.13	0.13	0.13	0.00	0.00	
	Institutional Employment	0.07	0.08	0.07	0.01	0.00	
	Primary Industry Employment	0.00	0.00	0.00	0.00	0.00	
	Total	0.31	0.29	0.28	-0.02	-0.01	

Source: Statistics Canada Employment by Place of Work

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

Appendix B

Region Share Policy for Development

Appendix B – Region Share Policy

1. Introduction

The purpose of this policy paper is to examine the Regional policy of cost sharing with developers for the construction of sanitary sewers, watermains and Regional roads (including storm sewers) in conjunction with development.

2. Applicability

This policy is intended to be applicable to all development for the areas specified in this by-law.

3. Development Charges Act

The Development Charges Act (DCA), 1997, states that:

“ss.59(1) a municipality shall not, by way of a condition or agreement under section 51 or 53 of the *Planning Act*, impose directly or indirectly a charge related to a development or a requirement to construct a service related to development except as allowed in subsection (2).

(2) a condition or agreement referred to in subsection (1) may provide for:

- a) 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 owners as a condition of approval under section 51 of the *Planning Act*;
- b) local services to be installed or paid for by the owner as a condition of approval under section 53 of the *Planning Act*.”

The term "local services" is not specifically defined in the DCA, 1997 or the associated regulations.

The existing Region's share policy is consistent with the requirements referenced above.

3.1 Definition of "Local Service"

For the purposes of Region Share, “Local Service” may be defined as the linear components of the sanitary sewerage system, water supply system or Regional road system which conform to Regional design guidelines and are of the minimum size required to provide service to the proposed development in its entirety.

4. Current Policy

4.1 General Philosophy

There is a range of significantly different approaches which can be taken under the DCA, 1997 with respect to the provision of municipal services.

One end of the range is to use the Front-ending provisions of the Act or the equivalent and have willing developers pay the full cost of necessary infrastructure with eventual collection and reimbursement by the municipality from other benefiting, but not contributing, landowners. This approach works relatively well in municipalities with only a few developers controlling large areas of land and a housing market that can support large scale land development. The developers have control over the cost and timing of servicing and the municipality does not have to provide major capital funding and assume the associated risk that developers will not proceed in a timely fashion.

At the opposite end of the range of approaches is for the municipality to partner with developers and provide major infrastructure through its capital budget. Infrastructure (beyond local services) constructed by developers, under this approach, is limited and eligible for either a credit against development charges or a cash rebate from the municipality. This is a workable approach in municipalities with a multitude of developers controlling relatively small and fragmented parcels of property. It also results in more competition among developers, which should result in lower consumer costs, and allows development to proceed in a slower housing market.

Elements of the developer's capital requirements and risk are reduced, or rather, shifted to the municipality.

Due to the fragmented land ownership and the multitude of developers in much of Durham Region, the Region has traditionally tended toward the second approach to the provision of infrastructure. The existing Region Share policy has been crafted in accordance with this philosophy and has worked well within the economic and market realities faced by Durham Region.

4.2 Existing Regional Policy, Established 1991, Amended 1993, 1999 and 2003

The current Region Share policy covers all Regional sanitary sewers, watermains and roads (including storm sewers), constructed in conjunction with development. The Policy came into effect in November 1991 and has been subsequently amended in 1993, 1999 and 2003 by Regional Council.

The current Region Share policy is as follows:

Category of Service	Source of Financing	
	Developer	Region
Sequential and Non-Sequential External Works required by the Developer	Min. Size	Oversizing Share
Sequential and Non-Sequential External Works not required by the Developer		100% of the cost
Internal Works	Min. Size	Oversizing Share
Abutting Works	50% of Min. Size	Remainder

The definitions of the service categories may be found in Attachment #1.

4.3 Sequentiality

Sequentiality is defined as "something which follows something else, or something which occurs in a chronological order of events". In the context of subdivision development, it can be defined as the next subdivision (or phase in a larger development) which is either contiguous or in immediate proximity, and for which all necessary external infrastructure is in place.

In order for a development to be considered sequential, the following criteria must be satisfied:

- Adequate Water Pollution Control Plant capacity;
- Adequate Water Supply Plant capacity;
- Trunk sewers available;
- Feeder mains available;
- Sanitary Sewerage Pumping stations available;
- Water booster pumping station available;
- Reservoir storage available;
- Suitable Regional Road access is available.
- The development must be the next, closest, logical, geographic extension of service to allow development (extension of services over open spaces or other non-developable lands may be permitted depending on the site location).

For services to be "available," they must exist, be committed in a Council approved tender award, or be contained within an executed servicing agreement (backed by 100 per cent performance guarantees).

Development which does not fit the above criteria is non-sequential.

The Regional Commissioner of Works and Finance have historically been authorized to arrange up to \$500,000 in Regional financing for sequential development and up to \$100,000 in Regional financing for non-sequential development. For larger amounts,

Council authorization was required. Proposed updates to these dollar thresholds and reporting requirements have been provided in Section 5 of this policy paper.

4.4 Oversizing/external/abutting Services

The Region cost shares (with funding largely from development charge revenue) the portion of those services which are sized or located so as to benefit lands beyond the proposed development. These include: services which are oversized beyond the minimum size required by the development or the minimum size permitted by the Regional Design Guidelines, whichever is larger; services which are external to, or not required by the development; and services which abut the development and provide direct service to adjacent lands.

The developer funds the minimum size of services required for the subject development, or the Regional Design Guideline minimum size, whichever is larger, in the case of internal or external oversizing. The developer funds one half of the cost of the minimum size, or the Regional Design Guideline minimum size of services, in the case of abutting services of direct benefit to adjacent lands. The Region bears the remainder of the cost (one half of the cost of the minimum size plus oversizing).

No compensation is given to a developer for any extra cost incurred due to increased depth of service which is necessary to accommodate lands beyond the proposed development.

4.5 Timing of Payment

Currently, payment of the Region's share is made once the following are satisfied:

- a) All required works have been completed and received Regional approval, as evidenced by a Completion Acceptance Certificate; and
- b) The required documentation in a form satisfactory to the Region has been submitted.

The required documentation consists of:

- an invoice with actual cost backup data; and
- a Statutory Declaration satisfactory to the Region.

Documentation should normally be filed with the Region shortly after completion of construction.

4.6 Form of Payment

The Region's share can be paid in the form of Development Charge credits or cash.

Under the current extended timeframe for payment of the Region's share, credits are popular with developers as they effectively speed up repayment to the developer, who receives recovery upon obtaining building permits. Unfortunately, the Region usually cannot quantify the amount of the credit until i) the works are completed, ii) the

contractor has submitted the final invoice to the developer and iii) the developer has invoiced the Region for their share.

For this reason, payment of the Region's share by cash is preferred once the conditions in the agreement have been satisfied and a satisfactory invoice from the developer has been received.

5. Proposed Policy

No changes are being proposed to the actual Cost Sharing Policy for Regional Services (Attachment #1). However, several minor changes are being proposed to the policy procedures to ensure conformity with how the Cost Sharing Policy is being applied. Changes are also being proposed to the procedures for Council reporting.

First, the policy paper is being revised to clarify that the policy applies to both residential and non-residential developments. The previous policy paper was written specifically to address Region share in conjunction with residential development; however, in practice, the policy was also applied to non-residential development. In the past, Council approvals have been sought and acquired in instances where the Region cost shares with non-residential development. This procedural change enables the continuation of the current practice, without the need for individual Council approvals. This change would also provide additional financial certainty to prospective non-residential developers.

This policy paper is also proposing changes to both the financial limits, for which staff can approve without seeking Council approval, and to the procedure for Council reporting. These changes are summarized below:

- The financial limits for sequential and non-sequential development have not been revised since 2003, effectively eroding staff's authority to approve Region share payments without seeking individual Council approvals for each development. It is proposed that the Regional Commissioner of Works and Finance be authorized to arrange up to \$1,200,000 in Regional financing for sequential development and up to \$250,000 in Regional financing for non-sequential development without reporting to Regional Council, to account for inflationary increases (as per the non-residential Construction Price Index for the Toronto CMA) from 2003 to 2023. The increased thresholds will also apply to both subdivisions and servicing agreements. This will be incorporated into the next update to the Delegation of Authority By-Law 04-2023 Schedule A.
- For Region share projects that exceed the \$1,200,000 and \$250,000 limits for sequential and non-sequential development respectively, staff provide semi-annual information reports advising Council of the projects that exceed these thresholds. This reporting structure would replace the need for Council approval and would result in the need for fewer Council reports. This streamlined process will increase the speed at which the development could proceed.

5.1 External Services – Sequential and Non-Sequential

Under the current policy the Development Charge By-law requires the developer to pay for the minimum size of external sanitary sewers and watermains and the Region to pay only for over sizing. For an external service which is not required to service the subdivision, the Region shall pay 100 percent of the cost. It is proposed that this policy remain in effect.

5.2 Regional Roads and Storm Drainage

Under the current policy, the developer pays for Regional road improvements required to access a development and for the minimum size of Regional storm drainage works required to service a development.

The Region’s cost sharing policy for Roads consists of paying for Regional road improvements over and above the cost of those required for the development and for the oversizing of Regional storm sewers. The Region also pays for its share of any non-Regional storm drainage works that are oversized to convey or treat runoff from Regional roads.

Historically, the Regional road improvements have primarily been focused on safe vehicular access to the lands. The “local service” definition relies on the minimum design which conforms to Regional design guidelines. Regional design guidelines are expanding to include active transportation facilities (e.g. sidewalk/MUP platforms, bike lanes, cross-rides, bike signals, etc.). As Regional design guidelines are expanded, the local services definition expands along with it, and as such more may be required from the developer to supply safe road access to sites for all modes of transportation.

5.3 Remaining Services

The current cost sharing policy with respect to internal and abutting services is a mechanism for equitably distributing the costs of network benefits over all other developments within the network. No revisions are proposed for these components of the policy.

5.4 Summary

The Region's share policy is proposed to remain unchanged as follows:

Category Service	Source of Financing	
	Developer	Region
Sequential and Non-Sequential External Works required by the developer	Min. size	Oversizing
Sequential and Non-Sequential External Works not required by the developer		100% of the cost
Internal Works	Min. Size	Oversizing
Abutting Works	50% of Min. Size	Remainder

Examples of the above are illustrated in Attachment #2.

6 Financial Impact

The estimated financial impact on the development charge quantum based on projections of sanitary sewer, watermain and road construction required to support the residential activity in the next 10 year period, is:

Average Cost Per Single Detached Equivalent Unit (\$2023)	
Sanitary Sewers ¹	\$500
Water Supply ¹	556
Regional Roads ²	<u>77</u>
TOTAL	<u>\$1,133</u>

¹ Based on 41,578 single detached equivalent units (Appendix A - Schedule 2c – Without Seaton, Water & Sewer).

² Based on 54,016 single detached equivalent units (Appendix A - Schedule 2c – With Seaton, Roads & General).

7 Financing of Region Share Payments to Developers

The construction of municipal sewer, watermain and road services in conjunction with new residential development also provides capacity for new non-residential development and occasionally for existing residential or non-residential development.

The new residential development component of the rebate to the developer is funded from the Residential Development Charge Fund. A share (e.g. 12.4 per cent for water supply, 26.2 per cent for sanitary sewerage and 30.0 per cent for roads) is related to Non-residential Development Charges (Commercial, Institutional and Industrial) collected from non-residential growth. Shortfalls in the Non-residential Development Charge funding are typically financed from User Revenue for Water Supply and Sanitary Sewerage systems and Property Taxes for Regional Roads, with the allocation reviewed on an annual business planning basis.

Historically during years 2018 to 2022, the financing of the Region Share Payments to developers has been as follows:

<u>Service</u>	Residential Development Charge <u>Reserve Fund</u>	Commercial Development Charge <u>Reserve Fund</u>	Property Tax/ <u>User Revenue</u> ¹
Water Supply	87.60%	2.20%	10.20%
Sanitary Sewerage	73.80%	4.60%	21.60%
Regional Roads	70.00%	8.00%	22.00%

¹ Due to the funding shortfalls with the institutional and industrial non-residential development charge shares

During the review of the Development Charges study, an updated analysis has been undertaken with respect to determining the percentage allocation attributable between the Regional Development Charge Reserve Funds.

The proposed attribution of financing is based on historic and projected data and is summarized in the Capital Cost Summary Tables as provided in Appendix E, F and G of the Development Charges Background Study.

8 Recommendations

It is recommended that, where applicable, the Region continue to cost share in the oversizing of infrastructure required for future development. It is recommended that the changes in Section 5 be implemented and that no further changes be made to the Region's Cost Sharing Policy for Regional Services.

Attachments

Attachment #1 – Cost Sharing Policy for Regional Services

Attachment #2 – Illustration of Region Share Calculation for Sewer and Water

Attachment #1

Cost Sharing Policy For Regional Services

SCHEDULE H

TO SUBDIVISION AGREEMENT dated the _____ day of _____

B E T W E E N:

-and-

THE REGIONAL MUNICIPALITY OF DURHAM

-and-

COST SHARING POLICY FOR REGIONAL SERVICES

A. DEFINITION OF TERMS

- | | | |
|------------------|---|--|
| Abutting service | - | shall include a service either existing or proposed, that is either located on a road allowance outside the limit of a subdivision but abuts the subdivision or located on a road allowance within the limit of a subdivision but abuts other lands outside the subdivision. |
| Cost | - | for an existing service, shall be the current cost, as determined by the Region, of constructing the service. |
| | - | for a proposed service, shall be the final cost of designing and constructing the service, as determined by the Region, after the construction is complete. |
| External service | - | shall include a service, either existing or proposed, that is located outside the limit of a subdivision but shall not include abutting service. |
| Internal service | - | shall include a service, either existing or proposed, that is located within the limit of a subdivision but shall not include an abutting service. |

- Minimum size - shall be the size of a service of sufficient size, as determined by the Region, to service a subdivision provided that the minimum size shall not be less than a two lane urban cross section road for regional roads, 200 millimetres in diameter for sanitary sewers, 100 millimetres in diameter for sanitary sewer connections, 300 millimetres in diameter for storm sewers, 150 millimetres in diameter for storm sewer connections, 150 millimetres in diameter for watermains and 19 millimetres in diameter for water connections.
- Regional road - shall be a road and related appurtenances that form part of the road system under the jurisdiction and control of the Regional Municipality of Durham and designed in accordance with Regional standards.
- Regional road connection - shall be that portion of a road and related appurtenances designed in accordance with Regional standards that provide direct access from the travelled portion of the regional road to a road under or planned to be under the jurisdiction of a lower-tier municipality or to a private driveway issued in accordance with the Region's Entranceway policy and by-law.
- Sanitary sewer - shall refer to a sanitary sewer system and related appurtenances designed in accordance with regional standards.
- Sanitary sewer connection - shall refer to a sanitary sewer service connection and related appurtenances designed in accordance with regional standards.
- Sequential development - the next development which may proceed geographically for which all necessary external regional service infrastructure is in place and capacity is available.
- Service - shall be a sanitary sewer, sanitary sewer connection, storm sewer, storm sewer connection, watermain or water connection.

- Shared stormwater management facility
- shall refer to the portion of a storm sewer system, such as a storm water detention or retention pond, and related appurtenances that accommodates storm water drainage from a Regional Road, and may be shared with other benefiting users.
- Storm sewer
- shall refer to a storm sewer system including catchbasins, connections, outfalls, inlets and related appurtenances under the jurisdiction and control of the Regional Municipality of Durham and designed in accordance with regional standards.
- Storm sewer connection
- shall refer to a storm sewer service connection and related appurtenances under the jurisdiction and control of the Regional Municipality of Durham and designed in accordance with regional standards.
- Subdivision
- shall mean the draft plan of subdivision approved, in accordance with the Planning Act, by the Regional Municipality of Durham, the Ministry of Housing or the Ontario Municipal Board subject to the conditions set out in Schedule C of this Agreement.
- Water connection
- shall refer to a water service connection and related appurtenances designed in accordance with regional standards.
- Watermain
- shall refer to a watermain system and related appurtenances designed in accordance with regional standards.

B. POLICY

1. Sanitary Sewer, Storm Sewer and Watermain

(a) Internal service

The cost of an internal service shall be shared between the Region and the Subdivider on the following basis:

- (i) For an internal service, which is not required to service the subdivision, the Region shall pay for 100 percent of the cost.
- (ii) For an internal service, which is required to service the subdivision, the Subdivider shall pay for 100 percent of the cost for the minimum size required to service the subdivision and the Region shall pay for the balance of the cost.

(b) Abutting service

The cost of an abutting service shall be shared between the Region and the Subdivider on the following basis:

- (i) For an abutting service, which is not required to service the subdivision, the Region shall pay for 100 percent of the cost.
- (ii) For an abutting service which is required to service the subdivision as well as other lands which are located outside the limit of the subdivision and abut the service, the Subdivider shall pay 50 percent of the cost for the minimum size required to service the subdivision and the Region shall pay for the balance of the cost.
- (iii) For an abutting service, which is required to service the subdivision, but will not service other lands which are located outside the limit of the subdivision and abut the service, the Subdivider shall pay for 100 percent of the cost for the minimum size required to service the subdivision and the Region shall pay for the balance of the cost.

(c) External service

The cost of an external service shall be shared between the Region and the Subdivider on the following basis:

- (i) For an external service, which is required to service the subdivision, the Subdivider shall pay 100 percent of the cost for the minimum size required to service the subdivision and the Region shall pay for the balance of the cost.
- (ii) For an external service, which is not required to service the subdivision, the Region shall pay for 100 percent of the cost.

2. Sanitary Sewer Connection, Storm Sewer Connection and Water Connection

The cost of sanitary sewer connections, storm sewer connections and/or water connections shall be shared between the Region and the Subdivider on the following basis:

- (a) For lands within the subdivision
The Subdivider's cost of sanitary sewer connections, storm sewer connections and/or water connections shall be the total cost of the connections to each lot, block or building site within the subdivision.
- (b) For lands external to the subdivision
The cost of sanitary sewer connections, storm sewer connections and/or water connections to lands external to the subdivision shall be 100 percent paid for by the Region.

3. Regional Road Connection

The cost of a regional road connection shall be shared between the Region and the Subdivider on the following basis:

- (a) The cost of Regional road improvements over and above the cost of those required for the development shall be 100 percent paid for by the Region.
- (b) All other costs necessary to provide safe and efficient access and egress to the subdivision, including, but not limited to, costs for turning lanes, tapers and traffic control measures, shall be 100 percent paid for by the Subdivider.

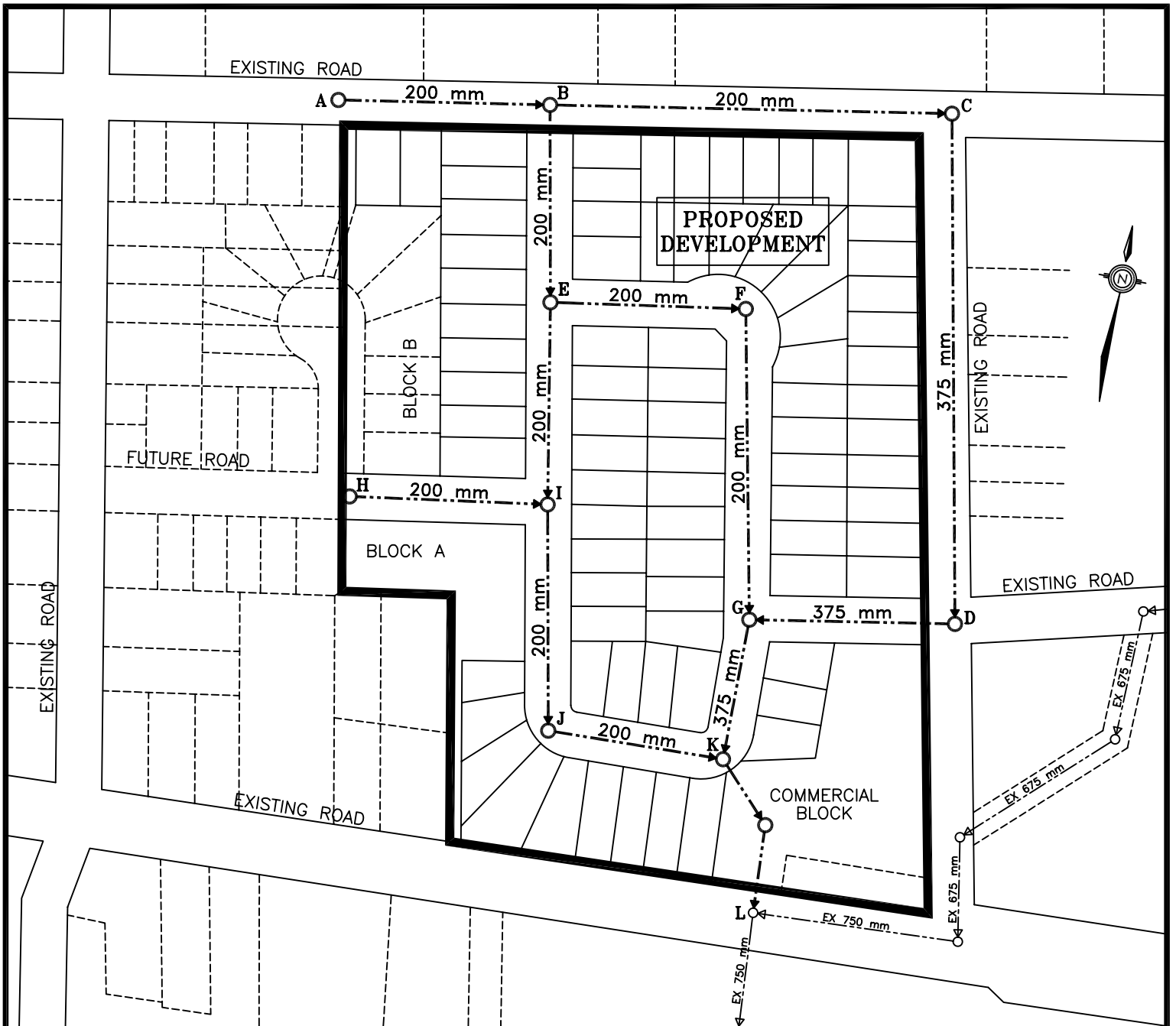
4. Shared Stormwater Management Facility

The cost of a shared stormwater management facility shall be shared between the Region and the Subdivider on the following basis:

- (a) The Subdivider shall pay for 100 percent of the cost of the minimum size required to service the subdivision and other contributing lands owned by the Subdivider.
- (b) The oversizing cost shall be attributed to other contributing parties, including the Region, based on each party's contributing area multiplied by runoff coefficient.
- (c) The Region shall pay for its share of the oversizing cost based on the Region's contributing area multiplied by runoff coefficient.

Attachment #2

Illustration of Region Share Calculation for Sewer and Water



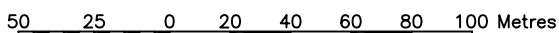
COST SHARING			
SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE
A-B, B-C	200 mm	50 %	50 %
C-D	375 mm	50% OF MINIMUM SIZE	BALANCE
D-G, G-K, K-L	375 mm	100% OF MINIMUM SIZE	BALANCE
OTHERS	200 mm	100 %	--

Note: EXTERNAL AND ABUTTING INFRASTRUCTURE FINANCED BY THE REGION OF DURHAM WILL BE SUBJECT TO COLLECTIONS FROM FUTURE BENEFITTING DEVELOPMENT OR LANDOWNERS.



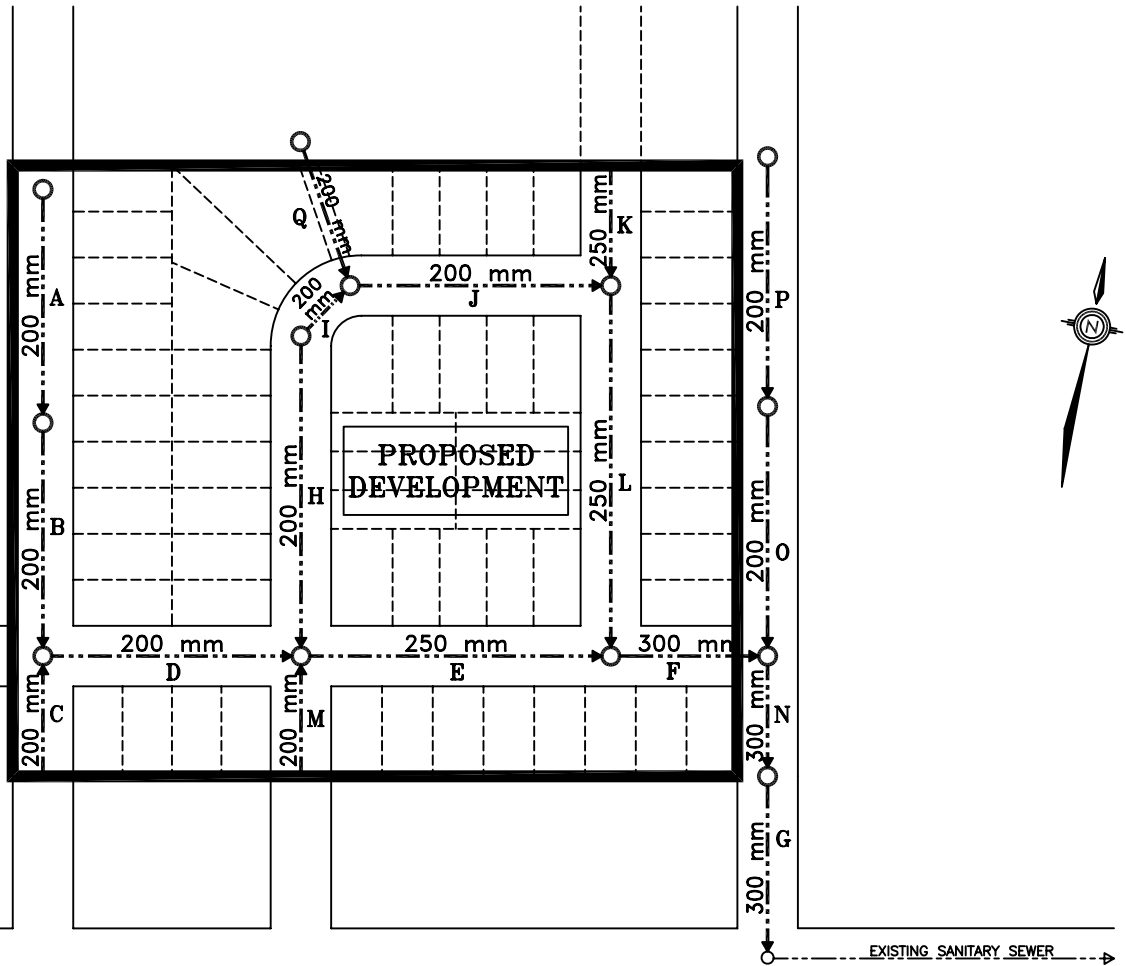
LEGEND

- EX. 750 mm EXISTING SANITARY SEWER
- 200 mm REQUIRED SANITARY SEWER



May 5, 2003

TYPICAL EXAMPLE
COST SHARING
SANITARY SEWER SERVICING
Attachment No. 2 – Page 1



COST SHARING

SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE
A	200 mm	50% OF MINIMUM SIZE	50 %
B	200 mm	50% OF MINIMUM SIZE	BALANCE
C	200 mm	--	100%
D	200 mm	100 %	--
E	250 mm	100% OF MINIMUM SIZE	BALANCE
F	300 mm	100% OF MINIMUM SIZE	BALANCE
G	300 mm	100% OF MINIMUM SIZE	BALANCE
H	200 mm	100 %	--
I	200 mm	100 %	--

SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE
J	200 mm	100 %	--
K	250 mm	100% OF MINIMUM SIZE	BALANCE
L	250 mm	100% OF MINIMUM SIZE	BALANCE
M	200 mm	--	100 %
N	300 mm	50% OF MINIMUM SIZE	BALANCE
O	200 mm	--	100 %
P	200 mm	--	100 %
Q	200 mm	--	100 %

Note: EXTERNAL AND ABUTTING INFRASTRUCTURE FINANCED BY THE REGION OF DURHAM WILL BE SUBJECT TO COLLECTIONS FROM FUTURE BENEFITTING DEVELOPMENT OR LANDOWNERS.

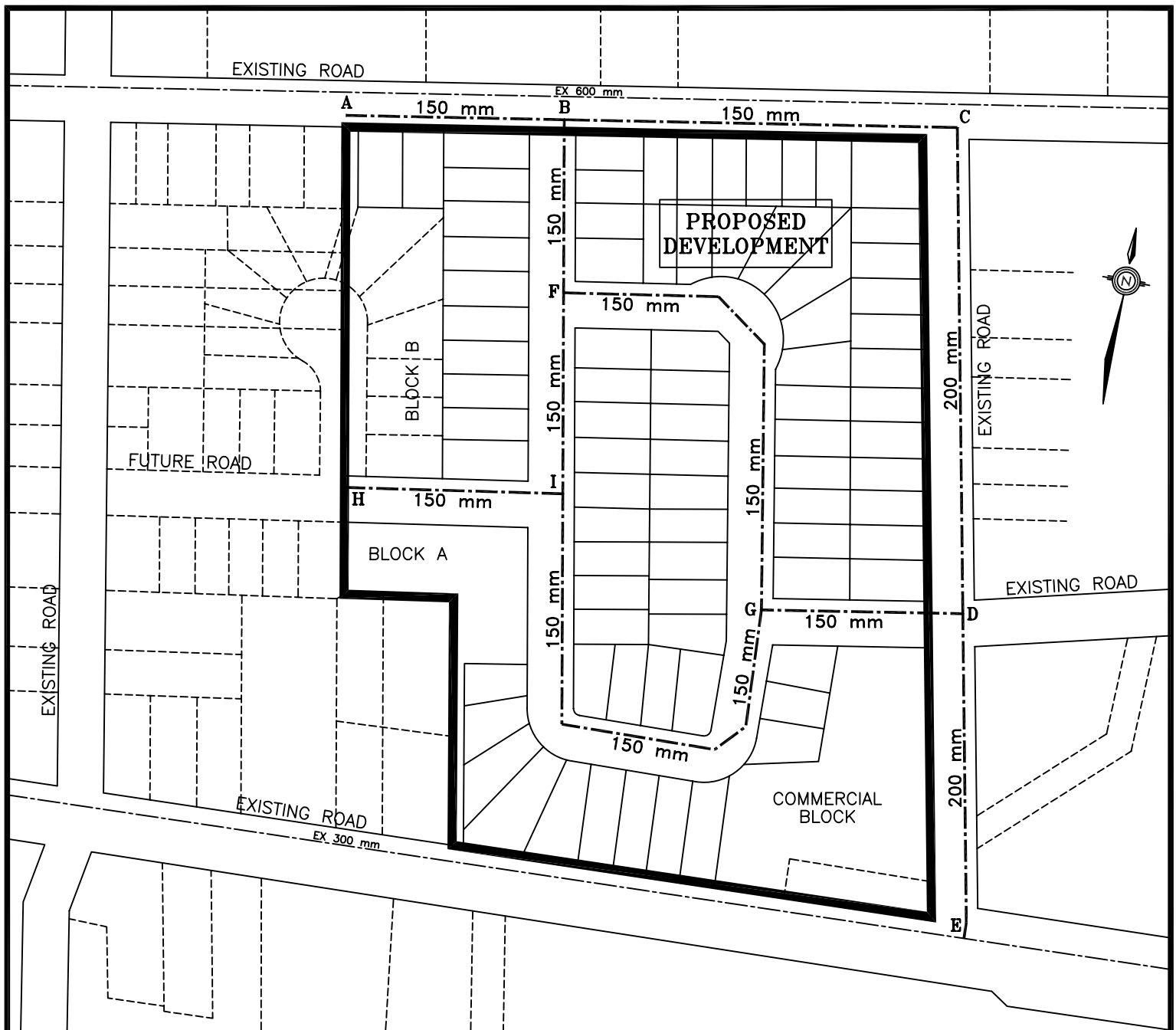


LEGEND

- EX. 750 mm EXISTING SANITARY SEWER
- 200 mm — ○ REQUIRED SANITARY SEWER

May 5, 2003

SCHEMATIC
COST SHARING
SANITARY SEWER SERVICING
Attachment No. 2 – Page 2



COST SHARING			
SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE
A-B, B-C	150 mm	50 %	50 %
C-D	200 mm	50% OF MINIMUM SIZE	BALANCE
D-E	200 mm	100 %	--
OTHERS	150 mm	100 %	--

Note: EXTERNAL AND ABUTTING INFRASTRUCTURE FINANCED BY THE REGION OF DURHAM WILL BE SUBJECT TO COLLECTIONS FROM FUTURE BENEFITTING DEVELOPMENT OR LANDOWNERS.



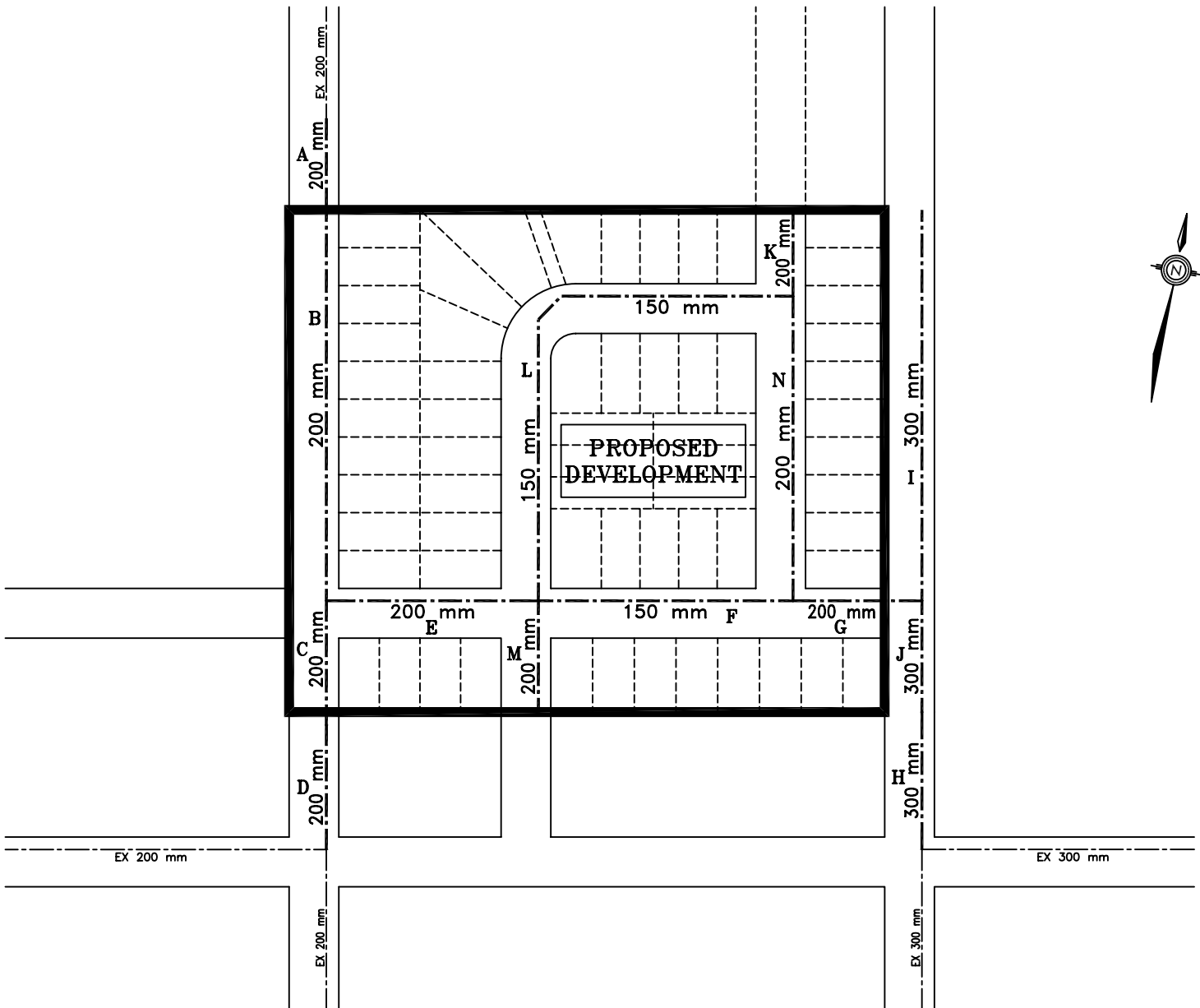
LEGEND

— EX 200 mm — EXISTING WATERMAIN
 — 200 mm — REQUIRED WATERMAIN
 K

50 25 0 20 40 60 80 100 Metres

May 5, 2003

TYPICAL EXAMPLE
 COST SHARING
 WATER SUPPLY SERVICING
 Attachment No. 2 – Page 3



COST SHARING

SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE	SECTION	SIZE	DEVELOPER'S SHARE	REGION'S SHARE
A	200 mm	100% OF MINIMUM SIZE	BALANCE	H	300 mm	100% OF MINIMUM SIZE	BALANCE
B	200 mm	50% OF MINIMUM SIZE	BALANCE	I	300 mm	--	100 %
C	200 mm	50% OF MINIMUM SIZE	BALANCE	J	300 mm	50% OF MINIMUM SIZE	BALANCE
D	200 mm	100% OF MINIMUM SIZE	BALANCE	K	200 mm	100% OF MINIMUM SIZE	BALANCE
E	200 mm	100% OF MINIMUM SIZE	BALANCE	L	150 mm	100 %	--
F	150 mm	100 %	--	M	200 mm	--	100 %
G	200 mm	100% OF MINIMUM SIZE	BALANCE	N	200 mm	100% OF MINIMUM SIZE	BALANCE

Note: EXTERNAL AND ABUTTING INFRASTRUCTURE FINANCED BY THE REGION OF DURHAM WILL BE SUBJECT TO COLLECTIONS FROM FUTURE BENEFITTING DEVELOPMENT OR LANDOWNERS.



LEGEND

- EX 200 mm EXISTING WATERMAIN
- 200 mm REQUIRED WATERMAIN
- K**

May 5, 2003

SCHEMATIC
COST SHARING
WATER SUPPLY SERVICING
Attachment No. 2 – Page 4

Appendix C
Regional Well Interference Policy

Appendix C - Regional Well Interference Policy

1. Introduction

The purpose of this policy paper is to examine the existing Regional Well Interference Policy (Attachment #1).

The existing Regional Well Interference Policy provides relief to residential property owners in situations where their private well has potentially been negatively impacted by the construction of Regional services. The construction of Regional services does not include local servicing impacts due to grading, storm water management ponds, storm sewers, foundation drain collectors etc. The current policy has been Regional practice since 1999, with very few changes.

The existing Regional Well Interference Policy uses Development Charge revenue to:

- provide a temporary supply of water during construction of Regional Services to the affected homeowner unless the resident is unwilling to cooperate with the Region's investigation into the well interference claim, as determined by the Commissioner of Works; and,
- construct watermains and water services to homes (e.g. only to the front line of homes that have been or will potentially be negatively impacted). Work on private property remains at the homeowner's expense.

These costs are included in the Development Charge Study and are funded 100 per cent from water development charges.

