Region of Durham

2019 Background Study Regarding a Proposed Development Charge By-law for Regional Water Supply and Sanitary Sewerage Applicable only to the Seaton Area

Prepared by:

The Regional Municipality of Durham

And

Watson & Associates Economists Ltd.

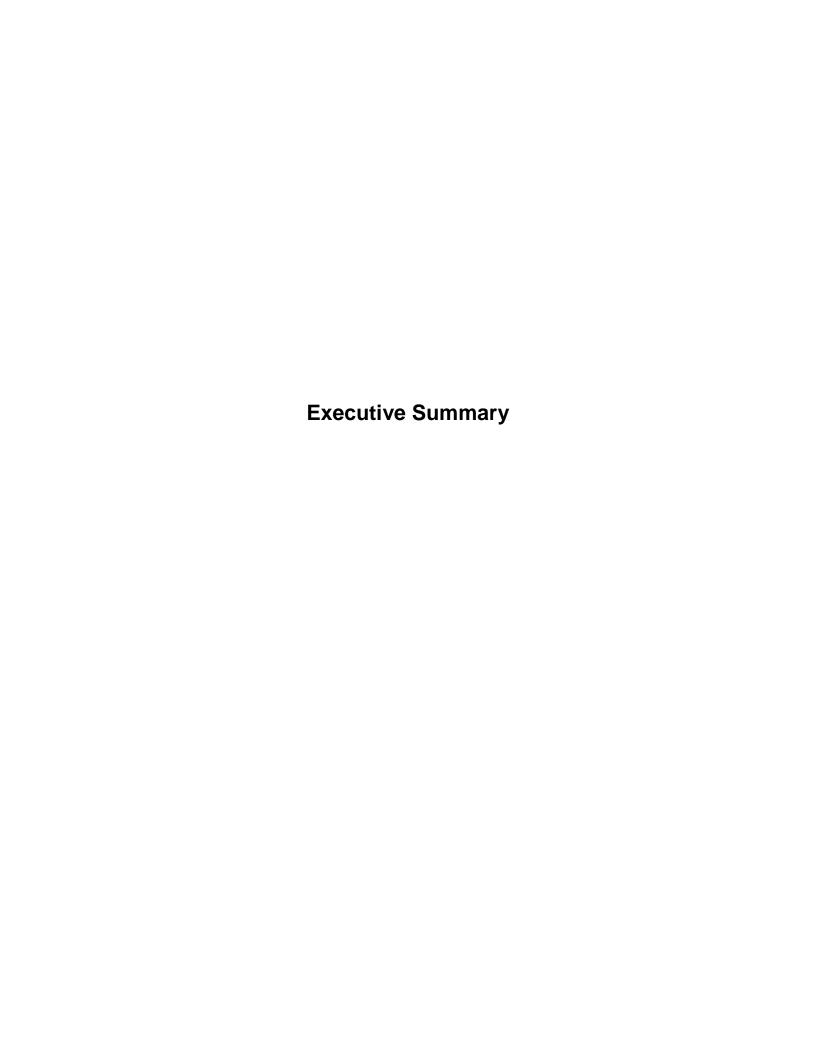
April 9, 2019

Table of Contents

		Page
Exe	cutive Summary	(i)
1.0	Introduction 1.1 Background 1.2 Development Charges Act, 1997 (DCA) Background Study Requirements	2
2.0	The Seaton Development Forecast to 2031 2.1 The Seaton Community	13
	2.2 External Area Forecasts	13
3.0	Development Charge Calculation Assumptions 3.1 Introduction 3.2 Capital Projects 3.3 Benefit to Existing Development Deductions 3.4 Benefit to Growth Elsewhere 3.5 Post Period Benefit (Beyond 2031) 3.6 Financing of Federal Land Servicing 3.7 Residential vs. Non-residential Split 3.8 Capital Cost Indexing/Updating 3.9 Financing Assumptions 3.10 ASDC Payment Timing 3.11 Water and Sanitary Sewer Service Levels 3.12 Capital and Operating Cost Examination 3.13 Asset Management 3.14 Area Specific Rating 3.15 Well Interference Policy 3.16 Proposed ASDCs 3.17 Proposed Changes to the Seaton ASDC By-law	16 17 20 20 21 22 23 23 23 24 25 27 27 27 28 30
4.0	Regional Constructed/Landowner Financed Works Development Charge Component - Water Supply 4.1 Capital Program, Cost Allocations and DC Calculations	31
5.0	Regional Attribution Development Charge Component – Water Supply 5.1 Capital Program, Cost Allocations and DC Calculations	38
6.0	Landowner Constructed and Financed Development Charge Component – Water Supply 6.1 Capital Program, Cost Allocations and DC Calculations	45

Table of Contents (Cont'd)

		Page
7.0	Regional Constructed/Landowner Financed Works Development Charge Component - Sanitary Sewerage 7.1 Capital Program, Cost Allocations and DC Calculations	52
8.0	Regional Attribution Development Charge Component – Sanitary Sewerage 8.1 Capital Program, Cost Allocations and DC Calculations	59
9.0	Landowner Constructed and Financed Development Charge Component – Sanitary Sewerage 9.1 Capital Program, Cost Allocations and DC Calculations	66
10.0	By-law and Implementation Matters 10.1 By-law Provisions 10.2 By-law Policy Modifications 10.3 By-law Adoption Process	74 74 75
Appe	ndices	
Α	Seaton Servicing Area	A-1
В	Seaton Water Supply Servicing	B-1
С	Seaton Sanitary Sewerage Servicing	C-1
D	Seaton Well Interference Policy	D-1
E	Proposed Seaton Area-Specific Development Charge By-law for Water Supply and Sanitary Sewerage	E-1



Executive Summary

1.0 Purpose of this Background Study

- 1.1 The purpose of this Development Charge (DC) Background Study is to update the Seaton Area Specific Development Charge (ASDC) By-law. The updated Seaton water supply and sanitary sewerage ASDC collects, on an equitable basis, the funds necessary to construct watermains, sanitary sewers, pumping stations, reservoirs, plant capacity and any other water supply and sanitary sewerage capital infrastructure necessary to develop the Seaton community as identified in this Background Study.
- 1.2 Regional Council has passed a number of development charge by-laws where the services are imposed on a Region-wide basis and therefore are applicable in the Seaton community, as follows:
 - The Transit DC By-law No. 81-2017 (effective January 1, 2018) for Regional transit services;
 - The GO Transit DC By-law No. 86-2001 (effective December 5, 2001) for GO Transit Service; and
 - Regional DC By-law No. 28-2018 (effective July 1, 2018) which applies to Seaton for Regional roads, police, paramedic, long term care, health and social services, housing services and studies.
- 1.3 Regional DC By-law No. 28-2018 also imposes development charges for water supply and sanitary sewerage services, except for the lands located within the Seaton Community. The rationale for excluding Seaton water supply and sanitary sewerage infrastructure from the Region-wide DC calculation for water supply and sanitary sewerage services is that a front-ending agreement was executed to advance the water and sewer infrastructure required to accommodate the development of Seaton. Area specific development charges for water supply and sanitary sewerage services facilitates the provision of development charge credits.
- 1.4 An ASDC by-law was approved by Regional Council in April 2013 for the imposition of water supply and sanitary sewerage area specific development charges against all lands within the Seaton service area in the City of Pickering (By-law No. 19-2013), that are developed for residential and non-residential uses. The by-law became effective November 26, 2015 which is the date the Seaton Phase 1 Regional Infrastructure Front-ending Agreement (RFEA) between the Region of Durham and the Seaton Landowners Group became effective.
- 1.5 The Seaton Phase 1 RFEA which includes water supply and sanitary sewerage services is underpinned by the Seaton water supply and sanitary sewerage ASDC by-law.
- 1.6 Although the Seaton ASDC By-law does not expire until November 25, 2020, the Seaton Landowners Group has requested that the Region update the Seaton

ASDC By-law to reflect updated capital cost estimates based on recent tenders and on-going construction of water supply and sanitary sewerage infrastructure in Seaton. This is a right extended to the Seaton Landowners Group though the Seaton Phase 1 RFEA.

1.7 This Background Study includes all information necessary to conform to the requirements of the current Development Charges Act and Ontario Regulation 82/98.

2.0 Separate Development Charges

2.1 The following table provides the various types of development charges imposed on the Seaton residential and non-residential lands.

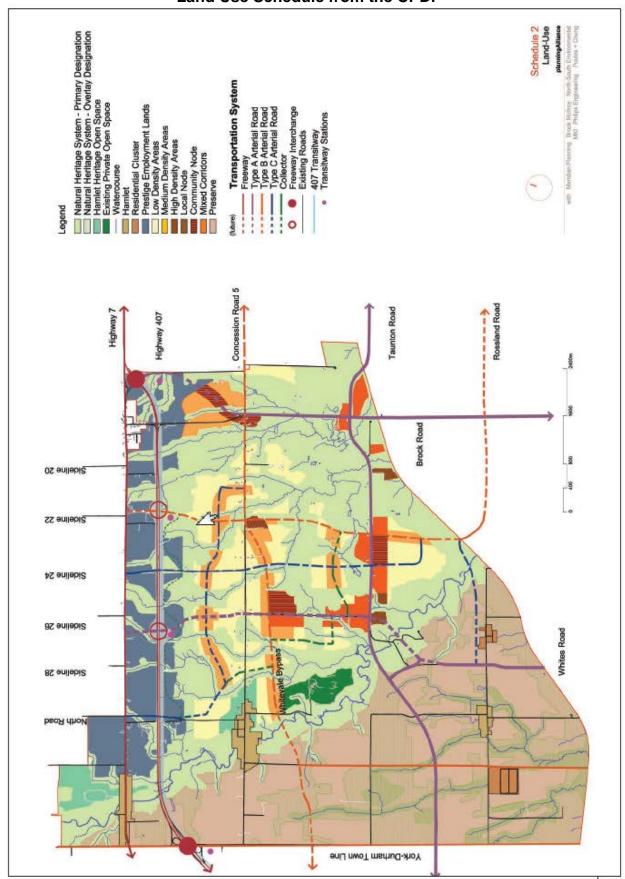
Types of Seaton Area Specific Development Charges Non-Residential Lands Residential Mixed Use Area **Prestige Employment Lands** DC Components **Lands** Non-Institutional Institutional I/C/I Region Constructed - Landowner Funded Works per unit per sq / ft per sq / ft per hectare Regional Attributions 1 per sq / ft per hectare per unit per sq / ft Landowner Constructed and Funded Works per sq / ft per unit per sq / ft per hectare

Table ES-1

Notes

- 1. Includes prior infrastructure costs and future plant expansions
- 2.2 On the residential lands, a per unit charge for water supply and sanitary sewerage services are applied based on the dwelling unit type (i.e. singles and semi-detached units, medium density multiples and one category for apartments). Two different non-residential development charges apply to the Seaton non-residential lands as follows:
 - i. The prestige employment lands along Highways 407 and 7 are subject to a land-based area specific development charge (i.e. a per hectare development charge). Figure 1 on the following page (Land Use schedule from the approved Provincial Central Pickering Development Plan) identifies the prestige employment lands area. It is a uniform charge, that is, the same per hectare charge will apply to all forms of development on these lands; and
 - ii. A separate non-residential development charge applies within the mixeduse area (i.e. non-residential development on lands outside of the prestige employment lands). The non-residential development charge within the mixed-use area are imposed based on floor-area basis (per square foot charge), for institutional and non-institutional development types.

Figure 1
Land Use Schedule from the CPDP



- 2.3 There are three separate components within the residential and non-residential development charges as follows:
 - one for Landowner constructed and financed works;
 - one for Region constructed / Landowner financed works; and
 - one for Regional attributions (mainly prior infrastructure costs and future plant expansions required for subsequent development phases that have been excluded from the Region-wide development charge by-law).

3.0 Seaton Residential and Non-residential Development Forecasts

- 3.1 The forecast period for the development charge background study is 2019 2031. Table ES-2 provides the residential and non-residential development activity (pre-2019) and forecasts from 2019 2031 needed to update the various Seaton residential and non-residential area specific development charges for water supply and sanitary sewerage services.
- 3.2 These development forecasts provide the basis for the update to the area specific development charges in this by-law. The residential forecasts have been updated based on the plans of subdivisions in Seaton, development occurring to date, and the anticipated timing of services. The non-residential forecasts are based on the forecasts included in the 2013 Seaton Development Charge Study, however the absorption has been modified to reflect that there has been no non-residential development in Seaton.
- 3.3 The residential development forecast includes the total number of units (by type) with corresponding single detached equivalent (SDE) unit total. The total number of units is estimated at 19,383 by 2031 and the SDE is estimated at 15,274. The pre-2019 units (1,214 units) are shown for information purposes but are not included in the updated ASDC calculations. The associated DC revenue collected and credits associated with the 1,214 units are incorporated in the updated cash flow calculations opening balances. As such, the residential DC is based on the remaining estimated development of 18,169 units (i.e. 14,171 SDE).
- 3.4 There are an estimated 702 acres of net developable lands on the prestige employment lands (net of local roads, flood plain area, natural heritage system area and storm-water facilities). They are projected to be developed at a rate of approximately 51 acres per year to 2031. This is the basis for the land area charge on the prestige employment lands.
- 3.5 The anticipated development on the mixed-use lands is estimated at approximately 1.87 million square feet (institutional) and 3.3 million square feet of other non-residential development (mainly retail) by 2031. This is the basis for the non-residential development charges (on a floor area basis) in the mixed-use area.
- 3.6 Staff will continue to monitor future development patterns within Seaton to ensure the most reasonable forecasts are being utilized, but will only update the forecast as part of a future Seaton ASDC By-law renewal.

Table ES-2 Seaton Development Forecast (pre-2019 and 2019-2031)

	al		582	330	2,024	1,925	1,394	1,176	,132	,700	,847	2,388	1,705	800′	696	34
	Total		,			Ĺ	`		1	1	_			1	5	20,234
Total Employment (1)	Non-Employment Land (Mixed-Use) Lands	,	619	398	1,035	962	337	213	169	737	714	1,425	742	44	•	7,395
ĭ	Employment Land	,	649	992	686	696	1,057	896	896	896	1,133	696	696	896	896	12,839
	Total (Prestige and Mixed-Use) Sq. Ft Development	,	915 197	1,380,037	1,306,934	1,392,661	1,554,817	660'966	1,076,371	1,488,792	1,638,707	1,877,780	1,756,816	900,586	922,476	17,207,269
	Mixed-Use Institutional GFA Sq. Ft.	,	14 611	141,778	259,007	65,507	171,721	65,507	65,507	239,430	131,014	501,458	117,799	-	-	1,873,338
	Other Mixed-Use Private Sector GFA Sq. Ft.	,		300,000	121,508	426,568	315,080	30,000	110,278	348,776	434,888	475,736	738,432	-	21,528	3,322,792
Employment Lands	GFA Sq. Ft.	,	900 586	938,259	926,419	900,586	910'896	985'006	985'006	985'006	1,072,805	900,586	900,586	985'006	900,948	12,011,138
Employ	Acres	1	17	59	54	51	62	51	51	51	71	51	51	51	51	702
	Total Std Equiv Units	1 103	624	1,408	2,247	1,648	1,766	1,085	1,860	1,071	1,588	715	124	-	-	15,274
-	Total Units	1716 1	815	1,780	2,501	2,351	666'1	1,798	7,800	1,389	1,758	828	150	-	-	19,383
Residential	High Density	,	175	200	1	686		1,141	1,307	431	٠		٠			4,493
	Medium Density	530	421	487	1,211	803	1,111	194	1,113	405	808	539	125		•	8,015
	Low Density	1/87	590	793	1,290	226	888	196	380	553	949	289	25			6,875
	Year	Pre-2019 Absorption	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total to 2031

1. Excludes work at home and no fixed place of work employment

4.0 Water Supply and Sanitary Sewerage Capital Programs

- 4.1 Since the adoption of the 2013 Seaton ASDC By-law, a substantial number of water supply and sanitary sewerage capital infrastructure projects supporting the Seaton Community have been constructed and / or are under construction.
- 4.2 Based on updated information, the following table (ES-3) provides a summary of the estimated water supply and sanitary sewerage capital costs necessary to accommodate the Seaton community. Three separate capital programs are identified for each of the water supply and sanitary sewerage services. These programs underlie the three separate components of the development charges as described in Section 2.0 (i.e. one for landowner constructed and financed works, one for Region constructed / landowner financed works and one for Regional Attributions).
- 4.3 The summary table provides the gross capital costs with deductions for benefit to existing development, post period benefit, benefit to growth elsewhere and benefit to the Federal Lands. The remaining costs are attributable to Seaton and are apportioned between residential and non-residential development.

Table ES-3
Seaton Water Supply and Sanitary Sewerage Capital Cost Summary
(\$ millions, \$2019)

	!		Benefit to Benefit to			Post			Seaton								
	C	ross	Ex	isting	G	rowth	Pe	riod	Fe	deral				Non-re	sident	ial	
		Cost	Deve	lopment	Els	<u>ewhere</u>	Ве	<u>nefit</u>	La	nds ⁽²⁾	Res	idential	Mix	ed-Use	Emp	. Lands	<u>Total</u>
Water Supply - DC Component (1)																	
Regional Cons. / Landowner Financed	\$	140.0	\$	-	\$	13.9	\$	8.2	\$	22.7	\$	85.2	\$	2.2	\$	7.8	\$ 95.2
Regional Attributions		205.2		10.1		49.5	;	38.5		30.6		57.0		4.4		15.1	76.5
Landowner Constructed / Financed		51.4		-		-		5.6		4.5		36.9		1.0		3.4	41.3
Total - Water Supply		396.6		10.1		63.4	;	52.3		57.8		179.1		7.6		26.3	213.0
Sanitary Sewerage - DC Component	(1)																
Regional Cons. / Landowner Financed		45.9		1.3		-		6.1		1.5		27.4		2.1		7.5	37.0
Regional Attributions		272.1		46.3		100.4	;	39.6		26.4		34.5		5.6		19.3	59.4
Landowner Constructed / Financed		99.9		-		-		-		2.3		72.2		5.7		19.7	97.6
Total - Sanitary Sewerage		417.9		47.6		100.4		15.7		30.2		134.1		13.4		46.5	194.0
Total - Water Supply & Sanitary Sewerage																	
Regional Cons. / Landowner Financed		185.9		1.3		13.9		14.3		24.2		112.6		4.3		15.3	132.2
Regional Attributions		477.3		56.4		149.9	-	78.1		57.0		91.5		10.0		34.4	135.9
Landowner Constructed / Financed		151.3		-		-		5.6		6.8		109.1		6.7		23.1	138.9
Total - Water & Sewer	\$	814.5	\$	57.7	\$	163.8	\$ 9	98.0	\$	88.0	\$	313.2	\$	21.0	\$	72.8	\$ 407.0

Notes

- 1. The capital costs for water supply and sanitary sewerage include three separate components, one for capital works to be constructed by the Region but financed by the Seaton Landowners Group, one for capital works to be constructed and financed by the Seaton Landowners Group and the Regional Attributions (works already constructed or to be constructed by the Region)
- 2. The share of capital related to the Federal Lands is the oversizing costs of the infrastructure to provide capacity to service the Federal Lands.