2. Proposed Policy Revision

The Regional Well Interference Policy is shown in Attachment #1. There is one recommended change to the policy. The current policy requires Council approval for well interference work that exceeds \$100,000 and approval by the Commissioners of Finance and Works for well interference work under \$100,000. It is recommended that these thresholds be increased to \$250,000 to account for inflationary increases and to maintain consistency with the Region Share Policy.

3. Financial Impact

The number of units that will fall under the Well Interference Policy over the 2023-2032 forecast period is estimated at 353 units, resulting in a total residential cost of approximately \$17.04 million (average cost per unit is approximately \$48,280 per unit). The estimated financial impact of the \$17.04 million in well interference costs on the residential development charge quantum, over the next 10 year period (41,578 standard equivalent units), is approximately \$410 per new single detached dwelling unit.

There is no matching user rate contribution as 100 per cent of the cost associated with the well interference policy is funded by development charges.

4. Recommendations

It is recommended that the Region continue to address well interference in accordance with Attachment #1 and that the dollar thresholds triggering Council approval be indexed for inflation.

Attachment #1

Well Interference Policy

Well Interference Policy

A. Definition of Terms

Affected Party	Shall be the owner of the property that is subject to a Well Impact.
Connection Fee	Shall be the fee paid by a homeowner for a Water Connection, as defined in the Region's Water System by-law.
Frontage Charge	Shall be the charge paid by a homeowner for a Watermain, as defined in the Region's Water System by-law.
Regional Service	Shall be a Watermain, Water Connection, sanitary sewer, sanitary sewer connection, Regional storm sewer, Regional storm sewer connection or Regional Road and for greater clarity, the construction of Regional services does not include local servicing impacts due to grading, storm water management ponds, storm sewers, foundation drain collectors etc.
Temporary Supply of Water	Shall be a system of supplying water to an Affected Party during the construction period by any method deemed appropriate by the Region.
Water Connection	Shall refer to a water service connection and related appurtenances designed in accordance with Regional standards and located within the road right-of way, between the Watermain and the private property line.
Watermain	Shall refer to a watermain system and related appurtenances designed in accordance with Regional standards.
Well Impact	Shall refer to negative influences on the performance of a well, as determined by the Region, that reasonably, and in light of all available data can be attributed to the construction of a Regional Service.
Works on Private Property	Shall refer to all works outside of the municipal road right-of-way including, but not limited to, underground piping, internal and external plumbing, and the abandonment of unused wells.

B. Policy

1. Well Interference During Construction Provisions

- a) A Temporary Supply of Water will be provided to an Affected Party at no cost during the construction period where there is a direct impact on the existing private well supply. Once a Water Connection is constructed and available for use to the property, this provision no longer applies. This often takes the form of water deliveries and temporary above ground tanks. In order to invoke this aspect of the Policy, there needs to be some evidence of an actual impact related to the construction of Regional services as determined by Regional staff, such as:
 - Lowering of the water level in the well beyond a usable level; and/or
 - Negative impact on the quality of the water.
- b) In the event that the resident is unwilling to cooperate with the Region’s investigation into the well interference claim, as determined by the Commissioner of Works, the “During Construction Provisions” of the well interference policy will no longer be available to provide relief to the subject property.

2. Well Interference Provisions Post Construction

- a) When Regional services are constructed, water services will be extended to adjacent properties that have private wells which potentially could be negatively impacted by construction which must be within the urban boundary or abutting the urban boundary and conform with the Region’s water service request connection policy.
- b) Once the watermain and water service is constructed to the property line, the temporary water supply is removed and the affected homeowner is given the choice to connect to the Regional service. This offer never expires.
- c) The Region will waive the applicable Frontage Charges and Connection Fee for properties serviced by Regional Water supply under this policy.
- d) The costs of constructing the Works on Private Property, including any plumbing requirements and the abandonment of unused wells will be borne by the property owner.
- e) In the event that an Affected Party is located outside of the water supply service area (outside the urban boundary) or when it is not economically feasible to extend water services to the affected party, a new well may be constructed as an alternative method of addressing a well impact, subject to the approval of Committee of the Whole and Council.

3. Future Redevelopment of the Lands

- a) In the event that a property which has received the benefits of this policy is severed or subdivided in the future, Frontage Charges and Connection Fees will be payable to the Region for any new lots created at the rates in effect at the time of connection of the newly created lots to the Regional water supply system.
- b) In the event that a property which has received the benefits of this policy is rezoned or redeveloped in the future for a different use, Frontage Charges and Connection Fees will be payable to the Region for the property at the rates in effect at the time of rezoning or redevelopment application.

4. Other Matters

- a) Once connected to the Regional water supply system and provided the benefits of the Policy, the residents will be charged for water usage based on water meter readings and Regional water rate policies as approved by Council.
- b) Any existing unconnected properties that are experiencing impacts, where the watermain was previously constructed, will be granted the benefits of the Policy. The Policy is not retroactive to any previously connected properties that paid frontage and connection charges at the time of connection.
- c) Where the Region requests that the developer of a nearby development construct a watermain under the Well Interference Policy, the developer will be compensated for those works upon issuance of the “Completion Acceptance Letter” and provision of supporting documentation in accordance with the terms of the executed subdivision or servicing agreement.
- d) In the event that well monitoring is required, this work is to be completed by the Region and funded by the well interference program.
- e) In the event that there is a dispute with respect to the issue of actual well impact, the Region will request that the Ministry of the Environment, Conservation and Parks review the situation and provide a decision in the matter as a means of resolving the dispute.
- f) That Council approval be required for well interference work that exceeds \$250,000 and approval of the Commissioners of Works and Finance be required for works under \$250,000.

Appendix D

Intensification Servicing Policy

Appendix D – Intensification Servicing Policy

1. Introduction

The intensification servicing policy was approved in the 2013 Development Charge Study by Regional Council. This policy was developed in response to an analysis of the costs of sanitary sewerage and water supply servicing associated with the intensification objectives of the Provincial Growth Plan for the Greater Golden Horseshoe and the implementation of the 40 per cent intensification requirement in the current Durham Regional Official Plan (ROP). The following provides a background of the intensification servicing policy, its applicability, and the proposed changes.

The following also provides a discussion on the increased intensification and density target requirements approved in the Growth Plan for the Greater Golden Horseshoe (2020) and the impact it may have on the intensification servicing policy.

1.1. Background

The current ROP requires that urban areas be planned to achieve the following growth management objective on a Region wide basis:

“By 2015, and each year thereafter, accommodate a minimum 40 per cent of all residential development occurring annually through intensification within built-up areas”.

Accordingly, the population forecasts contained in Appendix A have distributed 40 per cent of the population growth in the urban areas throughout the built-up areas, based on density considerations for key structural elements of the current Regional Official Plan (e.g. Urban Growth Centres, Regional Centres and Corridors, Commuter Stations and Waterfront Places). It is noted that the draft new Regional Official Plan includes a 50 per cent intensification target to align with the current Growth Plan for the Greater Golden Horseshoe.

Overall servicing of this intensification has been included in the water supply and sanitary sewerage analysis contained in Appendix F and Appendix G. However, even though the forecasted growth has been targeted to strategic areas on an average density basis, intensification projects may occur at specific locations at a density beyond the average estimated for a broader area, such as a Regional Corridor. In these instances, additional development charge works may be required to service the specific sites.

Because the location of intensification projects and the associated required development charge works are site or area specific, they cannot be predicted with certainty in advance. Therefore, it is necessary to include an allowance for such works required to support intensification and to reaffirm a policy to provide access to these allowances, based on the costs of recent experiences in Durham Region.

1.2 Approved Policy

In order to address the difficulty in anticipating where Regional development charge works will be required for intensification projects, Regional Council approved the intensification servicing policy in 2013. This policy created an intensification allowance within the sanitary sewage development charge quantum calculation.

Under the approved policy, developers apply to use the funds in this allowance if their proposed development meets the following conditions:

- The proposed development is located within the existing built-up area.
- The proposed development requires a development charge sanitary sewage work that is not already listed in the projects included in Appendix G.
- All local works as defined in Section 3.0 of this Appendix are to be funded by the developer.

Council approval is required for all expenditures from this allowance. For future updates to the development charge by-law, actual sanitary sewage development charge servicing costs within the built-up area would be continuously monitored and included in future analyses contained within this Appendix, and the charge per person updated.

2. Applicability

The Intensification Servicing Policy is applicable to development that includes residential, within the built-up area, whether the development proceeds by plan of subdivision or condominium, consent or issuance of a building permit on an existing vacant parcel or redevelopment site.

3. Development Charges Act

The Development Charges Act, 1997, states that:

“ss.59(1) a municipality shall not, by way of a condition or agreement under section 51 or 53 of the *Planning Act*, impose directly or indirectly a charge related to a development or a requirement to construct a service related to development except as allowed in subsection (2).

(2) a condition or agreement referred to in subsection (1) may provide for:

- a) 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 owners as a condition of approval under section 51 of the *Planning Act*;
- b) local services to be installed or paid for by the owner as a condition of approval under section 53 of the *Planning Act*.”

The term "local services" is not specifically defined in the DCA, 1997 or the associated regulations.

The proposed Intensification Servicing Policy is consistent with the requirements referenced above.

3.1 Definition of "Local Service"

For the purposes of intensification servicing, "Local Service" is defined as the linear components of the sanitary sewerage system and water supply system, which conform to Regional design guidelines and are of the minimum size required to provide service to the proposed development in its entirety.

4. Analysis of Previous Intensification Projects (2008 – 2013)

4.1. 2013 Development Charge Analysis

As part of the 2013 Development Charge Study, staff examined a number of large developments constructed or initiated in Durham that are representative of the type of intensification that is consistent with the policy directions of the ROP, and that had development charge funded works (i.e. costs) associated with them. These included:

- Simcoe Street Corridor, south of Durham College/UOIT, Oshawa
- San Francisco by the Bay, on Bayly Street, Pickering
- Vision at Pat Bayly Square at Bayly Street and Harwood Avenue (Medallion Corporation project), Ajax

A brief description of each project, along with the development charge works that were required to service these intensification sites, is provided below.

Simcoe Street Corridor

To address student housing pressures in this corridor, a provision was made within the sanitary sewerage system to provide housing for 6,800 additional people. To provide service to these lands, modifications were required to the Simcoe Street Sanitary Pumping Station and forcemain totaling an estimated development charge cost of \$548,000 (\$2013). There were no development charge funded water supply works required to service this intensification project.

San Francisco by the Bay

This project involved the redevelopment of an underutilized shopping plaza into condominium apartments and townhouses for an ultimate population of 1,200 people. This project required the replacement of undersized sanitary trunk sewers downstream at a development charge cost of \$1,565,000 (\$2013). There were no development charge funded water supply works required to service this intensification project.

Vision at Pat Bayly Square (Medallion Corporation project)

This project is under construction and will create six apartment blocks over several phases. The ultimate population is planned at 3,190 people. Sanitary sewerage servicing required for this development is the construction of a new sanitary sewage pumping station and forcemain. These works will be oversized to allow for further

intensification north of the subject site, which will accommodate an additional 4,800 people. The estimated development charge component of the cost of these works is \$2,555,000 (\$2013). There are no development charge funded water supply works required to service this intensification project.

Staff also looked at a number of smaller developments constructed that are representative of the type of intensification required by the ROP, including:

- 44 Bond Street, Oshawa: Redevelopment of an office building into condominiums for 229 people.
- 400 Bloor Street East, Oshawa: Redevelopment of an abandoned industrial property into apartments for 90 people.
- 50 Station Street, Ajax: Redevelopment of vacant surplus commercial property into apartments for 136 people.

As these projects occurred on much smaller sites and involved significantly fewer units, no development charge funded water supply works or sanitary sewage works were required to service these intensification projects.

None of the above projects required any upgrades to the water supply system. Regional water supply systems are designed to support domestic uses as well as fire fighting demands. Firefighting demands have a significant impact on the sizing of the systems as compared to increases in domestic uses resulting from intensification. It is, therefore, reasonable to only address sanitary sewerage servicing in this intensification policy.

The following table summarizes the additional sanitary sewerage servicing development charge costs, per person, required to service the intensification associated with the preceding examples (based on the 2013 analysis):

Table 1
Sanitary Sewer Development Charge Costs
Intensification Projects (2008-2013)
(per person)

Project	Intensification Population	Sanitary DC Cost (\$2013)	Sanitary DC Cost / Person
Simcoe Street Corridor	6,800	\$ 548,000	\$ 81
SF by the Bay	1,200	\$ 1,565,000	\$ 1,304
Bayly and Harwood	7,990	\$ 2,555,000	\$ 320
44 Bond Street	229	\$ 0	\$ 0
400 Bloor Street East	90	\$ 0	\$ 0
50 Station Street	136	\$ 0	\$ 0
Total	16,445	\$ 4,668,000	\$ 284

The 2013 analysis illustrates that servicing requirements of intensification projects within the built up area on these selected sites varies significantly and is very site specific. As noted above, some projects required significant development charges funded works while others did not require any.

The above table indicates that for every person planned to be added within the built boundary for this particular sample, it costs \$284 to provide sanitary sewerage servicing. However, at this time, 40 per cent of the Region wide growth is planned to be provided within the built-up area, therefore, on a Region wide basis, a cost of \$114/person ($\284×40 per cent) is the currently required sanitary servicing cost.

4.2. Additional Intensification Projects (2013-2022)

As part of the 2018 DC By-law review, Regional staff undertook an analysis to look at residential intensification projects within the built-up area that took place from 2013 to 2017. Staff had identified 16 apartment building developments from 2013-2017 with the number of units ranging from 25 to 239 units (staff included developments with 25 or more units). The analysis included a total of 1,578 units. No Regional sanitary sewer development charge capital works were required to accommodate these developments (i.e. only local works were required which are funded by the developer) and therefore there were no applications for this funding.

Regional staff undertook a similar analysis as part the 2023 DC Background Study to review residential intensification projects within the built-up area from 2018 to 2022. The 2023 analysis identified 28 high-density developments, consisting of 25 units or more, that were issued building permits between 2018 and 2022. The analysis included a total of 4,415 units across the various developments.

Although no intensification projects required sanitary sewerage development charge works since the policy was established in 2013, it is recommended that this policy be retained as it is possible that future projects may need such improvements. Further, during discussions with area municipal staff, they expressed interest in seeing this policy continue. The development industry has also supported this policy in the past, recognizing that infill projects may result in significant infrastructure costs.

The following table provides the updated sanitary sewer development charge costs per person for the intensification projects, incorporating the projects from 2013-2022. The project costs, in the table below, have all been indexed to bring the values in to \$2023 using the non-residential construction price index for the Toronto Census Metropolitan Area.

Table 2
Updated Sanitary Sewer Development Charge Costs
Intensification Projects (2008-2022)
(per person)

Project	Intensification Population	Sanitary DC Cost (\$2023)	Sanitary DC Cost / Person
Simcoe Street Corridor	6,800	\$ 845,000	\$ 124
SF by the Bay	1,200	\$ 2,414,000	\$ 2,012
Bayly and Harwood	7,990	\$ 3,941,000	\$ 493
44 Bond Street	229	\$ 0	\$ 0
400 Bloor Street East	90	\$ 0	\$ 0
50 Station Street	136	\$ 0	\$ 0
Sub-total	16,445	\$ 7,200,000	\$ 438
Projects from 2013-2017 ¹	2,367	\$0	\$0
Projects from 2018-2022 ¹	6,623	\$0	\$0
Total	25,435	\$ 7,200,000	\$283

¹ Intensification population based on a PPU of 1.5, representing a rounded simple average of the PPU's for one and two-bedroom apartments.

5. Proposed Policy

It is recommended that the intensification policy continue and that an intensification allowance be provided within the sanitary sewage development charge quantum calculation. Building upon the analysis completed in 2018, and including the 28 additional apartment developments over 2018-2022, it is estimated that the cost per person to provide sanitary sewerage servicing is \$283. Based on 40 per cent of the Region wide growth being planned to be provided within the built-up area, the cost on a Region-wide basis is \$113 per person (e.g. 40 per cent x \$283) or \$371 per single detached unit (assuming 3.286 ppu).

Developers can apply to use the funds in this allowance if their proposed development meets the following conditions:

- The proposed development must be located within the existing built-up area;
- The proposed development must require a development charge sanitary sewage work that is not already listed in the projects included in Appendix G; and
- All local works as defined in Section 3.0 of this Appendix must be funded by the developer.

Council approval will be required for all expenditures from this allowance.

6. Financial Impact

The estimated financial impact on the development charge quantum based on the analyses contained in this Appendix is:

	Average Cost Per Dwelling Unit (3.286 ppu) (\$2023)
Sanitary Sewerage	<u>\$371</u>
TOTAL	<u>\$371</u>

7. Future Intensification Analysis

As noted previously, the current Regional Official Plan currently requires that a minimum of at least 40 per cent of all new development occur within the built-up area. This policy direction serves to reduce the need for additional new growth (e.g. greenfield) areas while accommodating the population forecasts in the Plan.

The sanitary servicing analysis contained within this Background Study assumes that 60 per cent of the growth will occur within greenfield areas and 40 per cent will occur within the built-up area as intensification. This is consistent with the directions of the current ROP.

When the Province released the Growth Plan for the Greater Golden Horseshoe (2017), the residential intensification target was increased to 50 per cent within the designated built boundary.

The most recent Growth Plan for the Greater Golden Horseshoe (2020) kept the minimum density target for existing designated greenfield areas (e.g. urban lands outside of the built boundary) at 50 residents and jobs combined per hectare, whereas the 2017 Plan had increased the density for community area lands.

The Region is in the final stages of its municipal comprehensive review. The draft new Regional Official Plan was released for consultation in February 2023. The new Regional Official Plan will allocate growth of population and employment to the year 2051, including the identification of intensification targets, for each area municipality. Following adoption of the new Regional Official Plan (expected in mid-2023), work will commence on updating the Region's water and wastewater and transportation master plans to examine infrastructure requirements to support growth in both intensification and greenfield areas.

The infrastructure master plans will provide critical information related to servicing needs in intensification areas and whether this policy will be required. This will be examined during the next Development Charge Study.

8. Recommendations

It is proposed that the Region continue with an Intensification Servicing Policy, as outlined above, to address site specific sanitary sewage servicing requirements within the built-up area. It is recommended that the sanitary sewerage capital program continue to include a provision for the anticipated additional growth-related infrastructure costs in order to accommodate site specific, population-intense residential developments. The recently enacted More Homes, Built Faster Act may trigger greater intensification in the future, which could potentially increase the need for this program.

This intensification policy ensures that the Regional development charge is sized so as to cover the unknown additional sanitary sewerage costs that are not included in the sanitary sewerage capital program. This development charge component is addressed on an average Region-wide calculation basis, as with virtually all Regional servicing costs. Further, the development charge by-law provides an incentive for redevelopment via the redevelopment credit, which applies to non-exempt development being redeveloped.

This policy is designed to provide assistance to intensification projects that require substantial Regional sanitary sewerage capital works (due to the specific location and the infrastructure constraints of the development). This is similar to the Regional Revitalization Plan which targets developments that require financial assistance due to the locational and infrastructure characteristics of the proposal. These financial policies target the eligibility of specific developments in need of financial assistance, instead of applying a general discount or exemption to a specific area or specific class of development, which may result in providing financial assistance to development projects that are viable without Regional financial assistance.

APPENDIX E

**REGIONAL ROADS
SERVICE LEVELS, CAPITAL COSTS
AND DC CALCULATIONS**

APPENDIX E - REGIONAL ROADS

1. Introduction

This appendix documents the analysis completed to establish the Regional Roads component of the development charge. The appendix presents:

- An examination of the historical fifteen-year average and projected ten-year levels of service;
- A forecast of capital works expenditures required to address the increase in need for Regional road service attributable to the anticipated new development over the period 2023 – 2032; and
- The calculation of the development charge quantum.

2. Service Levels

The following table lists the historical and projected service levels for Regional roads provided by the Region of Durham. This information has been estimated to ensure that the projected capital expenditures do not provide a level of service that exceeds the average level that has been provided over the preceding fifteen (15) years. The analysis considered both the quantity and quality of service as required by subsection 4(1) of O. Reg. 82/98.

The quantity level of service was defined in terms of lane-kilometres of roadway per capita. The quality level of service was defined in terms of the average volume to capacity ratio combined for both directions of travel (vehicle travel in passenger car equivalents divided by the carrying capacity of the infrastructure) at four screenlines (lines that coincide with natural or man-made features, such as creeks and roads). The four screenlines examined were Highway 401 and Taunton Road for north-south travel, and Lake Ridge Road and Townline Road (Oshawa/Clarington)/Mid-Scugog for east-west conditions.

**REGION OF DURHAM
COMPARISON OF HISTORICAL AND PROJECTED
LEVELS OF SERVICE FOR REGIONAL ROADS**

Service Measure	Historical (2008 – 2022)	Projected 2033
<u>Quantity of Service</u> Average lane-kilometres of Regional Road per 1,000 capita	3.56	3.33
<u>Quality of Service</u> Average volume to capacity ratio at screenline (combined for both directions of travel during A.M. peak hour):		
Highway 401 (Pickering to Oshawa)	0.45	0.63
Taunton Road (Pickering to Oshawa)	0.35	0.49
Lake Ridge Road (Victoria St. to Myrtle Rd.)	0.53	0.64
Townline Road/Mid-Scugog (Hwy. 401 to Hwy. 7A)	0.34	0.44
All Screenlines	0.42	0.56

The table below provides an additional qualitative measure for the historic level of service by estimating the average replacement cost of all roads related infrastructure on a per lane kilometer, per capita, basis.

15 Year Average	2008-2022
Average Population (2008-2022)	642,298
Average Lane Km's (2008-2022)	2,283
Quantity per capita	0.004
Quality (\$/lane km, including land)	\$ 3,583,699.10
Combined Quantity/Quality Level (\$/capita)	\$ 12,740.31

DC Amount (before deductions)	
2023-2033 Forecast Population Growth	161,913
\$ per Capita	\$ 12,740.31
Eligible Amount	\$ 2,062,821,964

The expenditures described in the capital works forecast presented in the following Tables E.1 and E.2 provide a service level, in terms of both quantity and quality, which is less than the historical average over the last 15 years. Accordingly, all growth-related Regional road improvement costs are eligible to be recovered from development charges, subject to the reductions identified in Section 3.3 below.

3. Capital Works Forecast

3.1 Development of Capital Works Program

A ten-year capital works program was prepared for the period 2023 – 2032, which identifies the projected expenditures, expressed in 2023 dollars, required to address the increase in need for Regional road service attributable to the anticipated development (Appendix A). For the purposes of the Development Charge rate calculation, this forecast has been lagged to match the time period of the development forecasts (e.g. July 1, 2023 to June 30, 2033).

The program shown in Tables E.1 and E.2 and Figures E.1 to E.4 is based on an assessment of the improvements and expansions required over the next ten years to serve expected demands. It includes the construction of road widenings, new connections, corridor improvements, intersection improvements, traffic signals and grade separations required as a result of both new development and redevelopment within the Region.

The need for future road widenings and new connections was determined by examining forecasts of future traffic volumes on the Regional Road network simulated by the Durham Regional Transportation Planning Model (the Model). The Model, which employs the Emme travel demand modelling software package, is calibrated to the most recent travel survey information (i.e., 2016 Transportation Tomorrow Survey), and verified using observed 2016 traffic counts. It forecasts auto and transit travel within the

entire Greater Toronto Area (GTA), focussing primarily on the freeways and arterial roads within Durham Region. Travel demands for the areas adjacent to and across the GTA boundary are also represented for completeness.

The Model identifies the increase in need for service as a result of the anticipated development and accounts for any uncommitted excess capacity presently within Durham's road system, consistent with the requirements of the Development Charges Act, 1997. It also utilizes available capacity on roads not under the Region's jurisdiction.

In particular, the forecasting methodology considered sensitivity analysis with respect to Provincial highway modifications, including Highway 401. Many of these improvements do not have committed funding and thus have undefined timelines. The Region performed a sensitivity analysis, particularly in the latter timeframes of the study, to determine if there were any projected areas of perceived overlap between Regional road and Provincial highway improvements that would result in excessive future capacity.

Our analysis considered the impact of the following highway widenings and enhancements by 2032, compared to the existing highway network, as follows:

i) Highway 401

- Widen to 12 lanes from Brock Road to Highway 412 with the express and collector lanes
- Widen to 10 lanes from Highway 412 to Liberty Street
- Widen to 8 lanes from Liberty Street to Highway 35/115
- Upgrade the Lake Ridge Road interchange from allowing only partial movements to full movements
- New interchange at Simcoe Street and reconfiguration of the Ritson Road, Harmony Road, Bowmanville Avenue and Liberty Street interchanges

ii) Highway 412

- New interchange at Rossland Road

Several key arterial or collector road improvements made by area municipalities were also considered for sensitivity analysis by the 2032 timeframe, based on their respective capital works programs. This was done to result in a more reasonable Regional road expansion program while ensuring that necessary Regional road connections would be provided.

The Lakeshore East GO Rail extension to Bowmanville was also considered and analyzed to determine the system impacts if it were to be operational by the 2027 time frame as targeted by Metrolinx. The planned full-day service with thirty-minute headways in both directions to Bowmanville, and four new GO stations at Thornton's Corners and Central Oshawa (Ritson) in Oshawa and Courtice and Bowmanville in Clarington, were assumed for the analysis. With respect to the Durham Bus Rapid Transit (BRT) assumptions, the Durham-Scarborough BRT (DSBRT) project was included as part of the transit network, from Scarborough Town Centre to Simcoe Street in Downtown Oshawa. The general lane configuration, which includes median transit

services consistent with the preliminary design of the project, and buses operating at five-minute headways during the A.M. and P.M. peak periods, were assumed. The Simcoe Street rapid transit corridor from Highway 407 to the Gibb/Olive Avenue connection, was also included as a BRT facility based on the Durham TMP, with buses operating at five-minute headways during the A.M. and P.M. peak periods. Dedicated bus lanes taking over a lane of traffic was assumed along the corridor, except for the section between Winchester Road and Conlin Road where an additional bus lane was added. Note that the Simcoe Street Rapid Transit Visioning Study is currently reviewing the recommended transit technology and overall design for the Simcoe Street corridor. These transit service enhancements influence the transit modal share and the distribution of auto trips to/from the GO stations.

The forecasts of 2033 peak hour traffic volumes based on the anticipated development (Appendix A) were compared to existing capacities to identify future Regional road deficiencies by time period. This analysis was further refined through the consideration of lane continuity issues, provision of future transit service, and efforts to consolidate improvements to a minimum number of facilities.

3.2 Forecast Periods

Tables E.1 and E.2, divide the projected capital works program into each forecast year (2023 – 2032), similar to the Region’s Annual Capital Budget and Nine-Year Forecast for the Regional Road system. This forecast is subject to review and approval by Regional Council on an annual basis.

The timing of implementation for the various projects identified in the forecast and associated cost estimates are preliminary in nature. Project priorities, construction timing and cost estimates will be reviewed on an ongoing basis and will be subject to review and approval annually by Regional Council. Infrastructure improvements also require the completion of a Class Environmental Assessment prior to implementation.

3.3 Allocation of Capital Costs

Table E.1 and E.2 include works required to correct existing deficiencies, which will benefit both existing and new development, as well as system modifications and expansions required solely to support growth during the forecast period.

An assessment has been carried out to allocate the total cost of the various projects contained in the forecast between existing development (non-growth), new residential development (Table E.1), and new non-residential development (Table E.2). This assessment distributes the capital cost of the projects contained in the forecast based on the demand imposed on the system. Demands were assessed on a traffic volume basis.

In addition, the tables identify deductions in accordance with the Development Charges Act, 1997 for:

- “Benefit to Existing Development”, which is the anticipated value of new capital works attributable to existing development. This deduction is assessed on a project by project basis and is primarily applicable to reconstruction, rehabilitation and

replacement portion of project construction. As an example, in widening an existing 2-lane road to 4 lanes, the construction work may involve either rehabilitation or reconstruction of the two centre lanes. On this basis, the share of the total project cost associated with rehabilitating or reconstructing the existing two centre lanes was calculated and deemed to be beneficial to the existing community.

- “Post Period Benefit”, is the value of any anticipated surplus capacity at the end of the forecast period which is to be recovered from subsequent development. The value of surplus capacity to be deducted was calculated on a project by project basis from the forecasted 2033 traffic volumes and capacities for those road widening and new connection projects to be constructed in the 2030-2032 time frame; and
- “Grants, Subsidy and Other”, which is the funding anticipated or received from other sources.

The following average percentages have been used in allocating the eligible growth-related capital costs between new residential and new non-residential development in Tables E.1 and E.2. The split between residential and non-residential (74% / 26%) development is based on the incremental increase in population and employment over the 2023-2033 forecast period as identified in Appendix A, as follows:

$$\text{Residential: } \frac{161,913}{161,913 + 58,334} = 74\%$$

$$\text{Non-Residential: } 100\% - 74\% = 26\%$$

The non-residential share of 26 per cent is further allocated to the industrial, commercial and institutional categories based on the incremental employment growth for these sectors as identified in Appendix A.

**SUMMARY OF GROWTH-RELATED CAPITAL UTILIZATION
FOR RESIDENTIAL AND NON-RESIDENTIAL PURPOSES**

Land Use Category	Percentage of Capital Attributable to Growth
Residential	74
Non Residential	
i) Industrial	8
ii) Commercial	11
iii) Institutional	7

The following table provides a summary of the overall roads capital program (including Seaton) totalling approximately \$2.63 billion over the 2023-2032 time period.

ROADS CAPITAL SUMMARY (2023-2032)
(\$ 000's)

Roads (\$ 000's)	Widenings, New Connections and Corridor Modifications	Intersection Modifications and Signal Installations	Other Development Charge Component Works	Total
Gross Cost	2,047,531	279,182	304,917	2,631,630
Benefit to Existing	325,673	27,918	60,508	414,098
Post Period Benefit	63,684	0	0	63,684
Grants, Subsidy & Other	92,600	0	0	92,600
Residential	1,152,821	184,260	180,836	1,517,917
Non-Residential	412,753	67,044	63,573	543,330
Total Res. + Non Res.	1,565,574	251,263	244,410	2,061,247

4. Calculation of Development Charge Quantum

Tables E.3 to E.6 determine the proposed DC per residential dwelling unit and per gross floor area of non-residential development within the Region of Durham. These tables summarize the net growth related capital costs against projected new development during the ten-year forecast, deducting existing uncommitted Reserve Fund Balances. Allowances for financing of committed excess capacity are not required since no debt has been issued to finance Regional road related improvements.

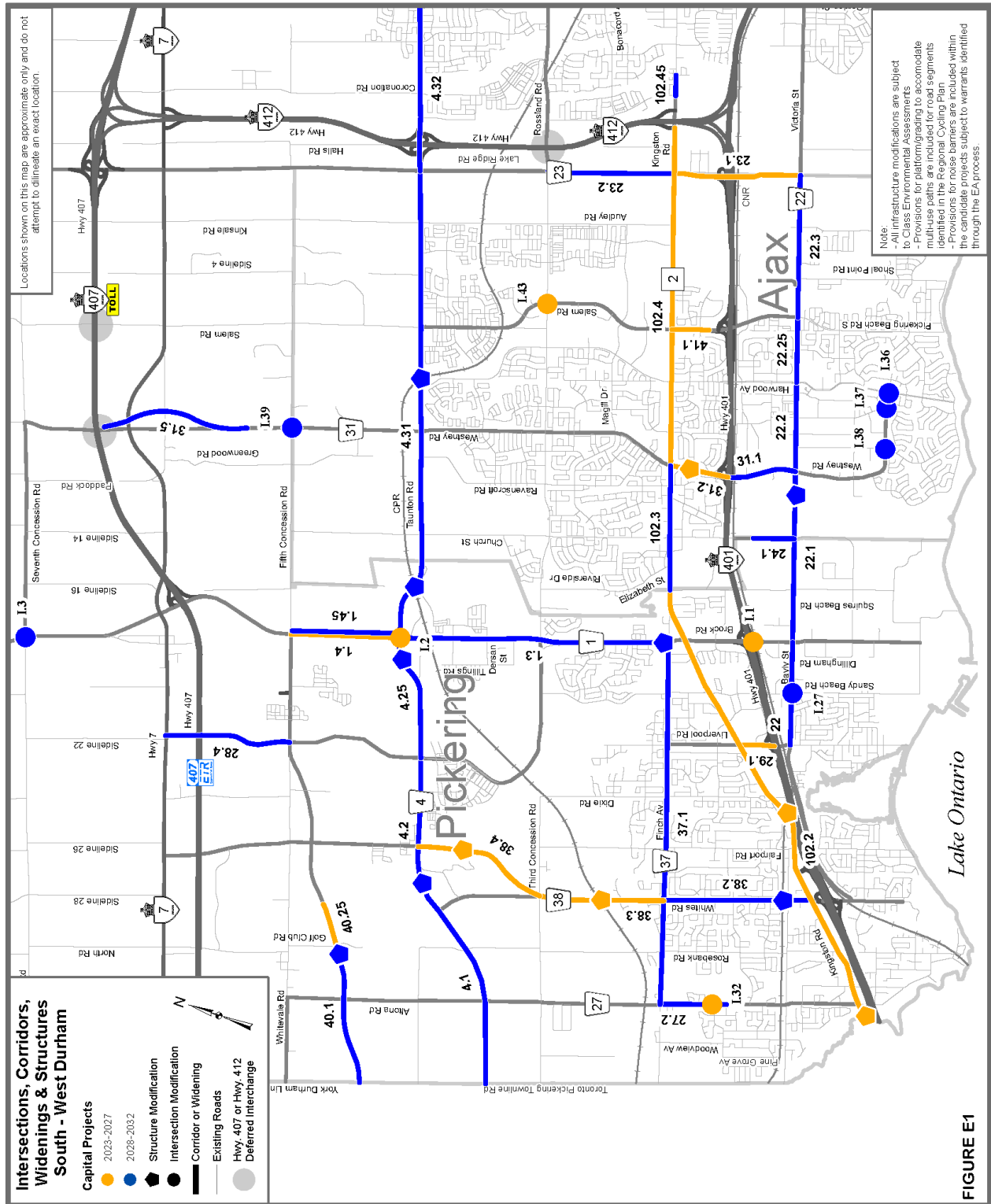
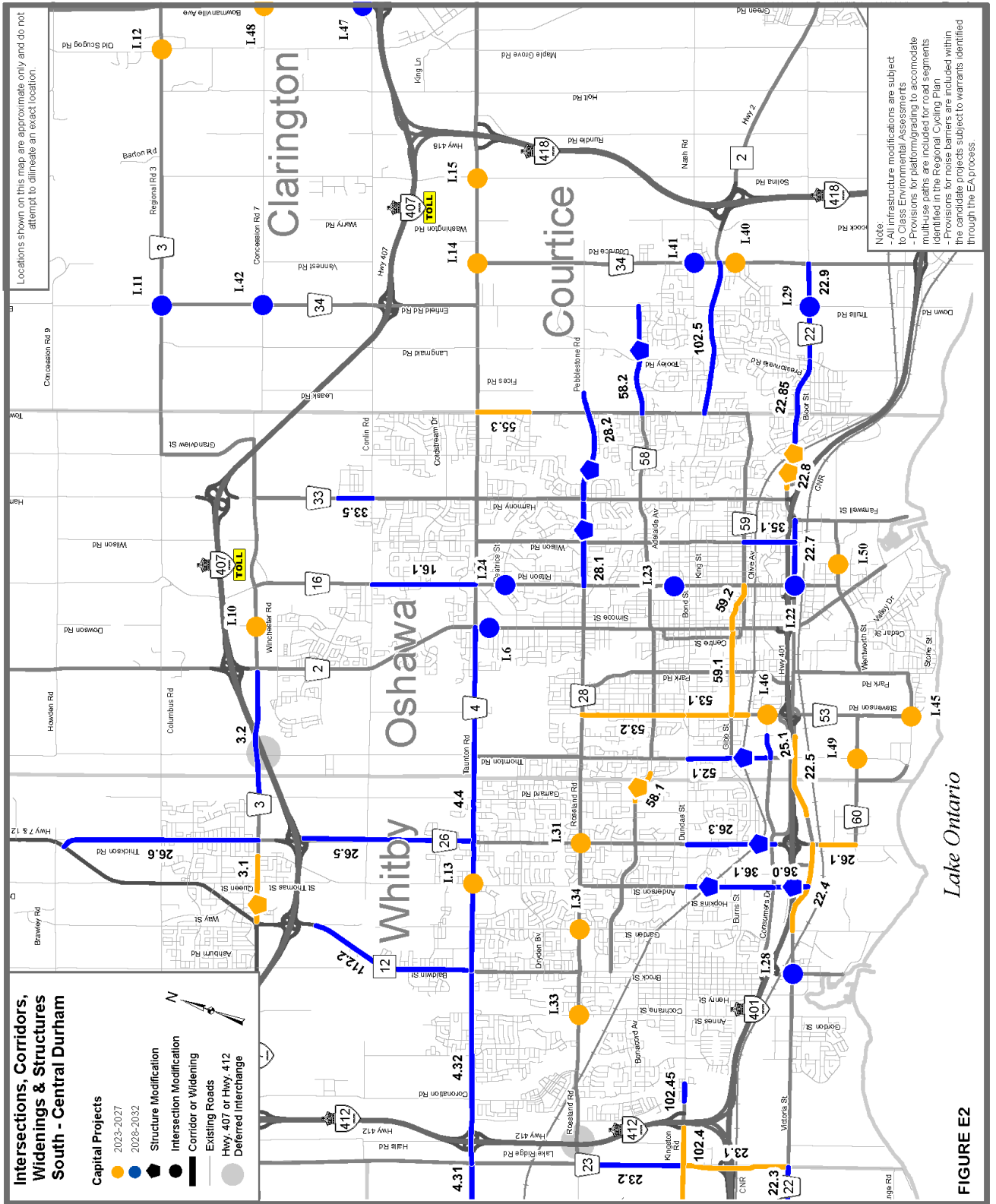
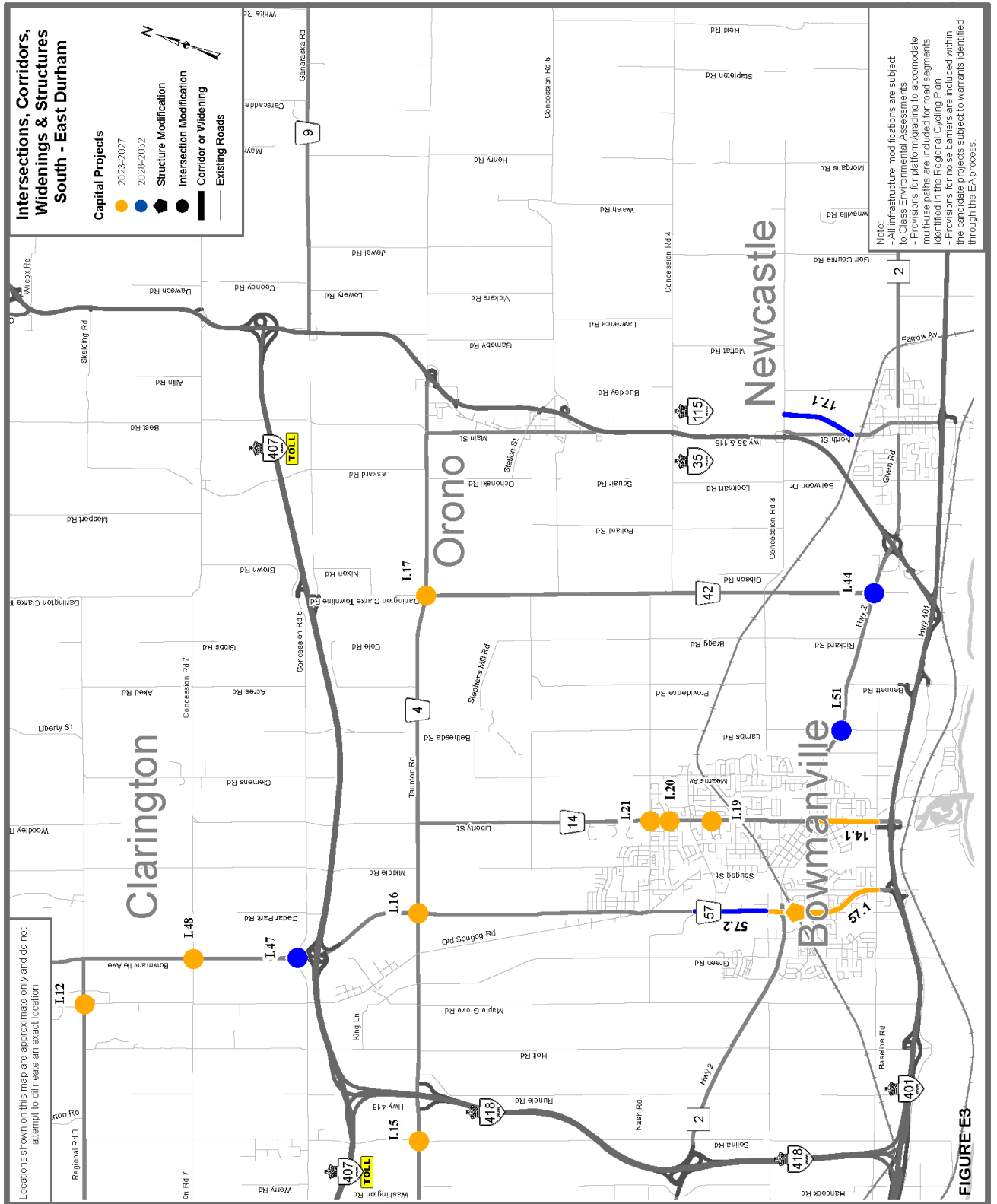


FIGURE E1





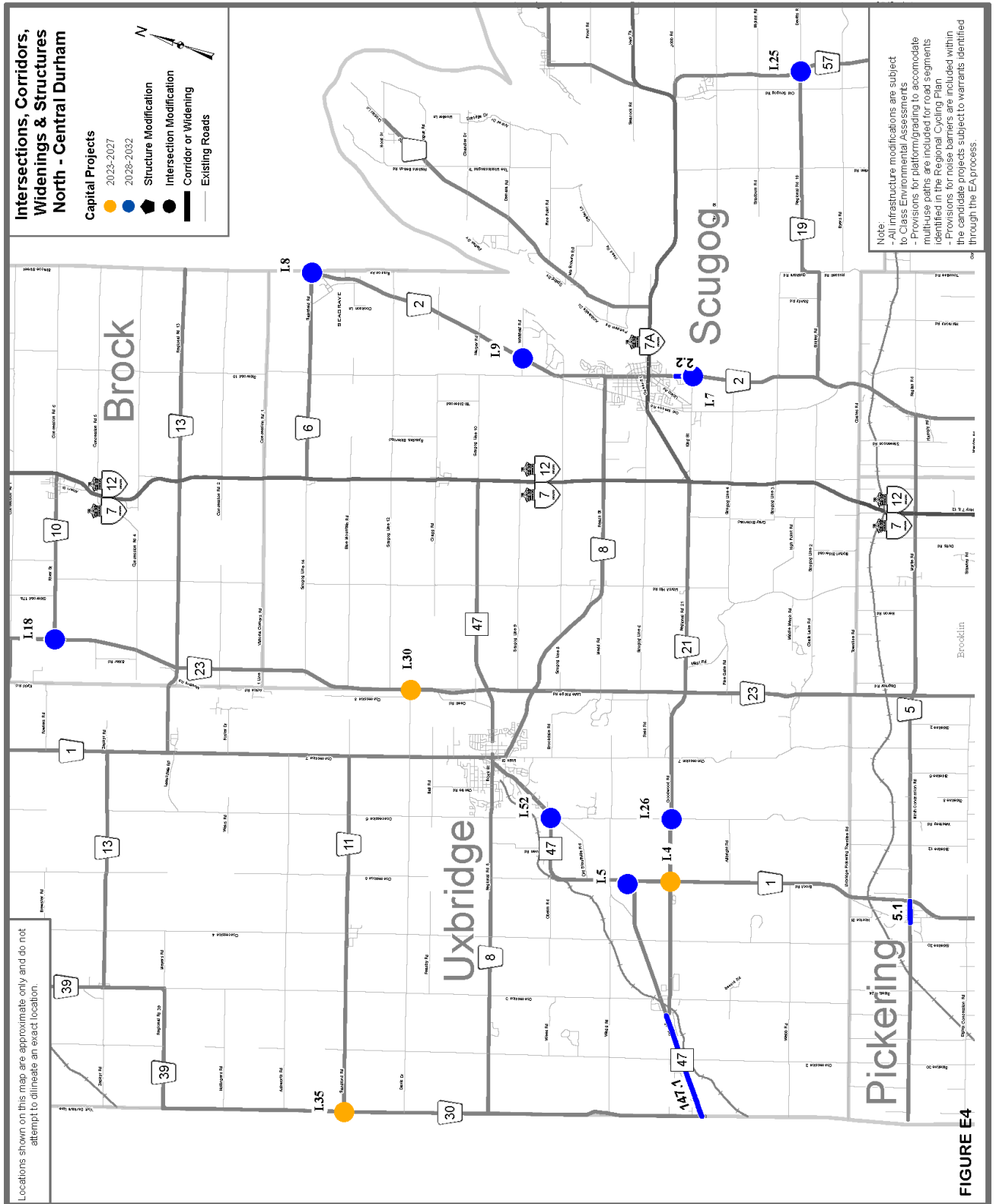


Table E.3
RESIDENTIAL ROADS
Region-Wide Development Charge (With Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9
	DC Reserve Fund Opening Balance	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Equivalent Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	59,600	58,746	58,746	5,238	26,998	141,415	142,269	4,268	146,537
2024-25	146,537	199,656	205,646	5,238	27,808	145,657	86,548	2,596	89,145
2025-26	89,145	142,870	151,571	5,238	28,642	150,027	87,601	2,628	90,229
2026-27	90,229	89,227	97,500	5,326	29,501	157,124	149,853	4,496	154,348
2027-28	154,348	129,008	145,199	5,485	30,386	166,669	175,818	5,275	181,092
2028-29	181,092	181,530	210,443	5,487	31,298	171,732	142,381	4,271	146,653
2029-30	146,653	166,375	198,661	5,487	32,237	176,884	124,875	3,746	128,622
2030-31	128,622	134,260	165,123	5,487	33,204	182,190	145,689	4,371	150,060
2031-32	150,060	192,517	243,875	5,515	34,200	188,613	94,798	2,844	97,642
2032-33	97,642	223,728	291,914	5,515	35,226	194,272	0	0	0
TOTAL		1,517,917	1,768,678	54,016		1,674,583		34,495	

	Single / Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$26,998	\$21,501	\$15,718	\$9,654

Table E.4
COMMERCIAL ROADS
Region-Wide Development Charge (With Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$000's)

Year	1	2	3	4	5	6	7	8	9	10
	DC Reserve Fund Opening Balance	Development Related Exp Total	Development Related Exp Commercial	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Commercial	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	21,959	21,157	9,119	9,119	926,240	21.91	20,298	33,138	994	34,132
2024-25	34,132	71,510	30,821	31,746	926,240	22.57	20,907	23,293	699	23,992
2025-26	23,992	50,913	21,943	23,280	926,240	23.25	21,534	22,247	667	22,914
2026-27	22,914	31,952	13,771	15,048	926,240	23.95	22,180	30,046	901	30,948
2027-28	30,948	46,341	19,973	22,480	926,240	24.66	22,846	31,314	939	32,253
2028-29	32,253	64,731	27,899	32,343	1,010,540	25.40	25,673	25,583	767	26,350
2029-30	26,350	59,470	25,632	30,605	1,010,540	26.17	26,443	22,188	666	22,853
2030-31	22,853	48,394	20,858	25,653	1,010,540	26.95	27,236	24,437	733	25,170
2031-32	25,170	68,675	29,599	37,495	1,010,540	27.76	28,053	15,728	472	16,199
2032-33	16,199	80,188	34,561	45,094	1,010,540	28.59	28,895	0	0	0
TOTAL		543,330	234,175	272,862	9,683,900		244,064		6,839	

Development Charge/sq. ft.	Commercial
	\$21.91

Table E.5
INDUSTRIAL ROADS
Region-Wide Development Charge (With Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10
	DC Reserve Fund Opening Balance	Development Related Exp Total	Development Related Exp Industrial	Development Related Exp. Inflated @ 3.0%	Estimated Development sq. ft. Industrial	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	11,929	21,157	6,199	6,199	2,033,180	7.59	15,434	21,164	635	21,799
2024-25	21,799	71,510	20,953	21,581	2,033,180	7.82	15,897	16,115	483	16,598
2025-26	16,598	50,913	14,917	15,826	2,033,180	8.05	16,374	17,147	514	17,661
2026-27	17,661	31,952	9,362	10,230	2,033,180	8.30	16,865	24,296	729	25,025
2027-28	25,025	46,341	13,578	15,282	2,033,180	8.54	17,371	27,115	813	27,928
2028-29	27,928	64,731	18,966	21,987	1,846,800	8.80	16,252	22,193	666	22,859
2029-30	22,859	59,470	17,425	20,806	1,846,800	9.06	16,740	18,793	564	19,356
2030-31	19,356	48,394	14,180	17,439	1,846,800	9.34	17,242	19,159	575	19,734
2031-32	19,734	68,675	20,122	25,490	1,846,800	9.62	17,759	12,004	360	12,364
2032-33	12,364	80,188	23,495	30,656	1,846,800	9.90	18,292	0	0	0
TOTAL		543,330	159,196	185,495	19,399,900		168,227		5,340	

Development Charge/sq. ft.	Industrial
	\$7.59

Table E.6
INSTITUTIONAL ROADS
Region-Wide Development Charge (With Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10
DC Reserve Fund Opening Balance	DC Reserve Fund Closing Bal.	Development Related Exp Total	Development Related Exp Institutional	Development Related Exp. Inflated @ 3.0%	Estimated Development sq. ft. Institutional	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	1,722	21,157	5,839	5,839	841,180	16.61	13,975	9,858	296	10,153
2024-25	10,153	71,510	19,737	20,329	841,180	17.11	14,394	4,218	127	4,345
2025-26	4,345	50,913	14,052	14,908	841,180	17.62	14,826	4,263	128	4,391
2026-27	4,391	31,952	8,819	9,636	841,180	18.15	15,270	10,025	301	10,325
2027-28	10,325	46,341	12,790	14,395	841,180	18.70	15,729	11,659	350	12,008
2028-29	12,008	64,731	17,866	20,711	943,400	19.26	18,169	9,466	284	9,750
2029-30	9,750	59,470	16,414	19,599	943,400	19.84	18,714	8,865	266	9,131
2030-31	9,131	48,394	13,357	16,427	943,400	20.43	19,276	11,980	359	12,339
2031-32	12,339	68,675	18,954	24,011	943,400	21.04	19,854	8,182	245	8,428
2032-33	8,428	80,188	22,132	28,877	943,400	21.68	20,449	0	0	0
TOTAL		543,330	149,959	174,733	8,922,900		170,655		2,355	

Development Charge/sq. ft.	Institutional
	\$16.61

Appendix F

**Regional Water Supply
Service Levels, Capital Costs
and DC Calculations**

Appendix F – Regional Water Supply

1. Introduction

This appendix provides the analysis completed to establish the Regional Water Supply component of the Development Charge in compliance with the DCA and Ontario Regulation 82/98. The appendix presents:

- An examination of the level of service;
- A forecast of capital works expenditures required to address the increase in need for Regional water supply service attributable to the anticipated new development in the urban areas over the period 2023 – 2032; and
- The calculation of the development charge quantum.

2. Service Levels

The following table lists the historical service standards provided for water supply by the Region of Durham. The standards are expressed in terms of design criteria, legislation or capacity requirements as issued by the Ministry of the Environment or any other appropriate regulatory standard setting body. The table also reflects other service criteria adopted by the Regional Works Department.

REGION OF DURHAM WATER SUPPLY STANDARDS	
Service Component	Service Standards Applied
Water Supply Plants	<ul style="list-style-type: none"> • Design criteria based on historical flow data for each individual supply facility. The current maximum day flows in litres/capita/day (l/c/d) which include residential, industrial, commercial and institutional demands are as follows: <ul style="list-style-type: none"> ○ Ajax, Whitby, and Oshawa Plants – 550 l/c/d ○ Bowmanville Plant – 550 l/c/d ○ Newcastle Plant – 600 l/c/d ○ Orono Wells – 560 l/c/d ○ Beaverton Plant – 600 l/c/d ○ Cannington Wells – 500 l/c/d ○ Sunderland Wells – 600 l/c/d ○ Port Perry Wells – 550 l/c/d ○ Blackstock Wells – 500 l/c/d ○ Greenbank Wells – 500 l/c/d ○ Uxbridge Wells – 550 l/c/d • Treatment based on MOECC regulations, MOECC guidelines and is site specific. MOECC regulations, policies and directives are used in order to establish the final Drinking Water Licence and associated Compliance Approval (ECA).
Storage Facilities	<ul style="list-style-type: none"> • Based on MOECC guidelines and Region of Durham system design criteria to meet the storage requirements for fire, equalization and emergency conditions using storage and reserve pumping capacity from water supply plants, if available.
Pumping Stations	<ul style="list-style-type: none"> • Based on MOECC and Region of Durham design guidelines and standards

The expenditures described in the capital works forecast presented in the following Tables F.1 and F.2 provide a similar level of service to that indicated in the table above.

3. Capital Works Forecast

3.1 Development of Capital Works Program

A ten-year capital works program was prepared for the period 2023-2032, which identifies the projected expenditures, expressed in 2023 dollars, required to address the increase in need for Regional water supply service attributable to the anticipated development (Appendix A). For the purposes of the Development Charge calculation, this forecast has been lagged to match the time period of the development forecasts (e.g. July 1, 2023 to June 30, 2033).

The program shown in Tables F.1 and F.2 and Figures F.1 to F.8 is based on information currently available on the capacity of the existing Regional water supply system, combined with an assessment of the improvements and expansions required to accommodate development over the next ten years. It includes the construction of works required to correct deficiencies in the system, and plant expansions, storage reservoirs, pumping stations, feeder mains and distribution system extensions required as a result of both new development and redevelopment within the urban areas.

3.2 Sequential Development

The basic premise underlying the forecast of capital works requirements is that development will be sequential in nature with the progressive extension / expansion of the Regional water supply system occurring as development proceeds within the urban areas.

3.3 Forecast Periods

Tables F.1 and F.2 divide the projected capital works program into annual forecast periods. The program is similar to the Region's Annual Capital Budget and Nine-Year Forecast for the Regional water supply system. This forecast is subject to review and approval by Regional Council on an annual basis. The works have been assigned to these time frames based on information currently available on existing system capacities, operations experience and estimates of future demand.

The timing of implementation of the various projects identified in the forecasts and associated cost estimates are preliminary in nature. Project priorities, construction timing and cost estimates will be reviewed on an ongoing basis and will be subject to review and approval on an annual basis by Regional Council.

3.4 Allocation of Capital Costs

Tables F.1 and F.2 include works required to correct existing system deficiencies, which will benefit both existing and new development, as well as system improvements and expansions required solely to support growth during the forecast period. An assessment has been carried out to allocate the total cost of the various projects contained in the forecast between existing development (non-growth), new residential development

(Table F.1), and new non-residential development (Table F.2). This assessment distributes the capital cost of the projects contained in the forecast based on the demand imposed on the system. Demands were assessed on either a flow or population equivalent basis, depending upon the situation.

In addition, the tables identify deductions in accordance with the Development Charges Act, 1997 for:

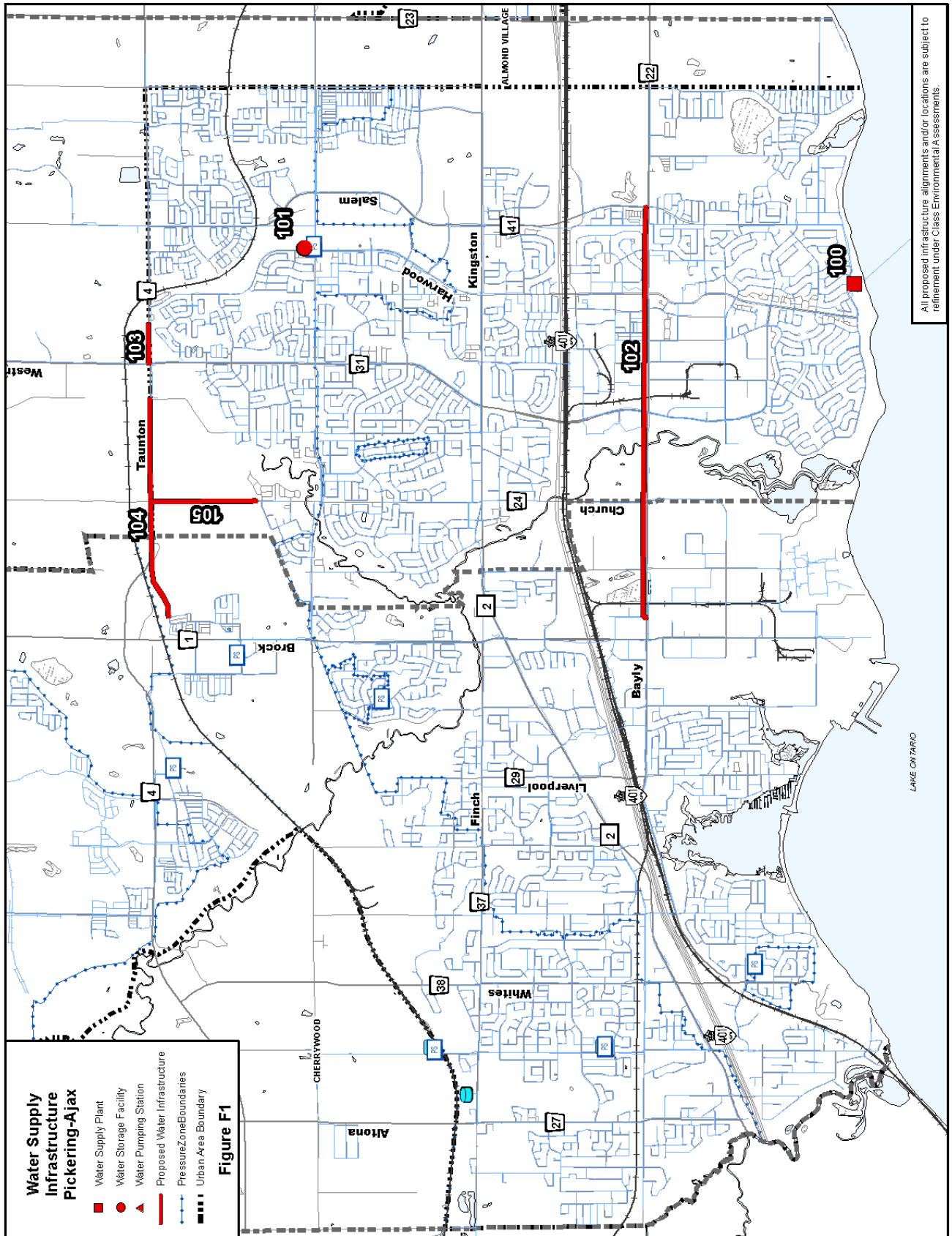
- "Benefit to Existing Development", which is the anticipated value of new capital works attributable to existing development. This deduction is assessed on a project-by-project basis and is primarily applicable to reconstruction, rehabilitation and replacement type projects;
- "Post Period Benefit", which is the value of anticipated surplus capacity at the end of the forecast period to be recovered from subsequent development. Deductions are made for specifically oversized capital works consisting of water supply plants, reservoirs and pumping stations;
- "Grants, Subsidy and Other", which is the funding anticipated or received from other sources; and,
- "Seaton" and "Federal Lands", the water supply infrastructure to service the Seaton and Federal Lands have been isolated and are not included in the Region Wide Development Charge. The Seaton share is to be covered via a separate area specific development charge by-law.

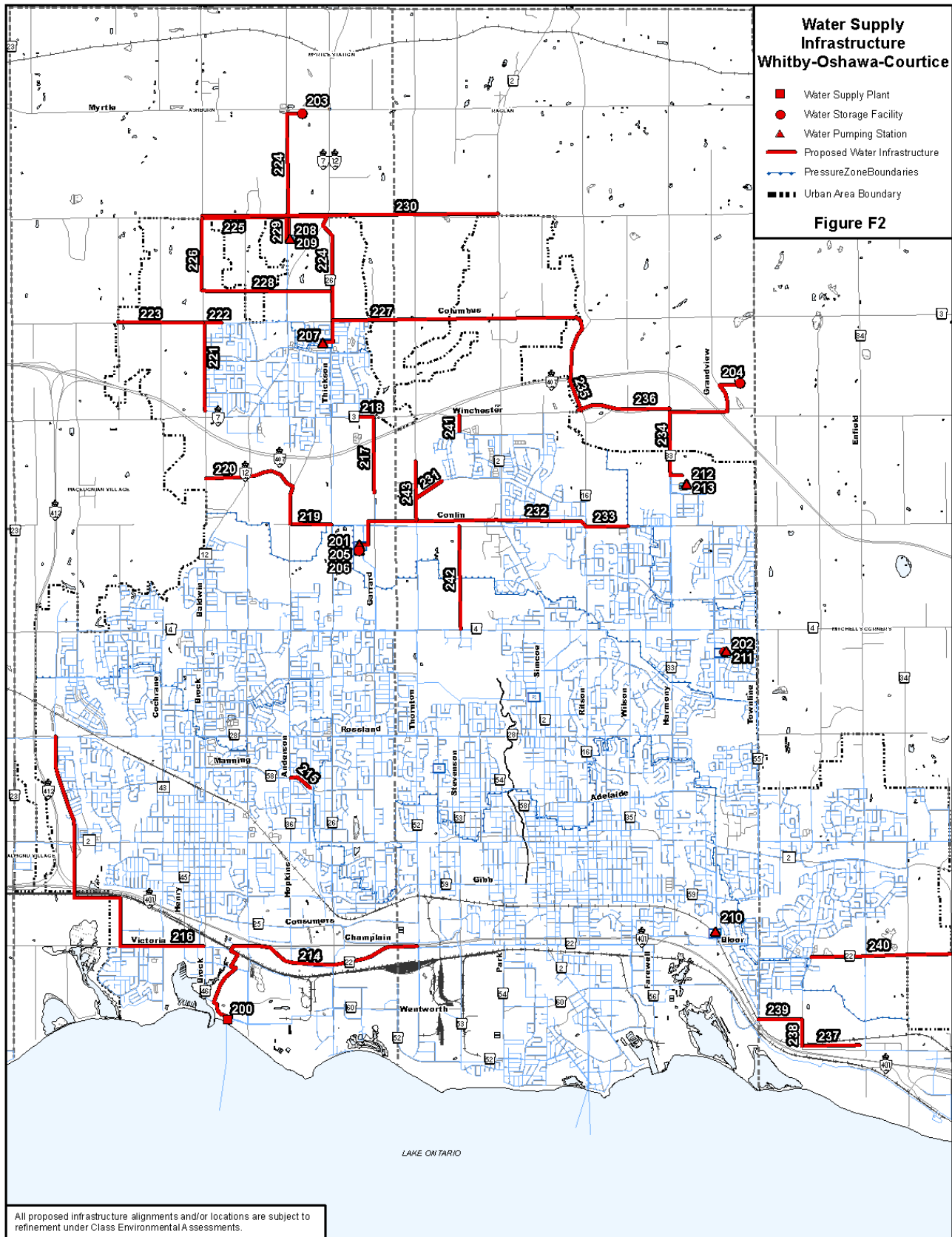
The following average percentages have been used in allocating the eligible growth-related capital costs between new residential and new non-residential development in Tables F.1 and F.2. The attributions, which are based on data obtained from actual water consumption records, plant operations records, and conventional design criteria, reflect relative utilization of eligible growth-related capital costs.

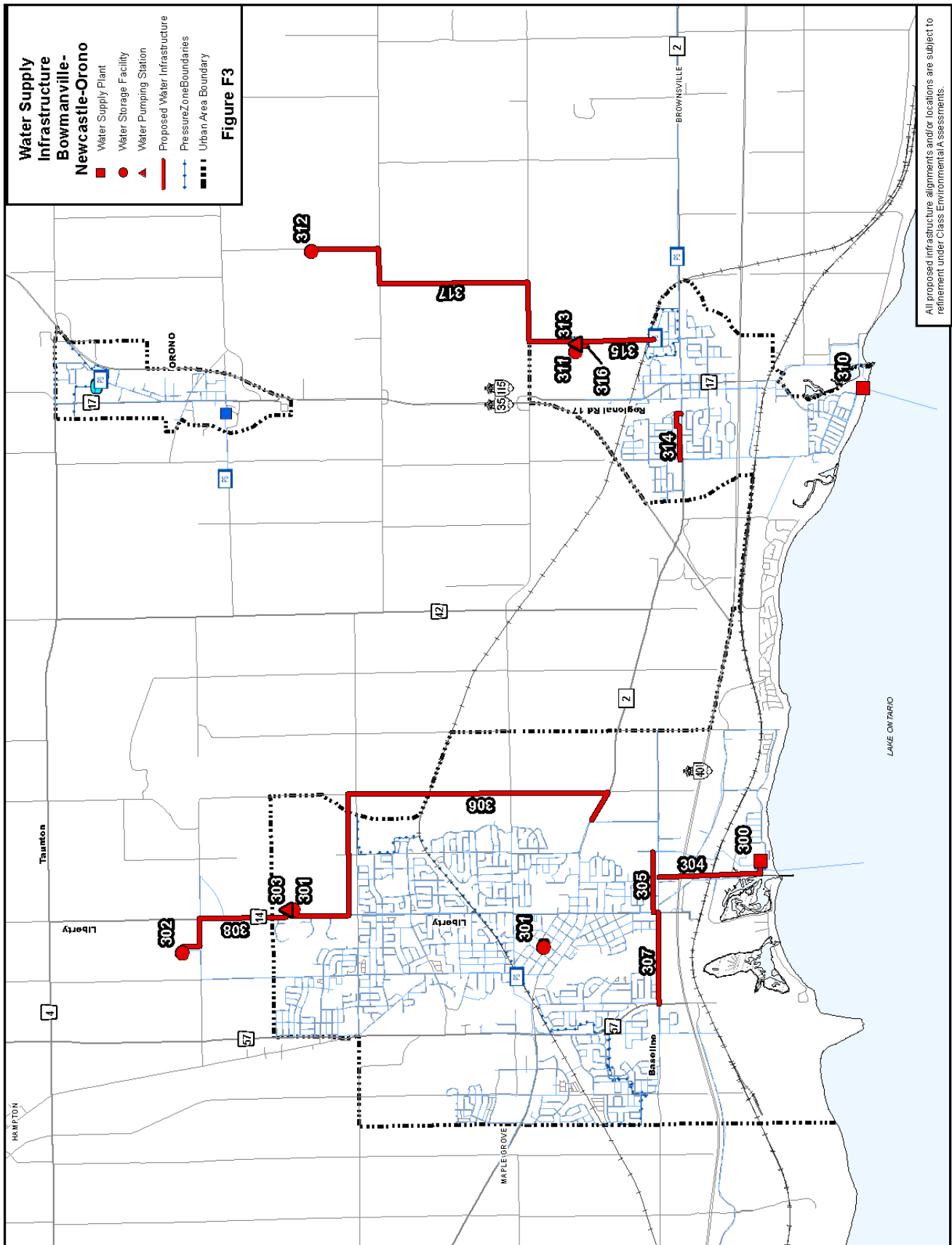
SUMMARY OF GROWTH RELATED CAPITAL UTILIZATION FOR RESIDENTIAL AND NON-RESIDENTIAL PURPOSES BY TYPE OF CAPITAL EXPENDITURE	
Land Use Category	Percentage of Capital Attributable to Growth by Development Type
Residential	
- Water Supply Plants	75.7
- Other	92.6
Non-Residential	
Water Supply Plants (All Non-res)	
i) Industrial	12.6
ii) Commercial	9.4
iii) Institutional	2.3
Other (All non-res)	
i) Industrial	3.8
ii) Commercial	2.9
iii) Institutional	0.7
<u>Note:</u>	
"Other" refers to Water Distribution System components including watermains, pumping stations and storage facilities i.e. reservoirs.	

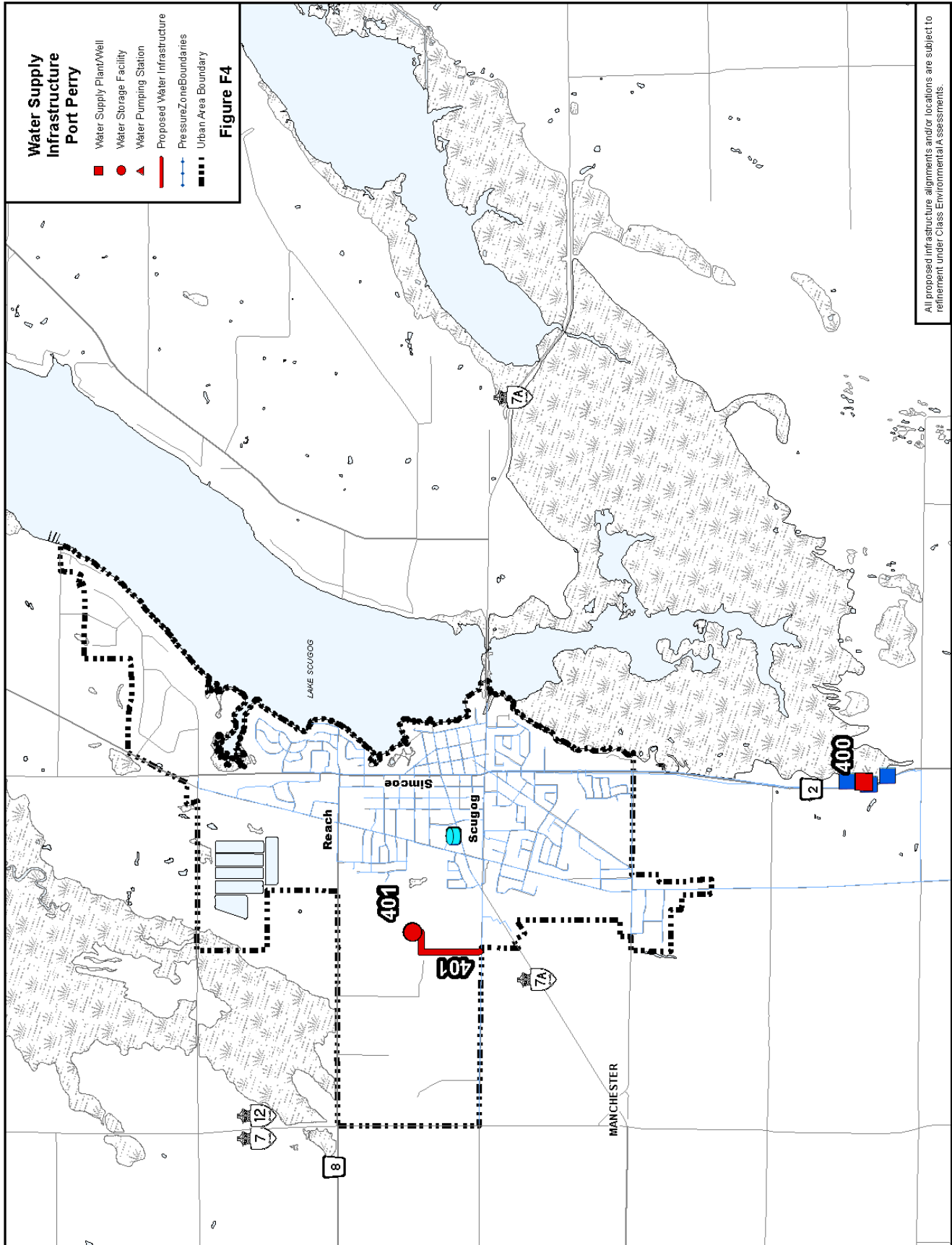
4. Calculation of Development Charge Quantum

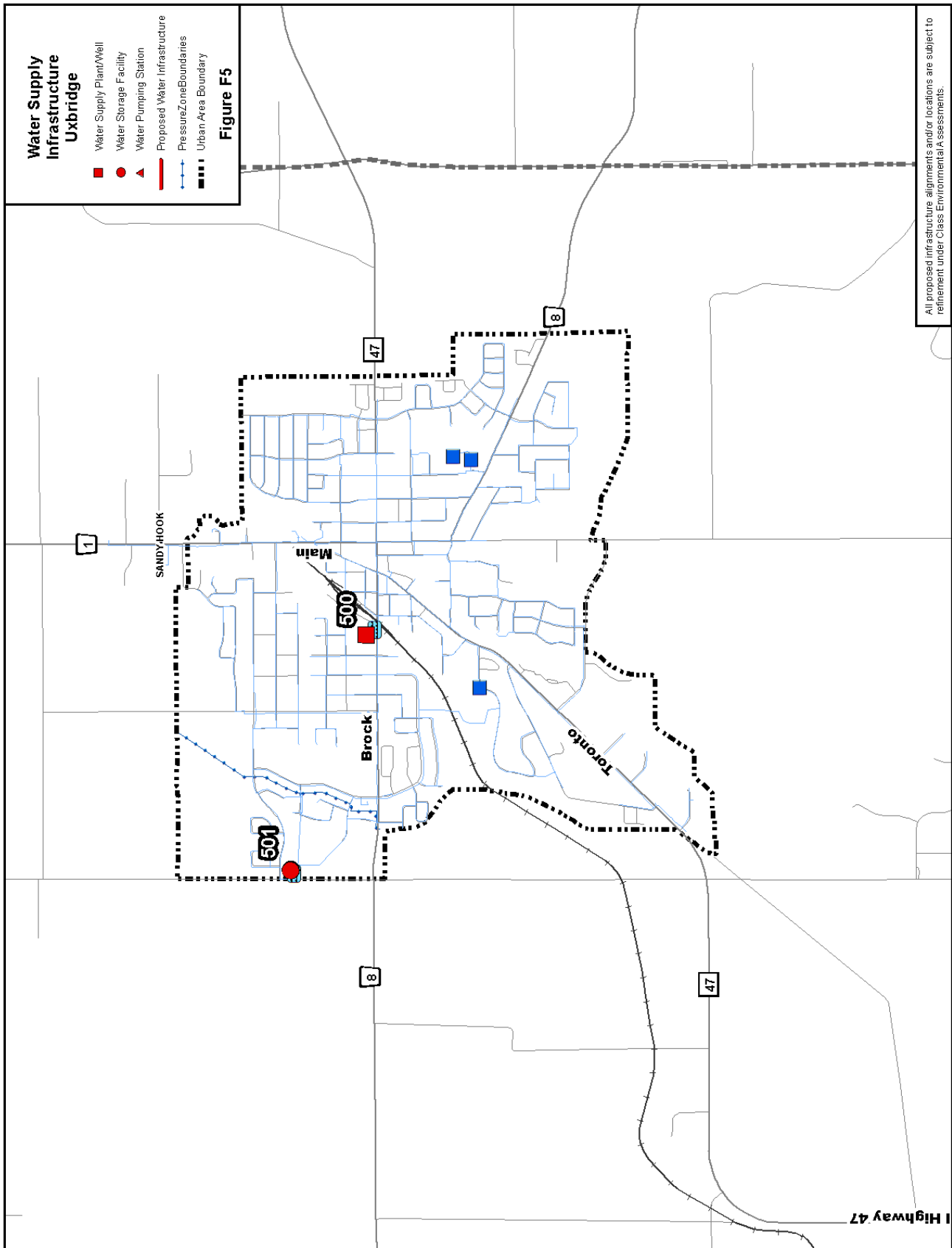
Tables F.3 to F.6 determine the proposed DC per residential dwelling unit and per square foot of gross floor area for non-residential development within the urban areas in the Region of Durham. These tables summarize the net growth-related capital costs against projected new development during the ten-year forecast, including allowances for deducting uncommitted excess capacity from the future requirement and deducting existing reserve fund balances.