5.0 Development Charge Quantums

5.1 Based on the updated development forecasts, capital cost estimates and cashflow projections, the following tables identify the calculated area specific development charges for water supply and sanitary sewerage services applicable to the residential and non-residential lands within Seaton. The total residential water supply and sanitary sewer charge is proposed to increase from the current rate of \$17,181 per SDE unit to \$21,862 on July 1, 2019. The most significant increase is for sanitary sewerage services, mainly due to the increased project estimates associated with higher tunneling costs.

Table ES-4
Seaton Water Supply and Sanitary Sewerage Area Specific Development Charges
Current and Proposed Residential Development Charges (per SDE)

	ent Rates No. 19-2013)	Proposed Rates	<u>C</u>	<u>hange</u>
Water Supply				
Region Constructed - Landowner Funded Works	\$ 4,264	\$ 5,752	\$	1,488
Regional Attributions	3,700	4,064		364
Landowner Constructed and Funded Works	 2,840	2,424		(416)
Total - Water Supply	 10,804	12,240		1,436
Sanitary Sewerage				
Region Constructed - Landowner Funded Works	1,440	1,863		423
Regional Attributions	2,276	2,751		475
Landowner Constructed and Funded Works	 2,661	5,008		2,347
Total - Sanitary Sewerage	6,377	9,622		3,245
Total - Water Supply and Sanitary Sewerage				
Region Constructed - Landowner Funded Works	5,704	7,615		1,911
Regional Attributions	5,976	6,815		839
Landowner Constructed and Funded Works	 5,501	7,432		1,931
Total - Water & Sewer	\$ 17,181	\$ 21,862	\$	4,681

5.2 The following table identifies the updated calculated area specific development charges for water supply and sanitary sewerage services applicable to the non-residential lands within Seaton. Similar to the residential charges, the increases are mainly for sanitary sewer services due to the anticipated increase in tunneling costs.

Table ES-5
Seaton Water Supply and Sanitary Sewerage Area Specific Development Charges
Current and Proposed Non-Residential Development Charges

	Curr	ent Rates	Pro	posed		
Non-Institutional (per sq ft)	By-law	No. 19-2013)	<u>R</u>	ates	<u>C</u>	<u>hange</u>
Water Supply	\$	1.91	\$	2.08	\$	0.17
Sanitary Sewerage		2.96		3.85		0.89
Total		4.87		5.93		1.06
Institutional (per sq ft)						
Water Supply		0.65		0.73		0.08
Sanitary Sewerage		1.03		1.33		0.30
Total		1.68		2.06		0.38
Prestige Employment Lands (per hectare)						
Water Supply		92,762	10	00,019		7,257
Sanitary Sewerage		144,779	18	35,076		40,297
Total	\$	237,541	\$28	35,095	\$	47,554

6.0 Proposed Changes to Development Charge By-law

- 6.1 A number of changes are proposed to the Seaton ASDC By-law in order to align with Regional DC By-law No. 28-2018. These include:
 - Broadening the exemption for secondary units to include additional units that are built separate from the primary residence, but on the same site;
 - Broadening the eligibility for the industrial expansion to include building expansions not attached to the existing building;
 - New definition of housing services and deferral of DC payment for social and government assisted affordable housing projects for up to 18 months after building permit issuance;
 - Modifications to definitions: farm building and apartment; and
 - New definition of Air Supported Structure and modification to definition of gross floor area.

7.0 Collection Policy

- 7.1 The Seaton area specific development charges are payable on the following basis:
 - i. The residential charges are fully payable at the execution of plan of subdivision for residential development;
 - ii. On the prestige employment lands, the land area charge is payable on the net developable area of the parcel upon building permit issuance for the first non-residential development on each parcel; and
 - iii. On the mixed use area, the non-residential charge (per square foot) is payable on building permit issuance for all non-residential development.

8.0 Indexing

- 8.1 Under the DCA, 1997, 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. 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."
- 8.2 The Seaton Phase 1 RFEA provides for indexing of the Seaton area specific development charges. It is recommended that the Seaton area specific development charges 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. Since the updated charges are in 2019 dollars, the first indexing is to occur on July 1, 2020 and every July 1 thereafter.

9.0 Long Term Capital, Operating Costs and an Asset Management Plan

- 9.1 As a requirement of the 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 in the capital plan. Moreover, subsection 10(2)(c.2) requires that an asset management plan be prepared in accordance with the requirements of the DCA, demonstrating that the assets to be funded under the DC by-law are financially sustainable over their full life cycle.
- 9.2 Long term capital costs for both residential and non-residential development are fully incorporated in the Seaton Water Supply and Sanitary Sewerage Services Development Charges. The Seaton Landowners Group (SLG) are up-fronting both the Landowner Constructed portion and the Regional constructed works. The remaining attributions share will be recovered from the SLG through the payment of area specific residential and non-residential development charges.
- 9.3 The operating costs related to the new infrastructure will be funded 100 per cent from water supply and sanitary sewerage user rates. A Fiscal Impact Study was completed in conjunction with the Seaton Phase 1 Front-ending Agreement to assess the financial implications of the development of Seaton on the Region with respect to facilities, services and infrastructure. The analysis indicated that existing property taxpayers and the existing water and sanitary sewer user ratepayers will not bear any additional costs related to the development of Seaton. Operating Costs will be comparable to the Operating Costs calculated for the Region-wide Water Supply and Sanitary Sewerage Service Systems.
- 9.4 The Fiscal Impact Study included an allowance for the future lifecycle replacement cost of the Seaton water and sewer infrastructure, including the future replacement cost of the major water supply and sanitary sewer items and also the replacement cost of the local water and sewer infrastructure to be constructed by the SLG and assumed by the Region as part of their subdivision agreements. Based on this work, the assets proposed to be funded under the

development charge by-law are deemed to be financially sustainable over the full life cycle.

10.0 Consultation and Subsequent Council Approval

- 10.1 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 passing of the 2019 Seaton Area Specific Development Charge By-law, effective July 1, 2019; and
 - the Background Study, including the growth projections, the developmentrelated capital program, the Development Charge calculations and associated material, subject to any Addendum which may be produced prior to by-law adoption.
- 10.2 The area municipalities, Boards of Trade and Chambers of Commerce, other business associations and the building and development industry have been notified of the pending Background Study and offered contact information for any further discussion.
- 10.3 As summarized below, the public meeting of Regional Council (as required by Section 12 of the DCA) is scheduled for April 24, 2019. Council will consider approval of the by-law on June 26, 2019.
- 10.4 There has been consultation between Regional staff and the Seaton Landowners Group in preparation of this Background Study.

	Process	Date
1.	Outreach to the development community and business	February- March
	associations	2019
2.	Meeting Notice ad placed in newspaper(s)	By April 3, 2019
3.	Proposed By-law and Background Study Available to	April 9, 2019
	public	
4.	Statutory Public Meeting	April 24, 2019
5.	By-law Revisions (if necessary)	May 2019
6.	Council considers adoption of background study and	June 26, 2019
	passage of By-law.	
7.	Implementation of New Development Charge By-law	July 1, 2019
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 pamphlet available	by 60 days after in
		force date

1. Introduction

1.0 Introduction

1.1 Background

1.2 The Region imposes development charges for water supply and sanitary sewerage services through By-law No. 28-2018. s.s.4(3) of that by-law states that:

"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."

1.3 Part 1 of the By-law in (nn) defines the "Seaton Community," as follows:

"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;"

- 1.4 As stated in the 2018 Development Charge Background Study (section 3.2 of the executive summary), the Region implemented area specific development charges for water supply and sanitary sewerage services for the Seaton Community. Through a separate background study and by-law, development in Seaton is subject to the area-specific development charges for water supply and sanitary sewerage services (By-law No. 19-2013). An area specific development charge by-law in Seaton is used in conjunction with a front-ending agreement in order to advance the water supply and sanitary sewerage services necessary to accommodate the Seaton development and to facilitate the provision of development charge credits.
- 1.5 The remaining services covered by By-law Number 28-2018 that are applicable to the entirety of the Region, inclusive of Seaton are:
 - Regional Roads Services;
 - Regional Police Services;
 - Long-term Care Services;
 - Paramedic Services;
 - Health and Social Services;
 - Housing Services; and

• Development-Related Studies.

In addition, Region-wide development, inclusive of Seaton, is subject to:

- By-law No. 81-2017 covering Regional Transit Service; and
- By-law No. 86-2001 covering GO Transit Service.
- 1.6 The Seaton Water Supply and Sanitary Sewerage Area Specific Development Charges (By-law No. 19-2013), collects on an equitable basis, the funds necessary to construct watermains, sanitary sewers, pumping stations, reservoirs and any other water and sewer capital infrastructure necessary to develop the Seaton community, including plant capacity, as identified in this Background Study. The service area to which the charges apply is presented in Appendix A.
- 1.7 The complementary Seaton Phase 1 Regional Infrastructure Front-ending Agreement (RFEA) between the Region of Durham and the Seaton Landowners Group (effective November 26, 2015) includes water supply and sanitary sewerage services and was completed in conjunction with the water supply and sanitary sewerage area specific development charge by-law.
- 1.8 Although the Seaton Area Specific Development Charge (ASDC) By-law does not expire until November 25, 2020, the Seaton Landowners Group has requested that the Region update the Seaton ASDC By-law to reflect updated capital cost estimates based on recent tenders and on-going construction of water supply and sanitary sewerage infrastructure in Seaton. This right has been extended to the Seaton Landowners Group (SLG) through the RFEA.

1.2 Development Charges Act, 1997 (DCA) Background Study Requirements

- 1.2.1 The DCA requires that a development charge background study must be completed by Regional 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, and are as follows:
- a) the estimates under paragraph 1 of subsection 5(1) of the anticipated amount, type and location of development (Chapter 2);
- b) the calculations under paragraphs 2 to 8 of subsection 5(1) for each service to which the development charge by-law would relate (Chapters 4 to 9);
- c) 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 and an asset management plan (Sections 3.12 and 3.13);

- d) a consideration of the use of more than one development charge by-law to reflect the different needs for services in different areas as required under section 10 of the D.C.A. (Section 3.14);
- e) 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 of subsection 5(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 bylaw.
 - 4. The allocation of the costs referred to in paragraph 3 of subsection 5(1) 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.
- 1.2.2 The following tabular text sets out the method that must be used to determine development charges. 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 1-2 which follows.

Summary of Statutory Development Charge Calculation Requirements

(a Para-	s.s.5(1) of the DCA and associated Regulations)	Commentary
1.	"The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated."	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.
	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	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.
2.	"The increase in the need for service attributable to the anticipated development must be estimated for each service to which the development charge by-law would relate."	This step involves estimating the additional service requirement, individually for water, wastewater, roads, etc., that is needed by the development increment in paragraph 1.
		The anticipated development in para. 1 must correspond to the service attribution in para. 2.
		This involves removing statutorily ineligible development (i.e. 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.
		As a result, the total cost/total development approach outlined above is used and has the same effect on the DC quantum.

	s.s.5(1) of the DCA	Commentary
3.	(and associated Regulations) "The estimate under paragraph 2 may include an increase in need only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met."1	The capital forecast underpinning the DC calculation must be formally approved by Council in one of the ways indicated in the Regulation.
	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 if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council."	
4.	"The estimate under paragraph 2 must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding	This provision creates a "service level cap" equal to the cost of providing service to the "anticipated development," consistent with the 10-year historical average level of service.
	the preparation of the background study required under section 10.1 The estimate also must not include an increase in the need for service that relates to a time after the 10-year	In accordance with s.s.5(1)4, services such as Paramedic Services, are restricted to a maximum 10-year planning horizon.
	period immediately following the preparation of the background study unless the service is set out in subsection (5)."	s.s.5(5) lists water, wastewater, storm water, road, police and fire services. They are not subject to a 10 year planning period cap.
		Services other than those excluded in s.s.2(4), may be defined by the municipality and, in some cases, grouped into "service categories" for purposes of reserve funds and credits (as per s.7).
	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."	Two "level of service" considerations must be taken into account in satisfying compliance re the 10-year historical average level of service cap. These considerations involve "quantity" (e.g. floor space/capita) and "quality" (e.g. cost per sq ft of floor space).
	s.s.4(2) addresses the service level in an excluded geographic area where a service is not provided.	
	s.s.4(4) limits the service level in part of a municipality to the level otherwise applicable to the full municipality.	This provision potentially affects area-specific charges.

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

s.s.5(1) of the DCA	Commentary
(and associated Regulations)	Commentary
s.s.4(3) modifies the service level cap where a higher level is required by another Act.	
O.Reg. 206/04 amended s.4 of O.Reg. 82/98 by adding the following subsection:	
"(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.	The Regulation clarifies that the quality level of service measure is to be based on the undepreciated replacement cost of municipal capital works.
5. "The increase in the need for service attributable to the anticipated development must be reduced by the part of that increase that can be met using the municipality's excess capacity, other than excess capacity that the council of the municipality has indicated an intention would be paid for by new development."	"Uncommitted excess capacity" is available capacity that obviates (part of) the need for new projects. It is different than "Post Period Capacity," which is not needed by development during the planning period and is provided for the use of subsequent, i.e. post-2028 development, which can be required to fund it through future DCs.
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 council of the municipality expressed a clear intention that the excess capacity would be paid for by development charges or other similar charges."	The Regulation explains the circumstances under which (part of) the cost of "committed excess capacity," (i.e. infrastructure in the ground from prior DC by-laws or otherwise), can be recovered via future DCs.
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 benefit existing development." Note: no regulatory clarification has been provided.	 Existing development benefits from: 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).

E(4) (4) DOA	
s.s.5(1) of the DCA	Commentary
(and associated Regulations) 7. "The capital costs necessary to provide the increased services must be estimated. The capital costs must be reduced by the reductions set out in subsection (2). What is included as a capital cost is set out in subsection (3)." O.Reg. 82/98 s. 6 indicates that: 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.	s.s.5(2) refers to capital grants, subsidies and other contributions made to a municipality or that Council anticipates will be made in respect of the capital costs.
s.s.5(3) defines capital costs to include: • the acquisition or lease of (an interest in) land; • construction, improvement, acquisition or lease (capital component only) costs for buildings/structures/facilities; • 7+ year useful life rolling stock; • FFE, other than computer equipment; • library materials; • studies re above; • DC Background Studies; and • interest on related	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)). Includes debt payments related to previously constructed growth-related works.
borrowings. 8. "The capital cost must be reduced by 10 per cent. This paragraph does not apply to services set out in subsection (5)."	For example, the 10 percent reduction does apply to: Paramedic Services Long Term Care Health and Social Services Housing Services Studies The purpose of this reduction is undefined, beyond the Province's expressed wish in 1997 to moderate development charge quantum. The exclusion of various services under s.s.2(4) serves a similar purpose. (i.e. Cultural/entertainment facilities, including museums, theatres and art galleries; tourism facilities, including convention centres; parkland acquisition; public hospitals; landfill sites; and general administration headquarters for municipalities/local boards).

(s.s.5(1) of the DCA and associated Regulations)	Commentary
9.	"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)."	These are mandatory DC by-law inclusions as to how the charge is to be applied to development types and circumstances.
	s.s.5(6):	There are three over-riding tests to be met by the DC by-law.
	"The rules developed under paragraph 9 of subsection (1) to determine if a development charge is payable in any particular case and to determine the amount of the charge are subject to the following restrictions:	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
	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) for all the services to which the development charge by-law relates.	means).
	2. If the rules expressly identify a type of development they must not provide for the type of development to pay development charges that exceed the capital costs, determined under paragraphs 2 to 8 of subsection (1), that arise from the increase in the need for services attributable to the type of development.	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.
	However, it is 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.	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.
	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, the rules for determining development charges may not provide for any resulting shortfall to be made up through higher development charges for other development."	This provision provides 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.

s.s.5(1) of the DCA (and associated Regulations)	Commentary
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."	There are optional by-law inclusions such as authority to set rules on discretionary exemptions, phasing in of DCs and indexing of DCs.

Anticipated Development Tax Base, 2. Ineligible Services User Rates, Etc Estimated Increase in Need For Ceiling Re: Service Increased Need 3. Subdivision 7. Specified Local Services Agreements Needs That Will and Consent Be Met **Provisions** 5. Examination of the Long Term Capital and Operating Costs For Capital Infrastructure 6. Less: Grants, Subsidies and **Uncommitted Excess** Capacity Other Contributions 8. 9. Less: Benefit To Existing Devpt. 10% Where Applicable 11. 10. Unfunded Works in Place Financing, Inflation and which will Benefit Future Investment 12. Development Considerations re Cash Flow Calculation 14. Credit Obligations to Landowners to be Recovered DC Net Capital Costs Costs for new development vs. existing development for the term of the by-law and the balance of the period 15. DC By-law(s) Spatial Applicability 16. Amount of the Charge By Type of Development (including apportionment of costs -Consideration of exemptions, residential and non-residential) phase-ins, etc. 17.

Figure 1-2
The Process of Calculating A Development Charge Under the DCA, 1997

2. The Seaton Development Forecast to 2031

2.0 The Seaton Development Forecast to 2031

2.1 The Seaton Community

2.1.1 Table 2-1 summarizes the Seaton Community growth forecast that has been used in this Background Study. The table covers the number of residential dwelling units by type and includes the non-residential gross floor area by type in square feet, employment land area absorption in acres and associated population and employment thereof. The conversion of total residential units to single detached equivalent units is based on the persons per unit shown below which were used in the 2013 ASDC Study and included in the executed Seaton Phase 1 Regional Front-ending Agreement (RFEA).