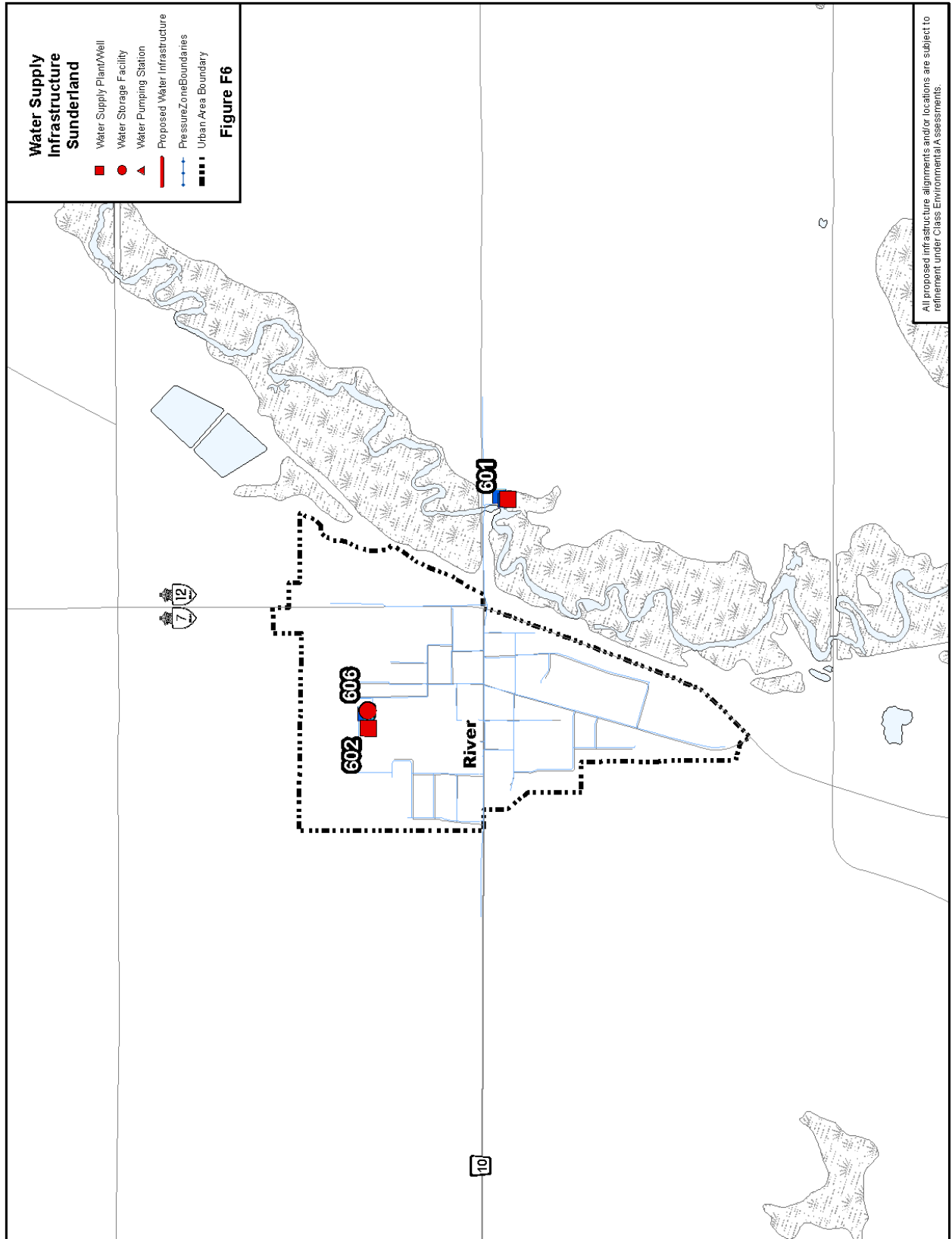


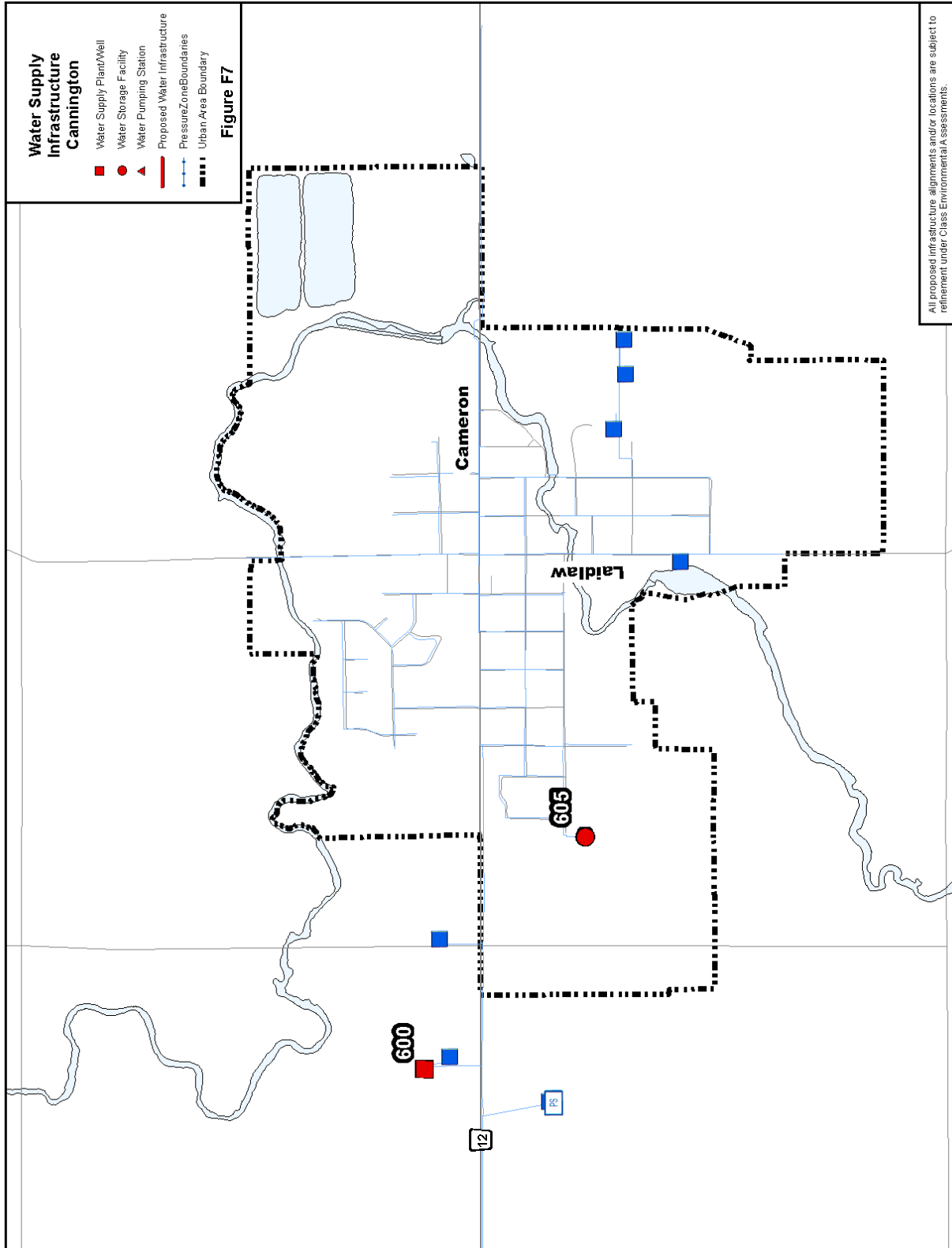












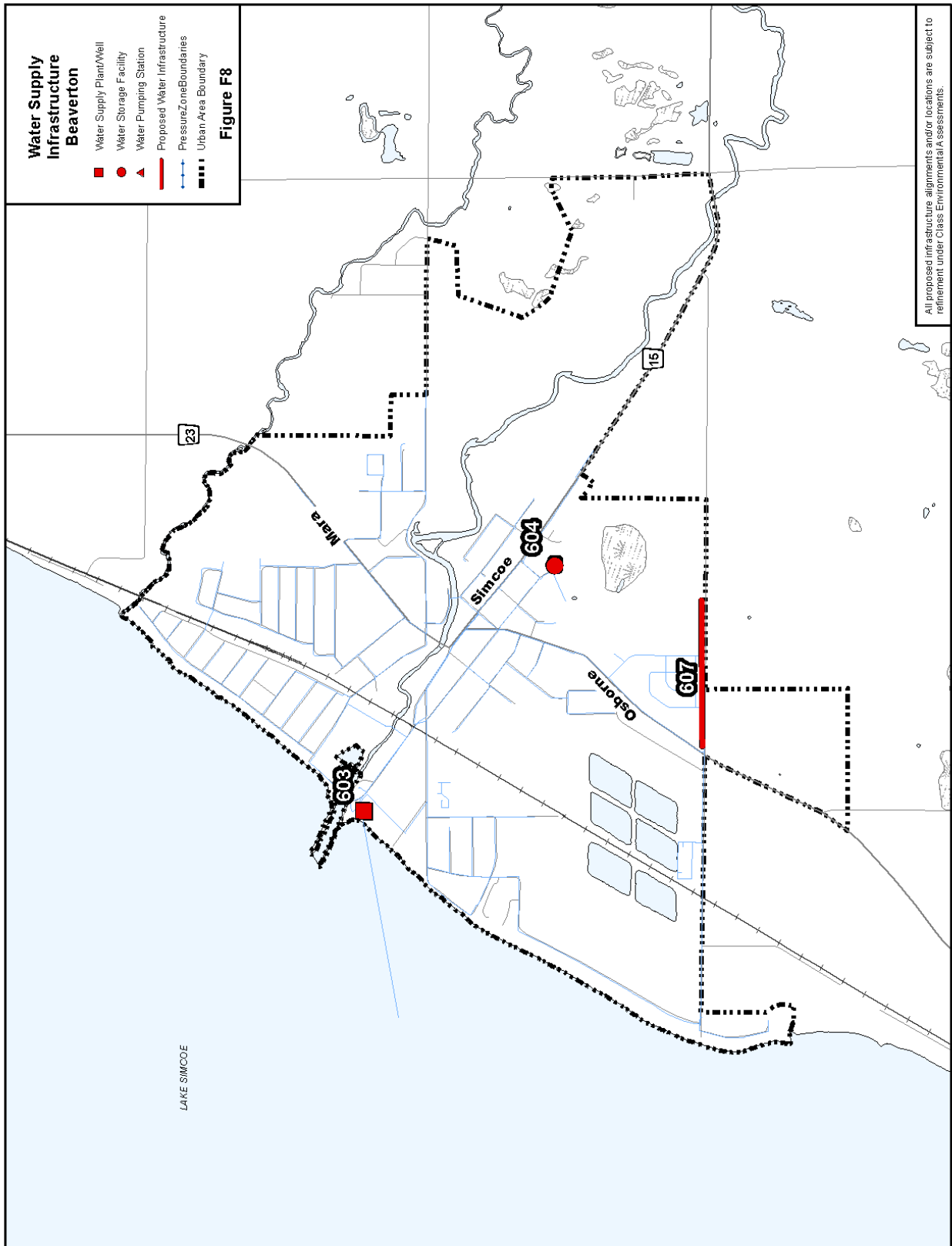


Table F.1 - Regional Water Supply: Capital Cost Summary: Residential (Year 2023 - 2032)

Item #	Description	Gross Cost (2023 Estimated Cost) \$ '000's	Benefit to Existing Development %	Post Period Benefit %	Grants, Subsidy, & Other %	Development Related				Total Net Residential Growth Cost \$ '000's	BY YEAR									
						Federal Lands	Non-Resid.	Resid.	Staton		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Uxbridge																				
Water Supply Plants (WSP)																				
500	New Well, Pumphouse with Standby Power - Uxbridge	6,900	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5,223	379	4,845								
501	Expansion of Quaker Hill Reservoir from 2.8 to 5.2 ML - Uxbridge	11,500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10,649	1,111	9,538								
Total Uxbridge		18,400	0	0	0	0	0	0	0	15,872	379	4,845	0	9,538	0	0	0			
Brock																				
Water Supply Plants (WSP)																				
600	New Well, Pumphouse with Standby Power - Cannington	8,500	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3,217				379			2,839			
601	New Wells, Pumphouse with Standby Power - Sunderland Site 1	5,000	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	757	757						2,536			
602	New Wells, Pumphouse with Standby Power - Sunderland Site 2	7,700	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,914				379			908			
603	Expansion of Beverton WSP	33,400	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12,642			379				11,355			
Storage Facility																				
604	Additional Water Storage from 2 to 4.8 ML - Beverton	12,500	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5,788	232	463		5,093						
605	Additional Water Storage from 1.4 to 3 ML - Cannington	10,200	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,723				463			556			
606	New Elevated Tank for Water Storage including Removal of Existing Standpipe - Sunderland	9,000	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,167				463			3,704			
Construction of Major Feedermains (FM) for New Developments																				
607	Watermain on Conc. Rd. 5 to service the west portion of the Beaver Ave. Employment Area A, Brock (Region's Share)	5,300	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4,908	2,269			2,639						
Total Brock		91,600	11,925	32,725	0	0	0	0	0	39,116	232	463	3,018	5,935	842	908	5,930	3,704		
Total Capital Cost		1,516,260	23,061	103,955	0	65,268	25,670	161,620	1,136,687	1,136,687	113,494	201,068	254,624	163,300	161,018	1,973	76,584	17,816	71,406	
Other Development Charge Component Works - Water Costs Only																				
700	Allowance for Private Well Interference	18,405	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17,043	1,396	2,059	2,154	1,803	1,703	1,703	1,703	1,703		
701	Allowance for Regional Share for works in conjunction with development	25,000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23,150	2,315	2,315	2,315	2,315	2,315	2,315	2,315	2,315		
702	Maintenance Facilities - Sunderland Depot	16,666	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11,575	926	926	9,723							
703	Maintenance Facilities - Ajax Depot	13,333	45.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5,811	323	2,258								
704	Maintenance Facilities - Oshawa/Whitby Depot	69,333	57.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27,607	5,044	664	21,900							
705	Maintenance Facilities - Orono Depot	2,433	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,253					176	2,077				
706	Maintenance Facilities - Scugog Depot	2,233	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,068				160	1,908					
707	Maintenance Fleet Vehicles Capital Allowance	1,969	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1,822	1,153	404		117	26	77	46			
707	Plant SCADA System Projects	14,100	63.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3,949	1,625	784	1,540							
Total Other Development Charge Component Works		163,472	58,569	0	0	4,547	0	8,308	92,048	92,048	12,781	9,440	37,632	4,395	5,335	4,271	6,095	4,064	4,018	
Total of Region		1,679,732	81,630	103,955	0	69,814	25,670	169,928	1,228,735	1,228,734	122,933	238,700	259,018	168,634	165,289	8,068	80,648	21,834	75,424	

Item #	Description	Gross Cost (2023 Estimated Cost)	Benefit to Existing Development	Post Period Benefit	Grants, Subsidy, & Other	Development Related						Total Net Non-Residential Residential Growth Cost	BY YEAR								
						Seaton	Federal Lands	Non-Resid.	Resid.	%	2023		2024	2025	2026	2027	2028	2029	2030	2031	2032
		\$ 000's	%	%	%	%	%	%	%	%	\$ 000's										
401	Storage Facility Water Storage Facility incl. feedermain allowance - Port Perry	16,200	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	92.60%	92.60%	1,199			1,199							
	Total Scugog	54,670	9,618	0	0	0	0	0	8,210	36,843	8,210	547	0	7,663	0	0	0	0	0		
	Uxbridge																				
500	Water Supply Plants (WSP) New Well, Pumphouse with Standby Power - Uxbridge	6,900	0.0%	0.0%	0.0%	0.0%	0.0%	24.30%	75.70%	75.70%	1,677	122		1,555							
501	Storage Facility Expansion of Quaker Hill Reservoir from 2.8 to 5.2 ML - Uxbridge	11,500	0.0%	0.0%	0.0%	0.0%	0.0%	7.40%	92.60%	92.60%	851	89		762							
	Total Uxbridge	18,400	0	0	0	0	0	2,528	15,872	2,528	122	89	1,555	0	762	0	0	0	0		
	Brock																				
600	Water Supply Plants (WSP) New Well, Pumphouse with Standby Power - Cannington	8,500	0.0%	50.0%	0.0%	0.0%	0.0%	12.15%	37.85%	37.85%	1,033			122				911			
601	New Wells, Pumphouse with Standby Power - Sunderland Site 1	5,000	80.0%	0.0%	0.0%	0.0%	0.0%	4.86%	15.14%	15.14%	243	243									
602	New Wells, Pumphouse with Standby Power - Sunderland Site 2	7,700	0.0%	50.0%	0.0%	0.0%	0.0%	12.15%	37.85%	37.85%	836							814			
603	Expansion of Beaverfoot WSP	33,400	0.0%	50.0%	0.0%	0.0%	0.0%	12.15%	37.85%	37.85%	4,058				122			282	3,645		
604	Storage Facility Additional Water Storage from 2 to 4.8 ML - Beaverfoot	12,500	25.0%	25.0%	0.0%	0.0%	0.0%	3.70%	46.30%	46.30%	463	19		37				44	296		
605	Additional Water Storage from 1.4 to 3 ML - Cannington	10,200	25.0%	25.0%	0.0%	0.0%	0.0%	3.70%	46.30%	46.30%	377							37			
606	New Elevated Tank for Water Storage including Standpipe - Sunderland	9,000	25.0%	25.0%	0.0%	0.0%	0.0%	3.70%	46.30%	46.30%	333								296		
607	Construction of Major Feeders (FM) for New Developments Watermain on Con. Rd. 5 to service the west portion of the Beaver Ave. Employment Area A, Brock (Region's Share)	5,300	0.0%	0.0%	0.0%	0.0%	0.0%	7.40%	92.60%	92.60%	392			211							
	Total Brock	91,600	11,925	32,725	0	0	0	7,835	39,116	7,835	19	424	37	332	566	189	282	1,770	296		
	Total Capital Cost	1,516,260	23,061	103,955	0	65,268	25,670	161,620	1,136,687	161,620	9,111	12,738	22,821	60,371	15,922	22,997	377	7,416	1,424		
	Other Development Charge Component Works - Water Costs Only																				
700	Allowance for Private Well Interference	18,405	0.0%	0.0%	0.00%	0.0%	0.0%	7.40%	92.60%	92.60%	1,362	112	167	172	144	87	136	136	136		
701	Allowance for Regional Share for works in conjunction with development	25,000	0.0%	0.0%	0.00%	0.0%	0.0%	7.40%	92.60%	92.60%	1,850	185	185	185	185	185	185	185	185		
702	Maintenance Facilities - Sunderland Depot	16,666	25.0%	0.0%	0.00%	0.0%	0.0%	5.55%	69.45%	69.45%	925	74	74	777							
703	Maintenance Facilities - Ajax Depot	13,333	45.0%	0.0%	0.00%	0.0%	0.0%	34.1%	19.35%	19.35%	206	26	180								
704	Maintenance Facilities - Oshawa/Whitby Depot	69,333	57.0%	0.0%	0.00%	0.0%	0.0%	3.18%	39.82%	39.82%	2,206	403	53	1,750							
705	Maintenance Facilities - Oroquo Depot	2,433	0.0%	0.0%	0.00%	0.0%	0.0%	7.40%	92.60%	92.60%	180						14	166			
706	Maintenance Facilities - Scugog Depot	2,233	0.0%	0.0%	0.00%	0.0%	0.0%	7.40%	92.60%	92.60%	165						13	152			
707	Maintenance Fleet Vehicles Capital Allowance Plant SCADA System Projects	1,669 14,100	0.0%	0.0%	0.00%	0.0%	0.0%	7.40%	92.60%	92.60%	146	92	32	9	2	6		4			
	Total Other Development Charge Component Works	163,472	58,569	0	0	4,547	0	8,308	92,048	8,308	1,413	943	3,379	351	426	341	487	325	321		
	Total of Region	1,679,732	81,630	103,955	0	69,814	25,670	169,928	1,228,735	169,928	10,524	13,682	26,200	60,723	16,348	23,338	864	7,741	1,745		

Table F.3
RESIDENTIAL WATER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$000's)

Year	1	2	3	4	5	6	7	8	9	10
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Equivalent Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	159,531	0	88,185	88,185	4,046	26,117	105,671	177,017	5,311	182,328
2024-25	182,328	0	122,933	126,621	4,046	26,901	108,841	164,548	4,936	169,484
2025-26	169,484	0	238,700	253,237	4,046	27,708	112,106	28,354	851	29,205
2026-27	29,205	0	259,018	283,036	4,083	28,539	116,526	-137,306	-6,865	-144,171
2027-28	-144,171	0	168,634	189,799	4,216	29,395	123,931	-210,040	-10,502	-220,542
2028-29	-220,542	0	165,289	191,615	4,225	30,277	127,921	-284,236	-14,212	-298,447
2029-30	-298,447	0	8,068	9,634	4,225	31,186	131,759	-176,322	-8,816	-185,138
2030-31	-185,138	0	80,648	99,187	4,225	32,121	135,712	-148,614	-7,431	-156,044
2031-32	-156,044	0	21,834	27,659	4,233	33,085	140,048	-43,655	-2,183	-45,838
2032-33	-45,838	0	75,424	98,411	4,233	34,077	144,249	-0	-0	-0
Total		0	1,228,734	1,367,385	41,578		1,246,765		-38,911	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$26,117	\$20,800	\$15,206	\$9,340

Table F.4
COMMERCIAL WATER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Commercial	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Commercial	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	10,406	0	10,524	4,073	4,073	703,220	7.51	5,281	11,614	348	11,963
2024-25	11,963	0	13,682	5,295	5,454	703,220	7.74	5,440	11,949	358	12,307
2025-26	12,307	0	26,200	10,139	10,757	703,220	7.97	5,603	7,153	215	7,368
2026-27	7,368	0	60,723	23,500	25,679	703,220	8.21	5,771	-12,540	-627	-13,167
2027-28	-13,167	0	16,348	6,327	7,121	703,220	8.45	5,944	-14,343	-717	-15,060
2028-29	-15,060	0	23,338	9,032	10,470	802,600	8.71	6,988	-18,543	-927	-19,470
2029-30	-19,470	0	864	334	399	802,600	8.97	7,197	-12,672	-634	-13,306
2030-31	-13,306	0	7,741	2,996	3,684	802,600	9.24	7,413	-9,577	-479	-10,055
2031-32	-10,055	0	1,745	675	855	802,600	9.51	7,636	-3,275	-164	-3,439
2032-33	-3,439	0	8,765	3,392	4,426	802,600	9.80	7,865	0	0	0
Total		0	169,928	65,762	72,918	7,529,100		65,138		-2,626	

Development Charge/sq. ft.	Commercial
\$	7.51

Table F.5
INDUSTRIAL WATER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Industrial	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Industrial	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	19,419	416	10,524	5,462	5,462	1,568,560	4.86	7,618	21,160	635	21,794
2024-25	21,794	416	13,682	7,101	7,314	1,568,560	5.00	7,847	21,912	657	22,569
2025-26	22,569	416	26,200	13,598	14,426	1,568,560	5.15	8,082	15,809	474	16,284
2026-27	16,284	416	60,723	31,515	34,437	1,568,560	5.31	8,325	-10,245	-512	-10,757
2027-28	-10,757	416	16,348	8,485	9,549	1,568,560	5.47	8,574	-12,148	-607	-12,755
2028-29	-12,755	416	23,338	12,112	14,042	1,459,500	5.63	8,218	-18,995	-950	-19,945
2029-30	-19,945	416	864	448	535	1,459,500	5.80	8,464	-12,432	-622	-13,053
2030-31	-13,053	416	7,741	4,017	4,941	1,459,500	5.97	8,718	-9,692	-485	-10,177
2031-32	-10,177	416	1,745	906	1,147	1,459,500	6.15	8,980	-2,760	-138	-2,898
2032-33	-2,898	416	8,765	4,549	5,935	1,459,500	6.34	9,249	0	0	0
Total		4,157	169,928	88,193	97,789	15,140,300		84,074		-1,547	

Development Charge/sq. ft.	Industrial
\$	4.86

Table F.6
INSTITUTIONAL WATER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Institutional	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Institutional	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	130	22	10,524	989	989	755,120	2.03	1,534	653	20	673
2024-25	673	22	13,682	1,286	1,325	755,120	2.09	1,580	907	27	934
2025-26	934	22	26,200	2,463	2,613	755,120	2.16	1,628	-72	-4	-76
2026-27	-76	22	60,723	5,708	6,237	755,120	2.22	1,677	-4,658	-233	-4,891
2027-28	-4,891	22	16,348	1,537	1,730	755,120	2.29	1,727	-4,915	-246	-5,161
2028-29	-5,161	22	23,338	2,194	2,543	861,680	2.36	2,030	-5,696	-285	-5,980
2029-30	-5,980	22	864	81	97	861,680	2.43	2,091	-4,008	-200	-4,209
2030-31	-4,209	22	7,741	728	895	861,680	2.50	2,153	-2,972	-149	-3,120
2031-32	-3,120	22	1,745	164	208	861,680	2.57	2,218	-1,131	-57	-1,188
2032-33	-1,188	22	8,765	824	1,075	861,680	2.65	2,285	-0	-0	-0
Total		215	169,928	15,973	17,711	8,084,000		18,923		-1,126	

Development Charge/sq. ft.	Institutional
\$	2.03

Appendix G

Regional Sanitary Sewerage Service Levels, Capital Costs And DC Calculations

Appendix G – Regional Sanitary Sewerage

1. Introduction

This appendix provides the analysis completed to establish the Regional Sanitary Sewerage component of the Development Charge. The appendix presents:

- An examination of the level of service;
- A forecast of capital works expenditures required to address the increase in need for Regional sanitary sewerage service attributable to the anticipated new development in the urban areas over the period 2023 – 2032; and
- The calculation of the development charge quantum.

2. Service Levels

The following table lists the historical service standards provided for sanitary sewerage by the Region of Durham. The standards are expressed in terms of design criteria, legislation, or capacity requirements as issued by the Ministry of the Environment or any other appropriate standard setting body. The table also reflects other service criteria adopted by the Regional Works Department.

REGION OF DURHAM SANITARY SEWERAGE STANDARDS	
Service Component	Service Standards Applied
Water Pollution Control Plants	<ul style="list-style-type: none"> • Design criteria based on historical flow data for each individual treatment facility. The current average day flows in litres/capita/day (l/c/d) which include residential, commercial and institutional demands are as follows: <ul style="list-style-type: none"> ○ Duffin Creek Plant (Durham Only) – 386 l/c/d ○ Corbett Creek Plant – 425 l/c/d ○ Harmony and Courtice Plant – 450 l/c/d ○ Port Darlington (Bowmanville) Plant – 375 l/c/d ○ Newcastle Plant – 375 l/c/d ○ Lake Simcoe (Beaverton) Plant – 500 l/c/d ○ Cannington Lagoons – 455 l/c/d ○ Sunderland Lagoons – 455 l/c/d ○ Nonquon (Port Perry) Plant – 395 l/c/d ○ Uxbridge Plant – 385 l/c/d • Treatment based on the MOECC design guidelines and is site specific. MOECC policies and directives are used to establish the final Environmental Compliance Approval (ECA)
Pumping Stations	<ul style="list-style-type: none"> • Based on MOECC and Region of Durham guidelines and system design criteria
Collection Systems	<ul style="list-style-type: none"> • Based on MOECC and Region of Durham design guidelines and standards

The expenditures described in the capital works forecast presented in the following Tables G.1 and G.2 provide a similar level of service to that indicated in the table.

3. Capital Works Forecast

3.1 Development of Capital Works Program

A ten-year capital works program was prepared for the period 2023-2032, which identifies the projected expenditures, expressed in 2023 dollars, required to address the increase in need for Regional sanitary sewerage service attributable to the anticipated development (Appendix A). For the purposes of the Development Charge rate calculation, this forecast has been lagged to match the time period of the development forecasts (i.e. July 1, 2023 to June 30, 2032).

The program shown in Table G.1 and G.2 and Figures G.1 to G.8 is based on information currently available on the capacity of the existing Regional sanitary sewerage system, combined with an assessment of the improvements and expansions required to accommodate development over the next ten years. It includes the construction of works required to correct existing deficiencies in the system, and plant expansions, storage reservoirs, pumping stations, forcemains and sewer system extensions required as a result of both new development and redevelopment within the urban areas.

3.2 Sequential Development

The basic premise underlying the forecast of capital works requirements is that development will be sequential in nature with the progressive extension / expansion of the Regional sanitary sewerage system occurring as development proceeds within the urban areas.

3.3 Forecast Periods

Tables G.1 and G.2 divide the projected capital works program into ten forecast periods. This program is similar to the Region's Annual Capital Budget and Nine-Year Forecast for the Regional sanitary sewerage system. This forecast is subject to review and approval by Regional Council on an annual basis. The works included have been assigned to these time frames based on information currently available on existing system capacities, operations experience and estimates of future demand.

The timing of implementation for the various projects identified in the forecasts and associated cost estimates are preliminary in nature. Project priorities, construction timing and cost estimates will be reviewed on an ongoing basis and will be subject to review and approval annually by Regional Council.

3.4 Allocation of Capital Costs

Tables G.1 and G.2 include works required to correct existing system deficiencies which will benefit both existing and new development, as well as system improvements and expansions required solely to support growth during the forecast period. An assessment has been carried out to allocate the total cost of the various projects contained in the forecast between existing development (non-growth), new residential development (Table G.1) and new non-residential development (Table G.2). This assessment distributes the capital cost of the projects contained in the forecast based on the demand imposed on the system. Demands were assessed on either a flow or population equivalent basis, depending upon the situation.

In addition, the tables identify deductions in accordance with the Development Charges Act, 1997 for:

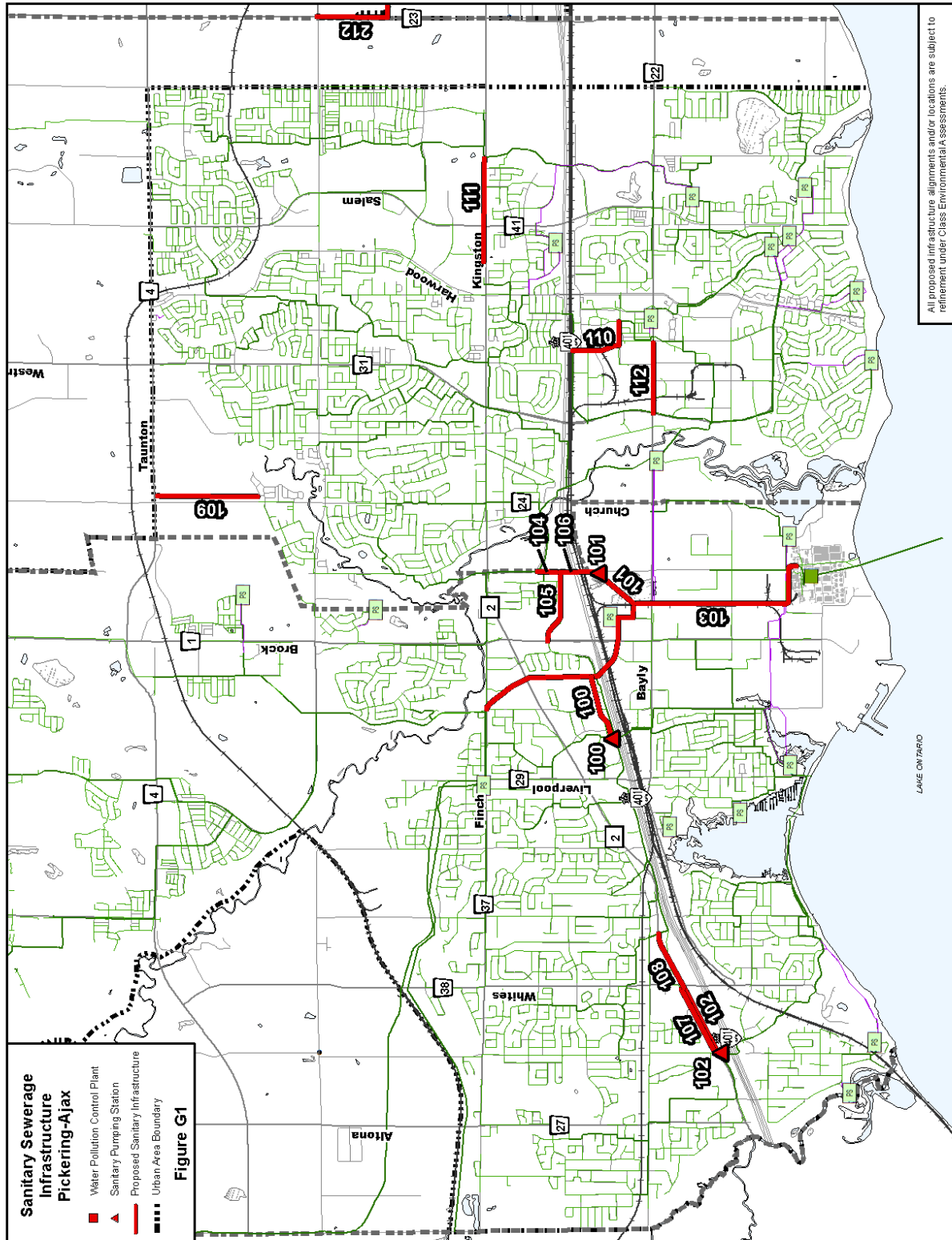
- "Benefit to Existing Development", which is the anticipated value of new capital works attributable to existing development. This deduction is assessed on a project by project basis and is primarily applicable to reconstruction, rehabilitation and replacement type projects;
- "Post Period Benefit", which is the value of anticipated surplus capacity at the end of the forecast period to be recovered from subsequent development. Deductions are made for oversized capital works consisting of water pollution control plants;
- "Grants, Subsidy and Other", which is the funding anticipated or received from other sources; and,
- "Seaton" and "Federal Lands", the sanitary sewerage infrastructure to service the Seaton and Federal Lands have been isolated and are not included in the Region Wide Development Charge. The Seaton share is to be covered via a separate area specific development charge by-law.

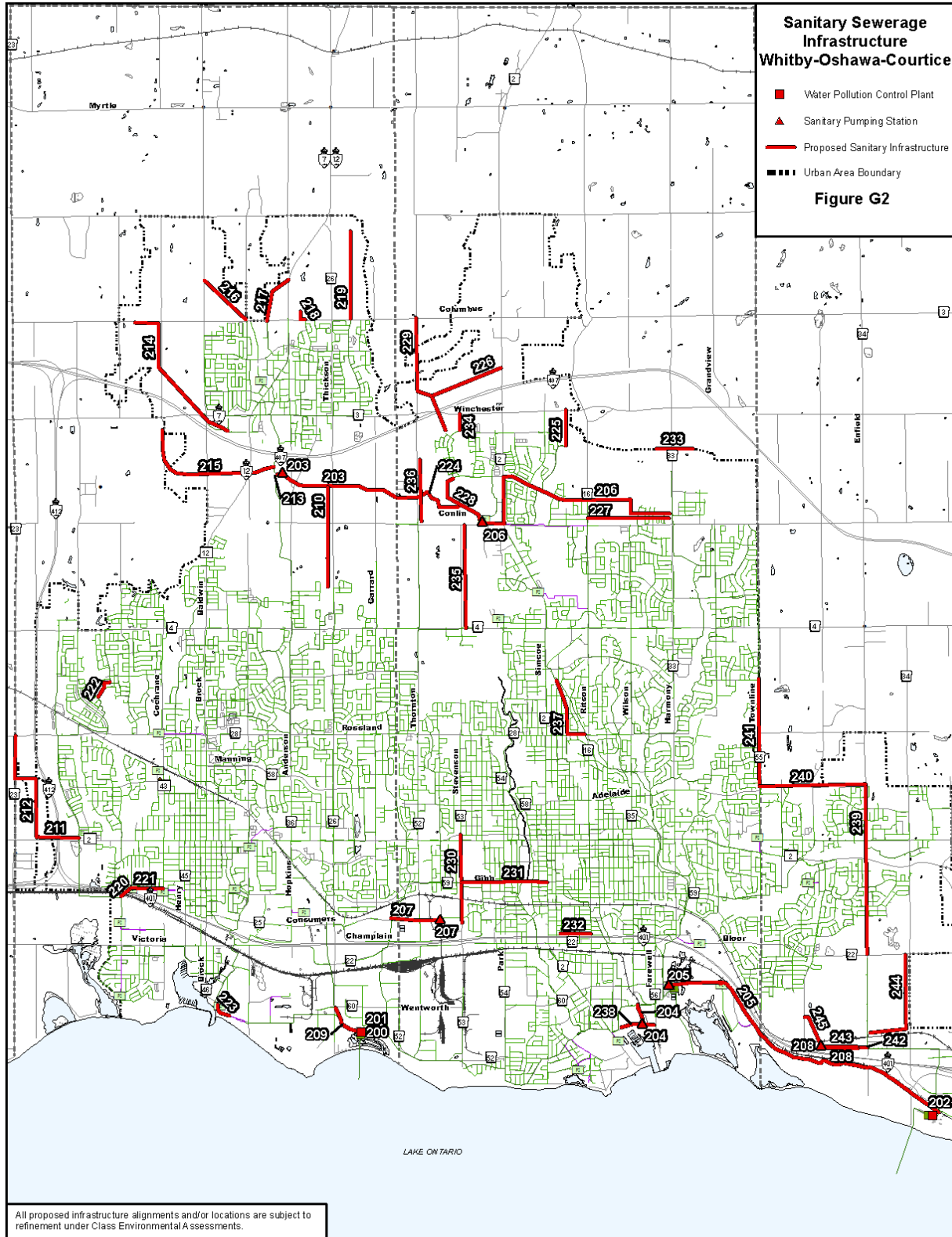
The following average percentages have been used in allocating the eligible growth-related capital costs between new residential and new non-residential development in Tables G.1 and G.2. The attributions, which are based on data obtained from actual water consumption records, plant operations records, and conventional design criteria, reflect relative utilization of eligible growth-related capital costs.

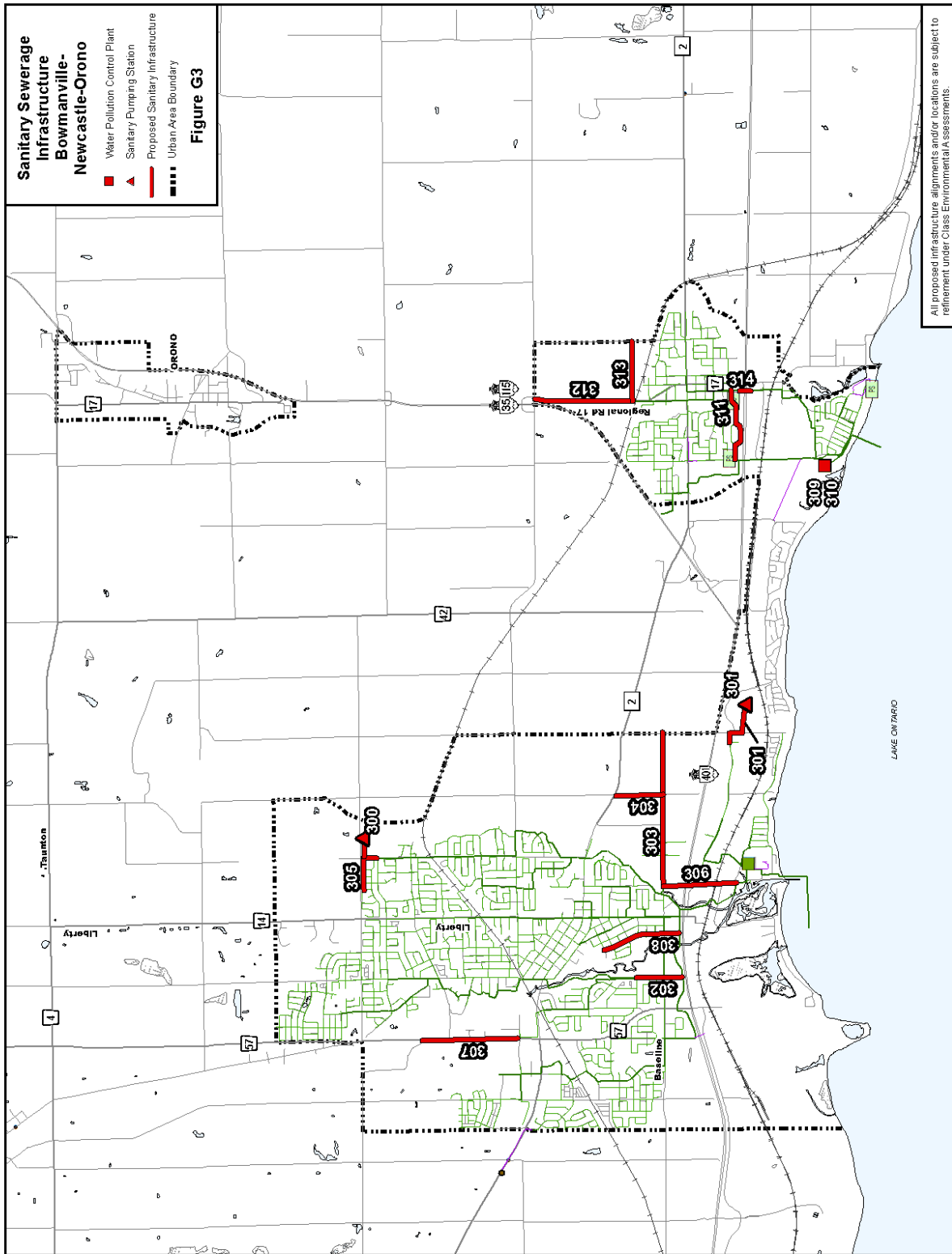
SUMMARY OF GROWTH RELATED CAPITAL UTILIZATION FOR RESIDENTIAL AND NON-RESIDENTIAL PURPOSES BY TYPE OF CAPITAL EXPENDITURE	
Land Use Category	Percentage of Capital Attributable to Growth by Development Type
Residential	
- Water Pollution Control Plants	66.4
- Other	83.3
Non-Residential	
Water Pollution Control Plants (All Non-Res):	
i) Industrial	17.4
ii) Commercial	13.0
iii) Institutional	3.2
Other (All Non-Res):	
i) Industrial	8.6
ii) Commercial	6.5
iii) Institutional	1.6
Note:	
"Other" refers to Sanitary Sewerage Collection System components including sanitary sewers and pumping stations.	