<u>Dwelling Unit</u>	Persons Per Unit
Singles / Semis detached	3.48
Townhouses (inc. stacked townhouses)	2.76
Apartments	1.59

2.1.2 These development forecasts provide the basis for the update to the area specific development charges in this by-law. The residential forecasts has been updated based on the approved draft plans of subdivisions in Seaton and anticipated timing of services. The non-residential forecasts are based on the forecasts included in the 2013 Study, however the timing of the absorption has been modified to reflect that no non-residential development has commenced to date.

2.2 External Area Forecasts

Although the timing of the development of the Federal lands is unknown, infrastructure is being oversized to accommodate the requirements of development on the Federal Lands. Infrastructure is also being oversized for growth in adjacent areas outside of Seaton. These oversizing costs are excluded from the area specific development charges for Seaton and are discussed in further detail in Section 3.6.

Table 2-1 Seaton Development Forecast (pre-2019 and 2019-2031)

			Residential	al		Employ	Employment Lands				OT	Total Employment (1)	
Year	Low Density	Medium Density	High Density	Total Units	Total Std Equiv Units	Acres	GFA Sq. Ft.	Other Mixed-Use Private Sector GFA Sq. Ft.	Mixed-Use Institutional GFA Sq. Ft	Total (Prestige and Mixed-Use) Sq. Ft Development	Employment Land	Non-Employment Land (Mixed-Use) Lands	Total
Pre-2019													
Absorption	684	530		1,214	1,103		1				1	-	
2019	590	421	125	815	699	51	985'006		14,611	915,197	896	619	1,582
2020	793	487	200	1,780	1,408	26	938,259	300'000	141,778	1,380,037	766	398	1,390
2021	1,290	1,211		2,501	2,247	54	926,419	121,508	259,007	1,306,934	686	1,035	2,024
2022	226	803	686	2,351	1,648	51	985'006	426,568	65,507	1,392,661	896	962	1,925
2023	888	1111		1,999	1,766	62	910'896	315,080	271,721	1,554,817	1,057	337	1,394
2024	196	194	1,141	1,798	1,085	51	985'006	30,000	65,507	860'966	896	213	1,176
2025	380	1,113	1,307	2,800	1,860	51	985'006	110,278	65,507	1,076,371	896	169	1,132
2026	553	405	431	1,389	1,071	51	985'006	348,776	239,430	1,488,792	896	737	1,700
2027	646	608		1,758	1,588	71	1,072,805	434,888	131,014	1,638,707	1,133	714	1,847
2028	289	689		828	715	51	985'006	475,736	501,458	1,877,780	896	1,425	2,388
2029	25	125		150	124	51	900,586	738,432	117,799	1,756,816	696	742	1,705
2030						51	900,586			900,586	696	44	1,008
2031	-			-	-	51	900,948	21,528	-	922,476	696	-	696
Total to 2031	6,875	8,015	4,493	19,383	15,274	702	12,011,138	3,322,792	1,873,338	17,207,269	12,839	7,395	20,234

1. Excludes work at home and no fixed place of work employment

3. Development Charge Calculation Assumptions

3.0 Development Charge Calculation Assumptions

3.1 Introduction

3.1.1 The following table provides the various types of development charges imposed on the Seaton residential and non-residential lands.

Table 3-1

Types of	Seaton Area S _l	pecific Development	Charges	
			Non-Resident	ial Lands
	Residential	Mixed Use	Area	Prestige Employment Lands
DC Components	<u>Lands</u>	Non-Institutional	Institutional	<u>I/C/I</u>
Region Constructed - Landowner Funded Works	per unit	per sq / ft	per sq / ft	per hectare
Regional Attributions	per unit	per sq / ft	per sq / ft	per hectare
Landowner Constructed and Funded Works	per unit	per sq / ft	per sq / ft	per hectare

- 3.1.2 On the residential lands, a per unit charge for water supply and sanitary sewerage services is applied based on the unit type (i.e. singles and semi-detached units, medium density multiples and a category for apartments).
- 3.1.3 The two different non-residential development charges for the non-residential lands are as follows:
 - i. The prestige employment lands along Highways 407 and 7 is subject to land-based area specific development charges for water and sewer (i.e. a per hectare development charge). There is a separate uniform charge for water and sewer, that is, the same per hectare charges will apply to all development on these lands; and
 - ii. Separate non-residential development charges for water and sewer apply within the mixed use area (i.e. non-residential development on lands outside of the prestige employment lands). The non-residential development charge within the mixed-use area is imposed on floor-area basis (per square foot charge), for institutional and non-institutional development types.
- 3.1.4 There are three separate residential charges for each of water supply and sanitary sewerage, consisting of one for landowner constructed and financed works, one for Region constructed / landowner financed works and one for Regional attributions (prior infrastructure costs incurred and future plant expansions required for subsequent development phases).

3.2 Capital Projects

- 3.2.1 Tables 3-3 and 3-4 provide the detailed capital programs for the landowner constructed and financed works, the Region constructed / landowner financed works and one for Regional attributions. Appendix B and C provide the servicing maps that align with the capital programs in Tables 3-3 and 3-4.
- 3.2.2 Table 3-2 provides a summary of the gross capital programs for water supply and sanitary sewerage with deductions for benefit to existing, post period benefit, benefit to growth elsewhere and benefit to the Federal Lands. The remaining costs are attributable to Seaton and are apportioned between residential and non-residential development.

Table 3-2
Sanitary Sewerage and Water Supply Capital Cost Summary
(million, 2019\$)

		Benefit to	Benefit to	Post			Seato	on	
	Gross	Existing	Growth	Period F	ederal		Non-res	idential	
	Cost	Development	Elsewhere	Benefit La	ands ⁽²⁾	Residential	Mixed-Use	Emp. Lands	<u>Total</u>
Water Supply - DC Component (1)									
Regional Cons. / Landowner Financed	\$ 140.0	\$ -	\$ 13.9	\$ 8.2 \$	22.7	\$ 85.2	\$ 2.2	\$ 7.8	\$ 95.2
Regional Attributions	205.2	10.1	49.5	38.5	30.6	57.0	4.4	15.1	76.5
Landowner Constructed / Financed	51.4		-	5.6	4.5	36.9	1.0	3.4	41.3
Total - Water Supply	396.6	10.1	63.4	52.3	57.8	179.1	7.6	26.3	213.0
Sanitary Sewerage - DC Component	(1)								
Regional Cons. / Landowner Financed	45.9	1.3	-	6.1	1.5	27.4	2.1	7.5	37.0
Regional Attributions	272.1	46.3	100.4	39.6	26.4	34.5	5.6	19.3	59.4
Landowner Constructed / Financed	99.9		-	-	2.3	72.2	5.7	19.7	97.6
Total - Sanitary Sewerage	417.9	47.6	100.4	45.7	30.2	134.1	13.4	46.5	194.0
Total - Water Supply & Sanitary Sewe	erage								
Regional Cons. / Landowner Financed	185.9	1.3	13.9	14.3	24.2	112.6	4.3	15.3	132.2
Regional Attributions	477.3	56.4	149.9	78.1	57.0	91.5	10.0	34.4	135.9
Landowner Constructed / Financed	151.3		-	5.6	6.8	109.1	6.7	23.1	138.9
Total - Water & Sewer	\$ 814.5	\$ 57.7	\$ 163.8	\$ 98.0 \$	88.0	\$ 313.2	\$ 21.0	\$ 72.8	\$ 407.0

Notes

- The capital costs for water supply and sanitary sewerage include three separate components, one for capital works to be constructed by the Region but financed by the SLG, one for capital works to be constructed and financed by the SLG and the Regional Attributions (works already constructed or to be constructed by the Region)
- 2. The share of capital related to the Federal Lands is the oversizing costs of the infrastructure to provide capacity to service the Federal Lands.

Table 3-3
Total Water Supply Capital Program

-1			Ī-				_			_	Οτ	т т		_		Su	Ч	۲	_	Ca	•		Pr					_	_		_	0 -					1
	Non-Residential Share Mixed- Use Lands		85.000	486,000	157,000	36,000	331,000	331,000	175,000	000'6	200,000	167,000	215,000	2,000	15,000	25,000			49,000	255,000	131,000	000'59	21,000	146.000	156,000	111,000	35,000		801,000	37,000	91,000	40,000	60,000	143,000	39,000	3.007.000	
Net Seaton	Residential Share Mixed- Use Lands		3.235.000	18,526,000	5,983,000	1,365,000	12,609,000	12,611,000	6,686,000	345,000	7,628,000	6,364,000	8,194,000	168,000	572,000	953,000			1,881,000	9,711,000	4,983,000	2,488,000	000,797	5.560.000	5,936,000	4,248,000	1,329,000		7,634,000	1,405,000	3,476,000	1,508,000	2,293,000	5,460,000	1,465,000	3,580,000	
Net	Prestige Employment Lands		295,000	1,686,000	544,000	124,000	1,148,000	1,148,000	000'609	31,000	694,000	579,000	746,000	15,000	52,000	87,000			171,000	884,000	454,000	227.000	73,000	506,000	540,000	387,000	121,000		2,779,000	128,000	317,000	137,000	209,000	497,000	133,000	326,000	
	Total		3,615,000	20,698,000	6,684,000	1,525,000	14,088,000	14,090,000	7,470,000	385,000	8,522,000	7,110,000	9,155,000	188,000	000'689	1,065,000			2,101,000	10,850,000	5,568,000	2.780.000	891,000	6.212.000	6,632,000	4,746,000	1,485,000		11,214,000	1,570,000	3,884,000	1,685,000	2,562,000	6,100,000	1,637,000	4,000,000	
	Federal		1.522.000	422,000	3,977,000	3,755,000	587,000		4,540,000			4,230,000	3,117,000	125,000	426,000	-			٠		٠	1.853.000	594,000	2.116.000					4,786,000	546,000		4 334 000	2.553.000			18,360,000	-
	Post Period Benefit				-								8.212.000		٠	-			٠		٠	•		5.572.000						2,924,000						35.640.000	
	Benefit to Growth Elsewhere		13.888.000	-	-			-	-				,		•	-			•		•	•							,	2,352,000	14,691,000	2,815,000	6.730,000			11.880.000	
	Benefit to Existing Share			-	-	-	-	- (- (-		-	'	-	- (- (- (,	- (-	,	,		,				10,108,000	-		,				
	Gross Capital Cost		19.025.000	21,120,000	10,661,000	5,280,000	14,675,000	14,090,000	12,010,000	385,000	8,522,000	11,340,000	20,484,000	313,000	1,065,000	1,065,000			2,101,000	10,850,000	5,568,000	4.633.000	1,485,000	13.900.000	6,632,000	4,746,000	1,485,000		16,000,000	17,500,000	18,575,000	4,500,000	11.845,000	6,100,000	1,637,000	4,000,000	
	Phase of Seaton Development		Phase 1	L	Phase 1		3 Phase 2			Phase 1	Phase 2		Phase 2	Phase 1	Phase 1	Phase 1			Phase 1	Phase 1	Phase 1	Phase 1			L				Phase 1	Phase 1		Phase 2		Phase 1	Phase 1	Phase 1	
	Timing (Year)		Complete	2018 - 2020	Complete	2018 - 2020	2024 - 2026	2022 - 2024	2024 - 2026	Complete	2020 - 2024	2028 - 2031	y 2028 - 2031	Complete		2019			Complete	2019	Complete	Complete	2020 - 2021	2020 - 2021	2020 - 2021	Complete	2020 - 2022		Complete	Complete	2025-2027	2018-2019	Complete	2019 >	2019 >	2027	
	ject increased Service Needs Attributable to Anticipated Development o.	Financed by Landowners Group, Constructed by Region of Durham	R1 25 ML Brock Rd. Zone 1 Reservoir			R4 Zone 5 PS (14.1 MLD) @ Zone 4 reservoir					Zone 3 FM - on Taunton Rd. from Zone 3 PS (at Zone 1 reservoir) to Brock Rd. Rb. and on Brock Rd. from Taunton Rd. to Whitevale Rd.		Zone 4 FM - on Whitevale Rd. from Brock Rd. to Westney Rd. and on Westney Rd. Zone 4 PS at Zone 2 reservoir Road from Whitevale Rd. to Westney Rd. Zone 4 PS at Zone 2 reservoir			Zone 5 FM - on Sideline 26 from the northside of Hwy 407 interchange to Zone (13) 5 reservoir		Financed and Constructed by Landowners Group	Zone 3 FM - on Taurton Rd. from Zone 3 PS (at Zone 1 reservoir) to Sideline .1a 24	Zone 3 FM - on Sideline 24 from Taunton Rd. to Whitevale Rd. and on .1b Whitevale Rd. from Sideline 24 to Zone 3 Reservoir	Zone 4 FM - on Taunton Rd. from Zone 4 PS (at Zone 1 reservoir) to Sideline L2 26 and on Sideline 26 to Whitevale Rd.	Zone 4 FM - on Sideline 26 from Whitevale Rd. to the north side Hwy 407 3a Interchange	Zone 4 FM - on Whitevale Rd. from Sideline 26 to Zone 4 PS (at Zone 3 .3b Reservoir)		Т	Zone 5 FM - on Sideline 26 from Whitevale Rd. to north side of the Hwy 407 .6a Interchange	Zone 5 FM - on Whitevale Rd. from Sideline 26 to Zone 5 PS (at Zone 3 .6b reservoir)	Regional Attributions Share	1 Ajax WSP Debt			Zone 1 Feedermain - Harwood Ave from Rossland Rd to Washay Rd Zone 1 Feedermain - Rossland Rd from Brook Rd to Washay Rd		Well Int		9 Depot Maintenance Facilities 0 Aax WSP Expansion	
	Project No.	Finan	WR1	WR2	WR3	WR4	WR5	WR6	WR7	WR8a	WR8b	WR9	WR10	WR11	WR12	WR13		Finan	WL1a	WL1b	WL2	WL3a	WL3b	WL4	WL5	WL6a	WL6b	Regio	, –	2	3	4 α	9	7	∞	6 6	

Table 3-4
Total Sanitary Sewerage Capital Program

										Net 8	Net Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Phase of Seaton Development	Gross Capital Cost estimate	Benefit to Existing Share	Benefit to Growth Elsewhere	Post Period Benefit	Federal Lands	Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non- Residential Share Mixed- Use Lands
Finance	Financed by Landowners Group, Constructed by Region of Durham											
SR1	Seaton SSPS 4 & twin 250 mm forcemains	2017 - 2020	Phase 1	4,800,000					4,800,000	968,000	3,553,000	279,000
SR2a	Central Duffin Collector TSS - upto south side of CPR to Old Taunton Rd. (O/S for Airport & Seaton & other)	Complete	Phase 1	2,195,000			367,000	272,000	1,556,000	314,000	1,152,000	000'06
SR2b	CDC TSS (O/S for Federal Lands & Other) - Old Taunton Rd. to Taunton Rd.	2017 - 2019	Phase 1	2,060,000	•		344,000	255,000	1,461,000	295,000	1,081,000	85,000
SR3a	CDC TSS (O/S for Federal Lands & Other) - on Taunton Rd. and Brock Rd. from Taunton Rd. to Whitevale Rd.	2018 - 2019		7,135,000			2,455,000	304,000	4.376.000	882.000	3,240,000	254,000
8	CDC Brock Rd. TSS (O/S for Federal Lands & Other) - Whitevale	2018 - 2019		3 765 000			1 295 000	161 000	2 309 000	466 000	1 709 000	134 000
SR4	Seaton SSPS 1 & twin 300 mm forcemains (Includes Whitevale)	2022 - 2024		11,879,000	941,000		-	-	10,938,000	2,205,000	8,097,000	636,000
SR5	Seaton SSPS 3 & twin 200 mm forcemains (Includes Green River)	2022 - 2024	Phase 2	7,825,000	405,000				7,420,000	1,496,000	5,493,000	431,000
SR6	CDC Brock Rd. TSS (0/S for Federal Lands & Other) - south of employment lands to Hwy 7	2022 - 2024	Phase 2	6,247,000			1,603,000	460,000	4,184,000	844,000	3,097,000	243,000
Finance	Financed and Constructed by Landowners Group											
2	West Seaton TSS - Central Duffin Collector from Third Concession	Complete	Dhase 1	40 691 000				565 000	40 126 000	000 000 8	29 704 000	0 332 000
SL1b	West Seaton TSS - Whitevale Rd. to south of employment lands	2019	Phase 1	3,949,000				55,000	3,894,000	785,000	2,883,000	226,000
SL2a	West Seaton Sub TSS - Whitevale Rd. to north side of Hwy 407 Interchange	Complete	Phase 1	4,880,000				30,000	4,850,000	978,000	3,590,000	282,000
SL2b	West Seaton Sub TSS - north side of Hwy 407 Interchange to Hwy 7	2019 - 2021	Phase 1	903.000				0000	897.000	181.000	664.000	52.000
SL3a	Central Seaton TSS on Peter Mathews Dr. from Burkholder Dr. to Taunton Rd.		Phase 1	13,663,000				374,000	13.289.000	2.679.000	9.838.000	772.000
SL3b	Central Seaton TSS on Sideline 22 from Taunton Rd. to Whitevale Rd.	2020 - 2021	Phase 1	18,418,000				504,000	17,914,000	3,612,000	13,261,000	1,041,000
<u>v</u>	Central Seaton TSS on Sideline 22 from Whitevale Rd. to south of	2020 - 2021	Dhase 1	1 925 000				53.000	1 872 000	377 000	1 386 000	109 000
3	Central Seaton Sub TSS on Whitevale Rd. from Sideline 22 to			00000					200,1		00000	
SL4a	approx. 475 m east of Sideline 22 Central Seaton Sub TSS from Whitevale Rd. to south of employment	2020 - 2021	Phase 1	1,022,000				24,000	998,000	201,000	739,000	58,000
SL4b	lands	2020 - 2021	Phase 1	3,949,000				94,000	3,855,000	777,000	2,854,000	224,000
SL5	West Seaton TSS (Including Green River) from south of employment lands to Hwy 7	2021 - 2023	Phase 2	4,077,000				182,000	3,895,000	785,000	2,884,000	226,000
SL6	Central Seaton TSS from (SL4b) south of employment lands to Hwy 7	2021 - 2023	Phase 2	3,118,000				302,000	2,816,000	568,000	2,084,000	164,000
SL7	Central Seaton Sub TSS from (SL3c) south of employment lands to Hwy 7	2024 - 2026	Phase 2	3,284,000				153,000	3,131,000	631,000	2,318,000	182,000
Regiona	Regional Attributions Share											
-	York-Durham Debt	Complete	Phase 1	12,822,000	-				12,822,000	4,374,000	7,187,000	1,261,000
2	Biosolids Incineration - Duffin Creek WPCP	2019	Phase 1	95,204,000		73,307,000		6,664,000	15,233,000	5,197,000	8,538,000	1,498,000
ε -	Effluent Discharge Upgrades - Duffin Creek WPCP (Durham Share)	2016 - 2022	Phase 1	51,500,000	22,624,000	8,755,000	7,555,000	3,775,000	8,791,000	2,999,000	4,928,000	864,000
-	Sanitary Sewer Central Duffin Collector upto south side of CPR	O DI	- 1890	1,000,000	23,000,100,000	000,100,0			0,999,000	000,510,000	3,010,000	000,610
2	(Constructed)	Complete	Phase 1	5,978,000		3,910,000	743,000	311,000	1,014,000	204,000	751,000	29,000
9 1	Additional Studies (Seaton Only)	2019 >	Phase 1	1,637,000					1,637,000	330,000	1,212,000	95,000
- &	Duffin Creek WPCP Allocation increase of 45.4 MLD	2029-2031	Phase 2	60,000,000		6,120,000	31,302,000	15,654,000	6,924,000	2,362,000	3,881,000	681,000
	Total			447 026 000	47 651 000	400 473 000	45 664 000	30 108 000	402 040 000	46 456 000	134 005 000	13 380 000
	l Otal			417,926,000	47,001,000	100,473,000	45,664,000	30,198,000	193,940,000	40,430,000	134,095,000	13,309,000

3.2.3 The costs are estimated in 2019 dollars and reflect the total capital needs to provide capacity to meet full build-out, that is 70,000 population and 35,000 employment as per the approved Central Pickering Development Plan. The Seaton costs will be fully recovered from the projected development within Seaton over the 2018 – 2031 time period.