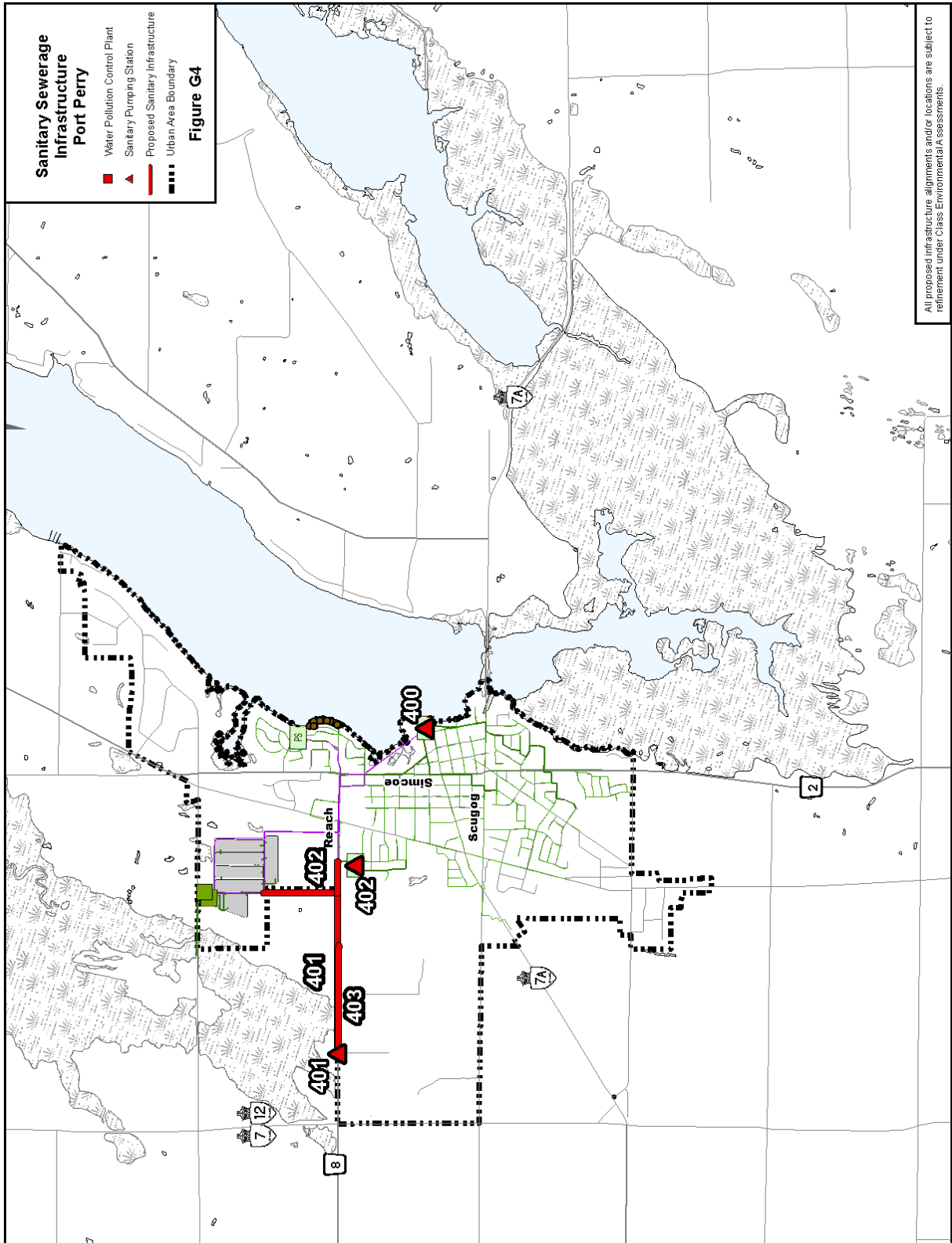
4. Calculation of Development Charge Quantum

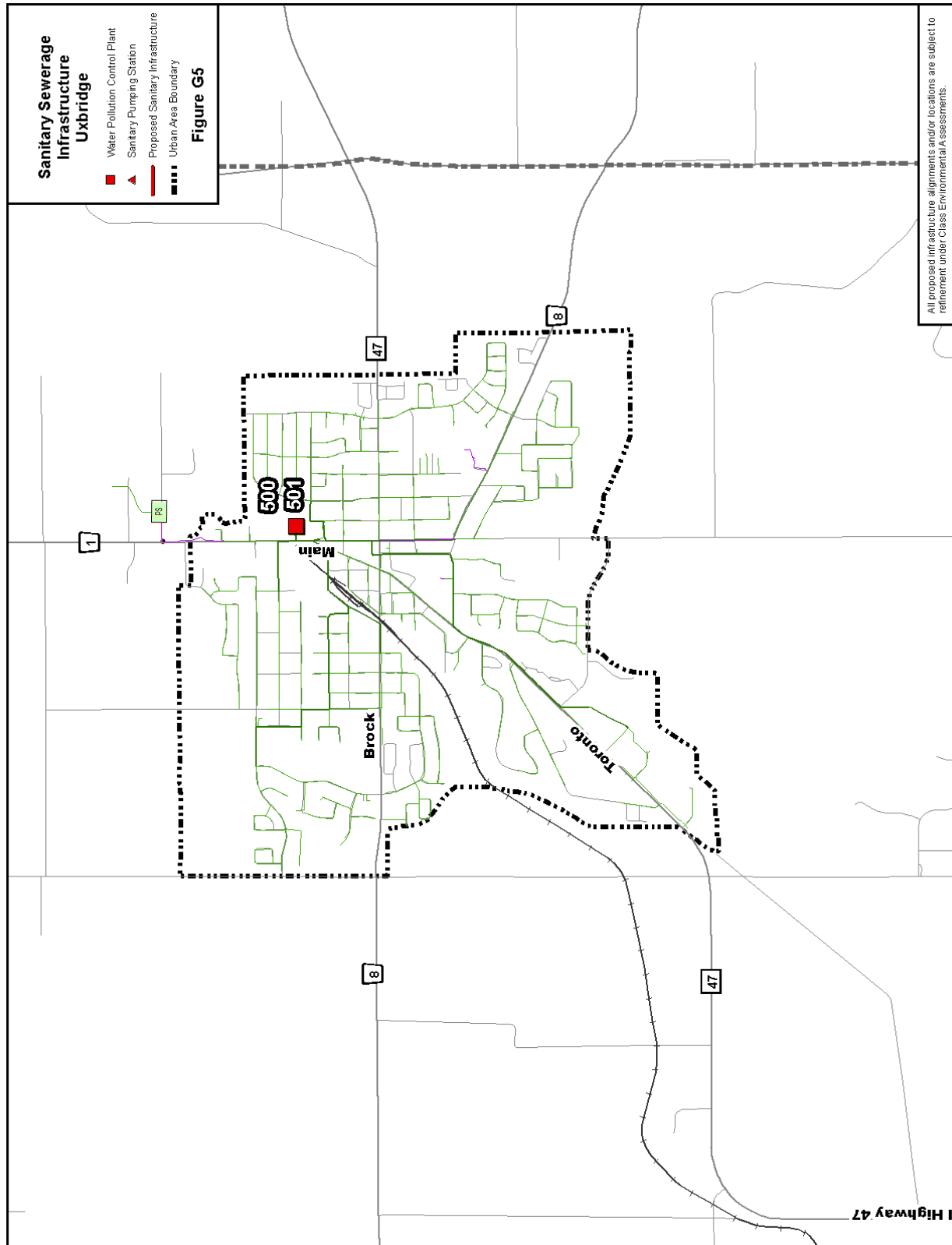
Tables G.3 to G.6 determine the proposed DC per residential dwelling unit and gross floor area of non-residential development within the urban areas in the Region of Durham. These tables summarize the net growth related capital costs against projected new development during the ten-year forecast, including allowances for deducting uncommitted excess capacity from the future requirement and deducting existing Reserve Fund Balances.

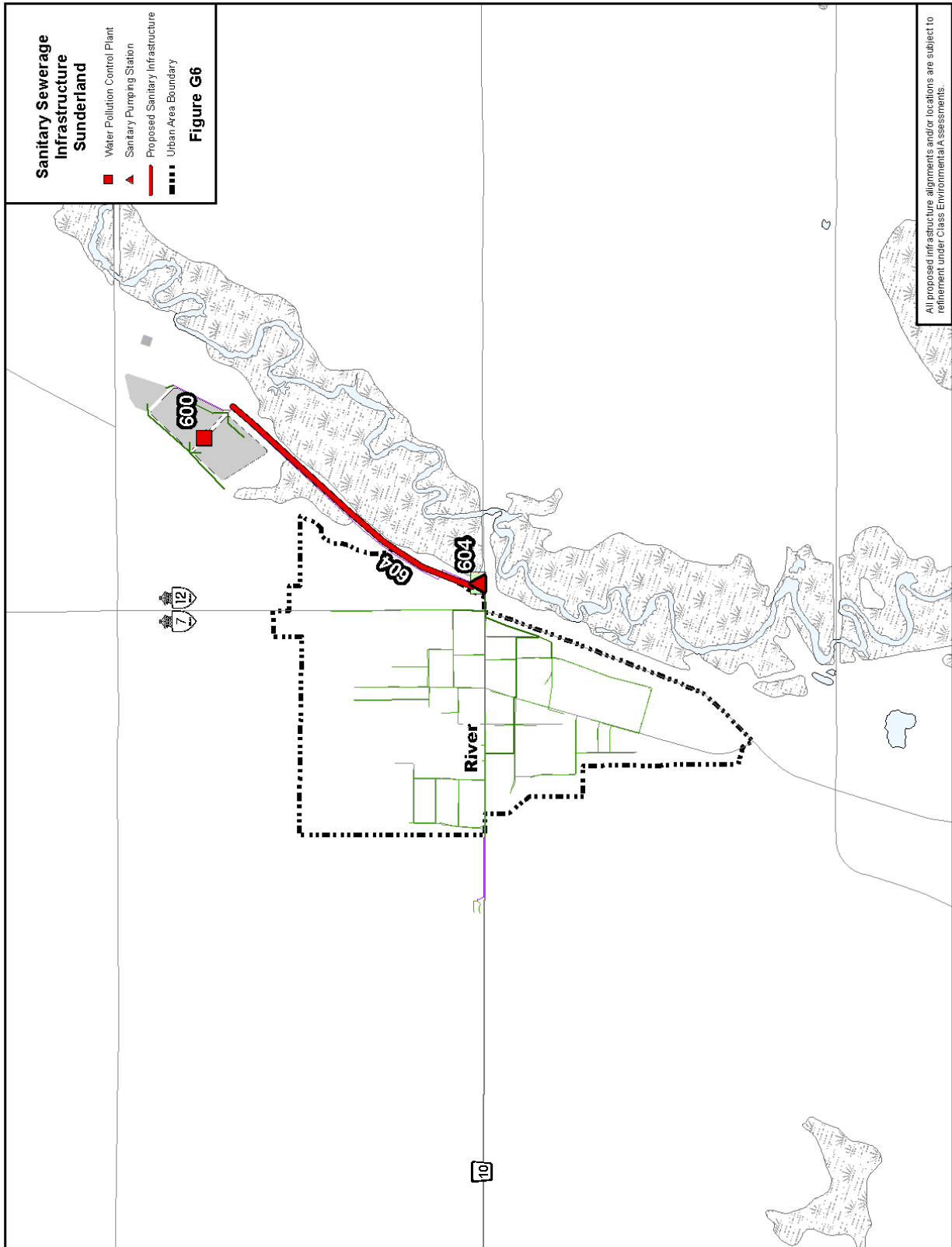


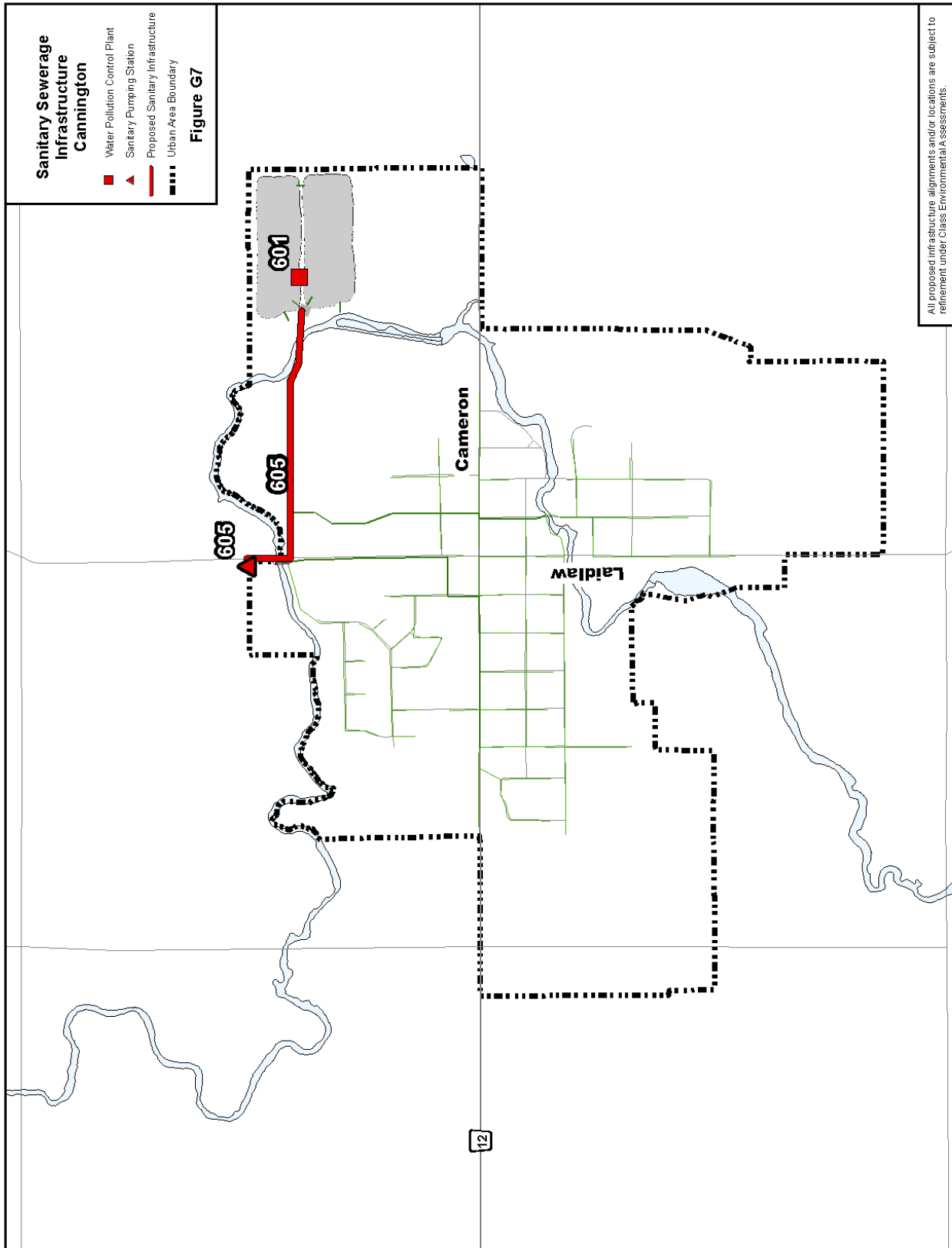












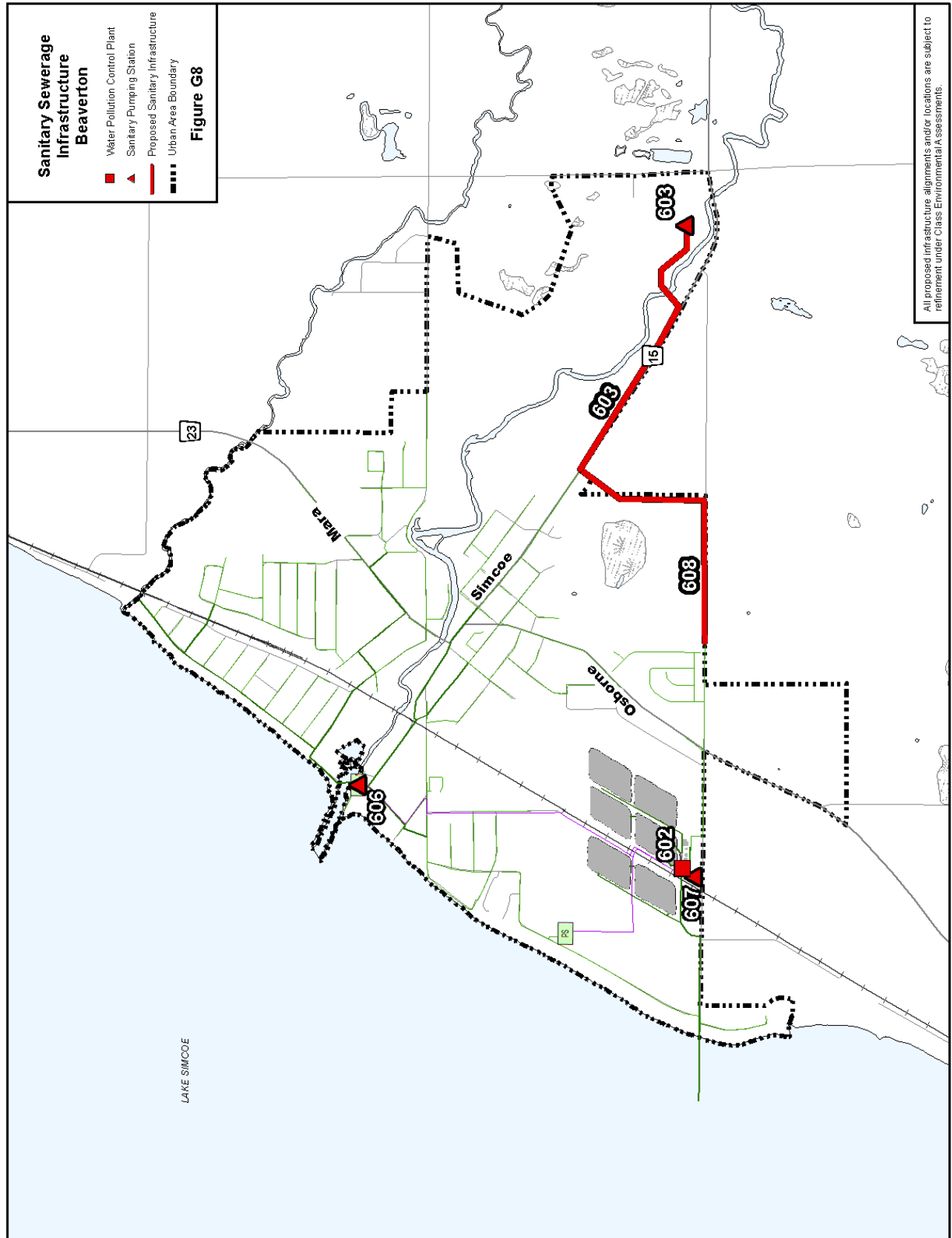


Table G.1 - Regional Sanitary Sewerage: Capital Cost Summary: Residential (Year 2023 - 2032)																																
Item #	Description	Gross Cost (2023 Estimated Cost)	Benefit to Existing Development	Post Period Benefit	Grants, Subsidy, & Other	Development Related						Total Residential Growth Cost	BY YEAR																			
						Sewer		Federal Lands		Non-Resid.			Resid.	2023	2024	2025	2026	2027	2028	2029	2030	2032										
						%	\$ 000's	%	\$ 000's	%	\$ 000's												%	\$ 000's								
Other Development Charge Component Works - Sanitary Costs Only																																
701	Allowance for Regional Share for works in conjunction with development	25,000	0.0%	0.0%	0.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20,825	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083				
702	Maintenance Facilities - Sunderland Depot	16,666	25.0%	0.0%	0.00%	0.0%	0.0%	16.70%	83.30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10,412	833	833	833	833	833	833	833	833	833	833	833	833	833
702	Maintenance Facilities - Ajax Depot	13,333	45.0%	0.0%	0.00%	34.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,321	290	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031	2,031
703	Maintenance Facilities - Oshawa/Whitby Depot	69,333	57.0%	0.0%	0.00%	0.0%	0.0%	7.18%	35.82%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24,835	4,537	597	19,700	19,700	19,700	19,700	19,700	19,700	19,700	19,700	19,700	19,700	
704	Maintenance Facilities - Orono Depot	2,433	0.0%	0.0%	0.00%	0.0%	0.0%	16.70%	83.30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,027	156	1,868	1,868	1,868	1,868	1,868	1,868	1,868	1,868	1,868	1,868	1,868	1,868
705	Maintenance Facilities - Scugog Depot	2,233	0.0%	0.0%	0.00%	0.0%	0.0%	16.70%	83.30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1,860	144	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716	1,716
706	Maintenance Fleet Vehicles Capital Allowance	1,119	0.0%	0.0%	0.00%	0.0%	0.0%	16.70%	83.30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	931	329	363	363	363	363	363	363	363	363	363	363	363	363
707	Allowance for Intensification	13,600	0.0%	0.0%	0.00%	0.0%	0.0%	16.70%	83.30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11,329	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133	1,133
708	Plant SCADA System Projects	3,300	63.0%	0.0%	0.00%	0.0%	0.0%	12.43%	24.57%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	811	123	319	389	389	389	389	389	389	389	389	389	389	389
709	Allowance for DC Credits for West Whitby Front Ending Agreement - Residential	2,800	0.0%	0.0%	0.00%	0.0%	0.0%	0.0%	100.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800
710	Allowance for DC Credits for West Whitby Front Ending Agreement - Non-Residential	6,200	0.0%	0.0%	0.00%	0.0%	0.0%	0.0%	100.00%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Development Charge Components Works		156,017	51,765	0	0	4,547	0	21,584	78,151	0	0	0	0	0	0	0	0	0	78,151	12,127	7,040	31,982	3,833	4,955	3,443	5,084	3,257	3,215	3,215	3,215	3,215	3,215
Total of Region		1,811,430	74,338	481,403	0	4,547	0	249,224	1,001,919	0	0	0	0	0	0	0	0	0	1,001,919	50,182	176,493	115,959	166,768	173,272	152,728	81,249	22,807	56,642	56,642	56,642	56,642	56,642

Table G.3
RESIDENTIAL SEWER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10
	DC Reserve Fund Opening Balance	Existing Debt Payments Total	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Equivalent Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	70,188	7,758	50,182	50,182	4,046	23,858	96,528	108,776	3,263	112,040
2024-25	112,040	7,757	176,493	181,788	4,046	24,573	99,423	21,918	658	22,576
2025-26	22,576	7,755	115,959	123,021	4,046	25,310	102,406	-5,795	-290	-6,085
2026-27	-6,085	7,753	166,768	182,232	4,083	26,070	106,443	-89,626	-4,481	-94,107
2027-28	-94,107	5,121	173,272	195,019	4,216	26,852	113,208	-181,040	-9,052	-190,092
2028-29	-190,092	2,592	152,728	177,054	4,225	27,657	116,853	-252,885	-12,644	-265,529
2029-30	-265,529	2,589	81,249	97,015	4,225	28,487	120,358	-244,775	-12,239	-257,014
2030-31	-257,014	1,762	22,807	28,050	4,225	29,342	123,969	-162,857	-8,143	-171,000
2031-32	-171,000	1,762	56,642	71,752	4,233	30,222	127,930	-116,584	-5,829	-122,414
2032-33	-122,414	1,762	5,819	7,592	4,233	31,129	131,768	0	0	0
Total		46,611	1,001,919	1,113,705	41,578		1,138,885		-48,757	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$23,858	\$19,000	\$13,890	\$8,531

Table G.4
COMMERCIAL SEWER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Commercial	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Commercial	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	10,593	815	11,313	4,378	4,378	703,220	12,06	8,483	13,882	416	14,299
2024-25	14,299	687	39,635	15,339	15,799	703,220	12,43	8,738	6,551	197	6,747
2025-26	6,747	687	28,773	11,135	11,813	703,220	12,80	9,000	3,247	97	3,344
2026-27	3,344	686	34,166	13,222	14,448	703,220	13,18	9,270	-2,521	-126	-2,647
2027-28	-2,647	271	35,460	13,723	15,446	703,220	13,58	9,548	-8,816	-441	-9,256
2028-29	-9,256	204	53,485	20,699	23,995	802,600	13,98	11,224	-22,232	-1,112	-23,343
2029-30	-23,343	204	23,974	9,278	11,078	802,600	14,40	11,561	-23,065	-1,153	-24,218
2030-31	-24,218	110	7,043	2,726	3,352	802,600	14,84	11,908	-15,772	-789	-16,561
2031-32	-16,561	110	13,588	5,259	6,662	802,600	15,28	12,265	-11,067	-553	-11,621
2032-33	-11,621	110	1,786	691	902	802,600	15,74	12,633	0	0	0
Total		3,884	249,224	96,450	107,874	7,529,100		104,628		-3,463	

Development Charge/sq. ft.	Commercial
\$	12.06

Table G.5
INDUSTRIAL SEWER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Industrial	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Industrial	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	27,921	509	11,313	5,871	5,871	1,568,560	7.06	11,076	32,617	979	33,595
2024-25	33,595	509	39,635	20,571	21,188	1,568,560	7.27	11,408	23,307	699	24,006
2025-26	24,006	509	28,773	14,933	15,842	1,568,560	7.49	11,750	19,406	582	19,988
2026-27	19,988	509	34,166	17,732	19,377	1,568,560	7.72	12,103	12,205	366	12,571
2027-28	12,571	509	35,460	18,404	20,714	1,568,560	7.95	12,466	3,815	114	3,929
2028-29	3,929	509	53,485	27,759	32,180	1,459,500	8.19	11,947	-16,812	-841	-17,653
2029-30	-17,653	509	23,974	12,443	14,857	1,459,500	8.43	12,305	-20,713	-1,036	-21,749
2030-31	-21,749	509	7,043	3,655	4,495	1,459,500	8.68	12,675	-14,078	-704	-14,782
2031-32	-14,782	509	13,588	7,052	8,934	1,459,500	8.94	13,055	-11,170	-558	-11,728
2032-33	-11,728	509	1,786	927	1,210	1,459,500	9.21	13,446	-0	-0	-0
Total		5,086	249,224	129,347	144,668	15,140,300		122,231		-398	

Development Charge/sq. ft.	Industrial
\$	7.06

Table G.6
INSTITUTIONAL SEWER
Region-Wide Development Charge (With-out Seaton)
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	1	2	3	4	5	6	7	8	9	10	11
	DC Reserve Fund Opening Balance	Existing Debt Payments	Development Related Exp Total	Development Related Exp Institutional	Development Related Exp Inflated @ 3.0%	Estimated Development sq. ft. Institutional	Charge sq. ft. Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.00%	DC Reserve Fund Closing Bal.
2023-24	323	7	11,313	1,063	1,063	755,120	2.92	2,203	1,456	44	1,499
2024-25	1,499	7	39,635	3,726	3,837	755,120	3.00	2,269	-77	-4	-80
2025-26	-80	7	28,773	2,705	2,869	755,120	3.09	2,337	-620	-31	-651
2026-27	-651	7	34,166	3,212	3,509	755,120	3.19	2,407	-1,761	-88	-1,849
2027-28	-1,849	7	35,460	3,333	3,752	755,120	3.28	2,479	-3,128	-156	-3,285
2028-29	-3,285	7	53,485	5,028	5,828	861,680	3.38	2,914	-6,206	-310	-6,517
2029-30	-6,517	7	23,974	2,254	2,691	861,680	3.48	3,001	-6,213	-311	-6,524
2030-31	-6,524	7	7,043	662	814	861,680	3.59	3,091	-4,254	-213	-4,467
2031-32	-4,467	7	13,588	1,277	1,618	861,680	3.70	3,184	-2,908	-145	-3,053
2032-33	-3,053	7	1,786	168	219	861,680	3.81	3,280	0	0	0
Total		72	249,224	23,427	26,202	8,084,000		27,165		-1,215	

Development Charge/sq. ft.	Institutional
\$	2.92

APPENDIX H

**OTHER SERVICES
SERVICE LEVELS, CAPITAL COSTS
AND DC CALCULATIONS**

APPENDIX H – OTHER SERVICES

1.0 Introduction

This appendix documents the analysis completed to establish the Other Services eligible for inclusion in a DC under s.s 2(4) of the DCA. For each service, including Police, Paramedic, Long Term Care, and Waste Diversion, the appendix presents:

- An examination of the historical fifteen-year average level of service;
- A forecast of capital works expenditures required to address the increase in need for Regional services attributable to the anticipated new development over the period 2023 – 2032; and
- The calculation of the development charge quantum.

2.0 Police

The capital program for Durham Regional Police includes a number of projects to provide services for growth in the Region over the 10-year forecast period. A number of the facilities involve the replacement of existing buildings with larger facilities. In these cases, only the cost of the expansion component has been included as follows:

- The cost of the Durham North-West Seaton facility is estimated at \$40.5 million, \$18.6 million (46%) of which is growth related as a portion of the building is replacing an existing facility.
- The cost of the Operations Training Centre facility - Phase 2 is estimated at \$40.0 million, \$26.4 million (66%) of which is growth related as a portion of the building is replacing an existing facility.
- The expansion of the North Division Facility is estimated to cost \$8.6 million, of which 100 per cent is growth related.
- The cost of the Central East Facility is estimated at \$79.4 million, \$22.2 million (28%) of which is growth related as a portion of the building is replacing an existing facility.

No deduction for benefit to existing has been made for the expanded facilities, beyond those identified above for facility replacement as the eligible increase in need will accommodate new development at the same level of service as existing development.

The Region has included \$5.9 million in the opening balance of the cash flow calculation. These are the available funds to be used to finance future Police services capital needs identified in the ten-year forecast (2023-2032).

The Region intends to maintain its historical average level of service regarding number of officers per capita. This will require expenditures for additional police vehicles. It has been assumed that 40 additional patrol vehicles will be added to the existing fleet, 20 vehicles for each five-year period, 2023-2027 and 2028-2032.

No benefit to existing deductions are applied to new vehicles as additions to fleet are to maintain existing service levels. Two radio towers are also included in the forecast, in years 2027 and 2032 respectively.

The allocation of costs attributable to new development between residential and non-residential growth has been made based on the share of total growth (161,913 population and 58,334 employment) that each sector represents. On this basis, the residential cost share is 74 per cent and the non-residential cost share is 26 per cent. No charge is being calculated for non-residential development; therefore, these costs will need to be funded from a non-DC source.

Service Level Calculation Sheet
Police (Facilities)
Unit Measure: Sq.Ft. of Building Space

Quantity Measure	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 Value with Land (\$/sq ft)
Central East Division - 77 Centre St. North, Oshawa	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	119,430	1,286
Clairmont Complex Phase 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
South Oshawa CPO - 1173 Cedar St., Oshawa	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	2,270	1,286
Central West Division - 460 Taunton Rd. East, Whitby	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	1,286
East Division - 1988 Regional Rd 57, Bowmanville	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	6,546	1,286
Property Bureau - 19 Courtoise Court, Courtoise	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	23,506	1,286
Impound Lot - 4621 Simcoe Street South, Oshawa	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	1,286
West Division - 1710 Kingston Rd, Pickering	806	806	806	806	806	806	806	806	806	806	806	806	806	806	806	1,286
Uxbridge CPC - 34 Brook St., West, Uxbridge	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	11,245	1,286
North Division - 15765 Hwy #12 Port Perry (excl garage)	9,377	9,377	9,377	10,488	10,488	10,488	10,488	10,488	10,488	10,488	10,488	10,488	10,488	10,488	10,488	1,286
Lawful Access	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	3,444	1,286
Alex Rod and Gun Club	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
Operations Training Centre - 4060 Anderson St., Whitby	875	875	875	875	875	875	875	875	875	875	875	875	875	875	875	1,286
Oshawa Airport Hanger - 1190 Keith Ross Court, Oshawa	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	14,290	1,286
PLC - 2000 Simcoe St. N. Oshawa (Durham College)	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	14,842	1,286
Regional Reporting Centre - 650 Rossland Rd. East, Whitby	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,422	1,286
Kias Safety Village - 1129 Athol St., Whitby	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,729	1,286
Beaveron CPC - 484 John St., Beaveron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
Beaveron CPC - 412 Bsey Street, Beaveron	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	1,286
Regional HQ Building - 605 Rossland Rd. East, Whitby	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	1,286
Courtoise CPC - 2611 Trulls Road, Courtoise	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	2,800	1,286
Case Management Unit - 3000 Garden St., Whitby	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,286
Domestic Violence Unit - 701 Rossland Rd. East, Whitby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
Durham Courthouse - 150 Bond St. East, Oshawa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
Education & Training Centre (replaces PLC in 2021)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,286
Total	317,357	317,357	326,838	327,949	374,471	374,471	371,027	444,817	442,817	442,817	438,816	439,543	439,543	452,357	453,851	
Population	568,973	599,064	603,153	608,124	614,599	624,295	630,429	637,780	645,862	652,442	662,808	674,834	685,337	696,992	709,778	
Per Capita Service Level	0.539	0.530	0.542	0.540	0.610	0.600	0.589	0.698	0.686	0.679	0.663	0.652	0.642	0.650	0.640	
15 Year Average																
Quantity per capita	0.617															
Quality (\$/sq ft)	\$ 1,284.77															
Combined Quantity/Quality Level (\$/capita)	\$ 789.30															
DC Amount (before deductions)																
2023-2033 Forecast Population Growth	161,913															
\$ per Capita	\$ 799.30															
Eligible Amount	\$ 129,417,519															

Service Level Calculation Sheet

Police (Vehicles and Other Assets)
Unit Measure: \$ Value of Vehicles and Other Assets

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Vehicles ¹	337	342	341	364	371	378	379	380	380	381	391	398	398	406	406	405	57,777
Lie Command Vehicle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550,000
Mobile Command	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	550,000
Collision Reconstruction vehicle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65,292
Forensic Identification Scene Truck two	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295,000
Public Order Support Truck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550,000
LAV/Tactical Vehicle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	800,000
Tactical scene truck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550,000
Courts transportation vehicle one	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	195,000
Courts transportation vehicle two	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	800,000
Hike vessel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	375,000
Zodiac Boat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000,000
Police Helicopter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	375,000
Other (Snowmobiles, Trailers, ATV, Motorcycles)	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	21,475
Radio Infrastructure	7,800,000	7,800,000	7,800,000	7,800,000	7,800,000	7,800,000	20,100,000	21,000,000	21,000,000	21,400,000	21,400,000	21,400,000	21,400,000	21,400,000	21,400,000	21,400,000	
Total	33,308,948	34,147,834	34,705,349	36,409,220	36,813,659	38,018,088	50,375,875	52,658,662	52,653,652	53,311,429	53,869,199	54,293,638	54,293,638	54,755,854	54,698,077	54,698,077	

Population	588,973	599,064	603,153	608,124	614,589	624,295	630,429	637,780	645,802	652,442	662,905	674,834	685,337	696,892	709,778	
Per Capita Service Level	56.56	57.01	57.54	59.88	59.90	60.90	79.91	82.97	81.84	81.72	81.31	80.46	79.23	78.37	77.07	

15 Year Average	2008-2022
Combined Quantity/Quality Level (\$ per capita)	71.63

DC Amount (before deductions)	161,913
2023-2033 Forecast Population Growth	71.63
\$ per Capita	11,598,044
Eligible Amount	

Notes:
(1) Vehicles include police cruisers, unmarked cars and SUVs. Values include equipment such as radio, lights and roof bar, and excludes computer.

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION
MUNICIPALITY: Region of Durham**

SERVICE: Police (Capital)

P/I No.	Increased Service Needs Attributable to Anticipated Development 2023-2032	Timing	Gross Capital Cost Est. (\$2023)	Ineligible Service	Less:		Sub Total	Benefit to Existing Development	Grants, Subsidies & Other Contributions Attrib. to New Development	Net Capital Cost	Potential DC Recoverable Cost			
					Post Period Benefit						Net Benefiting New Development	Residential Share 74%	Non-Residential Share 26%	
	Vehicles and Other													
1	20 additional patrol vehicles	2023-2027	1,155,540	-	-	1,155,540	-	-	-	1,155,540	1,155,540	855,100	300,440	
2	Radio Tower	2027	350,000	-	-	350,000	-	-	-	350,000	350,000	259,000	91,000	
3	20 additional patrol vehicles	2028-2032	1,155,540	-	-	1,155,540	-	-	-	1,155,540	1,155,540	855,100	300,440	
4	Radio Tower	2032	350,000	-	-	350,000	-	-	-	350,000	350,000	259,000	91,000	
	Facilities													
5	Durham North West Seaton ⁽¹⁾													
	- Design	2024	3,860,640	-	-	3,860,640	2,084,746	-	-	1,775,894	1,775,894	1,314,162	461,733	
	- Construction	2026	36,608,320	-	-	36,608,320	19,768,493	-	-	16,839,827	16,839,827	12,461,472	4,378,355	
6	Operations Training Centre - Phase 2 ⁽²⁾													
	- Design	2027	3,722,000	-	-	3,722,000	1,265,480	-	-	2,456,520	2,456,520	1,817,825	638,695	
	- Construction	2029	36,293,000	-	-	36,293,000	12,339,620	-	-	23,953,380	23,953,380	17,725,501	6,227,879	
7	North Division Expansion ⁽³⁾													
	- Site servicing design	2024	100,000	-	-	100,000	-	-	-	100,000	100,000	74,000	26,000	
	- Site servicing construction	2025	3,000,000	-	-	3,000,000	-	-	-	3,000,000	3,000,000	2,220,000	780,000	
	- Design of new building	2027	510,200	-	-	510,200	510,200	-	-	510,200	510,200	377,548	132,652	
	- Construction of new building	2029	4,989,400	-	-	4,989,400	-	-	-	4,989,400	4,989,400	3,692,156	1,297,244	
8	Central East ⁽⁴⁾													
	- Design	2026	472,000	-	-	472,000	339,840	-	-	132,160	132,160	97,798	34,362	
	- Construction	2028	7,061,250	-	-	7,061,250	5,084,100	-	-	1,977,150	1,977,150	1,463,091	514,059	
	- Construction	2030	71,862,120	-	-	71,862,120	51,740,726	-	-	20,121,394	20,121,394	14,889,831	5,231,562	
	Total Estimated Capital Cost		\$ 171,490,010	\$	\$	\$ 171,490,010	\$ 92,623,005	\$	\$	\$ 78,867,005	\$ 78,867,005	\$ 58,361,584	\$ 20,505,421	

Notes:

- ⁽¹⁾ The cost of the Durham North West Seaton facility is estimated at \$40.5 million, \$18.6 million (46%) of which is growth related as a portion of the building is replacing an existing facility.
- ⁽²⁾ The cost of the Operations Training Centre facility (Phase 2) is estimated at \$40.02 million, \$26.4 million (66%) of which is growth related as a portion of the building is replacing an existing facility.
- ⁽³⁾ North Division Expansion includes: \$3.1 million for cost to bring serviced water to site, and \$5.5 million for expansion. Costs are 100% growth-related.
- ⁽⁴⁾ The cost of the Central East facility is estimated at \$79.4 million, \$22.2 million (28%) of which is growth related as a portion of the building is replacing an existing facility.

POLICE SERVICES
Region-Wide Development Charge
Cash Flow Calculation of the Residential Development Charge
(\$'000's)

Year	DC Reserve Fund Opening Balance	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Eqv. Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.0%	DC Reserve Fund Closing Bal.
2023-24	5,874	171	171	5,238	977	5,118	10,821	325	11,145
2024-25	11,145	1,559	1,606	5,238	1,006	5,271	14,811	444	15,255
2025-26	15,255	2,391	2,537	5,238	1,037	5,430	18,148	544	18,692
2026-27	18,692	12,730	13,911	5,326	1,068	5,686	10,468	314	10,782
2027-28	10,782	2,625	2,955	5,485	1,100	6,032	13,859	416	14,275
2028-29	14,275	1,634	1,894	5,487	1,133	6,215	18,596	558	19,154
2029-30	19,154	21,589	25,778	5,487	1,167	6,402	-223	-11	-234
2030-21	-234	15,061	18,523	5,487	1,202	6,594	-12,163	-608	-12,771
2031-32	-12,771	171	217	5,515	1,238	6,826	-6,162	-308	-6,470
2032-33	-6,470	430	561	5,515	1,275	7,031	0	0	0
TOTAL		58,362	68,152	54,016	11,201	60,605	68,155	1,674	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$977	\$778	\$569	\$349

3.0 Paramedic Services

The capital program for Paramedic Services includes new paramedic stations, as well as the replacement and expansion of existing stations. Only the expansion portion of the new stations have been included in the DC calculation. The remaining portions of the new facilities replacing existing space have been deducted as a benefit to existing. The Paramedic Services capital program includes:

- \$7.9 million for the expansion and replacement of the Clarington Paramedic Station. Approximately \$4.59 million (58 per cent) is attributable to growth as a portion of the building is replacing an existing facility.
- \$9.93 million for the expansion and replacement of the Uxbridge Paramedic Station. Approximately \$5.76 million (58 per cent) is attributable to growth as a portion of the building is replacing an existing facility.
- \$8.83 million for the new South Whitby Paramedic Station, of which 100 per cent is attributed to growth.
- \$9.1 million for the new North-East Oshawa Paramedic Station, of which 100 per cent is attributable to growth.

The capital program also includes the addition of 10 ambulances, over the 2023 – 2032 forecast period to maintain compliance with legislated performance standards. No benefit to existing deduction has been applied to new vehicles as additions to fleet are to maintain existing service levels.

The Region has included \$2.1 million in the opening balance of the cash flow calculation. These are the available funds to be used to finance future Paramedic services capital needs identified in the ten-year forecast (2023-2032). This balance excludes the reserve funds committed for the new ambulance station in the Seaton community.

The DC recoverable costs to address the increase in need of new development is greater than the historic level of service cap and associated deductions have been made.

The allocation of costs attributable to residential growth has been made based on the ratio of forecast increased population to employment with population weighted at three times in order to reflect increased per capita needs related to age and time spent in residence. Therefore the calculation for the residential share is:

$$\frac{161,913 \text{ additional persons} \times 3}{(161,913 \times 3) + 58,334 \text{ employees}}$$

This produces a residential cost share of 89 per cent.

Service Level Calculation Sheet

Paramedic Services (Vehicles and Other Assets)
Total Value of Vehicles and Other Assets

Service:
Unit Measure:

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Number of Vehicles																
Ambulances with defibrillators	24	25	25	27	27	25	26	27	27	27	27	27	30	31	32	263,000
Ambulances with defibrillators and power cots with power load																327,500
Ambulances Spare (no defibrillators)	11	11	11	12	12	15	15	16	16	15	15	14	14	14	14	255,000
Bariatric Special Purpose Vehicle																230,000
Emergency Response Vehicles with defibrillators	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	136,000
Emergency Response Vehicle Spares (no defib.)	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	101,000
EMS Command and Response Vehicles with defibrillators	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	136,000
EMS Command and Response Vehicle Spares (no defib)				1	1	1	1	1	1	1	1	1	1	1	1	101,000
Management Support Vehicles with Emergency Warning Systems	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	46,000
Management support spare																42,000
Emergency Support Van	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	105,000
Emergency Support Trailers	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	60,000
Logistics Trucks	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	100,000
All Terrain Gator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18,000
ESU pull trucks																86,000
G4D Van																70,000
Golf Carts																30,000
Paramedic transport vehicles						10	11	11	11	11	11	11	11	11	11	7,000
Total Value of Vehicles and Other Assets	\$ 10,751,000	\$ 11,150,000	\$ 11,286,000	\$ 12,315,000	\$ 12,315,000	\$ 12,908,000	\$ 13,176,000	\$ 13,726,000	\$ 13,756,000	\$ 15,472,500	\$ 15,472,500	\$ 15,979,000	\$ 16,306,500	\$ 16,306,500	\$ 16,634,000	
Population	588,973	590,084	603,453	608,124	614,599	624,295	630,439	637,749	645,862	652,442	662,808	674,834	685,337	695,992	709,774	
Service Level per Capita/Employment	\$ 18.26	\$ 18.92	\$ 18.72	\$ 20.26	\$ 20.04	\$ 20.68	\$ 20.91	\$ 21.53	\$ 21.30	\$ 23.72	\$ 23.35	\$ 23.68	\$ 23.80	\$ 23.40	\$ 23.41	
15 Year Average																
Combined Quantity/Quality Level (\$/capita)	\$ 21.45															
DC Amount (before deductions)																
2023-2033 Forecast Population Growth	161,913															
Eligible Capita	\$ 21.45															
Eligible Amount	\$ 3,472,602															

(1) Values include equipment such as radio, lights and roof bar where applicable, and exclude computers.

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION
MUNICIPALITY: Region of Durham**

SERVICE: Paramedic Services - Capital

Pri. No.	Increased Service Needs Attributable to Anticipated Development 2023-2032	Timing	Gross Capital Cost Est. (\$2023)	Ineligible Service	Less:		Sub Total	Benefit to Existing Development	Grants, Subsidies & Other Contributions Attrib. to New Development	Net Capital Cost	Potential DC Recoverable Cost			
					Post Period Benefit						Net Benefiting New Development	Residential Share 89%	Non-Residential Share 11%	
	Vehicles													
1	2 Additional Ambulances with Defibrillator	2023	655,000	-	-	655,000	-	-	-	655,000	655,000	582,950	72,050	
2	2 Additional Ambulances with Defibrillator	2025	655,000	-	-	655,000	-	-	-	655,000	655,000	582,950	72,050	
3	2 Additional Ambulances with Defibrillator	2027	655,000	-	-	655,000	-	-	-	655,000	655,000	582,950	72,050	
4	2 Additional Ambulances with Defibrillator	2029	655,000	-	-	655,000	-	-	-	655,000	655,000	582,950	72,050	
5	2 Additional Ambulances with Defibrillator	2031	655,000	-	-	655,000	-	-	-	655,000	655,000	582,950	72,050	
	Facilities													
6	Additional Paramedic Station - Clarrington ⁽¹⁾ - Construction	2024	7,910,000	-	-	7,910,000	3,322,200	-	-	4,587,800	4,587,800	4,083,142	504,658	
7	Additional Paramedic Station - Uxbridge ⁽²⁾ - Land and Design - Construction	2023 2025	1,900,000 8,025,000	- -	- -	1,900,000 8,025,000	798,000 3,370,500	- -	- -	1,102,000 4,654,500	1,102,000 4,654,500	980,780 4,142,505	121,220 511,995	
8	Additional Paramedic Station - South Whitby - Design - Construction	2023 2025	800,000 8,025,000	- -	- -	800,000 8,025,000	- -	- -	- -	800,000 8,025,000	800,000 8,025,000	712,000 7,142,250	88,000 882,750	
9	Additional Paramedic Station - North-East Oshawa - Design - Construction	2026 2027	900,000 8,200,000	- -	3,494,370	900,000 8,200,000	- -	- -	- -	900,000 4,705,630	900,000 4,705,630	801,000 4,188,011	99,000 517,619	
	Total Estimated Capital Cost		\$ 39,035,000	\$	\$	\$ 35,540,630	\$ 7,490,700	\$	\$	\$ 28,049,930	\$ 28,049,930	\$ 24,964,438	\$ 3,085,492	

Notes:

- (1) The construction cost of the Clarrington Paramedic Station replacement and expansion is estimated at \$7.91 million, \$4.59 million (58%) of which is growth related as a portion of the building is replacing an existing facility.
- (2) The cost of the Uxbridge Paramedic Station replacement and expansion is estimated at \$9.93 million, \$5.76 million (58%) of which is growth related as a portion of the building is replacing an existing facility.

PARAMEDIC SERVICES
Region-Wide Development Charge
Cash Flow Calculation of the Residential Development Charge
(\$000's)

Year	DC Reserve Fund Opening Balance	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Eqv. Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.0%	DC Reserve Fund Closing Bal.
2023-24	2,085	2,276	2,276	5,238	441	2,310	2,120	64	2,183
2024-25	2,183	4,083	4,206	5,238	454	2,379	357	11	368
2025-26	368	11,868	12,590	5,238	468	2,451	-9,772	-489	-10,261
2026-27	-10,261	801	875	5,326	482	2,567	-8,570	-428	-8,998
2027-28	-8,998	4,771	5,370	5,485	496	2,722	-11,645	-582	-12,228
2028-29	-12,228	0	0	5,487	511	2,805	-9,422	-471	-9,894
2029-30	-9,894	583	696	5,487	527	2,889	-7,700	-385	-8,085
2030-21	-8,085	0	0	5,487	542	2,976	-5,109	-255	-5,365
2031-32	-5,365	583	738	5,515	559	3,081	-3,022	-151	-3,173
2032-33	-3,173	0	0	5,515	575	3,173	0	0	0
TOTAL		24,964	26,751	54,016	5,056	27,354	-52,765	-2,688	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$441	\$351	\$257	\$158

4.0 Long-Term Care

The Region completed the reconstruction of the South Building of Hillsdale Terraces in the City of Oshawa in 2005. This 200-bed home included 65 new beds with the balance being replacement.

In the Region's 2003 Development Charge Study, it was estimated that the residential growth-related share of the 200 Bed Hillsdale Terraces long term care facility was \$3.9 million (net of a 50 per cent benefit to existing deduction and provincial subsidies). The Region had a \$1.3 million balance in the Long-Term Care Development Charge Reserve Fund which was used to fund a portion of these growth-related costs. Therefore, a debenture requirement of \$2.6 million was included in the calculation of the 2003 development charge for Long-Term Care.

The Region issued \$2.6 million in debt to pay for the growth-related cost share of this facility in 2004. As of 2022, the amount of growth-related debt attributed to this project is \$416,224, plus interest. This outstanding amount of the debenture, plus interest, has been included in the DC calculation.

On March 18, 2021, the Ontario Ministry of Long-Term Care approved a new 200 bed long-term care home in North Pickering. The estimated capital cost of the facility is \$126.025 million. This excludes land acquisition costs as the facility is planned to be constructed on property that was provided to the Region from the Province at no cost, as per the Seaton Community Lands Agreement.

It is recognized that the additional beds will relieve the pressure on existing waiting lists and over the long term, will provide accommodation for both existing and new residents. In order to recognize the benefit to existing development, a 50 per cent deduction has been made. Therefore, it is assumed that 100 beds are growth related and the estimated cost of the facility in the DC calculation is \$63.013 million (50 per cent of \$126.025 million).

It is anticipated that the Region will receive subsidies from the Province towards the new Long-Term Care Home. These subsidies include development grants and a construction funding subsidy (\$23.78 per bed per day for a 25-year period).

Additionally, the Provincial Government announced, on November 25, 2022, an additional construction subsidy supplement equal to \$35 per bed per day for a 25-year period. However, this subsidy is contingent on certain construction timelines being met, including being ready to start construction by August 31, 2023. The breakdown of the various grants and subsidies is provided below.

Grants and Subsidies	Funding \$
Construction Subsidy ¹ (\$23.78 per bed per day over 25-years)	\$12,233,544
Development Grant (\$51, 376 per bed x 100 growth beds)	\$5,137,600
One-time Planning Grant	\$250,000
Construction Subsidy Supplement ² (\$35 per bed per day over 25-years)	\$18,005,014
Total	\$35,626,158

¹ The present value of this subsidy (based on a 5% borrowing cost) has been calculated at \$122,335 per bed (assuming 100 beds as being growth-related)

² The present value of this subsidy (based on a 5% borrowing cost) has been calculated at \$180,050 per bed (assuming 100 beds as being growth-related)

The Region has included \$0.651 million in the opening balance of the cash flow calculation. These are the available funds to be used to finance future Long-term Care services capital needs identified in the ten-year forecast (2023-2032). The Region has allocated 100 per cent of the DC recoverable costs to residential development in the calculation.

Service Level Calculation Sheet

Service: Long Term Care (Facilities)
Unit Measure: sq.ft. of building space

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 Value with Land (\$/sq.ft.)
Hillsdale Estates	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	261,928	755
Hillsdale Terraces	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	164,515	755
Fairview	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	128,306	755
Lakeview	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	123,559	755
Total	678,308	678,308	678,308	678,308	678,308	678,308	678,308	720,911	720,911	720,911	720,911	720,911	720,911	720,911	720,911	

Population	588,973	599,064	603,153	608,124	614,599	624,295	630,429	637,780	645,862	652,442	662,808	674,834	685,337	696,992	709,778
Per Capita Service Level	1.152	1.132	1.125	1.115	1.104	1.087	1.076	1.130	1.116	1.105	1.088	1.068	1.052	1.034	1.016

	2008-2022
15 Year Average	
Quantity per capita	1.093
Quality (\$/sq.ft.)	755
Combined Quantity/Quality Level (\$/capita)	\$ 825.44

DC Amount (before deductions)	
2023-2033 Forecast Population Growth	161,913
\$ per Capita	\$ 825.44
Eligible Amount	\$ 133,648,895

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION
MUNICIPALITY: Region of Durham**

SERVICE: Long Term Care

Pri. No.	Increased Service Needs Attributable to Anticipated Development 2023-2032	Timing	Gross Capital Cost Est. (\$2023)	Ineligible Service	Less:		Sub Total	Benefit to Existing Development	Grants, Subsidies & Other Contributions Attrib. to New Development	Net Capital Cost	Potential DC Recoverable Cost	
					Post Period Benefit						Net Costs Benefiting New Development	Residential Share 100%
1	65 Bed Addition to Hillisdale Terraces ⁽¹⁾	2023-2024	416,224	-	-	-	416,224	-	-	416,224	416,224	-
2	200 Bed Long Term Care Home ⁽²⁾	2023	126,025,000	-	-	126,025,000	63,012,500	\$35,626,158	27,386,342	27,386,342	27,386,342	-
	Total Estimated Capital Cost		\$ 126,441,224	\$ -	\$ -	\$ 126,441,224	\$ 63,012,500	\$ 35,626,158	\$ 27,802,566	\$ 27,802,566	\$ 27,802,566	\$ -

Notes

- ⁽¹⁾ The Region issued \$2,626,000 in debentures in 2004 to finance the growth related share of the Hillisdale Terraces Facility. The outstanding debt of \$416,224 plus interest charges are the amounts included in the cash flow table that will be funded by DC's.
- ⁽²⁾ The Region received approval by the Province for 200 new long-term care beds (letter dated March 18, 2021). The estimated cost of the facility is \$126,025 million and 50% (\$63,013 million) is growth related.

LONG TERM CARE SERVICES
Region-Wide Development Charge
Cash Flow Calculation of the Residential Development Charge
(\$000's)

Year	DC Reserve Fund Opening Balance	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Debt Costs on Existing Debt	Eqv. Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.0%	DC Reserve Fund Closing Bal.
2023-24	651	27,386	27,386	208	5,238	548	2,869	-24,075	-1,204	-25,279
2024-25	-25,279	0	0	208	5,238	564	2,955	-22,532	-1,127	-23,659
2025-26	-23,659	0	0	0	5,238	581	3,043	-20,615	-1,031	-21,646
2026-27	-21,646	0	0	0	5,326	598	3,187	-18,459	-923	-19,382
2027-28	-19,382	0	0	0	5,485	616	3,381	-16,001	-800	-16,801
2028-29	-16,801	0	0	0	5,487	635	3,484	-13,317	-666	-13,983
2029-30	-13,983	0	0	0	5,487	654	3,588	-10,395	-520	-10,914
2030-21	-10,914	0	0	0	5,487	674	3,696	-7,219	-361	-7,579
2031-32	-7,579	0	0	0	5,515	694	3,826	-3,753	-188	-3,941
2032-33	-3,941	0	0	0	5,515	715	3,941	0	0	0
TOTAL		27,386	27,386	416	54,016	6,278	33,970	-136,366	-6,818	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$548	\$436	\$319	\$196

5.0 Waste Diversion

The Region is constructing a new Waste Management Facility to be located in North-West Durham. The new facility would provide a fourth waste management facility in Durham, joining the facilities in Oshawa, Port Perry, and Brock. The facility is being constructed to service current and expected growth throughout Durham Region.

The new facility will include both landfill and waste diversion components. Approximately 50 per cent of the facility will be related to waste diversion services; therefore, 50 per cent of the gross capital cost is being included in the DC calculation for Waste Diversion Services.

The allocation of DC recoverable costs are attributable to residential development. This is reflective of the fact that the Region's waste diversion facilities predominantly service the needs of the residential population. The non-residential population accounts for less than one per cent of the Region's waste diversion facility capacity utilization.

Service: Waste Diversion (Facilities)
Unit Measure: Square Feet of Building Space (Diversion only)

Quantity Measure	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 Value with land (\$/sq ft)
Sq Ft of Building Area - Regionally Owned																
Garrard Road Facility - MRF (includes scale house)	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	70,160	1,069
Garrard Road Facility - DRC (includes portables)	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	14,500	14,500	14,500	1,089
Rison Road Facility - Oshawa WMF	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	2,688	1,089
Port Perry - 1623 Reach Street - Scugog WMF	918	918	918	918	918	918	918	918	918	918	918	918	918	918	918	1,069
Brock - Sideroad #17 - Brock WMF	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,069
Clarington Facility - Hazardous Waste/Call Centre/Admin																
DYEC Processing Area									1,882	1,882	1,882	1,882	1,882	1,882	1,882	1,089
Sq Ft of Building Area - Not Regionally Owned																
MWS - Compost Facility - Pickering	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	1,069
MWS - Household Hazardous Waste Depot - Pickering	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	1,089
MWS - Maintenance Building - Pickering	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	1,089
MWS - Office Building - Pickering	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	1,089
MWS - Compost Facility - Courtnice	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	267,590	1,069
MWS - Maintenance Building - Courtnice	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	1,069
MWS - Pebblestone Transfer Station - Whitby	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880	1,089
MWS - Pebblestone Maintenance Building - Whitby	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	4,575	1,089
MWS - Pebblestone Office Building - Whitby	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,013	1,089
GFL - Maintenance Building - Pickering	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	1,069
GFL - Office Building - Pickering	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,069
Total	443,174	443,174	443,174	443,174	443,174	443,174	443,174	443,174	445,056	445,056	445,056	451,061	450,561	450,561	450,561	

Population	588,973	598,064	603,153	608,124	614,589	624,295	630,429	637,780	645,862	652,442	662,808	674,834	685,337	696,892	709,778	
Service Level per Capita	0.75	0.74	0.73	0.73	0.72	0.71	0.70	0.69	0.69	0.68	0.67	0.67	0.66	0.65	0.63	

15-Year Average	
Quantity Standard (sq ft / capita)	0.70
Quality Standard (\$ per sq ft)	\$1,089.00
Service Standard (\$ per capita)	\$757.53

DC Amount (Before Deductions)	
Projected Population Growth	161,913
\$ per capita	\$757.53
Eligible Amount	\$122,653,942

Service Level Calculation Sheet

Service: Other Assets (Bins, Scales, Vehicles etc.) - Diversion Only
Unit Measure: Total Value of Other Assets

Quantity Measure	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 Value
Regionally Owned																
Truck Scales	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	60,000
Trucks	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	85,000
Forklifts	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	125,000
Loaders	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	300,000
Baler - MRF	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	700,000
Processing System - MRF	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7,000,000
Roll-off Bins	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	12,000
Cardboard Compactors	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	24,000
Not Regionally Owned																
Miller Waste vehicles (curbside - all contracts)	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	400,000
Miller Waste vehicles (MRF)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	400,000
Miller waste totes (MR)	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	2,418	150
Miller waste bins (MR)	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154	2,500
Green For Life vehicles (curbside)	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	400,000
Thorah Island contractor boat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	75,000
Thorah Island contractor ATV	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27,000
Thorah Island contractor trailer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,000
Thorah Island enclosure totes (provided by Miller)	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	900
DYEC Equipment																32,250
Total Durham Value of Other Assets	\$36,167,180	\$36,167,180	\$36,167,180	\$36,167,180	\$36,167,180	\$36,167,180	\$36,167,180	\$36,167,180	\$36,168,148	\$36,168,148	\$36,168,148	\$36,168,148	\$36,168,148	\$36,168,148	\$36,168,148	

Population (Total Durham)	588,973	599,064	603,153	608,124	614,599	624,295	630,429	637,780	645,862	652,442	662,808	674,834	685,337	696,992	709,776
Service Level per Capita	\$61.41	\$60.37	\$59.96	\$59.47	\$58.65	\$57.93	\$57.37	\$56.71	\$56.00	\$55.44	\$54.57	\$53.60	\$52.77	\$51.89	\$50.96

15-Year Average	2008-2022
Combined Quantity/Quality Level (\$/cap)	56.49

DC Amount (Before Deductions)	161,913
Projected Population/Employment Growth	\$56.49
\$ per capita and employment	\$9,145.873

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION
MUNICIPALITY: Region of Durham**

SERVICE: Works - Waste Diversion Capital

Pri. No.	Increased Service Needs Attributable to Anticipated Development 2023-2032	Timing	Gross Capital Cost Est. (\$2023)	Ineligible Service	Less:		Sub Total	Benefit to Existing Development	Grants, Subsidies & Other Contributions Attrib. to New Development	Net Capital Cost	Potential DC Recoverable Cost			
					Post Period Benefit						Net Benefiting New Development	Residential Share 100%	Non-Residential Share 0%	
1	Additional Waste Management Facility - North-West Durham ⁽¹⁾													
	- Design	2025	1,000,000	500,000	-	-	500,000	-	-	500,000	500,000			
	- Construction	2025	3,500,000	1,750,000	-	-	1,750,000	-	-	1,750,000	1,750,000			
	- Construction	2026	4,500,000	2,250,000	-	-	2,250,000	-	-	2,250,000	2,250,000			
	- Equipment	2026	750,000	375,000	-	-	375,000	-	-	375,000	375,000			
	Total Estimated Capital Cost		\$ 9,750,000		\$ -	\$ -	\$4,875,000	\$ -	\$ -	\$4,875,000	\$4,875,000	\$4,875,000	\$ -	\$ -

Notes:

⁽¹⁾ The cost of a new WMF- North-West expansion is estimated at \$9.75 million, \$9.75 million (100%) of which is growth related and 50% of which (\$4.88 million) is related to diversion.

WASTE DIVERSION
Region-Wide Development Charge
Cash Flow Calculation of the Residential Development Charge
(\$000's)

Year	DC Reserve Fund Opening Balance	Development Related Expenditures	Development Related Expend. Inflated @ 3.0%	Eqv. Single Detached Units	Unit Charge Inflated @ 3.0%	Anticipated Revenue	Surplus (Deficit)	Int. Earnings 3%/debt rate 5.0%	DC Reserve Fund Closing Bal.
2023-24	0	0	0	5,238	94	494	494	15	508
2024-25	508	0	0	5,238	97	508	1,017	31	1,047
2025-26	1,047	2,250	2,387	5,238	100	524	-816	-41	-857
2026-27	-857	2,625	2,868	5,326	103	549	-3,177	-159	-3,335
2027-28	-3,335	0	0	5,485	106	582	-2,754	-138	-2,891
2028-29	-2,891	0	0	5,487	109	600	-2,292	-115	-2,406
2029-30	-2,406	0	0	5,487	113	617	-1,789	-89	-1,878
2030-21	-1,878	0	0	5,487	116	636	-1,242	-62	-1,304
2031-32	-1,304	0	0	5,515	119	658	-646	-32	-678
2032-33	-678	0	0	5,515	123	678	-0	-0	-0
TOTAL		4,875	5,255	54,016	1,080	5,846	-11,204	-590	

	Single/Semi Detached	Medium Density Multiple	2 Bedroom Apartment	1 Bedroom Apartment
DC/Unit	\$94	\$75	\$55	\$34

APPENDIX I
LONG TERM CAPITAL AND
OPERATING COST EXAMINATION AND ASSET MANAGEMENT PLAN

1.0 INTRODUCTION

As a requirement of the Development Charges Act, 1997 (DCA) 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 DC Background Study. As part of this analysis, it was necessary to isolate the incremental operating expenditures directly associated with these capital projects.

Also, the DCA requires that the Background Study include an Asset Management Plan (AMP) related to new infrastructure to be funded under the DC by-law. Subsection 10(3) of the DCA provides that the AMP shall:

- (a) deal with all assets whose capital costs are proposed to be funded under the DC 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.

The following sections of this appendix document the examination of long-term capital and operating costs, and the AMP, for the following services:

- Regional Roads;
- Regional Water Supply and Sanitary Sewerage;
- Regional Police;
- Paramedic Services;
- Long-Term Care; and
- Waste Diversion.

2.0 REGIONAL ROADS

2.1 Capital Costs

The Regional Roads capital costs anticipated over the period 2023-2032 are provided in Appendix E. These proposed expenditures, expressed in 2023 dollars, are for growth-related projects, which are eligible for development charge financing. The capital works forecasts are summarized in Table I.1 on the following page, and are based on Tables E.1 and E.2 from Appendix E.

TABLE I.1 - REGIONAL ROADS: LONG TERM CAPITAL AND OPERATING COST EXAMINATION (2023 - 2032)												
SERVICE: REGIONAL ROADS	2023 BUDGET	FORECAST EXPENDITURE										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
CAPITAL EXPENDITURES FOR PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
A. Growth Related Projects (All projects with DC components)												
Attribution												
1 New Residential	58,745,900	199,656,248	142,870,037	89,226,768	129,007,756	181,529,915	166,375,342	134,259,787	192,517,051	223,727,964	1,517,916,848	
2 New Non-Residential (Commercial)	9,118,508	30,820,994	21,943,311	13,771,134	19,972,791	27,899,167	25,631,550	20,857,979	29,599,062	34,560,902	234,175,399	
3 New Non-Residential (Industrial & Institutional)	12,038,123	40,689,434	28,969,243	18,180,463	26,367,791	36,832,079	33,838,404	27,536,404	39,076,256	45,626,806	309,154,993	
4 Post Period Benefit	0	0	714,003	1,043,897	2,986,780	3,596,280	3,232,288	15,338,588	21,529,886	15,242,407	63,684,138	
5 Grants, Subsidy and Other	51,505,525	36,974,453	4,120,156	0	0	0	0	0	0	0	92,600,134	
6 Total (1+2+3+4+5)	131,408,147	308,141,129	198,616,749	122,222,242	178,335,117	249,857,440	229,077,594	197,992,758	282,722,255	319,158,079	2,217,531,511	
B. Non-Growth Projects (100% GL only)												
1 General Levy Financing (Benefit to Existing)	17,476,319	23,631,671	53,297,176	19,848,040	22,385,086	54,231,888	41,259,966	68,338,469	33,077,545	80,571,171	414,117,332	
C. Capital Costs Funded by General Levy												
Attribution												
1 General Levy Financing (Industrial & Institutional) - Shortfall	4,815,249	16,275,773	11,587,697	7,272,181	10,547,116	14,732,832	13,535,362	11,014,562	15,630,502	18,250,722	123,661,997	
2 General Levy Financing (Benefit to Existing)	17,476,319	23,631,671	53,297,176	19,848,040	22,385,086	54,231,888	41,259,966	68,338,469	33,077,545	80,571,171	414,117,332	
3 Post Period Benefit	0	0	714,003	1,043,897	2,986,780	3,596,280	3,232,288	15,338,588	21,529,886	15,242,407	63,684,138	
4 Five-Year Phase-in of DC Rates	35,871,915	27,711,054	19,028,257	9,929,358	0	0	0	0	0	0	92,540,585	
5 Total (1+2+3+4)	56,163,484	67,618,499	84,627,133	38,093,476	35,918,982	72,560,999	58,027,625	94,691,619	70,237,934	114,064,300	694,004,051	
OPERATING EXPENDITURES FOR EXISTING WORKS AND PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
D. Annual Cost												
1 Roads and Streets Maintenance Operations	23,414,095	23,623,198	23,697,925	23,761,882	23,949,762	24,156,513	24,379,780	24,669,641	24,892,069	25,168,916		
2 Traffic Operations	12,586,168	12,642,109	12,703,921	12,776,723	12,867,518	12,941,890	13,008,532	13,111,887	13,180,945	13,281,402		
3 Total (1+2)	35,980,263	36,265,307	36,401,846	36,538,604	36,817,280	37,098,403	37,388,313	37,781,528	38,073,014	38,450,318		
4 Annual Increase		285,044	136,539	136,758	278,676	281,123	289,910	393,215	291,486	377,304	2,470,055	
E. Forecast Population	727,899	743,782	759,665	775,548	791,431	807,314	823,814	840,313	856,813	873,312		
F. Cost per Capita	\$49.43	\$48.76	\$47.92	\$47.11	\$46.52	\$45.95	\$45.38	\$44.96	\$44.44	\$44.03		

2.2 Operating Costs

The operating costs anticipated over the period 2023 to 2032 were projected from budgeted program costs, net of recoveries and revenues, contained in the 2023 General Levy Budget. The Regional Roads operating budget is divided into two categories:

- *Roads and Streets Maintenance Operations* – This category includes any costs related to the operation and maintenance of the road allowance and travelled portion of the roadway, except for those tasks directly related to controlling the flow of traffic.
- *Traffic Operations* – This category includes any costs related to controlling the flow of traffic, primarily for traffic signals, signs, and pavement markings.

Unit costs were calculated for each program area within these two broad categories. Given the different nature of the program areas, the unit costs were calculated based on three measures:

- *Per linear kilometre of road* – For program areas that involve services related to the edge of pavement or which are general in nature;
- *Per linear lane-kilometre of road* – For program areas that involve services related to the road surface; and
- *Per traffic signal* – For program areas that involve services related to traffic signals and systems.

The following table summarizes the various program areas, the unit of measure selected, the 2023 General Levy Budget amount and per unit costs for 2023.

REGION OF DURHAM REGIONAL ROADS OPERATING PROGRAMS AND UNIT COSTS			
Program Area	Unit of Measure	2023 Budget Amount	2023 Unit Cost
2021 Inventory	Km	829	
	Lane-km	2,482	
	Signals	493	
Roads and Streets Maintenance Operations			
Winter Control	Lane-km	\$11,833,941	\$4,769
Roadside Maintenance	Km	\$5,578,639	\$6,728
Storm Sewers	Km	\$195,337	\$236
Depot Operations	Km	\$1,850,459	\$2,232
Maintenance General	Km	\$330,324	\$398
Overhead	Km	\$3,393,375	\$4,092
	Net cost	\$23,182,075	
Traffic Operations			
Signals and Systems	Signal	\$2,451,971	\$4,974
Signs, Markings & Roadside Protection	Km	\$3,052,038	\$3,681
Engineering & Central Control System	Km	\$5,773,379	\$6,963
Overhead	Km	\$1,188,323	\$1,433
	Net cost	\$12,465,711	
TOTAL 2023 OPERATING COST		\$35,647,786	

The unit costs, as calculated above, were applied to the forecast Regional Roads inventory to estimate future operating costs. The length of new regional roads, in both kilometres and lane-kilometres, to be constructed through the Capital Works Forecast (Tables E.1 and E.2 from Appendix E) was estimated and added to existing inventory figures to obtain totals. The costs for 2023 are based on actual budget provisions.

The forecasted operating costs over the period 2023 – 2032 are provided at the bottom of Table I.1. The costs are presented on an annual basis and expressed in terms of the cost per capita. The table illustrates that the per capita operating cost associated with the new Regional road infrastructure is projected to decrease slightly over the cost of providing the service in 2023.

Table I.1 also includes the projected loss in revenue resulting from the mandatory five-year phase-in of DC rates as prescribed through Bill 23. The estimated revenue loss is based on the planning forecast provided in Appendix A and the proposed rates provided in Table E.3 of Appendix E.

3.0 REGIONAL WATER SUPPLY AND SANITARY SEWERAGE

3.1 Capital Costs

The capital costs for Regional water supply and sanitary sewerage services anticipated over the period 2023-2032 are provided in Appendices F and G. These proposed expenditures, expressed in 2023 dollars, are for growth-related projects, which are eligible for development charge financing. The capital works forecasts as summarized in the following Tables I.2 and I.3 and are based on Tables F.1 and F.2 and Tables G.1 and G.2, from Appendix F and G respectively.

3.2 Operating Costs

The operating costs anticipated over the period 2023-2032 were projected from budget program costs, net of recoveries and revenues, contained in the 2023 Water Supply and Sanitary Sewerage Budgets. The operating costs are divided into two categories, Maintenance Operations and Plant Operations summarized below.

3.2.1 Maintenance Operations

Costs associated with the operation of the water distribution and sanitary sewerage collection systems have been forecast based on current per metre pipe costs. Maintenance Operations costs include all operating and maintenance costs associated with the watermains and sanitary sewers.

The cost for Maintenance Operations was calculated as follows:

REGION OF DURHAM WATER SUPPLY AND SANITARY SEWERAGE MAINTENANCE OPERATIONS COSTS (\$2023)		
	Water Supply	Sanitary Sewerage
Maintenance Operations Annual Budget Costs	\$23,721,263	\$12,340,661
Number of metres of pipe in inventory	2,639,945	2,280,404
Cost per metre	\$8.99	\$5.41

The cost per metre, as calculated above, was applied to the forecast pipe inventory to estimate future Maintenance Operations costs. The total length of pipe proposed in the Capital Works program and forecast to be constructed in conjunction with new development was estimated based on available information. The Maintenance Operations cost for 2023 is based on 2022 actual budget provisions, indexed for inflation.

3.2.2 Plant Operations

Costs associated with the operation of Water Supply Plants (WSP) and Water Pollution Control Plants (WPCP) have been forecast based on the current cost per MLD (megalitre per day) average day flow. Plant Operations costs include all operating costs

associated with the plants as well as water storage facilities, water pumping stations and sanitary sewage pumping stations.

The cost for Plant Operations was calculated as follows:

REGION OF DURHAM WATER SUPPLY AND SANITARY SEWERAGE PLANT OPERATIONS COSTS (\$2023)		
	Water Supply	Sanitary Sewerage
Plant Operations Annual Budget Costs	\$25,211,453	\$37,870,165
Average Day Flow (MLD)	187.00	193.51
Cost per MLD	\$134,468	\$195,700

The cost per MLD, as calculated above, was applied to the forecast flow to estimate future Plant Operations costs. The Plant Operations cost for 2023 is based on 2022 actual budget provisions, indexed for inflation.

The forecasted operating costs over the period 2023-2032 are provided at the bottom of Table I.2 and I.3. The costs are presented on an annual basis and expressed in terms of the cost per capita. The tables illustrate that the per capita operating cost associated with Water Supply and Sanitary Sewerage infrastructure is projected to increase slightly over the current cost of providing the service.

Tables I.2 and I.3 also include the projected loss in revenue resulting from the mandatory five-year phase-in of DC rates as prescribed through Bill 23. The estimated revenue loss is based on the planning forecast provided in Appendix A and the proposed rates provided in Tables F.3 of Appendix F and G.3 of Appendix G.