3.3 **Benefit to Existing Development Deductions**

- 3.3.1 Since the area specific development charges are calculated within a geographical service area with limited pre-existing development, a benefit to existing development deduction is not applicable for the majority of the capital items identified in the capital tables.
- 3.3.2 For the water supply capital program, there is only one capital item with a benefit to existing cost share, which is the existing feedermain from the Ajax WSP to Bayly Street (estimated at 58%).
- 3.3.3 For the sanitary sewerage capital program, two pumping stations within the Seaton lands will be constructed with minimal benefit to existing development, based on the flow requirements to service existing residents in the communities of Whitevale and Green River.
- 3.3.4 There are also two applicable capital projects related to the Duffin Creek Water Pollution Control Plant in the City of Pickering, the outcome of the outfall environmental assessment (EA) and Stage 1 and 2 upgrades. The benefit to existing cost share for the outfall project is necessary, as the existing outfall provides service to the existing customers. The outcome of the outfall EA is unknown. The outfall limitation project EA was filed, however the Province issued an order to the Regions of York and Durham to conduct a Phosphorous Reduction Action Plan, which has been submitted. A decision by the Minister of Environment, Conservation and Parks is pending.
- 3.3.5 The Stage 1 and 2 upgrades require a benefit to existing cost share, as these upgrades applied to a share of the existing plant capacity being utilized (estimated at approximately 57.8% or 65.8 MLD being utilized of Durham's share of the rated plant capacity of 114 MLD).

3.4 **Benefit to Growth Elsewhere**

3.4.1 Some of the infrastructure required for Seaton provides capacity for developable lands outside of Seaton within the Region's urban boundary. The majority of these

- capital items are located outside of the Seaton area, as the infrastructure constructed within Seaton mainly benefits Seaton lands only.
- 3.4.2 For water supply, the expansion of the Ajax water supply plant in the Town of Ajax is required to service subsequent phases of the Seaton community. expansion will also provide capacity for other areas within the Ajax and Pickering urban area (estimated at 11% or 18/164 MLD). The Brock Road Zone 1 reservoir is needed for Seaton, however it also provides a large benefit to growth elsewhere (estimated at 73% based on 18.3/25.1 MLD requirements).
- 3.4.3 A number of feedermains required for Seaton also provide capacity to areas outside of Seaton. The methodology used to determine the share attributable to growth elsewhere and the Seaton share is the marginal cost approach. The pipe size required to meet the Regional needs produced the benefit to growth elsewhere. The Seaton share is then based on the increased cost to increase the pipe size to meet the needs of Seaton.
- 3.4.4 For Sanitary Sewer, there is a benefit to growth elsewhere for two capital items at the Duffin Creek WPCP, the Stage 1 and 2 upgrades and the Biosolids incineration These attributions were based on the flow requirements of the adjacent lands that required capacity within the urban boundary. The remaining project (Central Duffin Collector) with a benefit to growth elsewhere has been constructed. This sewer was constructed for the Duffin Heights Community and the pipe size required for this community determined the attribution to benefit to growth elsewhere.

3.5 Post Period Benefit (Beyond 2031)

- 3.5.1 A number of capital projects identified in the capital tables also provide capacity to development areas outside Seaton and long term potential service requirements (post 2031). For example, the expansion of the Ajax WSP will provide excess capacity for lands to be developed post 2031, estimated at 33% (approximately 54 MLD of the 164 MLD planned expansion).
- 3.5.1 A number of feedermains to be constructed within Seaton will be oversized to provide capacity for development post 2031 for lands outside of Seaton. The share for post period benefit is based on the increased cost to upsize the pipe to meet the needs of these lands.
- 3.5.2 For sewer, the plant expansion at the Duffin Creek WPCP and outfall limitations EA solution will provide benefit to development post 2031 and therefore have a

post period benefit share (based on the flows required to service the areas to be developed post 2031). The Central Duffin Collector sanitary sewer that was constructed for the Duffin Heights Community was also oversized for future development (post 2031).

3.6 Financing of Federal Land Servicing

- 3.6.1 The cost estimates provided in the water and sewer capital tables identify a share related to the servicing of the Federal lands north of the Seaton community. Although the timing for development of the Federal Lands has not been determined, the Region is planning to oversize the water supply and sanitary sewerage infrastructure to provide capacity to these lands.
- 3.6.2 The water supply capital program includes oversizing for the future expansion of the Ajax WSP, reservoirs and pumping stations, with the Federal share being based on the estimated flow requirements of the Federal lands. A number of feedermains are also being oversized for the Federal lands. The methodology to allocate the capital cost is based on the marginal cost approach, that is, if the pipe size is required to increase due to the Federal Lands, the additional cost to oversize the pipe is allocated to these lands.
- 3.6.3 For sanitary sewerage, the future plant expansion (Duffin Creek WPCP), outfall limitations EA solution and the biosolids incineration expansion project (at the Duffin Creek WPCP) includes a share for the Federal Lands, based on anticipated flow requirements. There are also a number of sanitary sewers that have a cost share allocated to the Federal Lands, based on the cost to increase the pipe size to service these lands.

3.7 Residential vs. Non-residential Split

3.7.1 The residential / non-residential share for the net Seaton capital costs are as follows:

Table 3-5 Seaton Residential / Non-residential Splits

				Non-resident	tial
Water Supply	Residential	Non-residential	<u>Industrial</u>	<u>Institutional</u>	Commercial
Plants	68.1%	31.9%	12.1%	1.3%	18.5%
Other Infrastructure	89.5%	10.5%	4.0%	0.4%	6.1%

				Non-resident	tial
Sanitary Sewerage	Residential	Non-residential	Industrial	<u>Institutional</u>	Commercial
Plants	56.0%	44.0%	16.6%	1.9%	25.5%
Other Infrastructure	74.0%	26.0%	9.9%	1.1%	15.0%

3.7.2 These splits are based on the full build-out of Seaton (i.e. 70,000 population and 35,000 employment). The water supply plant splits are based on maximum day volume and all other infrastructure is based on maximum hour volume. The sanitary sewerage plant splits are based on average day volume and all other infrastructure is based on peak flow volumes.

3.8 **Capital Cost Indexing/Updating**

- 3.8.1 The capital costs being utilized to update the area specific development charges are based on the most recent estimates (in 2019 dollars) from the on-going construction and design of infrastructure required to accommodate the Seaton community.
- 3.8.2 The Region will also index the area specific development charges annually on July 1 of each year, commencing July 1, 2020.

3.9 **Financing Assumptions**

- 3.9.1 The Region is utilizing a 3.0% inflation rate, 2.5% interest earnings rate and 5.0% debt rate for the calculations of the attribution development charge quantums. These are the capital items the Region has already financed or will be financing in the future and recovers the Seaton share through future development charge collections.
- 3.9.2 For the Regional constructed and Landowner constructed capital works that are financed by the Seaton Landowners, the Region is using a lower debt rate of 3.0% for the capital works they are upfronting. This was requested as part of the 2013 Seaton DC Study. Staff agreed to use this lower debt rate where the Region would not incur borrowing costs.

3.10 Area Specific Development Charge Payment Timing

- 3.10.1 The Seaton ASDC are payable on the following basis:
 - The residential charges are fully payable at the execution of plan of subdivision for residential development;
 - On the prestige employment lands, the land area charge is payable on the net developable parcel area upon building permit issuance for the first nonresidential development on each parcel; and
 - On the mixed use area, the non-residential charge (per square foot) is payable on building permit issuance for all non-residential development.

3.11 Water and Sanitary Sewer Service Levels

3.11.1 The following table summarizes the historical service standards that have been provided for water supply in Durham Region and as planned for Seaton infrastructure. 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								
	Water Supply Standards								
Service	Service Standards Applied								
Component									
Purification Plants	 Design criteria based on historical flow data for the individual municipality, estimated at 550 litres/capita/day is used which includes residential, industrial, commercial and institutional demands 								
	 Treatment based on MOE regulations, MOE guidelines and is site specific. MOE regulations, policies and directives are used in order to establish the final Certificate of Approval (C of A). 								
Reservoirs	Based on MOE guidelines and 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	Based on MOE and Region of Durham design guidelines and standards								

3.11.2 The following table summarizes the historical service standards that have been provided for sanitary sewerage in Durham Region and as planned for Seaton infrastructure. 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							
Treatment Plants	 Design criteria based on historical flow data for the individual municipality, estimated at 386 litres/capita/day is used which includes residential, commercial and institutional demands Treatment based on the MOE guidelines and is site specific. MOE policies and directive are used to establish the final Certificate of Approval (C of A) 							
Pumping Stations	Based on MOE guidelines and system design criteria							
Collection Systems	 Based on MOE and Region of Durham design guidelines and standards 							

3.12 Capital and Operating Cost Examination

- 3.12.1 As a requirement of the D.C.A, 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 in the capital plan.
- 3.12.2 The Seaton-related water supply and sanitary sewerage capital costs identified in Table 3-2 total \$407.0 million. The Seaton Landowners Group (SLG) are upfronting both the Landowner Constructed portion (\$138.9 million) and the Regional constructed works (\$132.2 million). The remaining attributions share (\$135.9 million) will be recovered from the SLG through the payment of area specific residential and non-residential development charges.
- 3.12.3 The pressure on water and sewer user rates related to the share of capital costs that cannot be funded by development charges is limited within the provisions of the area specific development charge by-law due to the following reasons:
 - The foregone development charge revenue due to the exemption on industrial building expansions (as per the DCA) is eliminated with a land based area specific development charge on the prestige employment lands;
 - All non-residential development charges are recommended at the full calculated rate (i.e. no discounted rates); and
 - The Region is providing limited discretionary development charge exemptions.
- 3.12.4 As well, the executed Seaton Phase 1 Front-ending Agreement and other agreements also provides provisions and funding that reduces pressures on user rates needed to fund capital infrastructure related to Seaton. These include:

- A share of the capital costs that cannot be funded by development charges
 (i.e. a share of the Federal share of water supply and sanitary sewerage
 capital and a share of the institutional development that is exempt from
 development charges as per the DCA) is being funded by the SLG;
- Additional contributions of \$30.0 million (over \$10.0 million already collected) from various landowner groups to support transit and other Seaton related infrastructure (including facilities); and
- Provision of land at no cost needed for infrastructure.
- 3.12.5 The operating costs related to the new infrastructure identified in Table 3-2 will be funded 100% from water supply and sanitary sewerage user rates. This includes the future costs to operate and maintain the infrastructure and the future costs to replace these assets. The water supply and sanitary sewerage service level provided in Seaton is expected to be similar to the Region-wide average, therefore the future operating costs are expected to be similar.
- 3.12.6 A Seaton fiscal impact study was completed in conjunction with the Seaton Phase 1 Front-ending Agreement to assess the financial implications of the development of Seaton on the Region with respect to facilities, services and infrastructure. This study addressed that Regional capital and operating cost implications of the development of Seaton out to 2031 and considered the tax based operating and user rate position (for water supply and sanitary sewer services).
- 3.12.7 For water and sewer, the forecasted revenues were estimated based on the expected development in Seaton and compared with the operating costs associated with the new development. For the residential sector, staff identified a neighbourhood with similar lot and house sized anticipated for Seaton to generate representative flow estimates. For the non-residential sector, Regional staff identified various commercial blocks and institutional developments throughout the Region to approximate flow estimates for the commercial and institutional developments in Seaton.
- 3.12.8 As reported in report #2015-J-25, the analysis indicated that existing property taxpayers and the existing water and sanitary sewer user ratepayers will not bear any additional costs related to the development of Seaton.

3.13 Asset Management

- 3.13.1 The D.C.A. requires that a D.C. Background Study include an asset management plan. Moreover, s.s. 10(3) requires that the asset management plan deal with the assets whose capital costs are to be funded by the D.C. by-law, and that the asset management plan demonstrate that the assets are financially sustainable over their full lifecycle. Some of the assets underlying the capital costs included in the Seaton ASDCs have been completed and are currently in operation within the municipality. Moreover, the Region annually updates its Asset Management Plan, which is adopted by Regional Council and will include all the Seaton infrastructure as the assets are constructed and assumed by the Region.
- 3.13.2 As noted in section 3.12, the Region completed a fiscal impact study in conjunction with the Seaton Phase 1 Front-ending Agreement to assess the financial implications of the development of Seaton on the Region with respect to facilities, services and infrastructure. It illustrated that existing water and sanitary sewer user ratepayers will not bear any additional costs related to the development of Seaton. This analysis included an allowance for the future lifecycle replacement cost of the Seaton water and sewer infrastructure, including the future replacement cost of the major water supply and sanitary sewer items and also the replacement cost of the local water and sewer infrastructure to be constructed by the SLG and assumed by the Region as part of their subdivision agreements.
- 3.13.3 Based on this work, the assets proposed to be funded under the development charge by-law are deemed to be financially sustainable over the full life cycle.

3.14 Consideration of Area Rating

3.14.1 Section 10 of the D.C.A. requires that a development charges background study consider the use of more than one development charge by-law to reflect the different needs for services in different areas. The Seaton Water Supply and Sanitary Sewerage Services Development Charge By-law is an area-specific development charge by-law used to underpin a front-ending agreement entered into with the Seaton Landowners Group in order to advance the water and sewer infrastructure required to accommodate the development of Seaton. The area specific development charges for water supply and sanitary sewerage services facilitates the provision of development charge credits.

3.15 Well Interference Policy

3.15.1 The Region has an established Well Interference Policy as approved in the 2018 Regional DC Background Study. This policy 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.

- 3.15.2 The Regional Well Interference Policy approved in the 2018 Regional DC Background Study uses Development Charge revenue to:
 - provide a temporary supply of water during construction of Regional Services to the affected homeowner;
 - 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.
- 3.15.3 This policy is included in this DC Background Study (Appendix D) and costs have been included in the water supply area specific development charge (these costs are funded 100 percent from the water supply area specific development charges based).

3.16 Proposed ASDCs

3.16.1 The following tables provide the updated Seaton ASDCs and compares the current and proposed rates for July 1, 2019. Chapters 4 – 9 provide the detailed cash flow calculations.

Table 3-6
Proposed Seaton Residential and Non-residential ASDCs

	Non-Residential Lands								
		Mixed Us	e Area	Prestige Employment Lands					
	Residential	Non-Institutional	Institutional	I/C/I					
Water Supply	(per SDE)	(per sq ft)	(per sq ft)	(per hectare)					
Region Constructed - Landowner Funded Works	\$ 5,752	\$ 0.57	\$ 0.20	27,474					
Regional Attributions	4,064	1.26	0.44	60,559					
Landowner Constructed and Funded Works	2,424	0.25	0.09	11,986_					
Total - Water Supply	12,240	2.08	0.73	100,019					
Sanitary Sewerage									
Region Constructed - Landowner Funded Works	1,863	0.55	0.19	26,489					
Regional Attributions	2,751	1.84	0.63	87,796					
Landowner Constructed and Funded Works	5,008	1.46	0.51	70,791					
Total - Sanitary Sewerage	9,622	3.85	1.33	185,076					
Total - Water Supply and Sanitary Sewerage									
Region Constructed - Landowner Funded Works	7,615	1.12	0.39	53,963					
Regional Attributions	6,815	3.10	1.07	148,355					
Landowner Constructed and Funded Works	7,432	1.71	0.60	82,777					
Total - Water & Sewer	\$ 21,862	\$ 5.93	\$ 2.06	\$ 285,095					

3.16.2 Based on the updated development forecasts and capital cost estimates, the following tables identify the calculated development charges for water supply and sanitary sewerage applicable to the residential and non-residential lands within

Seaton. The total residential water supply and sanitary sewer charge is proposed to increase from the current rate of \$17,181 for an SDE to \$21,862 on July 1, 2019. The most significant increase is for sanitary sewerage services, mainly due to the increased project estimates associated with higher tunnelling costs.

Table 3-7 **Seaton Water Supply and Sanitary Sewerage Area Specific Development Charges Current and Proposed Residential Development Charges (per SDE)**

	Curre	ent Rates	Proposed		
	(By-law	No. 19-2013)	<u>Rates</u>	<u>C</u>	<u>hange</u>
Water Supply					
Region Constructed - Landowner Funded Works	\$	4,264	\$ 5,752	\$	1,488
Regional Attributions		3,700	4,064		364
Landowner Constructed and Funded Works		2,840	2,424		(416)
Total - Water Supply		10,804	12,240		1,436
Sanitary Sewerage					
Region Constructed - Landowner Funded Works		1,440	1,863		423
Regional Attributions		2,276	2,751		475
Landowner Constructed and Funded Works		2,661	5,008		2,347
Total - Sanitary Sewerage		6,377	9,622		3,245
Total - Water Supply and Sanitary Sewerage					
Region Constructed - Landowner Funded Works		5,704	7,615		1,911
Regional Attributions		5,976	6,815		839
Landowner Constructed and Funded Works		5,501	7,432		1,931
Total - Water & Sewer	\$	17,181	\$ 21,862	\$	4,681

3.16.3 The following table identifies the updated calculated development charges for water supply and sanitary sewerage applicable to the non-residential lands within Seaton. The increases are mainly for sanitary sewer services due to the anticipated increase in tunneling costs.

Table 3-8
Seaton Water Supply and Sanitary Sewerage Area Specific Development Charges
Current and Proposed Non-Residential Development Charges

	Cur	rent Rates	Pro	posed		
Non-Institutional (per sq ft)	(By-lav	v No. 19-2013)	<u>R</u>	ates_	<u>Change</u>	
Water Supply	\$	1.91	\$	2.08	\$	0.17
Sanitary Sewerage		2.96		3.85		0.89
Total		4.87		5.93		1.06
Institutional (per sq ft)						
Water Supply		0.65		0.73		0.08
Sanitary Sewerage		1.03		1.33		0.30
Total		1.68		2.06		0.38
Prestige Employment Lands (per hectare)						
Water Supply		92,762	10	00,019		7,257
Sanitary Sewerage		144,779	18	35,076		40,297
Total	\$	237,541	\$28	35,095	\$	47,554

3.17 Proposed Changes to the Seaton ASDC By-law

- 3.17.1 A number of changes are proposed to the Seaton ASDC By-law in order to align with Regional DC By-law No. 28-2018. These include:
 - Broadening the exemption for secondary units to include additional units that are built separate from the primary residence, but on the same site;
 - Broadening the eligibility for the industrial expansion to include building expansions not attached to the existing building;
 - New definition of housing services and deferral of DC payment for social and government assisted affordable housing projects for up to 18 months after building permit issuance;
 - Modifications to definitions: farm building and apartment; and
 - New definition of Air Supported Structure and modification to definition of gross floor area.

4. Regional Constructed / Landowner Financed Works
Development Charge
Component- Water Supply

4.0 Regional Constructed / Landowner Financed Works Development Charge Component – Water Supply

4.1 Capital Program, Cost Allocations and DC Calculations

- 4.1.1 Table 4-1 capital estimates for the Seaton Water Supply Capital Program that will be constructed by the Region of Durham and funded by the Seaton Landowners Group. The table identifies the growth cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and non-residential development).
- 4.1.2 Tables 4-2 to 4-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 4-1.

Table 4-1
Infrastructure Costs Covered in the DC Calculation
Regional Seaton-Specific Water Supply Capital Works Program – Financed by Landowners Group, Constructed by Durham 2019\$

			Dhana of		Benefit to	Benefit to				Net	Seaton	
Project	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Phase of Seaton	Gross Capital	Existing	Growth	Post Period	Federal		Prestige	Residential	Non-Residential
No.	increased Service Needs Attributable to Anticipated Development	rilling (rear)	Development	Cost estimate	Share	Elsewhere	Benefit	Lands	Total	Employment	Share Mixed-	Share Mixed-
			Development		Silare	Lisewilere				Lands	Use Lands	Use Lands
WR1	25 ML Brock Rd. Zone 1 Reservoir	Complete	Phase 1	19,025,000	-	13,888,000	-	1,522,000	3,615,000	295,000	3,235,000	85,000
WR2	Zone 4 Reservoir (17 ML)	2018 - 2020	Phase 1	21,120,000	-	-	-	422,000	20,698,000	1,686,000	18,526,000	486,000
WR3	Zone 3 PS (62.2 MLD) and Zone 4 PS (32.2 MLD) @ Zone 1 reservoir	Complete	Phase 1	10,661,000	-	-	-	3,977,000	6,684,000	544,000	5,983,000	157,000
WR4	Zone 5 PS (14.1 MLD) @ Zone 4 reservoir	2018 - 2020	Phase 1	5,280,000	-	-	-	3,755,000	1,525,000	124,000	1,365,000	36,000
WR5	Zone 3 Reservoir (10 ML)	2024 - 2026	Phase 2	14,675,000	-	-	-	587,000	14,088,000	1,148,000	12,609,000	331,000
WR6	Zone 5 Elevated Tank (8.8 ML)	2022 - 2024	Phase 2	14,090,000	-	-	-	-	14,090,000	1,148,000	12,611,000	331,000
WR7	Zone 4 PS (46.5 MLD) and Zone 5 PS (10.6 MLD) @ Zone 3 Reservoir	2024 - 2026	Phase 2	12,010,000	-	-	-	4,540,000	7,470,000	609,000	6,686,000	175,000
WR8a	Zone 3 FM - Zone 3 PS (at Zone 1 reservoir) to Taunton Rd.	Complete	Phase 1	385,000	-	-	-	-	385,000	31,000	345,000	9,000
	Zone 3 FM - on Taunton Rd. from Zone 3 PS (at Zone 1 reservoir) to Brock Rd.											
WR8b	and on Brock Rd. from Taunton Rd. to Whitevale Rd.	2020 - 2024	Phase 2	8,522,000	-	-	-	-	8,522,000	694,000	7,628,000	200,000
WR9	Zone 4 PS (40.1 MLD) at Westney Zone 2 reservoir	2028 - 2031	Phase 2	11,340,000	-	-	-	4,230,000	7,110,000	579,000	6,364,000	167,000
	Zone 4 FM - on Whitevale Rd. from Brock Rd. to Westney Rd. and on Westney											
WR10	Road from Whitevale Rd. to Westney Rd. Zone 4 PS at Zone 2 reservoir	2028 - 2031	Phase 2	20,484,000	-	-	8,212,000	3,117,000	9,155,000	746,000	8,194,000	215,000
WR11	Zone 4 FM - Zone 4 PS (at Zone 1 reservoir) to Taunton Road	Complete	Phase 1	313,000	-	-	-	125,000	188,000	15,000	168,000	5,000
	Zone 4 FM - on Sideline 26 from north side of Hwy 407 Interchange to Zone 4											
WR12	reservoir	2019	Phase 1	1,065,000	-	-	-	426,000	639,000	52,000	572,000	15,000
	Zone 5 FM - on Sideline 26 from the northside of Hwy 407 interchange to Zone 5							_				
WR13	reservoir	2019	Phase 1	1,065,000	-	-	-	-	1,065,000	87,000	953,000	25,000
	Total			140,035,000	-	13,888,000	8,212,000	22,701,000	95,234,000	7,758,000	85,239,000	2,237,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 4-2
Residential Water Supply
Regional Seaton-Specific Water Supply Capital Works Program – Financed by Landowners Group, Constructed by Durham (\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(20,396)	-	1,573	1,573	659	5,752	3,791	(18,179)	(545)	(18,724)
2020	(18,724)	-	5,811	5,985	1,408	5,925	8,342	(16,367)	(491)	(16,858)
2021	(16,858)	-	-	1	2,247	6,103	13,713	(3,145)	(94)	(3,239)
2022	(3,239)	-	1,261	1,378	1,648	6,286	10,359	5,742	144	5,885
2023	5,885	-	-	•	1,766	6,474	11,434	17,319	433	17,752
2024	17,752	-	20,145	23,353	1,085	6,669	7,235	1,634	41	1,675
2025	1,675	-	-	•	1,860	6,869	12,776	14,451	361	14,812
2026	14,812	-	17,366	21,358	1,071	7,075	7,577	1,031	26	1,057
2027	1,057	-	-	1	1,588	7,287	11,572	12,629	316	12,944
2028	12,944	-	1,456	1,899	715	7,506	5,367	16,412	410	16,822
2029	16,822	-	-	1	124	7,731	959	17,780	445	18,225
2030	18,225	-	-	1	-	7,963	-	18,225	456	18,681
2031	18,681	-	13,102	18,680	-	8,202	-	0	0	0
	Total		60,714	74,227	14,171		93,124		1,500	

	Sir	ngle/Semi	Medium	
Measure	D	etached	Density	Apartment
DC/Residential Unit Type	\$	5,752	\$ 4,544	\$ 2,646

1. Table 4-1 identifies \$85.2 million in the residential share of Seaton capital costs, which includes \$60.7 million in future costs and \$24.5 million in prior costs. The opening balance reflects the prior costs, development charge credits realized and the indexing of development charge credits.

Table 4-3

Prestige Employment Lands – Per Acre Charge for Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed by Landowners Group, Constructed by Durham (\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(2,276)	-	143	143	50.8	11,119	564	(1,854)	(56)	(1,910)
2020	(1,910)	-	529	545	59.4	11,452	680	(1,775)	(53)	(1,828)
2021	(1,828)	-	-	-	53.7	11,796	634	(1,195)	(36)	(1,231)
2022	(1,231)	-	115	125	50.8	12,150	617	(739)	(22)	(762)
2023	(762)	-	-	-	61.6	12,514	771	10	0	10
2024	10	-	1,834	2,126	50.8	12,890	654	(1,462)	(44)	(1,505)
2025	(1,505)	-	-	-	50.8	13,276	674	(832)	(25)	(857)
2026	(857)	-	1,581	1,944	50.8	13,675	694	(2,107)	(63)	(2,170)
2027	(2,170)	-	-	-	70.5	14,085	993	(1,177)	(35)	(1,212)
2028	(1,212)	-	133	173	50.8	14,507	736	(649)	(19)	(668)
2029	(668)	-	-	-	50.8	14,943	758	90	2	93
2030	93	-	-	-	50.8	15,391	781	874	22	896
2031	896	-	1,193	1,700	50.8	15,853	805	0	0	0
	Total		5,527	6,757	702.0		9,362		(329)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 11,119	\$ 27,474

1. Table 4-1 identifies \$7.8 million in the prestige employment lands share of Seaton capital costs, which includes \$5.5 million in future costs and \$2.3 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 4-4

Non-Institutional Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed by Landowners Group, Constructed by Durham

Year	DC Reserve Fund Opening Balance	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated ft2 at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(547,544)	34,458	34,458	•	0.57	•	(582,002)	(17,460)	(599,462)
2020	(599,462)	127,276	131,094	300,000	0.58	174,836	(555,720)	(16,672)	(572,392)
2021	(572,392)	-	•	121,508	0.60	72,938	(499,454)	(14,984)	(514,438)
2022	(514,438)	27,623	30,185	426,568	0.62	263,738	(280,885)	(8,427)	(289,311)
2023	(289,311)	-	-	315,080	0.64	200,652	(88,659)	(2,660)	(91,319)
2024	(91,319)	441,242	511,521	30,000	0.66	19,678	(583,162)	(17,495)	(600,657)
2025	(600,657)	-	-	110,278	0.68	74,505	(526,152)	(15,785)	(541,937)
2026	(541,937)	380,384	467,824	348,776	0.70	242,706	(767,056)	(23,012)	(790,067)
2027	(790,067)	-	•	434,888	0.72	311,708	(478,359)	(14,351)	(492,710)
2028	(492,710)	31,886	41,604	475,736	0.74	351,216	(183,099)	(5,493)	(188,592)
2029	(188,592)	-	-	738,432	0.76	561,508	372,915	9,323	382,238
2030	382,238	-		-	0.78		382,238	9,556	391,794
2031	391,794	286,977	409,161	21,528	0.81	17,367	0	0	0
	Total	1,329,848	1,625,849	3,322,792		2,290,850		(117,458)	

	Non-	-Institutional
Development Charge/sq ft	\$	0.57

1. Table 4-1 identifies \$2.2 million in the non-residential mixed use lands share of Seaton capital costs (\$1.8 million for non-institutional). The non-institutional share includes \$1.3 million in future costs and \$0.5 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 4-5
Institutional Water Supply
Regional Seaton-Specific Water Supply Capital Works Program – Financed by Landowners Group, Constructed by Durham

Year	DC Reserve Fund Opening Balance	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated ft2 at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(107,860)	6,788	6,788	14,611	0.20	2,890	(111,758)	(3,353)	(115,111)
2020	(115,111)	25,072	25,824	141,778	0.20	28,886	(112,049)	(3,361)	(115,410)
2021	(115,410)	-	-	259,007	0.21	54,354	(61,056)	(1,832)	(62,888)
2022	(62,888)	5,442	5,946	65,507	0.22	14,159	(54,675)	(1,640)	(56,315)
2023	(56,315)	-	•	271,721	0.22	60,495	4,179	104	4,284
2024	4,284	86,920	100,764	65,507	0.23	15,022	(81,458)	(2,444)	(83,902)
2025	(83,902)	-	•	65,507	0.24	15,472	(68,430)	(2,053)	(70,483)
2026	(70,483)	74,932	92,156	239,430	0.24	58,248	(104,391)	(3,132)	(107,523)
2027	(107,523)	-	•	131,014	0.25	32,829	(74,693)	(2,241)	(76,934)
2028	(76,934)	6,281	8,196	501,458	0.26	129,424	44,294	1,107	45,401
2029	45,401	-	-	117,799	0.27	31,315	76,717	1,918	78,634
2030	78,634	-	•	-	0.27	-	78,634	1,966	80,600
2031	80,600	56,531	80,600	-	0.28	-	0	0	0
	Total	261,966	320,274	1,873,338		443,094		(14,960)	

	Institutional
Development Charge/sq ft	\$ 0.20

1. Table 4-1 identifies \$2.2 million in the non-residential mixed use lands share of Seaton capital costs (\$0.4 million for institutional). The institutional share includes \$0.3 million in future costs and \$0.1 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

5. Regional Attribution Development Charge Component – Water Supply

5.0 Regional Attribution Development Charge Component – Water Supply

5.1 Capital Program, Cost Allocations and DC Calculations

- 5.1.1 The following table (Table 5-1) provides the capital estimates for the Seaton Water Supply Capital Program (Regional Attributions portion). This includes prior infrastructure costs and future plant expansions required for subsequent development phases. The table identifies the growth cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and non-residential development).
- 5.1.2 Tables 5-2 to 5-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 5-1.

Table 5-1
Infrastructure Costs Covered in the DC Calculation
Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Durham (Attributions Share)
2019\$

			Phase of	Gross Capital	Benefit to	Benefit to				Net	Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Seaton Development	Cost Estimate	Existing Share	Growth Elsewhere	Growth Post Period		Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non-Residential Share Mixed- Use Lands
1	Ajax WSP Debt	Complete	Phase 1	16,000,000		-	-	4,786,000	11,214,000	2,779,000	7,634,000	801,000
2	Feedermains - Ajax WSP to Bayly	Complete	Phase 1	17,500,000	10,108,000	2,352,000	2,924,000	546,000	1,570,000	128,000	1,405,000	37,000
3	Zone 1 Feedermain - Bayly St from Pickering Beach to Toy Ave.	2025-2027	Phase 2	18,575,000	-	14,691,000	-	-	3,884,000	317,000	3,476,000	91,000
4	Zone 1 Feedermain - Harwood Ave from Rossland Rd to Magill Dr.	2018-2019	Phase 2	4,500,000	-	2,815,000	-	-	1,685,000	137,000	1,508,000	40,000
5	Zone 1 Feedermain - Rossland Rd. from Brock Rd. to Westney Rd.	2014 - 2019	Phase 1	17,063,000	-	11,029,000	-	4,334,000	1,700,000	139,000	1,521,000	40,000
6	Zone 1 Feedermain - Brock Rd. from Rossland to Zone 1 Reservoir	Complete	Phase 1	11,845,000	-	6,730,000	-	2,553,000	2,562,000	209,000	2,293,000	60,000
7	Well Interference	2019 >	Phase 1	6,100,000	-	-	-	-	6,100,000	497,000	5,460,000	143,000
8	Additional Studies (Seaton Only)	2019 >	Phase 1	1,637,000	-	-	-	-	1,637,000	133,000	1,465,000	39,000
9	Depot Maintenance Facilities	2027	Phase 1	4,000,000	-	-	-	-	4,000,000	326,000	3,580,000	94,000
10	Ajax WSP Expansion	2020-2024	Phase 2	108,000,000	-	11,880,000	35,640,000	18,360,000	42,120,000	10,440,000	28,673,000	3,007,000
	Total			205,220,000	10,108,000	49,497,000	38,564,000	30,579,000	76,472,000	15,105,000	57,015,000	4,352,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 5-2 Residential Water Supply egional Seaton-Specific Water Supply Capital Works Program – Financed and C

Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Durham (Attributions Share) (\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Developmnt Related Expenses	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(13,006)	-	2,754	2,754	659	4,064	2,678	(13,082)	(654)	(13,736)
2020	(13,736)	-	398	410	1,408	4,186	5,893	(8,253)	(413)	(8,666)
2021	(8,666)	-	•	-	2,247	4,311	9,687	1,021	26	1,047
2022	1,047	-	1,239	1,354	1,648	4,440	7,318	7,010	175	7,186
2023	7,186	-	-	-	1,766	4,574	8,077	15,263	382	15,644
2024	15,644	-	31,994	37,090	1,085	4,711	5,111	(16,334)	(817)	(17,151)
2025	(17,151)	-	187	223	1,860	4,852	9,025	(8,349)	(417)	(8,766)
2026	(8,766)	-	45	55	1,071	4,998	5,353	(3,469)	(173)	(3,642)
2027	(3,642)	-	6,869	8,702	1,588	5,148	8,175	(4,170)	(208)	(4,378)
2028	(4,378)	-	-	-	715	5,302	3,791	(587)	(29)	(616)
2029	(616)	-	•	-	124	5,461	677	61	2	62
2030	62	-	45	62	-	5,625	-	0	0	0
2031	0	-	-	-	-	5,794	-	0	0	0
	Total	-	43,531	50,650	14,171		65,785		(2,128)	

Measure	gle/Semi tached	Medium Density	Apartment
DC/Residential Unit Type	\$ 4,064	\$ 3,210	\$ 1,869

1. Table 5-1 identifies \$57.0 million in the residential share of Seaton capital costs, which includes \$43.5 million in future costs and \$13.5 million in prior costs. The opening balance reflects the prior costs indexed, development charges collected and capital costs excluded (i.e. Cost of EA funded by Seaton Landowners Group).