TABLE I.2 - REGIONAL WATER SUPPLY: LONG TERM CAPITAL AND OPERATING COST EXAMINATION (2023 - 2032)												
SERVICE: REGIONAL WATER SUPPLY	2023 BUDGET	FORECAST EXPENDITURE										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
CAPITAL EXPENDITURES FOR PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
A. Growth Related Projects (All projects with DC components)												
Attribution												
1 New Residential	88,184,881	122,933,134	238,699,924	259,018,466	168,634,210	165,289,102	8,068,232	80,648,314	21,834,154	75,424,014	1,228,734,430	
2 New Non-Residential (Commercial)	4,072,820	5,294,868	10,139,372	23,499,621	6,326,634	9,031,767	334,278	2,995,645	675,255	3,392,050	65,762,309	
3 New Non-Residential (Industrial & Institutional)	6,451,262	8,386,961	16,060,555	37,222,913	10,021,257	14,306,131	529,490	4,745,041	1,069,591	5,372,936	104,166,138	
4 Post Period Benefit	125,000	4,125,000	250,000	1,000,000	49,205,000	2,350,000	1,200,000	26,700,000	2,000,000	17,000,000	103,955,000	
5 Grants, Subsidy and Other	0	0	0	0	0	0	0	0	0	0	0	
6 Total (1+2+3+4+5)	98,833,963	140,739,963	265,149,850	320,741,000	234,187,100	190,977,000	10,132,000	115,089,000	25,579,000	101,189,000	1,502,617,876	
B. Non-Growth Projects (100% GL only)												
1 General Levy Financing (Benefit to Existing)	13,177,430	13,470,183	47,432,048	0	3,000,000	250,000	0	300,000	2,000,000	2,000,000	81,629,660	
Capital Costs Funded by General Levy												
Attribution												
1 General Levy Financing (Industrial & Institutional) - Shortfall	1,612,816	2,096,740	4,015,139	9,305,728	2,505,314	3,576,533	132,372	1,186,260	267,398	1,343,234	26,041,534	
2 General Levy Financing (Benefit to Existing)	13,177,430	13,470,183	47,432,048	0	3,000,000	250,000	0	300,000	2,000,000	2,000,000	81,629,660	
3 Post Period Benefit	125,000	4,125,000	250,000	1,000,000	49,205,000	2,350,000	1,200,000	26,700,000	2,000,000	17,000,000	103,955,000	
4 Five-year Phase-in of DC Rates	23,563,371	18,202,704	12,499,190	6,489,881	0	0	0	0	0	0	60,755,146	
5 Total (1+2+3+4)	38,478,616	37,894,627	64,196,377	16,795,609	54,710,314	6,176,533	1,332,372	28,186,260	4,267,398	20,343,234	272,381,341	
OPERATING EXPENDITURES FOR EXISTING WORKS AND PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
D. Annual Cost												
1 Maintenance Operations	21,788,212	22,422,106	23,017,541	23,512,926	24,055,104	24,646,358	25,133,436	25,676,369	26,170,909	26,716,539		
2 Plant Operations	22,658,024	23,073,666	23,489,308	23,904,950	24,320,592	24,736,234	25,167,071	25,597,908	26,028,745	26,459,581		
3 Total (1+2)	44,446,236	45,495,772	46,506,849	47,417,876	48,375,696	49,382,592	50,300,507	51,274,277	52,199,654	53,176,120		
4 Annual Increase		1,049,536	1,011,077	911,027	957,820	1,006,896	917,915	973,770	925,377	976,467	8,729,885	
E. Forecast Population												
Forecast Population	710,172	721,957	733,742	745,527	757,312	769,097	781,315	793,533	805,751	817,969		
F. Cost per Capita												
Cost per Capita	\$62.59	\$63.02	\$63.38	\$63.60	\$63.88	\$64.21	\$64.38	\$64.62	\$64.78	\$65.01		

TABLE I.3 - REGIONAL SANITARY SEWERAGE: LONG TERM CAPITAL AND OPERATING COST EXAMINATION (2023 - 2032)												
SERVICE: REGIONAL SANITARY SEWERAGE	2023 BUDGET	FORECAST EXPENDITURE										
		2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
CAPITAL EXPENDITURES FOR PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
A. Growth Related Projects (All projects with DC components)												
Attribution												
1 New Residential	50,181,879	176,493,033	115,959,383	166,767,767	173,272,199	152,728,119	81,248,874	22,807,310	56,641,580	5,818,505	1,001,918,649	
2 New Non-Residential (Commercial)	4,378,163	15,338,718	11,135,003	13,222,332	13,723,137	20,698,649	9,277,987	2,725,521	5,258,719	691,374	96,449,602	
3 New Non-Residential (Industrial & Institutional)	6,934,920	24,296,212	17,637,614	20,943,901	21,737,165	32,786,232	14,696,139	4,317,169	8,329,701	1,095,121	152,774,175	
4 Post-Period Benefit	3,100,000	0	42,604,000	0	3,044,000	145,350,000	170,050,000	66,880,000	47,250,000	3,125,000	481,403,000	
5 Grants, Subsidy and Other	0	0	0	0	0	0	0	0	0	0	0	
6 Total (1+2+3+4+5)	64,594,963	216,127,963	187,336,000	200,934,000	211,776,500	351,563,000	275,273,000	96,730,000	117,480,000	10,730,000	1,732,545,426	
B. Non-Growth Projects (100% GL only)												
1 General Levy Financing (Benefit to Existing)	8,618,430	12,689,183	37,468,548	2,270,000	6,291,500	0	750,000	0	0	6,250,000	74,337,660	
C. Capital Costs Funded by General Levy												
Attribution												
1 General Levy Financing (Industrial & Institutional) - Shortfall	1,733,730	6,074,053	4,409,404	5,235,975	5,434,291	8,196,558	3,674,035	1,079,292	2,082,425	273,780	38,193,544	
2 General Levy Financing (Benefit to Existing)	8,618,430	12,689,183	37,468,548	2,270,000	6,291,500	0	750,000	0	0	6,250,000	74,337,660	
3 Post-Period Benefit	3,100,000	0	42,604,000	0	3,044,000	145,350,000	170,050,000	66,880,000	47,250,000	3,125,000	481,403,000	
4 Five-year Phase-in of DC Rates	22,993,910	17,762,796	12,197,120	6,329,746	0	0	0	0	0	0	59,283,571	
5 Total (1+2+3+4)	36,446,070	36,526,031	96,679,071	13,835,721	14,769,791	153,546,558	174,474,035	67,959,292	49,332,425	9,648,780	653,217,775	
OPERATING EXPENDITURES FOR EXISTING WORKS AND PROPOSED CAPITAL WORKS PROGRAM (YEAR 2023-2032)												
D. Annual Cost												
1 Maintenance Operations	10,702,682	11,201,134	11,682,362	12,144,092	12,512,465	12,863,446	13,192,169	13,509,555	13,869,903	14,192,755		
2 Plant Operations	35,419,873	37,923,861	38,601,767	39,279,673	39,957,579	40,635,485	41,313,391	42,016,347	42,719,303	43,422,259		
3 Total (1+2)	46,122,555	49,124,996	50,284,129	51,423,765	52,470,045	53,498,932	54,505,561	55,525,902	56,589,207	57,615,014		
4 Annual Increase	3,002,441	3,002,441	1,159,134	1,139,636	1,046,280	1,028,887	1,006,629	1,020,342	1,063,304	1,025,807	11,492,459	
Forecast Population	697,021	708,806	720,591	732,376	744,161	755,946	768,164	780,382	792,600	804,818		
Cost per Capita	\$66.17	\$69.31	\$69.78	\$70.21	\$70.51	\$70.77	\$70.96	\$71.15	\$71.40	\$71.59		

4.0 OTHER SERVICES

4.1 Capital Costs

The capital costs for Regional Police, Paramedic Services, Long-Term Care, and Waste Diversion Services anticipated over the period 2023-2032 are provided in Appendix H. Over the 2023-2032 forecast, there is \$139.6 million in total growth-related capital costs, with \$116 million in capital costs eligible for development charge recoveries, for these services.

4.2 Operating Costs

The annual operating costs associated with Regional Police, Paramedic Services, Long-Term Care, and Waste Diversion Services were projected using budget program costs information contained in the 2022 Business Plans and Budgets. Once all facilities and vehicles of the capital forecasts are in service, the incremental increase to operating costs over the ten years is estimated to be \$4.63 million.

4.3 Maintenance Costs

The annual maintenance costs associated with Regional Police, Paramedic Services, Long-Term Care and Waste Diversion Services facilities and vehicles were projected using budget program costs information contained in the 2022 Business Plans and Budgets. Once all facilities and vehicles of the capital forecasts are in service, the incremental increase to maintenance costs over the ten years is estimated to be \$2.50 million.

5.0 ASSET MANAGEMENT PLAN

A strong asset management program ensures not only that the Region is accounting for the assets correctly, but monitoring asset condition, assessing repair or replacement options, prioritizing investments in critical infrastructure and incorporating asset renewal in long term financial plans.

The Region's annual Asset Management Report sets the stage for strategic and financial infrastructure planning, which continues through the annual business planning cycle, including the multi-year Economic and Financial Forecast and Budget Guidelines Report, and detailed individual program Business Plans and Budgets.

The AMP provides for the long-term investment in an asset over its entire useful life and demonstrates that the Regional property tax and water supply and sanitary sewer utility rate impacts are projected to stay at reasonable increments.

In addition to the operational impacts, over time the initial capital projects will require future replacement. This replacement of capital and related maintenance costs are often referred to as lifecycle costs. 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 following table consolidates operating and maintenance cost information for Transportation, Water Supply and Sanitary Sewer infrastructure, as well as growth-related vehicle and facility infrastructure for Regional Police, Paramedic Services, Long-term Care, and Waste Diversion Services. Annual capital depreciation factors have been estimated for all forecasted growth capital, to serve as a representation of the replacement cost of assets on an average annualized basis. The annual depreciation factors have been estimated by dividing the development-related capital costs over the 2023-2032 period by the expected useful life of the assets.

Estimated Incremental Operating, Maintenance and Depreciation Costs Associated with Total Forecasted 2023-2032 Growth Capital (\$2023)

Estimated Annual Operating, Maintenance and Depreciation Costs Associated with Total Forecast Growth Capital				
	Operating Cost (Annual)	Maintenance Cost (Annual)	Depreciation Factor (Annual)	Total
Water Supply and Sanitary Sewer	11,800,000	8,420,000	51,310,000	71,530,000
Transportation	720,000	1,750,000	47,880,000	50,350,000
Other Services*				
Vehicles	460,000	450,000	1,240,000	2,150,000
Facilities	4,170,000	2,050,000	2,270,000	8,490,000
Other Services Sub Total	4,630,000	2,500,000	3,510,000	10,640,000
Total	17,140,000	12,670,000	102,700,000	132,520,000

*Other Services includes Regional Police, Paramedic Services, Long-Term Care Facilities and Waste Diversion Services
Note: Totals may not add due to rounding

While the asset management plans anticipate that the majority of the related life-cycle costs will be funded primarily from Durham property tax and user rate payers, there are a variety of other potential infrastructure financing options and related policy and strategy initiatives employed by the Region.

It is important to note that, while municipal program expenditures will increase with growth in population, the costs associated with the new infrastructure would be delayed until the time these works are in place. Regional Staff will continue to monitor development activity and re-examine and reprioritize the capital program in accordance with the location and rate of future growth.

A number of asset management reserve funds have been established to address the future rehabilitation and replacement needs related to transportation, water supply and sanitary sewer services. These reserve funds in conjunction with modest increases in property tax and water and sewer user rates will address the future incremental operating, maintenance and replacement costs associated with the new assets acquired over 2023-2032. Based on the anticipated revenues generated by the forecasted growth in residential and non-residential assessment for property tax purposes and water supply and sanitary sewer customers which enables an increase in water and sewer user revenues, the capital projects in the DC Background Study are deemed to be financially sustainable.

Appendix J

**Inter-Regional Development
Charge Comparison**

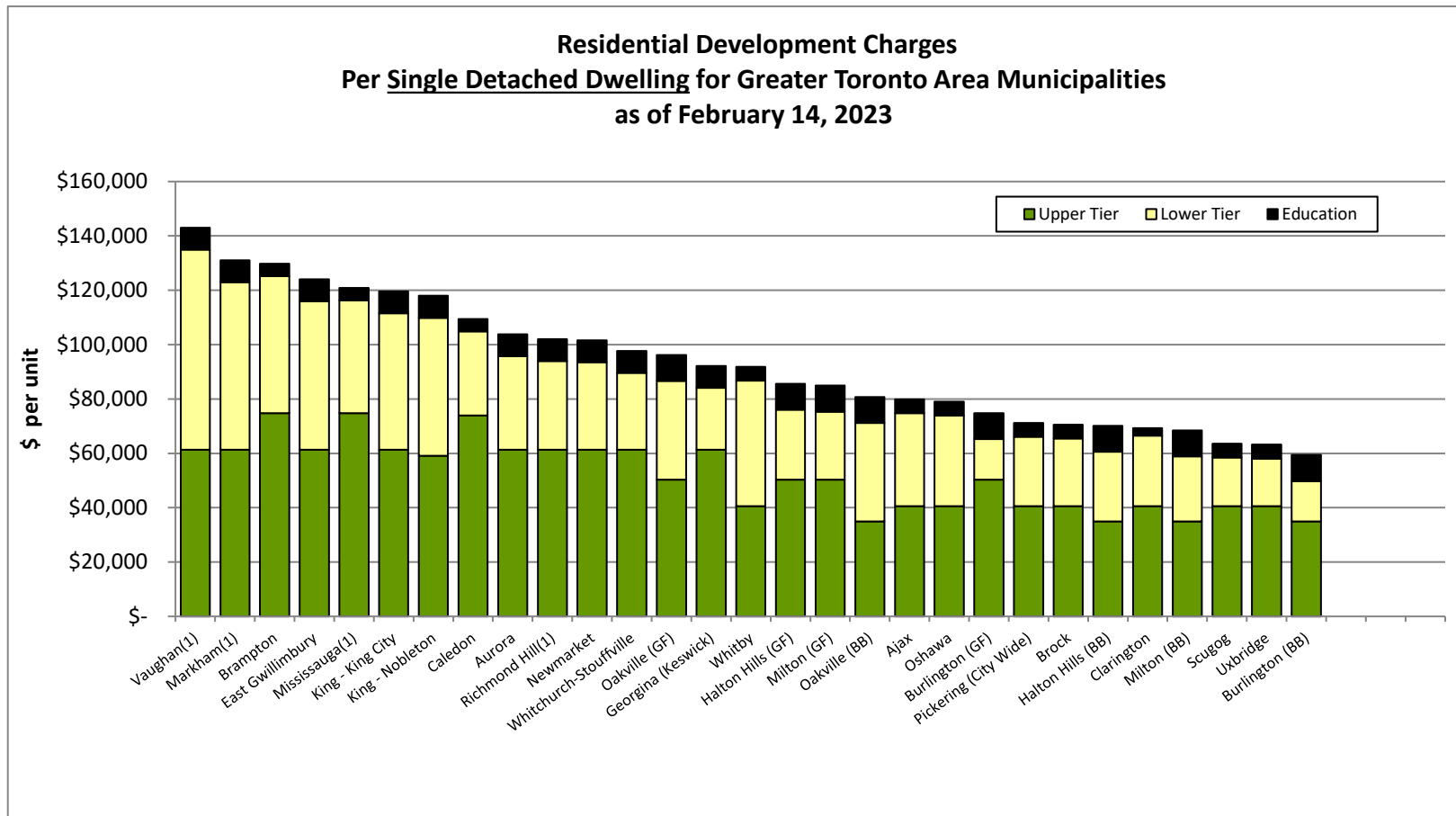
**TABLE 1 - RESIDENTIAL DEVELOPMENT CHARGES
FOR GREATER TORONTO AREA MUNICIPALITIES
(AS AT FEBRUARY 14, 2023)**

Single Detached Unit-\$ per unit

Municipality	Lower/ Single Tier	Upper Tier	Education	Total
1 Vaughan(1)	\$ 73,576	\$ 61,330	\$ 8,096	\$ 143,002
2 Markham(1)	\$ 61,651	\$ 61,330	\$ 8,096	\$ 131,077
3 Brampton	\$ 50,450	\$ 74,772	\$ 4,572	\$ 129,794
4 East Gwillimbury	\$ 54,607	\$ 61,330	\$ 8,096	\$ 124,033
5 Mississauga(1)	\$ 41,555	\$ 74,772	\$ 4,572	\$ 120,899
6 King - King City	\$ 50,162	\$ 61,330	\$ 8,096	\$ 119,588
7 King - Nobleton	\$ 50,799	\$ 59,062	\$ 8,096	\$ 117,957
8 Caledon	\$ 30,947	\$ 73,917	\$ 4,572	\$ 109,436
9 Aurora	\$ 34,408	\$ 61,330	\$ 8,096	\$ 103,834
10 Richmond Hill(1)	\$ 32,621	\$ 61,330	\$ 8,096	\$ 102,047
11 Newmarket	\$ 32,153	\$ 61,330	\$ 8,096	\$ 101,579
12 Whitchurch-Stouffville	\$ 28,255	\$ 61,330	\$ 8,096	\$ 97,681
13 Oakville (GF)	\$ 36,265	\$ 50,355	\$ 9,561	\$ 96,181
14 Georgina (Keswick)	\$ 22,740	\$ 61,330	\$ 8,096	\$ 92,166
15 Whitby	\$ 46,205	\$ 40,529	\$ 5,135	\$ 91,869
16 Halton Hills (GF)	\$ 25,656	\$ 50,355	\$ 9,561	\$ 85,572
17 Milton (GF)	\$ 24,999	\$ 50,355	\$ 9,561	\$ 84,915
18 Oakville (BB)	\$ 36,265	\$ 34,903	\$ 9,561	\$ 80,729
19 Ajax	\$ 34,202	\$ 40,529	\$ 5,135	\$ 79,866
20 Oshawa	\$ 33,373	\$ 40,529	\$ 5,135	\$ 79,037
21 Burlington (GF)	\$ 14,912	\$ 50,355	\$ 9,561	\$ 74,828
22 Pickering (City Wide)	\$ 25,518	\$ 40,529	\$ 5,135	\$ 71,182
23 Brock	\$ 24,889	\$ 40,529	\$ 5,135	\$ 70,553
24 Halton Hills (BB)	\$ 25,656	\$ 34,903	\$ 9,561	\$ 70,120
25 Clarington	\$ 25,954	\$ 40,529	\$ 2,830	\$ 69,313
26 Milton (BB)	\$ 23,996	\$ 34,903	\$ 9,561	\$ 68,460
27 Scugog	\$ 17,918	\$ 40,529	\$ 5,135	\$ 63,582
28 Uxbridge	\$ 17,557	\$ 40,529	\$ 5,135	\$ 63,221
29 Burlington (BB)	\$ 14,912	\$ 34,903	\$ 9,561	\$ 59,376
			\$/SDU	
			average	\$ 93,169
			median	\$ 91,869

Notes:
BB - Built Boundary Regional Charge; GF - Green Field Regional Charge

1. A component of the charge has been converted from a per hectare charge to a hypothetical single detached unit.



BB=Built Boundary & GF=Greenfield.

1. A component of the charge has been converted from a per hectare charge to a hypothetical single detached unit.

**TABLE 2 - NON-RESIDENTIAL DEVELOPMENT CHARGES (RETAIL)
FOR GREATER TORONTO AREA MUNICIPALITIES
(AS AT FEBRUARY 14, 2023)**

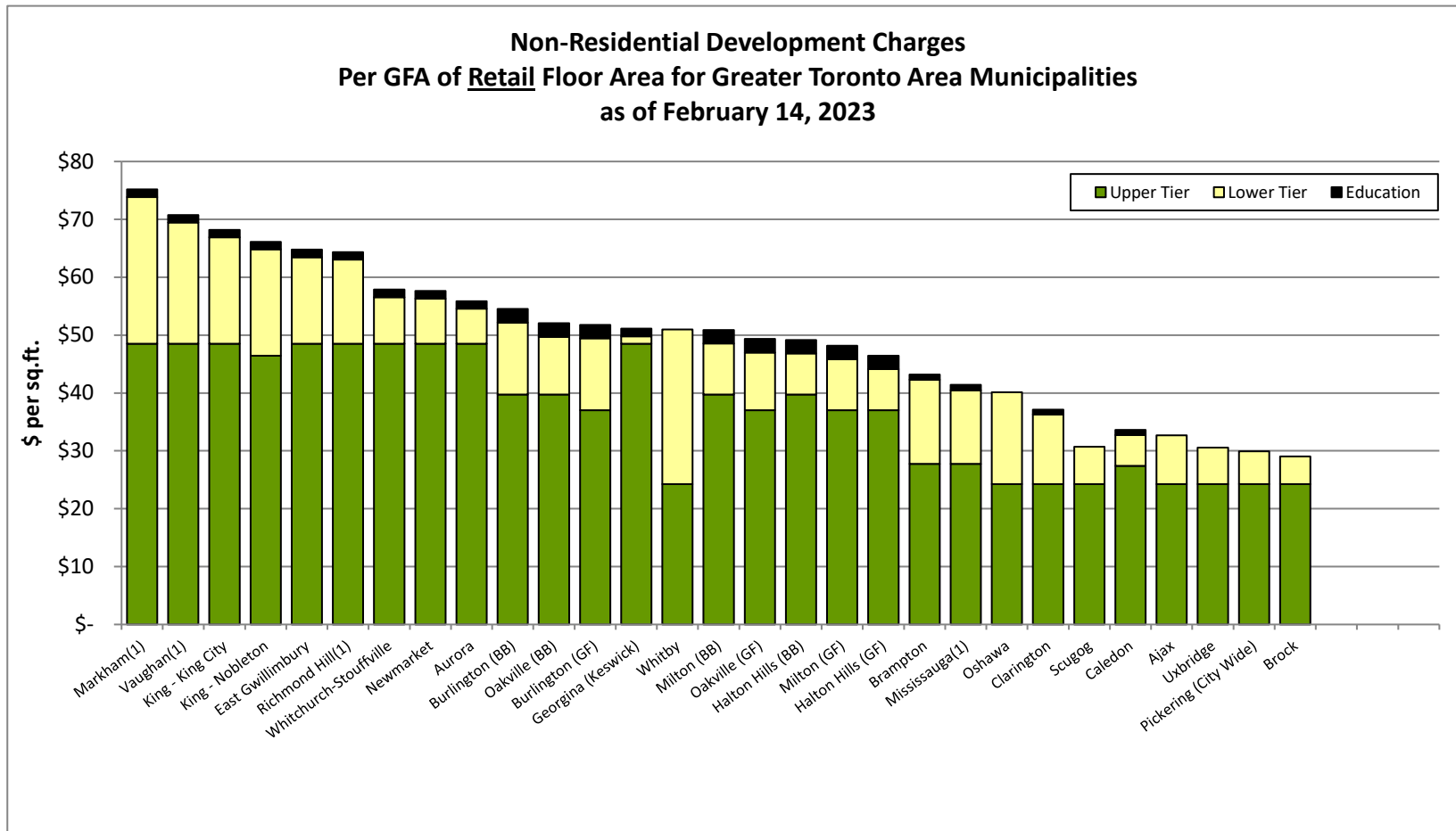
Retail - \$ per sq.ft. of GFA

Municipality	Lower/ Single Tier	Upper Tier	Education	Total
1 Markham(1)	\$ 25.37	\$ 48.50	\$ 1.31	\$ 75.18
2 Vaughan(1)	\$ 20.94	\$ 48.50	\$ 1.31	\$ 70.75
3 King - King City	\$ 18.37	\$ 48.50	\$ 1.31	\$ 68.18
4 King - Nobleton	\$ 18.37	\$ 46.43	\$ 1.31	\$ 66.11
5 East Gwillimbury	\$ 14.97	\$ 48.50	\$ 1.31	\$ 64.78
6 Richmond Hill(1)	\$ 14.54	\$ 48.50	\$ 1.31	\$ 64.35
7 Whitchurch-Stouffville	\$ 8.07	\$ 48.50	\$ 1.31	\$ 57.88
8 Newmarket	\$ 7.80	\$ 48.50	\$ 1.31	\$ 57.61
9 Aurora	\$ 6.06	\$ 48.50	\$ 1.31	\$ 55.87
10 Burlington (BB)	\$ 12.43	\$ 39.72	\$ 2.35	\$ 54.50
11 Oakville (BB)	\$ 9.98	\$ 39.72	\$ 2.35	\$ 52.05
12 Burlington (GF)	\$ 12.43	\$ 37.00	\$ 2.35	\$ 51.79
13 Georgina (Keswick)	\$ 1.31	\$ 48.50	\$ 1.31	\$ 51.12
14 Whitby	\$ 26.74	\$ 24.25	\$ -	\$ 50.99
15 Milton (BB)	\$ 8.83	\$ 39.72	\$ 2.35	\$ 50.90
16 Oakville (GF)	\$ 9.98	\$ 37.00	\$ 2.35	\$ 49.33
17 Halton Hills (BB)	\$ 7.10	\$ 39.72	\$ 2.35	\$ 49.17
18 Milton (GF)	\$ 8.83	\$ 37.00	\$ 2.35	\$ 48.18
19 Halton Hills (GF)	\$ 7.10	\$ 37.00	\$ 2.35	\$ 46.45
20 Brampton	\$ 14.53	\$ 27.78	\$ 0.90	\$ 43.20
21 Mississauga(1)	\$ 12.71	\$ 27.78	\$ 0.90	\$ 41.39
22 Oshawa	\$ 15.90	\$ 24.25	\$ -	\$ 40.15
23 Clarington	\$ 12.06	\$ 24.25	\$ 0.80	\$ 37.11
24 Scugog	\$ 6.46	\$ 24.25	\$ -	\$ 30.71
25 Caledon	\$ 5.30	\$ 27.43	\$ 0.90	\$ 33.63
26 Ajax	\$ 8.43	\$ 24.25	\$ -	\$ 32.68
27 Uxbridge	\$ 6.32	\$ 24.25	\$ -	\$ 30.57
28 Pickering (City Wide)	\$ 5.66	\$ 24.25	\$ -	\$ 29.91
29 Brock	\$ 4.79	\$ 24.25	\$ -	\$ 29.04
				\$/sq.ft.
			average	\$ 49.43
			median	\$ 50.90

Notes:

BB - Built Boundary Regional Charge; GF - Green Field Regional Charge

1. A portion of the charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.



BB=Built Boundary & GF=Greenfield.

1. A portion of the charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.

**TABLE 3 - NON-RESIDENTIAL DEVELOPMENT CHARGES (INDUSTRIAL)
 FOR GREATER TORONTO AREA MUNICIPALITIES
 (AS AT FEBRUARY 14, 2023)**

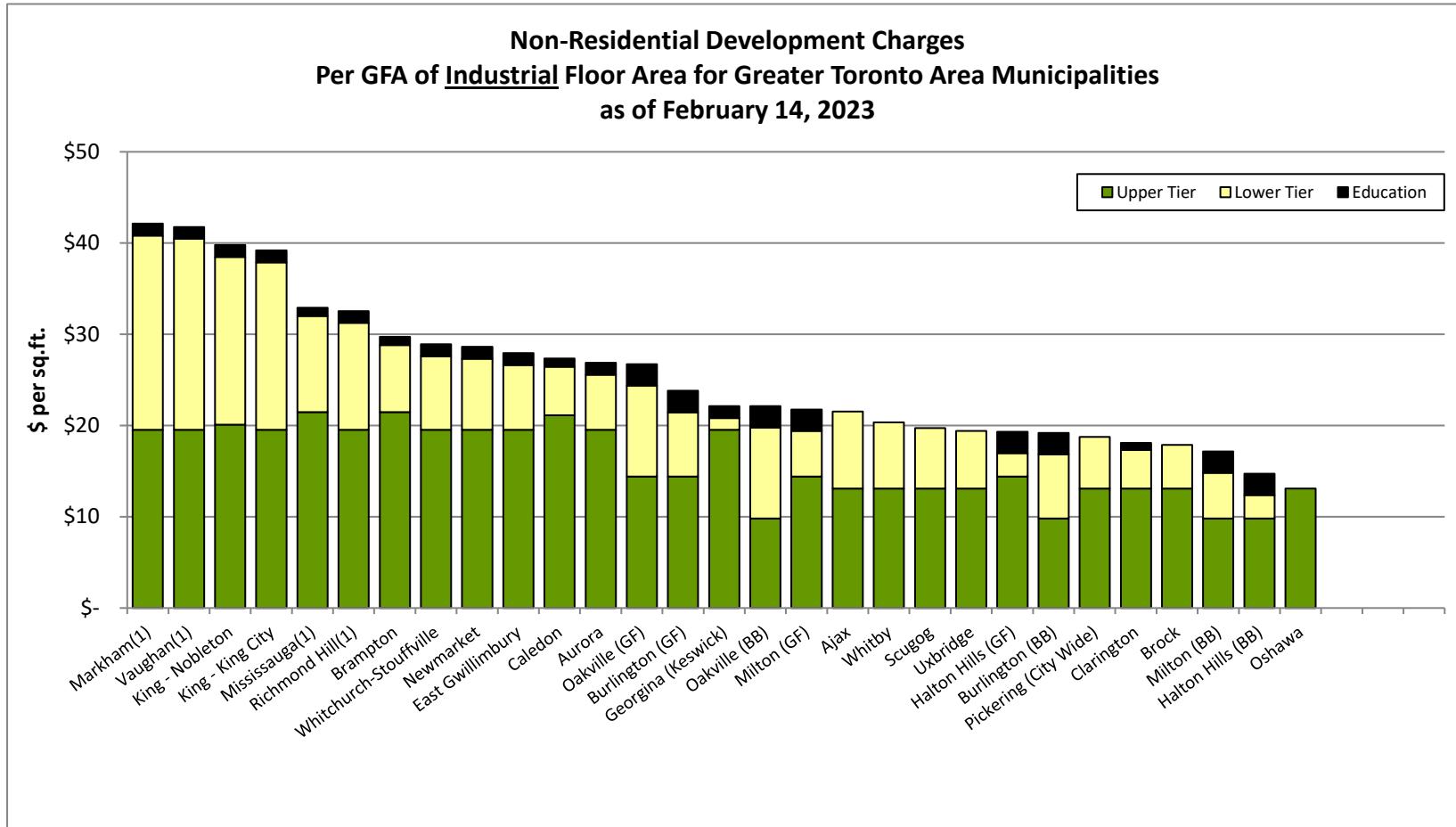
Industrial- \$ per sq.ft. of GFA

Municipality	Lower/ Single Tier	Upper Tier	Education	Total
1 Markham(1)	\$ 21.29	\$ 19.52	\$ 1.31	\$ 42.12
2 Vaughan(1)	\$ 20.94	\$ 19.52	\$ 1.31	\$ 41.77
3 King - Nobleton	\$ 18.37	\$ 20.11	\$ 1.31	\$ 39.79
4 King - King City	\$ 18.37	\$ 19.52	\$ 1.31	\$ 39.20
5 Mississauga(1)	\$ 10.53	\$ 21.49	\$ 0.90	\$ 32.92
6 Richmond Hill(1)	\$ 11.72	\$ 19.52	\$ 1.31	\$ 32.55
7 Brampton	\$ 7.32	\$ 21.49	\$ 0.90	\$ 29.71
8 Whitchurch-Stouffville	\$ 8.07	\$ 19.52	\$ 1.31	\$ 28.90
9 Newmarket	\$ 7.80	\$ 19.52	\$ 1.31	\$ 28.63
10 East Gwillimbury	\$ 7.11	\$ 19.52	\$ 1.31	\$ 27.94
11 Caledon	\$ 5.30	\$ 21.14	\$ 0.90	\$ 27.34
12 Aurora	\$ 6.06	\$ 19.52	\$ 1.31	\$ 26.89
13 Oakville (GF)	\$ 9.98	\$ 14.40	\$ 2.35	\$ 26.73
14 Burlington (GF)	\$ 7.05	\$ 14.40	\$ 2.35	\$ 23.80
15 Georgina (Keswick)	\$ 1.31	\$ 19.52	\$ 1.31	\$ 22.14
16 Oakville (BB)	\$ 9.98	\$ 9.81	\$ 2.35	\$ 22.14
17 Milton (GF)	\$ 5.00	\$ 14.40	\$ 2.35	\$ 21.75
18 Ajax	\$ 8.43	\$ 13.10	\$ -	\$ 21.53
19 Whitby	\$ 7.26	\$ 13.10	\$ -	\$ 20.36
20 Scugog	\$ 6.62	\$ 13.10	\$ -	\$ 19.72
21 Uxbridge	\$ 6.32	\$ 13.10	\$ -	\$ 19.42
22 Halton Hills (GF)	\$ 2.56	\$ 14.40	\$ 2.35	\$ 19.31
23 Burlington (BB)	\$ 7.05	\$ 9.81	\$ 2.35	\$ 19.21
24 Pickering (City Wide)	\$ 5.66	\$ 13.10	\$ -	\$ 18.76
25 Clarington	\$ 4.21	\$ 13.10	\$ 0.80	\$ 18.11
26 Brock	\$ 4.79	\$ 13.10	\$ -	\$ 17.89
27 Milton (BB)	\$ 5.00	\$ 9.81	\$ 2.35	\$ 17.16
28 Halton Hills (BB)	\$ 2.56	\$ 9.81	\$ 2.35	\$ 14.72
29 Oshawa	\$ -	\$ 13.10	\$ -	\$ 13.10
				<u>\$/sq.ft.</u>
			average	\$ 25.30
			median	\$ 22.14

Notes:

BB - Built Boundary Regional Charge; GF - Green Field Regional Charge

1. A portion of the charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.



BB=Built Boundary & GF=Greenfield.

1. A portion of the charge has been converted from a per hectare charge to a hypothetical GFA charge assuming 30% coverage.

**TABLE 4 - RESIDENTIAL DEVELOPMENT CHARGES
FOR GREATER TORONTO AREA MUNICIPALITIES
(AS AT FEBRUARY 14, 2023)**

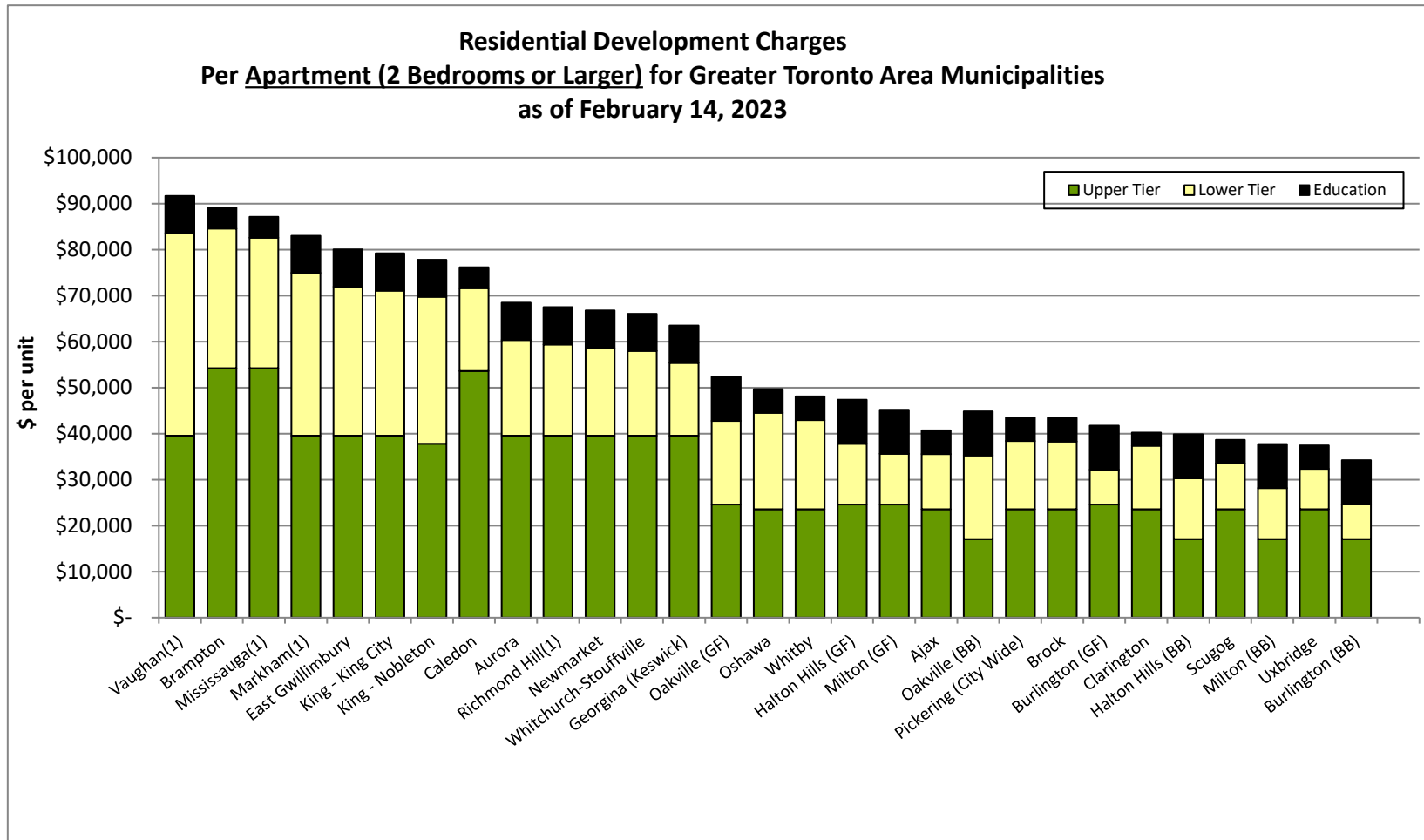
Apartments - 2 Bedrooms + or Greater than 700sq.ft.

Municipality	Lower Tier	Upper Tier	Education	Total
1 Vaughan(1)	\$ 44,030	\$ 39,570	\$ 8,096	\$ 91,696
2 Brampton	\$ 30,331	\$ 54,237	\$ 4,572	\$ 89,140
3 Mississauga(1)	\$ 28,323	\$ 54,237	\$ 4,572	\$ 87,132
4 Markham(1)	\$ 35,363	\$ 39,570	\$ 8,096	\$ 83,029
5 East Gwillimbury	\$ 32,360	\$ 39,570	\$ 8,096	\$ 80,026
6 King - King City	\$ 31,502	\$ 39,570	\$ 8,096	\$ 79,168
7 King - Nobleton	\$ 31,902	\$ 37,827	\$ 8,096	\$ 77,825
8 Caledon	\$ 17,981	\$ 53,617	\$ 4,572	\$ 76,170
9 Aurora	\$ 20,785	\$ 39,570	\$ 8,096	\$ 68,451
10 Richmond Hill(1)	\$ 19,823	\$ 39,570	\$ 8,096	\$ 67,489
11 Newmarket	\$ 19,088	\$ 39,570	\$ 8,096	\$ 66,754
12 Whitchurch-Stouffville	\$ 18,391	\$ 39,570	\$ 8,096	\$ 66,057
13 Georgina (Keswick)	\$ 15,812	\$ 39,570	\$ 8,096	\$ 63,478
14 Oakville (GF)	\$ 18,202	\$ 24,573	\$ 9,561	\$ 52,336
15 Oshawa	\$ 21,002	\$ 23,546	\$ 5,135	\$ 49,683
16 Whitby	\$ 19,398	\$ 23,546	\$ 5,135	\$ 48,079
17 Halton Hills (GF)	\$ 13,234	\$ 24,573	\$ 9,561	\$ 47,368
18 Milton (GF)	\$ 11,074	\$ 24,573	\$ 9,561	\$ 45,208
19 Ajax	\$ 12,026	\$ 23,546	\$ 5,135	\$ 40,707
20 Oakville (BB)	\$ 18,202	\$ 17,075	\$ 9,561	\$ 44,838
21 Pickering (City Wide)	\$ 14,841	\$ 23,546	\$ 5,135	\$ 43,522
22 Brock	\$ 14,734	\$ 23,546	\$ 5,135	\$ 43,415
23 Burlington (GF)	\$ 7,584	\$ 24,573	\$ 9,561	\$ 41,718
24 Clarington	\$ 13,818	\$ 23,546	\$ 2,830	\$ 40,194
25 Halton Hills (BB)	\$ 13,234	\$ 17,075	\$ 9,561	\$ 39,870
26 Scugog	\$ 9,954	\$ 23,546	\$ 5,135	\$ 38,635
27 Milton (BB)	\$ 11,074	\$ 17,075	\$ 9,561	\$ 37,710
28 Uxbridge	\$ 8,779	\$ 23,546	\$ 5,135	\$ 37,460
29 Burlington (BB)	\$ 7,584	\$ 17,075	\$ 9,561	\$ 34,220
1 Vaughan(1)	\$ 44,030	\$ 39,570	\$ 8,096	\$ 91,696
2 Brampton	\$ 30,331	\$ 54,237	\$ 4,572	\$ 89,140
3 Mississauga(1)	\$ 28,323	\$ 54,237	\$ 4,572	\$ 87,132
4 Markham(1)	\$ 35,363	\$ 39,570	\$ 8,096	\$ 83,029
				\$/Unit
			average	\$ 61,587
			median	\$ 63,478

Notes:

BB - Built Boundary Regional Charge; GF - Green Field Regional Charge

1. A component of the charge has been converted from a per hectare charge to a hypothetical single detached unit.



BB=Built Boundary & GF=Greenfield.

1. A component of the charge has been converted from a per hectare charge to a hypothetical single detached unit.

By-law Number *-2023**

of The Regional Municipality of Durham

Being a by-law regarding the imposition of development charges.