Table 5-3

Prestige Employment Lands – Per Acre Charge for Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Durham (Attributions Share)

(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(4,631)	-	251	251	50.8	24,508	1,244	(3,638)	(182)	(3,820)
2020	(3,820)	-	145	149	59.4	25,243	1,498	(2,471)	(124)	(2,594)
2021	(2,594)	-	-	ı	53.7	26,001	1,397	(1,198)	(60)	(1,258)
2022	(1,258)	-	439	480	50.8	26,781	1,359	(378)	(19)	(397)
2023	(397)	-	-	•	61.6	27,584	1,700	1,303	33	1,336
2024	1,336	-	10,307	11,949	50.8	28,412	1,442	(9,172)	(459)	(9,630)
2025	(9,630)	-	17	20	50.8	29,264	1,485	(8,165)	(408)	(8,573)
2026	(8,573)	-	4	5	50.8	30,142	1,530	(7,049)	(352)	(7,401)
2027	(7,401)	-	625	792	70.5	31,046	2,189	(6,004)	(300)	(6,304)
2028	(6,304)	-	-	•	50.8	31,977	1,623	(4,681)	(234)	(4,915)
2029	(4,915)	-	-	-	50.8	32,937	1,672	(3,244)	(162)	(3,406)
2030	(3,406)	-	4	6	50.8	33,925	1,722	(1,690)	(84)	(1,774)
2031	(1,774)	=	=	•	50.8	34,943	1,774	(0)	(0)	(0)
	Total	-	11,793	13,652	702.0		20,635	·	(2,352)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 24,508	\$ 60,559

1. Table 5-1 identifies \$15.1 million in the prestige employment lands share of Seaton capital costs, which includes \$11.8 million in future costs and \$3.3 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA funded by Seaton Landowners Group).

Table 5-4

Non-Institutional Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Durham (Attributions Share)

Year	DC Reserve Fund Opening Balance	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(1,114,339)	60,321	60,321	-	1.26	-	(1,174,660)	(58,733)	(1,233,393)
2020	(1,233,393)	34,891	35,938	300,000	1.30	389,266	(880,065)	(44,003)	(924,068)
2021	(924,068)	-	-	121,508	1.34	162,393	(761,675)	(38,084)	(799,759)
2022	(799,759)	105,653	115,450	426,568	1.38	587,202	(328,008)	(16,400)	(344,408)
2023	(344,408)	-	-	315,080	1.42	446,742	102,334	2,558	104,893
2024	104,893	2,480,225	2,875,260	30,000	1.46	43,812	(2,726,555)	(136,328)	(2,862,883)
2025	(2,862,883)	4,099	4,895	110,278	1.50	165,882	(2,701,896)	(135,095)	(2,836,990)
2026	(2,836,990)	980	1,206	348,776	1.55	540,374	(2,297,822)	(114,891)	(2,412,714)
2027	(2,412,714)	150,464	190,603	434,888	1.60	694,004	(1,909,312)	(95,466)	(2,004,778)
2028	(2,004,778)	-	-	475,736	1.64	781,966	(1,222,812)	(61,141)	(1,283,952)
2029	(1,283,952)	-	-	738,432	1.69	1,250,173	(33,780)	(1,689)	(35,469)
2030	(35,469)	980	1,357	-	1.74	-	(36,825)	(1,841)	(38,667)
2031	(38,667)	-	-	21,528	1.80	38,667	0	0	0
	Total	2,837,614	3,285,030	3,322,792		5,100,481	<u> </u>	(701,112)	

	Non	-Institutional
Development Charge/sq ft	\$	1.26

1. Table 5-1 identifies \$4.3 million in the non-residential mixed use lands share of Seaton capital costs (\$3.6 million for non-institutional). The non-institutional share includes \$2.8 million in future costs and \$0.8 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA funded by Seaton Landowners Group).

Table 5-5
Institutional Water Supply
Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Durham (Attributions Share)

Year	DC Reserve Fund Opening Balance	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(219,512)	11,883	11,883	14,611	0.44	6,363	(225,033)	(11,252)	(236,284)
2020	(236,284)	6,873	7,079	141,778	0.45	63,592	(179,771)	(8,989)	(188,760)
2021	(188,760)	-	•	259,007	0.46	119,659	(69,101)	(3,455)	(72,556)
2022	(72,556)	20,813	22,742	65,507	0.48	31,172	(64,127)	(3,206)	(67,333)
2023	(67,333)	-	-	271,721	0.49	133,178	65,844	1,646	67,490
2024	67,490	488,577	566,395	65,507	0.50	33,070	(465,834)	(23,292)	(489,126)
2025	(489,126)	808	964	65,507	0.52	34,062	(456,028)	(22,801)	(478,830)
2026	(478,830)	193	237	239,430	0.54	128,233	(350,835)	(17,542)	(368,376)
2027	(368, 376)	29,640	37,547	131,014	0.55	72,273	(333,650)	(16,683)	(350,333)
2028	(350,333)	-	-	501,458	0.57	284,924	(65,409)	(3,270)	(68,679)
2029	(68,679)	-	-	117,799	0.59	68,940	261	7	267
2030	267	193	267	-	0.60	-	(0)		(0)
2031	(0)	-	•	-	0.62	-	(0)	(0)	(0)
	Total	558,979	647,115	1,873,338		975,464		(108,837)	

	Institutional
Development Charge/sq ft	\$ 0.44

1. Table 5-1 identifies \$4.3 million in the non-residential mixed use lands share of Seaton capital costs (\$0.7 million for institutional). The institutional share includes \$0.6 million in future costs and \$0.1 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA funded by Seaton Landowners Group).

6. Landowner Constructed and Financed Development Charge Component – Water Supply

6. **Landowner Development Charge Component – Water Supply**

6.1 **Capital Program, Cost Allocations and DC Calculations**

The following table (Table 6-1) provides the capital estimates for the Seaton Water Supply Capital Program (Landowner constructed and financed). The table identifies the gross cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and nonresidential development).

Tables 6-2 to 6-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 6-1.

Table 6-1
Infrastructure Costs Covered in the DC Calculation
Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Landowners Group
2019\$

			Phase of		Benefit to	Benefit to				Net	Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Seaton Development	Gross Capital Cost estimate	Evieting	Growth Elsewhere	Post Period Benefit	Federal Lands	Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non-Residential Share Mixed- Use Lands
WL1a	Zone 3 FM - on Taunton Rd. from Zone 3 PS (at Zone 1 reservoir) to Sideline 24	Complete	Phase 1	2,101,000	_	_	_	-	2,101,000	171,000	1,881,000	49,000
	Zone 3 FM - on Sideline 24 from Taunton Rd. to Whitevale Rd. and on Whitevale Rd. from Sideline 24 to Zone 3 Reservoir	2019	Phase 1	10,850,000	_	-	-	-	10,850,000	884,000	9,711,000	255,000
	Zone 4 FM - on Taunton Rd. from Zone 4 PS (at Zone 1 reservoir) to Sideline 26 and on Sideline 26 to Whitevale Rd.	Complete	Phase 1	5,568,000	_	-	-	-	5,568,000	454,000	4,983,000	131,000
	Zone 4 FM - on Sideline 26 from Whitevale Rd. to the north side Hwy 407 Interchange	Complete	Phase 1	4,633,000	-	-	-	1,853,000	2,780,000	227,000	2,488,000	65,000
	Zone 4 FM - on Whitevale Rd. from Sideline 26 to Zone 4 PS (at Zone 3 Reservoir)	2020 - 2021	Phase 1	1,485,000	_	-	-	594,000	891,000	73,000	797,000	21,000
WL4	Zone 4 FM - on Whitevale Rd. from Zone 4 PS (at Zone 3 reservoir) to Brock Rd.	2020 - 2021	Phase 1	13,900,000	-	-	5,572,000	2,116,000	6,212,000	506,000	5,560,000	146,000
	Zone 4 FM - on Whitevale Rd Sideline 26 to 1100 m west of Sideline 26	2020 - 2021	Phase 1	6,632,000	-	-	-	-	6,632,000	540,000	5,936,000	156,000
	Zone 5 FM - on Sideline 26 from Whitevale Rd. to north side of the Hwy 407 Interchange	Complete	Phase 1	4,746,000	-	-	-	-	4,746,000	387,000	4,248,000	111,000
	Zone 5 FM - on Whitevale Rd. from Sideline 26 to Zone 5 PS (at Zone 3 reservoir)	2020 - 2022	Phase 1	1,485,000	-	-	-	-	1,485,000	121,000	1,329,000	35,000
	Total			51,400,000	-	-	5,572,000	4,563,000	41,265,000	3,363,000	36,933,000	969,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 6-2
Residential Water Supply
Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Landowners Group
(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(11,010)	-	9,711	9,711	659	2,424	1,597	(19,124)	(574)	(19,698)
2020	(19,698)	-	1,362	1,403	1,408	2,496	3,515	(17,586)	(528)	(18,114)
2021	(18,114)	-	11,064	11,738	2,247	2,571	5,777	(24,074)	(722)	(24,796)
2022	(24,796)	-	1,196	1,307	1,648	2,648	4,364	(21,739)	(652)	(22,391)
2023	(22,391)	-	•	•	1,766	2,728	4,817	(17,574)	(527)	(18,102)
2024	(18,102)	-	-	-	1,085	2,810	3,048	(15,053)	(452)	(15,505)
2025	(15,505)	-	-	-	1,860	2,894	5,382	(10,122)	(304)	(10,426)
2026	(10,426)	-	•	-	1,071	2,981	3,192	(7,234)	(217)	(7,451)
2027	(7,451)	-	•	-	1,588	3,070	4,875	(2,576)	(77)	(2,653)
2028	(2,653)	-	-	-	715	3,162	2,261	(392)	(12)	(404)
2029	(404)	-	•	•	124	3,257	404	0	0	0
2030	0	-	•	-	-	3,355	1	0	0	0
2031	0	-	1	-	-	3,455	-	0	0	0
	Total		23,334	24,159	14,171		39,233		(4,064)	

	Single/Semi	Medium	
Measure	Detached	Density	Apartment
DC/Residential Unit Type	\$ 2,424	\$ 1,915	\$ 1,115

1. Table 6-1 identifies \$36.9 million in the residential share of Seaton capital costs, which includes \$23.3 million in future costs and \$13.6 million in prior costs. The opening balance reflects the prior costs, development charge credits realized and the indexing of development charge credits.

Table 6-3

Prestige Employment Lands – Per Acre Charge for Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Landowners Group

(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(1,281)	-	884	884	50.8	4,851	246	(1,919)	(58)	(1,977)
2020	(1,977)	-	124	128	59.4	4,996	297	(1,808)	(54)	(1,862)
2021	(1,862)	•	1,007	1,068	53.7	5,146	276	(2,654)	(80)	(2,734)
2022	(2,734)	-	109	119	50.8	5,300	269	(2,584)	(78)	(2,661)
2023	(2,661)	-	-	ı	61.6	5,459	336	(2,325)	(70)	(2,394)
2024	(2,394)	-		ı	50.8	5,623	285	(2,109)	(63)	(2,172)
2025	(2,172)	-	-	ı	50.8	5,792	294	(1,878)	(56)	(1,935)
2026	(1,935)	-	-	•	50.8	5,966	303	(1,632)	(49)	(1,681)
2027	(1,681)	-	-	ı	70.5	6,145	433	(1,248)	(37)	(1,285)
2028	(1,285)	-	-	•	50.8	6,329	321	(964)	(29)	(993)
2029	(993)	-	-	-	50.8	6,519	331	(662)	(20)	(682)
2030	(682)	-	-	ı	50.8	6,714	341	(341)	(10)	(351)
2031	(351)	-	-	T.	50.8	6,916	351	0	0	0
	Total		2,124	2,199	702.0		4,084		(604)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 4,851	\$ 11,986

1. Table 6-1 identifies \$3.4 million in the prestige employment lands share of Seaton capital costs, which includes \$2.1 million in future costs and \$1.3 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 6-4

Non-Institutional Water Supply

Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Landowners Group

Year	DC Reserve Fund Opening Balance	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(308,285)	212,714	212,714	-	0.25	-	(520,999)	(15,630)	(536,629)
2020	(536,629)	29,838	30,733	300,000	0.25	76,198	(491,165)	(14,735)	(505,900)
2021	(505,900)	242,341	257,099	121,508	0.26	31,788	(731,211)	(21,936)	(753,148)
2022	(753,148)	26,202	28,632	426,568	0.27	114,943	(666,836)	(20,005)	(686,842)
2023	(686,842)	-	•	315,080	0.28	87,448	(599,393)	(17,982)	(617,375)
2024	(617,375)	-	-	30,000	0.29	8,576	(608,799)	(18,264)	(627,063)
2025	(627,063)	-	-	110,278	0.29	32,471	(594,592)	(17,838)	(612,430)
2026	(612,430)	-	-	348,776	0.30	105,776	(506,653)	(15,200)	(521,853)
2027	(521,853)	-	-	434,888	0.31	135,849	(386,004)	(11,580)	(397,584)
2028	(397,584)	-	-	475,736	0.32	153,067	(244,516)	(7,335)	(251,852)
2029	(251,852)	-	-	738,432	0.33	244,717	(7,134)	(214)	(7,348)
2030	(7,348)	-	-	-	0.34	-	(7,348)	(220)	(7,569)
2031	(7,569)	-	-	21,528	0.35	7,569	(0)	(0)	(0)
	Total	511,095	529,179	3,322,792		998,403		(160,940)	

	Non-I	nstitutional
Development Charge/sq ft	\$	0.25

1. Table 6-1 identifies \$1.0 million in the non-residential mixed use lands share of Seaton capital costs (\$0.8 million for non-institutional). The non-institutional share includes \$0.5 million in future costs and \$0.3 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 6-5
Institutional Water Supply
Regional Seaton-Specific Water Supply Capital Works Program – Financed and Constructed by Landowners Group

Year	DC Reserve Fund Opening Balance	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/Landowner rate at 3.0%	DC Reserve Fund Closing Balance
2019	(60,729)	41,902	41,902	14,611	0.09	1,259	(101,372)	(3,041)	(104,413)
2020	(104,413)	5,878	6,054	141,778	0.09	12,582	(97,885)	(2,937)	(100,822)
2021	(100,822)	47,738	50,646	259,007	0.09	23,675	(127,792)	(3,834)	(131,626)
2022	(131,626)	5,162	5,640	65,507	0.09	6,168	(131,099)	(3,933)	(135,032)
2023	(135,032)	-	-	271,721	0.10	26,350	(108,681)	(3,260)	(111,942)
2024	(111,942)	-	-	65,507	0.10	6,543	(105,399)	(3,162)	(108,561)
2025	(108,561)	-	-	65,507	0.10	6,739	(101,821)	(3,055)	(104,876)
2026	(104,876)	-	-	239,430	0.11	25,372	(79,504)	(2,385)	(81,889)
2027	(81,889)	-	-	131,014	0.11	14,300	(67,590)	(2,028)	(69,617)
2028	(69,617)	-	-	501,458	0.11	56,374	(13,243)	(397)	(13,640)
2029	(13,640)	-	-	117,799	0.12	13,640	(0)	(0)	(0)
2030	(0)	-	-	-	0.12	-	(0)		(0)
2031	(0)	-	-	-	0.12	-	(0)	(0)	(0)
	Total	100,680	104,242	1,873,338		193,003		(28,032)	

	Institutional
Development Charge/sq ft	\$ 0.09

1. Table 6-1 identifies \$1.0 million in the non-residential mixed use lands share of Seaton capital costs (\$0.2 million for institutional). The institutional share includes \$0.1 million in future costs and \$0.1 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

7.0 Regional Constructed / Landowner Financed Works
Development Charge Component- Sanitary Sewerage

7.0 Regional Constructed / Landowner Financed Works Development Charge Component – Sanitary Sewerage

7.1 Capital Program, Cost Allocations and DC Calculations

Table 7-1 provides capital estimates for the Seaton Sanitary Sewerage Capital Program that will be constructed by the Region of Durham and funded by the Seaton Landowners Group. The table identifies the growth cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and non-residential development).

Tables 7-2 to 7-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 7-1.

Table 7-1
Infrastructure Costs Covered in the DC Calculation

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed by Landowners Group, Constructed by Durham 2019\$

										Net S	Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Phase of Seaton Development	Gross Capital Cost estimate	Benefit to Existing Share	Benefit to Growth Elsewhere	Post Period Benefit	Federal Lands	Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non- Residential Share Mixed- Use Lands
SR1	Seaton SSPS 4 & twin 250 mm forcemains	2017 - 2020	Phase 1	4,800,000	-	-	-	-	4,800,000	968,000	3,553,000	279,000
SR2a	Central Duffin Collector TSS - upto south side of CPR to Old Taunton Rd. (O/S for Airport & Seaton & other)	Complete	Phase 1	2,195,000	-	-	367,000	272,000	1,556,000	314,000	1,152,000	90,000
SR2b	CDC TSS (O/S for Federal Lands & Other) - Old Taunton Rd. to Taunton Rd.	2017 - 2019	Phase 1	2,060,000	-	-	344,000	255,000	1,461,000	295,000	1,081,000	85,000
SR3a	CDC TSS (O/S for Federal Lands & Other) - on Taunton Rd. and Brock Rd. from Taunton Rd. to Whitevale Rd.	2018 - 2019	Phase 1	7,135,000	-	_	2,455,000	304,000	4,376,000	882,000	3,240,000	254,000
	CDC Brock Rd. TSS (O/S for Federal Lands & Other) - Whitevale Rd. to south of employment lands	2018 - 2019	Phase 1	3,765,000	-	-	1,295,000	161,000	2,309,000	466,000	1,709,000	134,000
	Seaton SSPS 1 & twin 300 mm forcemains (Includes Whitevale)	2022 - 2024	Phase 2	11,879,000	941,000	-	-	-	10,938,000	2,205,000	8,097,000	636,000
SR5	Seaton SSPS 3 & twin 200 mm forcemains (Includes Green River)	2022 - 2024	Phase 2	7,825,000	405,000	-	-	-	7,420,000	1,496,000	5,493,000	431,000
	CDC Brock Rd. TSS (O/S for Federal Lands & Other) - south of employment lands to Hwy 7	2022 - 2024	Phase 2	6,247,000	-	-	1,603,000	460,000	4,184,000	844,000	3,097,000	243,000
	Total			45,906,000	1,346,000	-	6,064,000	1,452,000	37,044,000	7,470,000	27,422,000	2,152,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 7-2
Residential Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed by Landowners Group, Constructed by Durham (\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(1,123)	-	8,358	8,358	659	1,863	1,228	(8,253)	(248)	(8,501)
2020	(8,501)	-	222	229	1,408	1,919	2,702	(6,027)	(181)	(6,208)
2021	(6,208)	-	-	-	2,247	1,977	4,442	(1,766)	(53)	(1,819)
2022	(1,819)	-	1,669	1,824	1,648	2,036	3,356	(287)	(9)	(295)
2023	(295)	-	-	•	1,766	2,097	3,704	3,408	85	3,493
2024	3,493	-	15,019	17,411	1,085	2,160	2,344	(11,574)	(347)	(11,921)
2025	(11,921)	-	-	-	1,860	2,225	4,138	(7,783)	(233)	(8,016)
2026	(8,016)	-	-	-	1,071	2,292	2,454	(5,562)	(167)	(5,729)
2027	(5,729)	-	-		1,588	2,360	3,748	(1,980)	(59)	(2,040)
2028	(2,040)	-	-	-	715	2,431	1,738	(301)	(9)	(310)
2029	(310)	=	-	-	124	2,504	311	0	0	0
2030	0	-	-		Ī	2,579	-	0	0	0
2031	0	-	-	-		2,657	-	0	0	0
	Total		25,268	27,821	14,171		30,165		(1,221)	

	Single/Semi		
Measure	Detached	Medium Density	Apartment
DC/Residential Unit Type	\$ 1,863	\$ 1,472	\$ 857

1. Table 7-1 identifies \$27.4 million in the residential share of Seaton capital costs, which includes \$25.3 million in future costs and \$2.1 million in prior costs. The opening balance reflects the prior costs, development charge credits realized and the indexing of development charge credits.

Table 7-3

Prestige Employment Lands – Per Acre Charge for Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed by Landowners Group, Constructed by Durham

(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(643)	-	2,276	2,276	50.8	10,720	544	(2,376)	(71)	(2,447)
2020	(2,447)	-	60	62	59.4	11,041	655	(1,854)	(56)	(1,910)
2021	(1,910)	-	-	•	53.7	11,373	611	(1,299)	(39)	(1,338)
2022	(1,338)	-	455	497	50.8	11,714	595	(1,240)	(37)	(1,277)
2023	(1,277)	-	-	•	61.6	12,065	744	(533)	(16)	(549)
2024	(549)	-	4,091	4,742	50.8	12,427	631	(4,661)	(140)	(4,801)
2025	(4,801)	-	-	-	50.8	12,800	650	(4,151)	(125)	(4,276)
2026	(4,276)	-	-	•	50.8	13,184	669	(3,606)	(108)	(3,715)
2027	(3,715)	-	-	•	70.5	13,580	958	(2,757)	(83)	(2,840)
2028	(2,840)	-	-	•	50.8	13,987	710	(2,130)	(64)	(2,194)
2029	(2,194)	-	-		50.8	14,406	731	(1,463)	(44)	(1,506)
2030	(1,506)	-	-		50.8	14,839	753	(753)	(23)	(776)
2031	(776)	-	-		50.8	15,284	776	0	0	0
	Total		6,882	7,578	702.0		9,026		(805)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 10,720	\$ 26,489

1. Table 7-1 identifies \$7.5 million in the prestige employment lands share of Seaton capital costs, which includes \$6.9 million in future costs and \$0.6 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 7-4
Non-Institutional Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed by Landowners Group, Constructed by Durham

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated ft2 at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(154,915)	•	548,124	548,124	-	0.55		(703,039)	(21,091)	(724,130)
2020	(724,130)	•	14,564	15,001	300,000	0.56	168,505	(570,626)	(17,119)	(587,745)
2021	(587,745)	i	-	-	121,508	0.58	70,297	(517,449)	(15,523)	(532,972)
2022	(532,972)	-	109,439	119,587	426,568	0.60	254,188	(398,372)	(11,951)	(410,323)
2023	(410,323)	•	-	-	315,080	0.61	193,386	(216,937)	(6,508)	(223,445)
2024	(223,445)	i	984,955	1,141,833	30,000	0.63	18,965	(1,346,313)	(40,389)	(1,386,702)
2025	(1,386,702)	•	-	-	110,278	0.65	71,807	(1,314,895)	(39,447)	(1,354,342)
2026	(1,354,342)	i	-	-	348,776	0.67	233,917	(1,120,426)	(33,613)	(1,154,038)
2027	(1,154,038)	•	-	-	434,888	0.69	300,420	(853,618)	(25,609)	(879,227)
2028	(879,227)	ı	-	-	475,736	0.71	338,497	(540,729)	(16,222)	(556,951)
2029	(556,951)		-	-	738,432	0.73	541,174	(15,777)	(473)	(16,250)
2030	(16,250)	-	-	-	-	0.75		(16,250)	(488)	(16,738)
2031	(16,738)	ı	-	-	21,528	0.78	16,738	0	0	0
	Total		1,657,083	1,824,546	3,322,792		2,207,894		(228,433)	

	Non-Institutional		
Development Charge/sq ft	\$	0.55	

1. Table 7-1 identifies \$2.2 million in the non-residential mixed use lands share of Seaton capital costs (\$1.8 million for non-institutional). The non-institutional share includes \$1.7 million in future costs and \$0.1 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 7-5
Institutional Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed by Landowners Group, Constructed by Durham

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated ft2 at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(30,493)	-	107,887	107,887	14,611	0.19	2,782	(135,598)	(4,068)	(139,666)
2020	(139,666)	-	2,867	2,953	141,778	0.20	27,802	(114,817)	(3,445)	(118,261)
2021	(118,261)	-	-	-	259,007	0.20	52,314	(65,947)	(1,978)	(67,926)
2022	(67,926)	-	21,541	23,538	65,507	0.21	13,628	(77,836)	(2,335)	(80,171)
2023	(80,171)	-	-	-	271,721	0.21	58,224	(21,947)	(658)	(22,605)
2024	(22,605)	-	193,867	224,745	65,507	0.22	14,458	(232,893)	(6,987)	(239,879)
2025	(239,879)	-	-	-	65,507	0.23	14,892	(224,988)	(6,750)	(231,737)
2026	(231,737)	-	-	-	239,430	0.23	56,062	(175,675)	(5,270)	(180,945)
2027	(180,945)	-	-	-	131,014	0.24	31,597	(149,348)	(4,480)	(153,829)
2028	(153,829)	-	-	-	501,458	0.25	124,567	(29,262)	(878)	(30,140)
2029	(30,140)	-	-	-	117,799	0.26	30,140	0	0	0
2030	0	-	-	-	-	0.26	-	0	0	0
2031	0	-	-	-	-	0.27	-	0	0	0
	Total		326,161	359,123	1,873,338	·	426,466		(36,849)	

	Inst	itutional
Development Charge/sq ft	\$	0.19

1. Table 7-1 identifies \$2.2 million in the non-residential mixed use lands share of Seaton capital costs (\$0.4 million for institutional). The institutional share includes \$0.3 million in future costs and \$0.1 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

8. Regional Attribution Development Charge Component – Sanitary Sewerage

8.0 Regional Constructed / Landowner Financed Works Development Charge Component – Sanitary Sewerage

8.1 Capital Program, Cost Allocations and DC Calculations

Table 8-1 provides the capital estimates for the Seaton Sanitary Sewerage Capital Program (Regional Attributions portion). This includes prior infrastructure costs and future plant expansions. The table identifies the growth cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and non-residential development).

Tables 8-2 to 8-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 8-1.

Table 8-1
Infrastructure Costs Covered in the DC Calculation
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Durham
(Attributions Share)
2019\$

										Net S	Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Phase of Seaton Development	Gross Capital Cost estimate	Benefit to Existing Share	Benefit to Growth Elsewhere	Post Period Benefit	Federal Lands	Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non- Residential Share Mixed- Use Lands
1	York-Durham Debt	Complete	Phase 1	12,822,000	-	-	1	-	12,822,000	4,374,000	7,187,000	1,261,000
2	Biosolids Incineration - Duffin Creek WPCP	2019	Phase 1	95,204,000	-	73,307,000	1	6,664,000	15,233,000	5,197,000	8,538,000	1,498,000
	Effluent Discharge Upgrades - Duffin Creek WPCP (Durham Share)	2016 - 2022	Phase 1	51,500,000	22,624,000	8,755,000	7,555,000	3,775,000	8,791,000	2,999,000	4,928,000	864,000
4	Duffin Creek WPCP Stage 1 & 2 Upgrades (Constructed)	Complete	Phase 1	41,000,000	23,681,000	8,381,000	-	-	8,938,000	3,049,000	5,010,000	879,000
	Sanitary Sewer Central Duffin Collector upto south side of CPR (Constructed)	Complete	Phase 1	5,978,000	-	3,910,000	743,000	311,000	1,014,000	204,000	751,000	59,000
6	Additional Studies (Seaton Only)	2019 >	Phase 1	1,637,000	-	-	1	-	1,637,000	330,000	1,212,000	95,000
7	Depot Maintenance Facilities	2027	Phase 1	4,000,000	-	-	ı	-	4,000,000	807,000	2,961,000	232,000
8	Duffin Creek WPCP Allocation increase of 45.4 MLD	2029-2031	Phase 2	60,000,000	-	6,120,000	31,302,000	15,654,000	6,924,000	2,362,000	3,881,000	681,000
	Total			272,141,000	46,305,000	100,473,000	39,600,000	26,404,000	59,359,000	19,322,000	34,468,000	5,569,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 8-2
Residential Sanitary Sewerage
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Durham
(Attributions Share)
(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(25,082)	-	476	476	659	2,751	1,813	(23,745)	(1,187)	(24,932)
2020	(24,932)	-	-	-	1,408	2,834	3,990	(20,942)	(1,047)	(21,989)
2021	(21,989)	-	-	-	2,247	2,919	6,559	(15,430)	(772)	(16,202)
2022	(16,202)	-	4,629	5,058	1,648	3,007	4,955	(16,305)	(815)	(17,120)
2023	(17,120)	-	-	•	1,766	3,097	5,469	(11,651)	(583)	(12,234)
2024	(12,234)	-	-	•	1,085	3,190	3,461	(8,773)	(439)	(9,211)
2025	(9,211)	-	-	•	1,860	3,285	6,111	(3,101)	(155)	(3,256)
2026	(3,256)	-	37	46	1,071	3,384	3,624	323	8	331
2027	331	-	2,961	3,751	1,588	3,486	5,535	2,115	53	2,168
2028	2,168	-	-	-	715	3,590	2,567	4,735	118	4,853
2029	4,853	-	388	522	124	3,698	459	4,790	120	4,910
2030	4,910	-	37	51	III.	3,809	•	4,859	121	4,980
2031	4,980	-	3,493	4,980		3,923	•	0	0	0
	Total	-	12,021	14,884	14,171		44,543		(4,577)	

	Single/Semi			
Measure	Detached	M	edium Density	Apartment
DC/Residential Unit Type	\$ 2,751	\$	2,174	\$ 1,266

1. Table 8-1 identifies \$34.5 million in the residential share of Seaton capital costs, which includes \$12.0 million in future costs and \$22.5 million in prior costs. The opening balance reflects the prior costs indexed, development charges collected and capital costs excluded (i.e. Cost of EA and Central Duffin Collector Sewer funded by Seaton Landowners Group).

Table 8-3
Prestige Employment Lands – Per Acre Charge for Sanitary Sewerage
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Durham
(Attributions Share)
(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(16,781)	-	278	278	50.8	35,530	1,803	(15,255)	(763)	(16,018)
2020	(16,018)	-	-	ı	59.4	36,596	2,172	(13,846)	(692)	(14,538)
2021	(14,538)	-	-	ı	53.7	37,694	2,025	(12,513)	(626)	(13,139)
2022	(13,139)	-	2,805	3,065	50.8	38,825	1,970	(14,234)	(712)	(14,945)
2023	(14,945)	-	-	-	61.6	39,990	2,465	(12,480)	(624)	(13,104)
2024	(13,104)	-	-	-	50.8	41,190	2,090	(11,014)	(551)	(11,565)
2025	(11,565)	-	-	-	50.8	42,425	2,153	(9,411)	(471)	(9,882)
2026	(9,882)	-	10	12	50.8	43,698	2,218	(7,677)	(384)	(8,060)
2027	(8,060)	-	806	1,022	70.5	45,009	3,174	(5,908)	(295)	(6,203)
2028	(6,203)	-	-	-	50.8	46,359	2,353	(3,851)	(193)	(4,043)
2029	(4,043)	-	236	317	50.8	47,750	2,423	(1,937)	(97)	(2,034)
2030	(2,034)	-	10	14	50.8	49,183	2,496	448	11	459
2031	459	-	2,126	3,031	50.8	50,658	2,572	0	0	0
	Total	-	6,272	7,740	702.0		29,915		(5,395)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 35,530	\$ 87,796

Table 8-1 identifies \$19.3 million in the prestige employment lands share of Seaton capital costs, which includes \$6.3 million in future costs and \$13.0 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA and Central Duffin Collector Sewer funded by Seaton Landowners Group).

Table 8-4
Non-Institutional Sanitary Sewerage
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Durham
(Attributions Share)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(4,040,464)	-	66,835	66,835	-	1.84	-	(4,107,299)	(205,365)	(4,312,664)
2020	(4,312,664)	-	-	-	300,000	1.89	567,133	(3,745,530)	(187,277)	(3,932,807)
2021	(3,932,807)	-	-		121,508	1.95	236,595	(3,696,212)	(184,811)	(3,881,022)
2022	(3,881,022)	-	675,460	738,094	426,568	2.01	855,513	(3,763,603)	(188,180)	(3,951,783)
2023	(3,951,783)	-	-	-	315,080	2.07	650,873	(3,300,910)	(165,046)	(3,465,956)
2024	(3,465,956)	-	-	•	30,000	2.13	63,831	(3,402,124)	(170,106)	(3,572,231)
2025	(3,572,231)	-	-	-	110,278	2.19	241,679	(3,330,552)	(166,528)	(3,497,079)
2026	(3,497,079)	-	2,427	2,985	348,776	2.26	787,287	(2,712,777)	(135,639)	(2,848,416)
2027	(2,848,416)	-	194,191	245,995	434,888	2.33	1,011,117	(2,083,294)	(104,165)	(2,187,459)
2028	(2,187,459)	-	-		475,736	2.39	1,139,272	(1,048,188)	(52,409)	(1,100,597)
2029	(1,100,597)	-	56,881	76,443	738,432	2.47	1,821,416	644,376	16,109	660,485
2030	660,485	-	2,427	3,360	-	2.54	-	657,125	16,428	673,553
2031	673,553	-	511,929	729,888	21,528	2.62	56,335	(0)	(0)	(0)
	Total	-	1,510,151	1,863,601	3,322,792		7,431,051		(1,526,987)	

	Non-Institution			
Development Charge/sq ft	\$	1.84		

1. Table 8-1 identifies \$5.6 million in the non-residential mixed use lands share of Seaton capital costs (\$4.7 million for non-institutional). The non-institutional share includes \$1.5 million in future costs and \$3.2 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA and Central Duffin Collector Sewer funded by Seaton Landowners Group).

Table 8-5
Institutional Sanitary Sewerage
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Durham
(Attributions Share)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Interest Earnings at 2.5%/debt rate at 5.0%	DC Reserve Fund Closing Balance
2019	(795,279)	-	13,155	13,155	14,611	0.63	9,260	(799,174)	(39,959)	(839,132)
2020	(839,132)	-	-	-	141,778	0.65	92,555	(746,578)	(37,329)	(783,907)
2021	(783,907)	-	-	-	259,007	0.67	174,156	(609,751)	(30,488)	(640,238)
2022	(640,238)	-	132,950	145,278	65,507	0.69	45,368	(740,148)	(37,007)	(777,155)
2023	(777,155)	-	-	-	271,721	0.71	193,832	(583,323)	(29,166)	(612,489)
2024	(612,489)	-	-	-	65,507	0.73	48,131	(564,358)	(28,218)	(592,576)
2025	(592,576)	-	-	-	65,507	0.76	49,575	(543,001)	(27,150)	(570,151)
2026	(570,151)	-	478	588	239,430	0.78	186,635	(384,104)	(19,205)	(403,309)
2027	(403,309)	-	38,222	48,419	131,014	0.80	105,189	(346,539)	(17,327)	(363,866)
2028	(363,866)	-	-	-	501,458	0.83	414,689	50,823	1,271	52,094
2029	52,094	-	11,196	15,046	117,799	0.85	100,338	137,386	3,435	140,820
2030	140,820	-	478	661	-	0.88	-	140,159	3,504	143,663
2031	143,663	-	100,762	143,663	-	0.90	-	0	0	0
	Total	-	297,241	366,810	1,873,338		1,419,729		(257,640)	

	Inst	itutional	
Development Charge/sq ft	\$ 0.0		

1. Table 8-1 identifies \$5.6 million in the non-residential mixed use lands share of Seaton capital costs (\$0.9 million for institutional). The institutional share includes \$0.3 million in future costs and \$0.6 million in prior costs. The opening balance reflects the prior costs indexed and capital costs excluded (i.e. Cost of EA and Central Duffin Collector Sewer funded by Seaton Landowners Group).

9. Landowner Constructed and Financed Development Charge Component – Sanitary Sewerage

9.0 Landowner Constructed and Financed Development Charge Component – Sanitary Sewerage

9.1 Capital Program, Cost Allocations and DC Calculations

Table 9-1 provides the capital estimates for the Seaton Water Supply Capital Program that will be constructed and financed by the Seaton Landowners Group. The table identifies the growth cost and the appropriate deductions (benefit to existing development, benefit to growth elsewhere, post period benefit, Federal lands share) with the remaining share being allocated to Seaton (residential and non-residential development).

Tables 9-2 to 9-5 provide the residential charge and non-residential development charge calculations related to the capital works in Table 9-1.