WHEREAS section 2(1) of the *Development Charges Act, 1997*, provides that council of a municipality may by by-law, impose development charges against land to pay for increased capital costs required because of increased needs for services arising from development of the area to which the by-law applies if the development requires one or more of the approvals identified in section 2(2) of the *Development Charges Act, 1997*;

AND WHEREAS a development charge background study, dated March 28, 2023, has been prepared in support of the imposition of development charges;

AND WHEREAS the Council of the Regional Municipality of Durham has given notice and will hold a public meeting on April 12, 2023, in accordance with section 12(1) of the *Development Charges Act, 1997*;

AND WHEREAS the Council of the Regional Municipality of Durham has permitted any person who attended the public meeting to make representations in respect of the proposed development charges;

AND WHEREAS Council considered all of the submissions made in respect of the background study and the proposed development charges;

AND WHEREAS at the Council meeting on June 14, 2023, Council approved the Study and adopted the recommendations in Report ●

NOW THEREFORE, the Council of The Regional Municipality of Durham hereby enacts as follows:

1. Interpretation

Definitions

1.1 In this By-law,

- (a) “Act” means the *Development Charges Act, 1997*, or a successor statute;
- (b) “agricultural use” means lands, buildings or structures, excluding any portion thereof used as a dwelling unit or for a commercial use, used or designed or intended for use for the purpose of a *bona fide* farming operation including, but not limited to, animal husbandry, dairying, livestock, fallow, field crops, removal of sod, forestry, fruit farming, greenhouses, horticulture, market gardening, pasturage, poultry keeping, and equestrian facilities;
- (c) “air-supported structure” means a structure consisting of a pliable membrane that achieves and maintains its shape and is supported by internal air pressure;
- (d) “apartment building” means a residential building, or the residential portion of a mixed-use building, consisting of more than 3 dwelling units, which dwelling units have a common entrance to grade but does not include a triplex, semi-detached duplex, semi-detached triplex, or townhouse. Despite the foregoing, an “apartment building” includes stacked townhouses;

- (e) “apartment” means a dwelling unit in an apartment building or a single storey dwelling unit located within or above a residential garage or a commercial use;
- (f) “area municipality” means a lower-tier municipality that forms part of the Region;
- (g) “bedroom” means a habitable room, of at least seven square meters (7 m²) where a built-in closet is not provided, or at least six square meters (6 m²) where a built-in closet is provided, including a den, study, loft, or other similar area, but does not include a living room, a dining room, a bathroom or a kitchen;
- (h) “building or structure” means a permanent enclosed structure and includes an air-supported structure;
- (i) “commercial accessory building or structure” means a building or structure that complies with all of the following criteria:
 - (i) is not essential to,
 - (ii) is naturally and normally incidental to or subordinate in purpose to,
 - (iii) is exclusively devoted to,
 - (iv) is detached from, and
 - (v) is situated on the same property as,

a principal commercial use. Commercial accessory buildings or structures shall include, but not limited to, the separate storage of refuse or the storage of mechanical equipment related to the operation or maintenance of the principal use, building, structure or site. Commercial accessory buildings or structures shall not include any building or structure, whether in whole or in part, falling within the definition of “commercial use” in this by-law;

- (j) “commercial use” means land, buildings or structures used, designed or intended for use for either or both of office and retail uses as defined in this by-law;
- (k) “Council” means the Council of the Regional Municipality of Durham;
- (l) “detached dwelling” and “detached” means a residential building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units on that parcel of land, where no portion of the building is attached to any building on another parcel of land;
- (m) “development” includes redevelopment;
- (n) “development charges” means charges imposed pursuant to this By-law in accordance with the Act, except in sections 3.2 to 3.11 where “development charges” means charges with respect to water supply services, sanitary sewer services and regional road services;
- (o) “duplex” means a building comprising, by horizontal division, two dwelling units on one parcel of land;
- (p) “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;
- (q) “existing industrial building” means a building used for or in connection with,

- (i) manufacturing, producing, processing, storing or distributing something,
- (ii) research or development in connection with manufacturing, producing or processing something,
- (iii) retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site where the manufacturing, production or processing takes place,
- (iv) office or administrative purposes, if they are,
 1. carried out with respect to manufacturing, producing, processing, storage or distributing of something, and
 2. in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution;
- (r) “farm building” means a building or structure used, in connection with a bona fide agricultural use and includes barns, silos, and similar structures, and includes a dwelling located on the same lot as the agricultural use or on a lot directly abutting the agricultural use, which is used exclusively for the housing of temporary or seasonal persons employed exclusively for the farming of that agricultural use, but otherwise excludes a building or structure used, or designed or intended for use for residential or commercial uses;
- (s) “gross floor area” means (except for the purposes of sections 2.24 to 2.26), in the case of a non-residential building or structure or the non-residential portion of a mixed-use building or structure, the aggregate of the areas of each floor, whether above or below grade, measured between the exterior faces of the exterior walls of the building or structure or pliable membrane in the case of an air supported structure, or from the centre line of a common wall separating a non-residential and a residential use, and, for the purposes of this definition, the non-residential portion of a mixed-use building is deemed to include one-half of any area common to the residential and non-residential portions of such mixed-use building or structure;
- (t) “hospice” means a building or structure used to provide not for profit palliative care to the terminally ill;
- (u) “industrial use” means lands, buildings or structures used or designed or intended for use for manufacturing, producing, processing, fabricating or assembly of raw goods, research or development in connection therewith, and includes office uses, warehousing or bulk storage of goods and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include the sale of commodities to the general public through a warehouse club or similar use;
- (v) “institutional use” means lands, buildings or structures used or designed or intended for use by a non-profit organized body, society or religious group for promoting a public and non-profit purpose, and would include a hospice and office uses where such uses are accessory to an institutional use;
- (w) “institutional development” for the purposes of section 3.13 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:
 - 1. a university in Ontario that receives direct, regular and ongoing operating funding from the Government of Ontario,
 - 2. a college or university federated or affiliated with a university described in subclause (i), or
 - 3. 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.
- (x) “local board” means a local board as defined in the Municipal Affairs Act, other than a board defined in subsection 1(1) of the Education Act;
- (y) “medium density multiples” includes plexes, townhouses and all other residential uses that are not included in the definition of “apartment building”, “apartment”, “mobile homes”, “retirement residence units”, “detached”, “detached dwelling” or “semi-detached dwelling”;
- (z) “mixed-use” means land, buildings or structures used, or designed or intended for use, for a combination of at least two of commercial, industrial, institutional or residential uses;
- (aa) “mobile home” means any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent or temporary residence for one or more persons, but does not include a travel trailer or tent trailer or trailer otherwise designed;
- (bb) non-profit housing development, means development of a building or structure intended for use as residential premises and developed by,
 - (i) a corporation to which the Not-for-Profit Corporations Act, 2010 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.
- (cc) “non-residential use” means lands, buildings or structures or portions thereof used, or designed or intended for use for other than residential use, and includes commercial, industrial and institutional uses;
- (dd) “office use” means lands, buildings or structures used or designed or intended for use for the practice of a profession, the carrying on of a business or occupation and, for greater certainty, but without in any way limiting the generality of the foregoing, shall include but not be limited to the office of a physician, lawyer, dentist, architect, engineer, accountant, real estate or insurance agency, insurance company, veterinarian, surveyor, appraiser, financial institution, consumer loan company, employment agency, advertising agency, consulting firm, business service, investment company, security broker, mortgage company, medical clinic, builder, land developer;

- (ee) “place of worship” means a building or structure or part thereof that is used primarily for worship and is exempt from taxation as a place of worship under the Assessment Act;
- (ff) “plex” means a duplex, a semi-detached duplex, a triplex or a semi-detached triplex;
- (gg) “Region” means the Regional Municipality of Durham;
- (hh) “region-wide charges” means the development charges imposed in regard to the region-wide services;
- (ii) “region-wide services” means services in regard to regional roads, regional police, paramedic services, long term care, and waste diversion;
- (jj) “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.
- (kk) “residential use” means lands, buildings or structures used, or designed or intended for use as a home or residence of one or more individuals, and shall include any building or structure containing dwelling units, and include but not limited to, a detached dwelling, a semi-detached dwelling, a townhouse, a plex, a stacked townhouse, an apartment, an apartment building, a mobile home, a retirement residence and a residential dwelling unit accessory to a non-residential use;
- (ll) “retail use” means lands, buildings or structures used or designed or intended for use for the sale or rental or offer for sale or rental of goods or services for consumption or use and, for greater certainty, but without in any way limiting the generality of the foregoing, shall include, but not be limited to, food stores, pharmacies, clothing stores, furniture stores, department stores, sporting goods stores, appliance stores, garden centres, automotive dealers, automotive repair shops, gasoline service stations, government owned retail facilities, private daycare, private schools, private lodging, private recreational facilities, sports clubs, golf courses, skiing facilities, race tracks, gambling operations, medical clinics, funeral homes, motels, hotels, rooming houses, restaurants, theatres, facilities for motion picture, audio and video production and distribution, sound recording services, self-storage facilities and secure document storage;
- (mm) “retirement residence” means a residential building or the residential portion of a mixed-use building which provides accommodation for persons of retirement age, where common facilities for the preparation and consumption of food are provided for the residents of the building, and where each unit or living accommodation has separate sanitary facilities, less than full culinary facilities and a separate entrance from a common hall;
- (nn) “retirement residence unit” means a unit within a retirement residence;
- (oo) “rooming house” means a detached building or structure which comprises rooms that are rented for lodging and where the rooms do not have both culinary and sanitary facilities for the exclusive use of individual occupants;
- (pp) “Seaton Community” means the lands shown on Schedule “F”, which may generally be described as being bounded: to the south by the Canadian Pacific Railway right-of-way; to the west by West Duffins Creek; to the north by Provincial Highway No. 7; and to the east by Sideline 16 and the boundary between the City of Pickering and the Town of Ajax, and excludes the lands comprising the Hamlet communities of Whitevale, Green River and Brougham;

- (qq) “semi-detached building” means a building on two parcels of land, divided vertically (above or below ground) along the common lot line of the two parcels and comprising at least 1 dwelling unit and not more than 3 dwelling units on each parcel;
- (rr) “semi-detached dwelling” means the portion of a semi-detached building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units;
- (ss) “semi-detached triplex” means one of a pair of triplexes divided vertically one from the other by a party wall;
- (tt) “serviced” means the particular service is connected to or available to be connected to the lands, buildings or structures, or, as a result of the development, will be connected to or will be available to be connected to the lands, buildings or structures, or the lands to be developed are in an area designated for the particular service in the Region’s Official Plan;
- (uu) “services” means the services designated in section 2.10 of this by-law;
- (vv) “stacked townhouse” means a building, other than a plex, a detached dwelling or townhouse, containing at least 3 dwelling units; each dwelling unit separated from the other vertically and/or horizontally and each dwelling unit having a separate entrance to grade;
- (ww) “townhouse building” means a residential building, on at least 3 parcels of land divided vertically (above or below ground) along the common lot line between each of the parcels and comprising at least 1 dwelling unit and not more than 3 dwelling units on each parcel;
- (xx) “townhouse dwelling” means the portion of a townhouse building on one parcel of land comprising at least 1 dwelling unit and not more than 3 dwelling units;
- (yy) “triplex” means a building comprising 3 dwelling units.

1.2 In this by-law where reference is made to a statute or a section of a statute such reference is deemed to be a reference to any successor statute or section.

2. Application of By-Law — Rules

Circumstances Where Development Charges are Payable

- 2.1 Development charges shall be payable in the amounts set out in sections 2.11, 2.17 to 2.22 of this by-law where:
- (a) the lands are located in the area described in subsection 2.2 of this by-law; and
 - (b) the development of the lands requires any of the approvals set out in section 2.5.

Area to Which By-law Applies

- 2.2 Subject to subsections 2.3 and 2.4, this by-law applies to all lands in the Region.
- 2.3 This by-law shall not apply to lands that are owned by and used for the purposes of:
- (a) the Region or a local board thereof;
 - (b) a board as defined in subsection 1(1) of the Education Act; and
 - (c) an area municipality or a local board thereof in the Region.

- 2.4 Development charges imposed under this by-law in regard to water supply and sanitary sewerage services do not apply to the development of lands located within the Seaton Community. For greater certainty, the balance of the development charges imposed under this by-law apply to the development of lands located within the Seaton Community.

Approvals for Development

- 2.5 Development charges shall be imposed upon all lands, buildings or structures that are developed for residential or non-residential uses if the development requires,
- (a) the passing of a zoning by-law or of 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 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.

Designation of Services

- 2.6 It is hereby declared by Council that all development of land within the area to which this By-law applies will increase the need for services.
- 2.7 The development charges under this By-law applicable to a development shall apply without regard to the services required or used by a particular development.
- 2.8 No more than one development charge for each service designated in section 2.10 shall be imposed on land to which this by-law applies even though two or more of the actions described in section 2.5 are required before the land can be developed.
- 2.9 Notwithstanding subsection 2.8, if two or more of the actions described in section 2.5 occur at different times, additional development charges shall be imposed if the subsequent action has the effect of increasing the need for services.
- 2.10 The categories of services for which development charges are imposed under this by-law are as follows:
- (a) water supply;
 - (b) sanitary sewerage;
 - (c) regional roads;
 - (d) long term care;
 - (e) regional police;
 - (f) paramedic services; and
 - (g) waste diversion;

The components of the services designated in subsection 2.10 are described on Schedule “A”.

Amount of Charge

Residential

2.11 The development charges described in Schedule “B” to this by-law shall be imposed upon 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, upon the residential uses in the mixed use building or structure, according to the type of residential unit. The development charges payable shall comprise the following:

- (a) Region-wide Charges
 - (i) a development charge with respect to each of the region-wide services according to the type of residential use;
- (b) Regional Water Supply and Sanitary Sewer Charges
 - (i) where the lands, buildings or structures are serviced by regional water supply services, the development charge with respect to water supply services according to the type of residential use;
 - (ii) where the lands, buildings or structures are serviced by regional sanitary sewer services, the development charge with respect to sanitary sewer services according to the type of residential use.

Exemptions

2.12 Development charges shall not be imposed in respect to:

- (a) the issuance of a building permit not resulting in the creation of an additional dwelling unit;
- (b) the enlargement of an existing dwelling unit;
- (c) the creation of additional dwelling units in accordance with the following table:

Description of Class of Existing Residential Buildings	Maximum Number of Additional Dwelling Units	Restrictions
2.12 (c)(i) Existing detached, semi-detached or townhouse dwellings, which contain a single dwelling unit, and where there are no other dwelling units in other buildings or structures on the parcel of land	Two	No exemption applies for the creation of a dwelling unit or units which would result in more than a total of three dwelling units on a parcel of land
2.12 (c)(ii) Existing detached, semi-detached or townhouse dwellings, each of which contains a single dwelling unit and where there is no more than one dwelling unit in	One	No exemption applies for the creation of a dwelling unit or units which would result in more than a total of three dwelling units on a parcel of land

other buildings or structures on the parcel of land		
2.12 (c)(iii) Existing detached, semi-detached or townhouse dwellings, each of which contains no more than 2 dwelling units and where there are no other dwelling units in other buildings or structures on the parcel of land	One	This exemption applies only for the creation of a dwelling unit in an ancillary building or structure and no exemption applies for the creation of a dwelling unit or units which would result in more than a total of three dwelling units on a parcel of land
2.12 (c)(iv) Existing rental residential buildings, each of which contains four or more dwelling units.	Greater of one and 1% of the existing units in the building	No exemption applies where it would result in a total number of dwelling units where units created under the exemption in this By-law would exceed the greater of one unit or 1% of the units existing in the building prior to the first exemption for an additional dwelling unit.
2.12 (c)(v) An existing residential building not in another class of residential building described in this table.	One	No exemption applies where a dwelling unit has already been created with an exemption this By-law.

- (d) the creation of additional dwelling units in accordance with the following table:

Description of Class of Proposed New Residential Buildings & Number of Units Proposed	Restrictions
2.12 (d)(i) the second or third dwelling units in a proposed detached, semi-detached or townhouse dwelling where there are no other dwelling units, existing or proposed, in other buildings or structures on the parcel of land	No exemption applies for the creation of first dwelling unit or where a dwelling unit or units which would result in more than a total of three dwelling units on a parcel of land
2.12 (d)(iii) one dwelling unit in a proposed new residential building that would be ancillary to a proposed new detached dwelling, semi-detached dwelling or townhouse dwelling which would not contain more than a two dwelling units.	No exemption applies for the creation of a dwelling unit which would result in more than a total of three dwelling units on a parcel of land.

- (e) non-profit housing development; and
- (f) residential units that are affordable housing units required to be included in a development or redevelopment (“inclusionary zoning units”) pursuant to a by-law passed under section 34 of the Planning Act to give effect to the policies described in subsection 16 (4) of that Act;

Mobile Home

- 2.13 The development charges imposed upon a mobile home under section 2.11 shall be payable at the rate applicable to an apartment of two bedrooms or larger.
- 2.14 The development charges paid in regard to a mobile home shall be refunded in full to the then current owner thereof, upon request, if the mobile home is removed within ten years of the issuance of the building permit relating thereto.
- 2.15 The onus is on the applicant to produce evidence to the satisfaction of the Region, acting reasonably, which establishes that the applicant is entitled to the refund claimed under this section.

Retirement Residence Unit

- 2.16 The development charges imposed on a retirement residence unit under section 2.11 shall be payable at the rate applicable to an apartment of one bedroom and smaller.

Non-Residential

Commercial

- 2.17 The development charges described in Schedule "C" to this by-law shall be imposed upon commercial uses of lands, buildings or structures, and, in the case of a mixed use building or structure, upon the commercial uses in the mixed use building or structure. The development charges payable shall comprise the following:
- (a) Regional Road Charges
 - (i) a development charge with respect to regional road services according to the gross floor area of the commercial use;
 - (b) Regional Water Supply and Sanitary Sewer Charges
 - (i) where the lands, buildings or structures are serviced by regional water supply services, the development charge with respect to water supply services according to the gross floor area of the commercial use;
 - (ii) where the lands, buildings or structures are serviced by regional sanitary sewer services, the development charge with respect to sanitary sewer services according to the gross floor area of the commercial use.
- 2.18 Subject to subsections 2.19 and 2.20 of this by-law, the development charges imposed on commercial accessory buildings or structures shall be payable at the rate applicable to industrial development under Schedule "E".
- 2.19 The application of development charges at the industrial rate in regard to commercial accessory buildings or structures shall be limited to an aggregate of 7,000 square feet of gross floor area of all such buildings or structures on the same site.
- 2.20 Development charges at the rate applicable to commercial development under Schedule "C" shall be imposed upon the gross floor area of commercial accessory buildings or structures in excess of 7,000 square feet on the same site.

Institutional

- 2.21 The development charges described in Schedule "D" to this by-law shall be imposed upon institutional uses of lands, buildings or structures, and, in the case of a mixed use building or structure, upon the institutional uses in the

mixed use building or structure. The development charges payable shall comprise the following:

- (a) Regional Road Charges
 - (i) a development charge with respect to regional road services according to the gross floor area of the institutional use;
- (b) Regional Water Supply and Sanitary Sewer Charges
 - (i) where the lands, buildings or structures are serviced by regional water supply services, the development charge with respect to water supply services according to the gross floor area of the institutional use;
 - (ii) where the lands, buildings or structures are serviced by regional sanitary sewer services, the development charge with respect to sanitary sewer services according to the gross floor area of the institutional use.

Industrial

2.22 The development charges described in Schedule “E” to this by-law shall be imposed upon industrial uses of lands, buildings or structures, and, in the case of a mixed use building or structure, upon the industrial uses in the mixed use building or structure. The development charges payable shall comprise the following:

- (a) Regional Road Charges
 - (i) a development charge with respect to regional road services according to the gross floor area of the industrial use;
- (b) Regional Water Supply and Sanitary Sewer Charges
 - (i) where the lands, buildings or structures are serviced by regional water supply services, the development charge with respect to water supply services according to the gross floor area of the industrial use;
 - (ii) where the lands, buildings or structures are serviced by regional sanitary sewer services, the development charge with respect to sanitary sewer services according to the gross floor area of the industrial use.

Exemptions

2.23 Notwithstanding the provisions of this by-law, development charges shall not be imposed in regard to:

- (a) agricultural uses and farm buildings;
- (b) places of worship;
- (c) public hospitals receiving aid under the Public Hospitals Act, R.S.O. 1990, c. P.40, excluding such buildings or structures or parts thereof used, designed or intended for use primarily for or in connection with a commercial purpose;
- (d) any part of a building or structure used for the parking of motor vehicles, excluding parking spaces for display of motor vehicles for sale or lease or parking spaces associated with the servicing of motor vehicles;
- (e) free standing roof-like structures and canopies that do not have exterior walls; and

- (f) 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, but only if the lands are occupied and used by the university.

Exemption for Enlargement of Existing Industrial Building

2.24 Despite any other provisions of this by-law, if a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable in respect of the enlargement shall be calculated as follows:

- (a) if the gross floor area is enlarged by fifty percent or less, the amount of the development charge in respect of the enlargement is zero;
- (b) if the gross floor area is enlarged by more than fifty percent the amount of the development charge in respect of the enlargement is the amount of the development charge that would otherwise be payable multiplied by the fraction determined as follows:
 - (i) determine the amount by which the enlargement exceeds fifty percent of the gross floor area before the enlargement; and
 - (ii) divide the amount determined under paragraph (i) by the amount of the enlargement.

2.25 For the purposes of subsection 2.24 the following provisions apply:

- (a) the gross floor area of an existing industrial building shall be calculated as it existed as of July 1, 2023;
- (b) subject to (c) below, the enlargement need not be an attached addition or expansion of an existing industrial building, but rather may be a new standalone structure, provided it is located on the same parcel of land as the existing industrial building;
- (c) in the event that the enlargement is in the form of a standalone building or structure located on the same parcel of land as per (b) above, prior to the issuance of a building permit for the standalone building or structure, the owner shall be required to enter into an agreement with the Region under section 27 of the Act respecting the timing and calculation of payment of development charges, notice of which the owner shall register on the title to the lands at its sole cost and expense with the intention that the provisions shall bind and run with title to the lands. Such agreement will require that in the event that the lands upon which any standalone building or structure is located are the subject of an application for consent under section 53 of the Planning Act; or for which a by-law is passed under subsection 50(7) of the Planning Act, within 10 years of building permit issuance for such standalone building or structure, that the development charges that would have otherwise been payable for such standalone building or structure, shall become due and payable.

2.26 In subsections 2.24 and 2.25 “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.

Reduction of Development Charges For Redevelopment

2.27 Despite any other provision of this by-law, where, as a result of the redevelopment of land, a building or structure existing on the land within five years prior to the date of payment of development charges in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another, in order to facilitate the redevelopment, the

development charges otherwise payable with respect to such redevelopment shall be reduced by the following amounts:

- (a) in the case of a residential building or structure, the amount of the reduction in the applicable development charges will equal the applicable development charges under section 2.11 of this by-law that would have been chargeable on the type of dwelling units demolished or to be demolished or converted to another use; and
- (b) in the case of a non-residential building or structure, the amount of the reduction in the applicable development charges will equal the applicable development charges under sections 2.17 to 2.22 of this by-law that would have been chargeable on the gross floor area of the non-residential building or structure that was demolished or to be demolished or converted to another use;
- (c) in the case of a non-residential building or structure that would have been exempt from the payment of development charges under the current Regional Development Charge By-law, the amount of the reduction in the applicable development charge will equal the applicable development charge under section 2.21 of this by-law that, had the building or structure not been exempt, could have been chargeable on the gross floor area of the non-residential building or structure that was demolished or to be demolished or converted to another use; and
- (d) in the case of a mixed-use building or structure, the amount of the reduction in the applicable development charges will equal the applicable development charges under sections 2.11, 2.17 to 2.22 of this by-law that would have been chargeable either upon the type of dwelling units or the gross floor area of non-residential use in the mixed-use building or structure that is being demolished or to be demolished or converted to another use;

provided that such amounts shall not exceed, in total, the amount of the development charges otherwise payable with respect to the redevelopment.

2.28 The five year period referred to in subsection 2.27 of this by-law shall be calculated from the date of the issuance of the first demolition permit.

2.29 The onus is on the applicant to produce evidence to the satisfaction of the Region, acting reasonably, which establishes that the applicant is entitled to the reduction in the payment of development charges claimed under this section.

Reduction for Rental Housing Development

2.30 The development charges set out on Schedule B shall be:

- (a) In rental housing development, for dwelling units with 3 or more bedrooms: 75% of the Total of All Charges shown on Schedule B;
- (b) In rental housing development, for dwelling units with 2 bedrooms: 80% of the Total of All Charges shown on Schedule B; and
- (c) In rental housing development, for all other dwelling units: 85% of the Total of All Charges shown on Schedule B;
- (d) The amounts in subsections (a) to (c) are in addition to any applicable mandatory phase-in reductions pursuant to section 3.18 of this by-law.

3. Administration

Timing of Payment of Development Charges

- 3.1 Development charges, determined in accordance with section 3.14 and adjusted in accordance with section 3.16 of this by-law, are payable in full on the date on which a building permit is issued with respect to each dwelling unit, building or structure.
- 3.2 Notwithstanding section 3.1, development charges, determined in accordance with sections 3.14 and adjusted in accordance with section 3.16 of this by-law, with respect to water supply services, sanitary sewer services and regional road services shall be payable, with respect to an approval of a residential plan of subdivision under section 51 of the Planning Act, immediately upon the owner entering into the subdivision agreement with the Region, on the basis of the proposed number and type of dwelling units in the plan of subdivision.
- 3.3 Notwithstanding section 3.2, development charges applicable to a high density or condominium block in a residential plan of subdivision are payable in accordance with section 3.1.
- 3.4 Notwithstanding subsection 3.2, where an owner elects to enter into an agreement with the Region pursuant to section 27 of the Act, development charges with respect to water supply services, sanitary sewer services and regional road services may be payable as follows:
- (a) upon the execution of the subdivision agreement, 50% of the development charges otherwise payable under subsection 3.2, adjusted in accordance with section 3.16 to the date of payment; and
 - (b) on the first anniversary date of the execution of the subdivision agreement, 50% of the development charges otherwise payable under subsection 3.2, adjusted in accordance with section 3.16 to the date of payment;

provided, however, in regard to any lot on the plan of subdivision, any balance of the development charges owing during the one year period following execution of the subdivision agreement shall become payable, after adjustment in accordance with section 3.16 to the date of payment, on the date a building permit is issued in regard to such lot.

- 3.5 The balance of the development charges outstanding at any time that are payable in accordance with subsection 3.4 shall be secured by a letter of credit, in a form acceptable to the Region, in an amount which is equal to 55% of the development charges as determined under section 2.11. The payment of the outstanding balance under subsection 3.4 may be made by way of a draw by the Region on the letter of credit.
- 3.6 Notwithstanding subsection 3.1 and subsection 3.4, Council, from time to time, and at any time, may enter into agreements in accordance with section 27 of the Act which provide for all or any part of a development charge to be paid before or after it would otherwise be payable.
- 3.7 If, at the time of issuance of a building permit or permits in regard to a lot on a plan of subdivision for which payments have been made pursuant to subsection 3.2 or 3.4, the type of dwelling unit for which building permits are being issued is different than that used for the calculation and payment under subsection 3.2 or 3.4, and there has been no change in the zoning affecting such lot, and the development charges for the type of dwelling unit for which building permits are being issued were greater at the time that payments were made pursuant to subsection 3.2 or 3.4 than for the type of dwelling unit used to calculate the payment under subsection 3.2 or 3.4, an additional payment to the Region is required, which payment, in regard to such different unit types, shall be the difference between the development charges in respect to the type of dwelling unit for which building permits are being issued, calculated as at the date of issuance of the building permit or permits, and the development charges previously collected in regard thereto, adjusted in accordance with section 3.16 of this by-law to the date of issuance of the building permit or permits.

- 3.8 If, at the time of issuance of a building permit or permits in regard to a lot on a plan of subdivision for which payments have been made pursuant to subsection 3.2 or 3.4, the total number of dwelling units of a particular type for which building permits have been or are being issued is greater, on a cumulative basis, than that used for the calculation and payment under subsection 3.2 or 3.4, and there has been no change in the zoning affecting such lot, an additional payment to the Region is required, which payment shall be calculated on the basis of the number of additional dwelling units at the rate prevailing as at the date of issuance of the building permit or permits for such dwelling units.
- 3.9 If, at the time of issuance of a building permit or permits in regard to a lot on a plan of subdivision for which payments have been made pursuant to subsection 3.2 or 3.4, the type of dwelling unit for which building permits are being issued is different than that used for the calculation and payment under subsection 3.2 or 3.4, and there has been no change in the zoning affecting such lot, and the development charges for the type of dwelling unit for which building permits are being issued were less at the time that payments were made pursuant to subsection 3.2 or 3.4 than for the type of dwelling unit used to calculate the payment under subsection 3.2 or 3.4, a refund in regard to such different unit types shall be paid by the Region, which refund shall be the difference between the development charges previously collected, adjusted in accordance with section 3.16 of this by-law to the date of issuance of the building permit or permits, and the development charges in respect to the type of dwelling unit for which building permits are being issued, calculated as at the date of issuance of the building permit or permits.
- 3.10 If, at the time of issuance of a building permit or permits in regard to a lot on a plan of subdivision for which payments have been made pursuant to subsection 3.2 or 3.4, the total number of dwelling units of a particular type for which building permits have been or are being issued is less, on a cumulative basis, than that used for the calculation and payment under subsection 3.2 or 3.4, and there has been no change in the zoning affecting such lot, a refund shall be paid by the Region, which refund shall be calculated on the basis of the number of fewer dwelling units at the rate prevailing as at the date of issuance of the building permit or permits.
- 3.11 Notwithstanding subsections 3.9 and 3.10, a refund shall not exceed the amount of the development charges paid under subsections 3.2 to 3.6.

Payment by Services

- 3.12 Notwithstanding the payments required under subsection 3.1 to 3.6, the Region may, by agreement pursuant to section 38 of the Act, permit an owner to provide services in lieu of the payment of all or any portion of a development charge. The Region shall give the owner who performed the work a credit towards the development charge in accordance with the agreement subject to the requirements of the Act.
- 3.13 Notwithstanding subsection 3.1 to 3.6, where development charges become payable after January 1, 2020 for development of rental housing that is not non-profit housing development and institutional development, development charges shall be paid in equal annual instalments, with interest where applicable pursuant to the Region of Durham Development Charge Interest Rate Policy as amended from time to time, beginning on the earlier of the date of issuance of a permit under the Building Code Act, 1992 authorizing occupation of the building and the date the building is first occupied, and continuing on the following five anniversaries of that date.

Determining Amount Payable

- 3.14 The development charges payable will be the development charge shown in the applicable Schedules to this by-law to be payable, with indexing under section 3.16, and where applicable, with interest under section 3.17, as follows:

- (a) for those developments to which section 3.13 applies,
 - (i) for applications filed after December 31, 2019, the day an application for an approval of development in a site plan control area under subsection 41 (4) of the Planning Act was made, provided the first building permit is issued within two years of the date that application was approved;
 - (ii) if clause (i) does not apply, for applications filed after December 31, 2019, the day an application for an amendment to a by-law passed under section 34 of the Planning Act was made, provided the first building permit is issued within two years of the date that amendment comes into force and effect; or
 - (iii) if neither clause (i) nor clause (ii) applies, the day the development charge would be payable in accordance with 3.1 to 3.6 of this by-law; and
- (b) for those developments to which section 3.13 does not apply,
 - (i) for applications filed after December 31, 2019, the day an application for an approval of development in a site plan control area under subsection 41 (4) of the Planning Act was made, provided the date the development charge is payable is within two years of the date that application was approved;
 - (ii) if clause (i) does not apply, for applications filed after December 31, 2019, the day an application for an amendment to a by-law passed under section 34 of the Planning Act was made, provided the date the development charge is payable is within two years of the date that amendment is brought into force and effect; or
 - (iii) if neither clause (i) nor clause (ii) applies, the day the development charge would be payable in accordance with sections 3.1 to 3.6 of this by-law.

Front-Ending Agreements

3.15 Council, from time to time, and at any time, may enter into front-ending agreements in accordance with the Act.

Indexing

3.16 Development charges imposed pursuant to this by-law shall be adjusted annually, without amendment to this by-law, as of the 1st day of July, 2024, and on each successive July 1st date in accordance with the Statistics Canada Quarterly, Construction Price Statistics, catalogue number 62-207, for the most recently available annual period ending March 31.

Interest

3.17 Development charges payable per this by-law shall bear interest in accordance with the Region of Durham Development Charge Interest Rate Policy, as amended from time to time.

Mandatory Phase-In Reduction in First Four Years

3.18 Despite the above, the Total of All Charges on Schedules B to E of this by-law shall be reduced for the first four years this by-law is in force in accordance with the applicable mandatory phase-in amounts shown under the Total of All Charges Row on each Schedule, with the annual time period to start on the day this by-law comes into force and increase to the next annual amount on the respective anniversary of the day this by-law comes into force.

3.19 The following schedules to this by-law form an integral part thereof:

- (a) Schedule "A" - Components of Services Designated in section 2.10
- (b) Schedule "B" - Residential Development Charges
- (c) Schedule "C" - Commercial Development Charges
- (d) Schedule "D" - Institutional Development Charges
- (e) Schedule "E" - Industrial Development Charges
- (f) Schedule "F" - Map of Seaton Community

Date By-law in Force

3.20 This by-law shall come into force on July 1, 2023.

Repeal

3.21 By-law No.28-2018 is hereby repealed effective on the date this by-law comes into force.

Registration

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

Severability

3.23 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.

Short Title

3.24 This By-law may be cited as the Regional Municipality of Durham Development Charges By-law, 2023.

This By-law Read and Passed on the -----th day of -----, 2023.

J. Henry, Regional Chair and CEO

A. Harras, Regional Clerk

Schedule "A"

Designated Regional Services and Service Components Thereunder

Category of Regional Services	Service Components
1. Regional Road	<ul style="list-style-type: none">• Regional Road Construction/Improvements/Urbanization• Improvements to Highway Interchanges/Grade Separations• Intersection and Corridor Improvements• Traffic Signals and Systems• Property Acquisition• Maintenance Facilities• Capital Equipment• Landscaping• Environmental Assessment
2. Regional Police	<ul style="list-style-type: none">• Costs to Acquire Land or an Interest in Land, Including a Leasehold Interest• Costs to Improve Land• Costs to Acquire, Lease, Construct or Improve Buildings and Structures• Costs to Acquire, Lease, Construct or Improve Facilities• Vehicles and Capital Equipment
3. Long Term Care	<ul style="list-style-type: none">• Costs to Improve Land• Costs to Acquire, Lease, Construct or Improve Buildings and Structures• Costs to Acquire, Lease, Construct or Improve Facilities
4. Water Supply	<ul style="list-style-type: none">• Pumping Stations• Reservoirs• Feeder mains• Water Supply Plants and Municipal Wells• Property Acquisition• Capital Equipment• Environmental Assessment• Water Use Efficiency Strategy• Well Interference
5. Sanitary Sewerage	<ul style="list-style-type: none">• Sewage Pumping Stations and Forcemains• Trunk Sanitary Sewers• Water Pollution Control Plants• Sludge Storage and Disposal Facilities• Property Acquisition• Capital Equipment• Environmental Assessment• Water Use Efficiency
6. Paramedic Services	<ul style="list-style-type: none">• Costs to Acquire Land or an Interest in Land, Including a Leasehold Interest• Costs to Improve Land• Costs to Acquire, Lease, Construct or Improve Buildings and Structures• Costs to Acquire, Lease, Construct or Improve Facilities• Vehicles and Capital Equipment
7. Waste Diversion	<ul style="list-style-type: none">• Costs for Construction of new Buildings or Units• Capital Equipment

Schedule "B"

**Residential Development Charges per Dwelling Unit
\$ per Dwelling Type**

Service Category	Detached & Semi-Detached \$	Medium Density Multiples \$	Two Bedroom Apartment & Larger \$	One Bedroom Apartment & Smaller \$
Region-Wide Charges				
Regional Roads	26,998	21,501	15,718	9,654
Regional Police	977	778	569	349
Long-Term Care	548	436	319	196
Paramedic Services	441	351	257	158
Waste Diversion	94	75	55	34
Subtotal	29,058	23,141	16,918	10,391
Regional Water Supply & Sanitary Sewer Charges				
Water Supply	26,117	20,800	15,206	9,340
Sanitary Sewerage	23,858	19,000	13,890	8,531
Subtotal	49,975	39,800	29,096	17,871
Total of All Charges (July 1, 2027 onward – see Section 3.18)	79,033	62,941	46,014	28,262
With Phase-Ins (see Section 3.18)				
July 1, 2023 to June 30, 2024 (80%)	63,226	50,353	36,811	22,610
July 1, 2024 to June 30, 2025 (85%)	67,178	53,500	39,112	24,023
July 1, 2025 to June 30, 2026 (90%)	71,130	56,647	41,413	25,436
July 1, 2026 to June 30, 2027 (95%)	75,081	59,793	43,713	26,849

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to Section 3.16 of this By-law.

Schedule “C”

**Commercial Development Charges
\$ per Square Foot of Gross Floor Area**

Service Category	Commercial Development Charges
Water Supply	7.51
Sanitary Sewerage	12.06
Regional Roads	21.91
Total of All Charges (July 1, 2027 onward – see Section 3.18)	41.48
With Phase-Ins (see Section 3.18)	
July 1, 2023 to June 30, 2024 (80%)	33.19
July 1, 2024 to June 30, 2025 (85%)	35.26
July 1, 2025 to June 30, 2026 (90%)	37.33
July 1, 2026 to June 30, 2027 (95%)	39.41

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to Section 3.16 of this By-law.

Schedule “D”

**Institutional Development Charges
\$ per Square Foot of Gross Floor Area**

Service Category	Institutional Development Charges
Water Supply	2.03
Sanitary Sewerage	2.92
Regional Roads	16.61
Total of All Charges (July 1, 2027 onward – see Section 3.18)	21.56
With Phase-Ins (see Section 3.18)	
July 1, 2023 to June 30, 2024 (80%)	17.25
July 1, 2024 to June 30, 2025 (85%)	18.33
July 1, 2025 to June 30, 2026 (90%)	19.40
July 1, 2026 to June 30, 2027 (95%)	20.48

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to Section 3.16 of this By-law.

Schedule "E"

**Industrial Development Charges
\$ per Square Foot of Gross Floor Area**

SERVICE CATEGORY	INDUSTRIAL DEVELOPMENT CHARGES
Water Supply	4.86
Sanitary Sewerage	7.06
Regional Roads	7.59
Total of All Charges (July 1, 2027 onward – see Section 3.18)	19.51
With Phase-Ins (see Section 3.18)	
July 1, 2023 to June 30, 2024 (80%)	15.61
July 1, 2024 to June 30, 2025 (85%)	16.58
July 1, 2025 to June 30, 2026 (90%)	17.56
July 1, 2026 to June 30, 2027 (95%)	18.53

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to Section 3.16 of this By-law.

Schedule "F"

Seaton Community