Table 9-1
Infrastructure Costs Covered in the DC Calculation
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Landowners Group
2019\$

										Net S	Seaton	
Project No.	Increased Service Needs Attributable to Anticipated Development	Timing (Year)	Phase of Seaton Development	Gross Capital Cost estimate	Benefit to Existing Share	Benefit to Growth Elsewhere	Post Period Benefit	Federal Lands	Total	Prestige Employment Lands	Residential Share Mixed- Use Lands	Non- Residential Share Mixed- Use Lands
	West Seaton TSS - Central Duffin Collector from Third											
	Concession @ Valleyfarm Rd. north to Whitevale Rd.	Complete	Phase 1	40,691,000	-	-	-	565,000	40,126,000	8,090,000	29,704,000	2,332,000
SL1b		2019	Phase 1	3,949,000	-	-	-	55,000	3,894,000	785,000	2,883,000	226,000
	West Seaton Sub TSS - Whitevale Rd. to north side of Hwy 407 Interchange	Complete	Phase 1	4,880,000	-	-	-	30,000	4,850,000	978,000	3,590,000	282,000
	West Seaton Sub TSS - north side of Hwy 407 Interchange to Hwy 7	2019 - 2021	Phase 1	903,000	_	-	-	6,000	897,000	181,000	664,000	52,000
	Central Seaton TSS on Peter Mathews Dr. from Burkholder Dr. to Taunton Rd.	Complete	Phase 1	13,663,000	-	-	_	374,000	13,289,000	2,679,000	9,838,000	772,000
	Central Seaton TSS on Sideline 22 from Taunton Rd. to Whitevale Rd.	2020 - 2021	Phase 1	18,418,000	ı	-	-	504,000	17,914,000	3,612,000	13,261,000	1,041,000
	Central Seaton TSS on Sideline 22 from Whitevale Rd. to south of employment lands	2020 - 2021	Phase 1	1,925,000	ı	-	-	53,000	1,872,000	377,000	1,386,000	109,000
	Central Seaton Sub TSS on Whitevale Rd. from Sideline 22 to approx. 475 m east of Sideline 22	2020 - 2021	Phase 1	1,022,000	-	-	_	24,000	998,000	201,000	739,000	58,000
	Central Seaton Sub TSS from Whitevale Rd. to south of employment lands	2020 - 2021	Phase 1	3,949,000	-	-	-	94,000	3,855,000	777,000	2,854,000	224,000
	West Seaton TSS (Including Green River) from south of employment lands to Hwy 7	2021 - 2023	Phase 2	4,077,000	-	-	-	182,000	3,895,000	785,000	2,884,000	226,000
	Central Seaton TSS from (SL4b) south of employment lands to Hwy 7	2021 - 2023	Phase 2	3,118,000	-	-	-	302,000	2,816,000	568,000	2,084,000	164,000
	Central Seaton Sub TSS from (SL3c) south of employment lands to Hwy 7	2024 - 2026	Phase 2	3,284,000	_	_	-	153,000	3,131,000	631,000	2,318,000	182,000
				,					-, -,,	,	,0.0,000	02,000
	Total			99,879,000	-	-	-	2,342,000	97,537,000	19,664,000	72,205,000	5,668,000

Notes: For the Non-residential share for Mixed Use Lands, approximately 16.5% is allocated to Institutional development and 83.5% allocated to Non-Institutional development.

Table 9-2

Residential Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Landowners Group

(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses	Development Related Expenses Inflated at 3.0%	Equivalent Single Detached Units	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(41,898)	-	2,949	2,949	659	5,008	3,300	(41,547)	(1,246)	(42,793)
2020	(42,793)	=	1,824	1,879	1,408	5,158	7,263	(37,409)	(1,122)	(38,531)
2021	(38,531)	=	17,510	18,577	2,247	5,313	11,939	(45,169)	(1,355)	(46,524)
2022	(46,524)	-	-	-	1,648	5,473	9,019	(37,505)	(1,125)	(38,631)
2023	(38,631)	-	4,471	5,033	1,766	5,637	9,955	(33,709)	(1,011)	(34,720)
2024	(34,720)	-	232	269	1,085	5,806	6,299	(28,689)	(861)	(29,550)
2025	(29,550)	-	-	-	1,860	5,980	11,123	(18,427)	(553)	(18,980)
2026	(18,980)	-	2,086	2,565	1,071	6,159	6,597	(14,949)	(448)	(15,397)
2027	(15,397)	-	-	-	1,588	6,344	10,075	(5,322)	(160)	(5,482)
2028	(5,482)	-	-	-	715	6,535	4,672	(810)	(24)	(834)
2029	(834)	-	-	-	124	6,731	835	0	0	0
2030	0	-	-	-	ı	6,932	-	0	0	0
2031	0	=	-	-	in the second	7,140	-	0	0	0
	Total	·	29,073	31,271	14,171		81,076		(7,906)	

	5	Single/Semi			
Measure		Detached	М	edium Density	Apartment
DC/Residential Unit Type	\$	5,008	\$	3,956	\$ 2,304

1. Table 9-1 identifies \$72.2 million in the residential share of Seaton capital costs, which includes \$29.1 million in future costs and \$43.1 million in prior costs. The opening balance reflects the prior costs, development charge credits realized and the indexing of development charge credits.

Table 9-3

Prestige Employment Lands – Per Acre Charge for Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Landowners Group

(\$000's)

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses ⁽¹⁾	Development Related Expenses Inflated at 3.0%	Number of Acres Developed	Per Acre Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(12,194)	-	803	803	50.8	28,649	1,454	(11,543)	(346)	(11,889)
2020	(11,889)	-	497	512	59.4	29,508	1,751	(10,649)	(319)	(10,969)
2021	(10,969)	-	4,769	5,060	53.7	30,393	1,633	(14,396)	(432)	(14,828)
2022	(14,828)	-	-	-	50.8	31,305	1,589	(13,239)	(397)	(13,636)
2023	(13,636)	-	1,218	1,371	61.6	32,244	1,987	(13,019)	(391)	(13,410)
2024	(13,410)	-	63	73	50.8	33,212	1,686	(11,798)	(354)	(12,152)
2025	(12,152)	-	-	-	50.8	34,208	1,736	(10,415)	(312)	(10,728)
2026	(10,728)	-	568	699	50.8	35,234	1,788	(9,638)	(289)	(9,927)
2027	(9,927)	-	-	-	70.5	36,291	2,559	(7,368)	(221)	(7,589)
2028	(7,589)	-	-	-	50.8	37,380	1,897	(5,692)	(171)	(5,863)
2029	(5,863)	-	-	-	50.8	38,502	1,954	(3,909)	(117)	(4,026)
2030	(4,026)	-	-	-	50.8	39,657	2,013	(2,013)	(60)	(2,074)
2031	(2,074)	-	-	-	50.8	40,846	2,074	0	0	0
	Total		7,918	8,517	702.0		24,121		(3,410)	

	Per Acre	Per Hectare
Area Specific DC for Prestige Employment Lands	\$ 28,649	\$ 70,791

1. Table 9-1 identifies \$19.7 million in the prestige employment lands share of Seaton capital costs, which includes \$7.9 million in future costs and \$11.8 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 9-4

Non-Institutional Sanitary Sewerage

Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Landowners Group

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Non- Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(2,935,998)	-	193,408	193,408	-	1.46	•	(3,129,407)	(93,882)	(3,223,289)
2020	(3,223,289)	-	119,618	123,206	300,000	1.50	450,333	(2,896,162)	(86,885)	(2,983,046)
2021	(2,983,046)	-	1,148,348	1,218,282	121,508	1.55	187,869	(4,013,460)	(120,404)	(4,133,864)
2022	(4,133,864)	-	-	-	426,568	1.59	679,322	(3,454,542)	(103,636)	(3,558,178)
2023	(3,558,178)	-	293,239	330,043	315,080	1.64	516,827	(3,371,394)	(101,142)	(3,472,536)
2024	(3,472,536)	-	15,199	17,620	30,000	1.69	50,685	(3,439,470)	(103,184)	(3,542,654)
2025	(3,542,654)	-	-	-	110,278	1.74	191,906	(3,350,749)	(100,522)	(3,451,271)
2026	(3,451,271)	-	136,791	168,236	348,776	1.79	625,147	(2,994,360)	(89,831)	(3,084,191)
2027	(3,084,191)	-	-	-	434,888	1.85	802,879	(2,281,312)	(68,439)	(2,349,751)
2028	(2,349,751)	-	-	-	475,736	1.90	904,641	(1,445,110)	(43,353)	(1,488,464)
2029	(1,488,464)	-	-	-	738,432	1.96	1,446,299	(42,165)	(1,265)	(43,430)
2030	(43,430)	-	-	-	-	2.02	-	(43,430)	(1,303)	(44,733)
2031	(44,733)	-	-	-	21,528	2.08	44,733	0	0	0
	Total		1,906,603	2,050,796	3,322,792		5,900,641		(913,847)	

	Non-Ir	nstitutional
Development Charge/sq ft	\$	1.46

1. Table 9-1 identifies \$5.7 million in the non-residential mixed use lands share of Seaton capital costs (\$4.7 million for non-institutional). The non-institutional share includes \$1.9 million in future costs and \$2.8 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

Table 9-5
Institutional Sanitary Sewerage
Regional Seaton-Specific Sanitary Sewerage Capital Works Program – Financed and Constructed by Landowners Group

Year	DC Reserve Fund Opening Balance	Existing Debt	Development Related Expenses (1)	Development Related Expenses Inflated at 3.0%	Estimated ft ² Institutional Development	Unit Charge Inflated at 3.0%	Anticipated Revenue	Surplus/(Deficit)	Landowner Rate (3.0%)	DC Reserve Fund Closing Balance
2019	(577,889)	•	38,068	38,068	14,611	0.51	7,434	(608,523)	(18,256)	(626,779)
2020	(626,779)	•	23,544	24,250	141,778	0.52	74,301	(576,728)	(17,302)	(594,030)
2021	(594,030)	-	226,028	239,793	259,007	0.54	139,809	(694,013)	(20,820)	(714,834)
2022	(714,834)	-	-	-	65,507	0.56	36,421	(678,413)	(20,352)	(698,765)
2023	(698,765)	-	57,718	64,962	271,721	0.57	155,605	(608,122)	(18,244)	(626,366)
2024	(626,366)	-	2,992	3,468	65,507	0.59	38,639	(591,195)	(17,736)	(608,931)
2025	(608,931)	-	-	-	65,507	0.61	39,798	(569,133)	(17,074)	(586,207)
2026	(586,207)	-	26,924	33,114	239,430	0.63	149,827	(469,493)	(14,085)	(483,578)
2027	(483,578)	-	-	-	131,014	0.64	84,444	(399,135)	(11,974)	(411,109)
2028	(411,109)	-	-	-	501,458	0.66	332,905	(78,204)	(2,346)	(80,550)
2029	(80,550)	-	-	-	117,799	0.68	80,549	(0)	(0)	(0)
2030	(0)	-	-	-	-	0.70	•	(0)	(0)	(0)
2031	(0)	Ī	-	-	•	0.73	ı	(0)	(0)	(0)
	Total		375,274	403,655	1,873,338		1,139,732		(158,189)	

	Inst	itutional
Development Charge/sg ft	\$	0.51

1. Table 9-1 identifies \$5.7 million in the non-residential mixed use lands share of Seaton capital costs (\$0.9 million for institutional). The institutional share includes \$0.4 million in future costs and \$0.5 million in prior costs. The opening balance reflects the prior costs and the indexing of development charge credits.

10. By-law and Implementation Matters

10.0 By-law and Implementation Matters

10.1 By-law Provisions

- 10.1.1 It is proposed that the following policies apply to Seaton Area-specific Water Supply and Sanitary Sewerage By-law:
 - a) The Industrial expansion exemption as per the DCA is not relevant on the Prestige Employment Lands as the development charge is on a land basis (i.e. a per hectare charge).
 - b) There are limited discretionary exemptions in the interests of full cost recovery.
 - d) A front-ending agreement represents an essential complement to this area specific development charge by-law which will include DC credit provisions.
 - e) Payment of residential development charges is due at execution of subdivision agreement.
 - g) This by-law does not provide credits for redevelopment of existing sites.
 - h) Indexing of the charges commences on July 1, 2020.

10.2 By-law Policy Modifications

- 10.2.1 Once the Region has fully recovered the Seaton area-specific water supply and sanitary sewerage costs contained in this Background Study, as updated and possibly expanded over time, it is understood that any additional development would not be subject to development charges for water supply or sanitary sewerage purposes, unless additional infrastructure is required.
- 10.2.2 Durham Region's "Region Share" policy for water supply and sanitary sewerage purposes provides subdividers with Regional cost sharing under the current and proposed Regional DC By-laws. This occurs where their servicing is oversized beyond the needs of their own development, based on a clearly enunciated set of sizing conventions. The cost to the Region of providing this funding arrangement is underwritten by a component of the Region's sanitary sewer and water supply development charge (in By-law No. 28-2018), in the amount of \$190 and \$225 per single detached equivalent unit, respectively (in 2018 \$).
- 10.2.3 This development charge component and Regional cost sharing arrangement do not apply to the Seaton development charge by-law addressed in this

Background Study. The landowners involved are making their own internal cost sharing arrangements for these purposes and the Region's participation, beyond the requirements of this by-law and the associated Front-ending Agreement, is not required or involved.

10.3 By-law Adoption Process

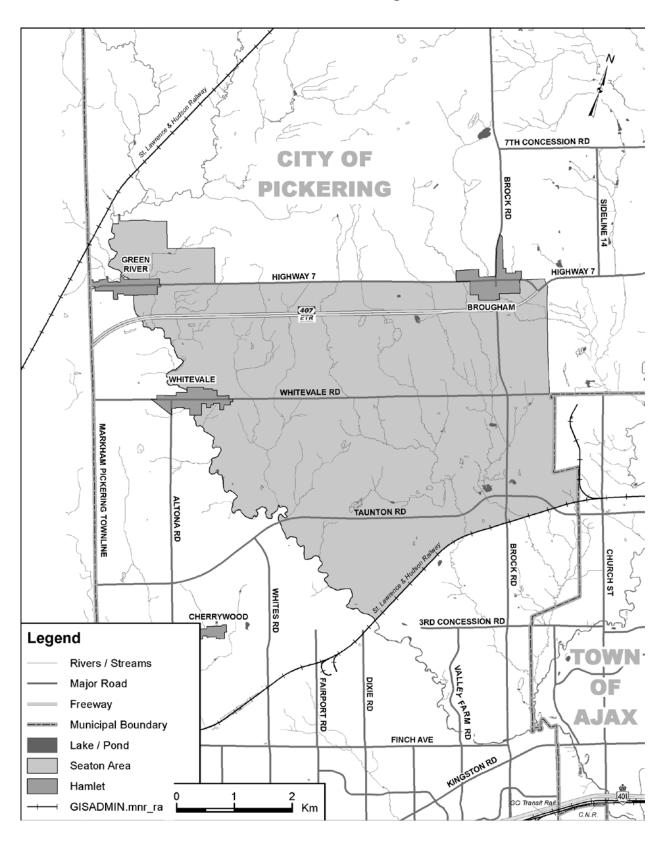
- 10.3.1 At this stage in the process, the Background Study and proposed Development Charge By-law are being provided for information purposes, as part of the consultation process. At such time as that process is complete and final Development Charge recommendations are made to Council, approval will be sought for:
 - the 2019 Development Charge By-law; and
 - the Background Study, including the growth projections, the developmentrelated capital program, the Development Charge calculations and associated material, subject to any Addendum which may be produced prior to by-law adoption.
- 10.3.2 The local Boards of Trade and Chamber of Commerce and other business associations and area municipalities have been notified of the pending Background Study and offered contact information for any further discussion.
- 10.3.3 As summarized below, the public meeting of Regional Council is scheduled for April 24, 2019 as required by Section 12 of the DCA. Council will consider approval of the by-law on June 26, 2019. There has been consultation between Regional staff and the Seaton Landowners Group in preparation of this background study.

	Process	Date
1.	Outreach to the development community and business associations	February- March 2019
2.	Meeting Notice ad placed in newspaper(s)	By April 3, 2019
3.	Proposed By-law and Background Study Available to public	April 9, 2019
4.	Statutory Public Meeting	April 24, 2019
5.	By-law Revisions (if necessary)	May 2019
6.	Council considers adoption of background study and passage of By-law.	June 26, 2019
7.	Implementation of New Development Charge By-law	July 1, 2019
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

Appendix A

Seaton Servicing Area

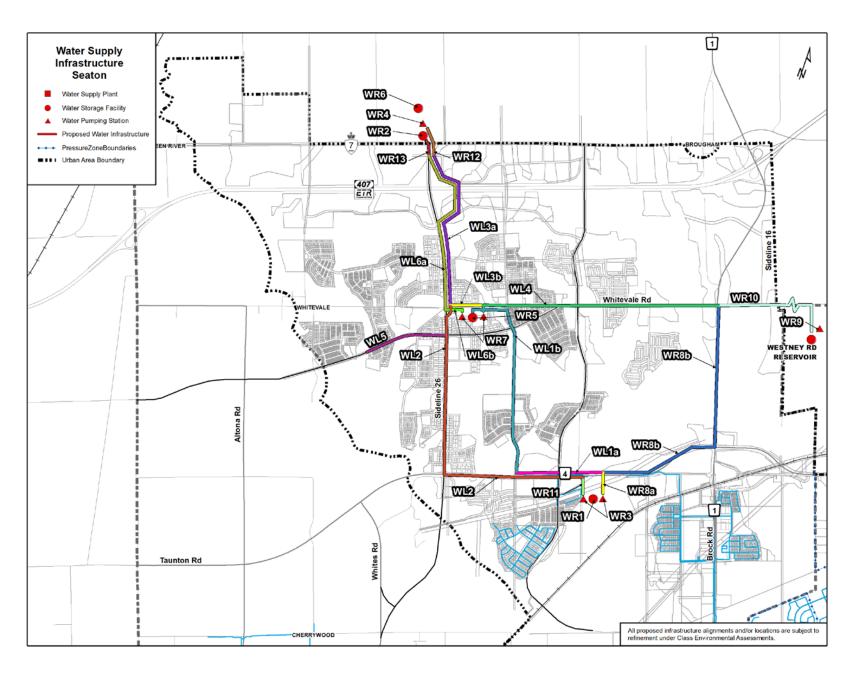
Seaton Servicing Area



Appendix B

Seaton Water Supply Servicing

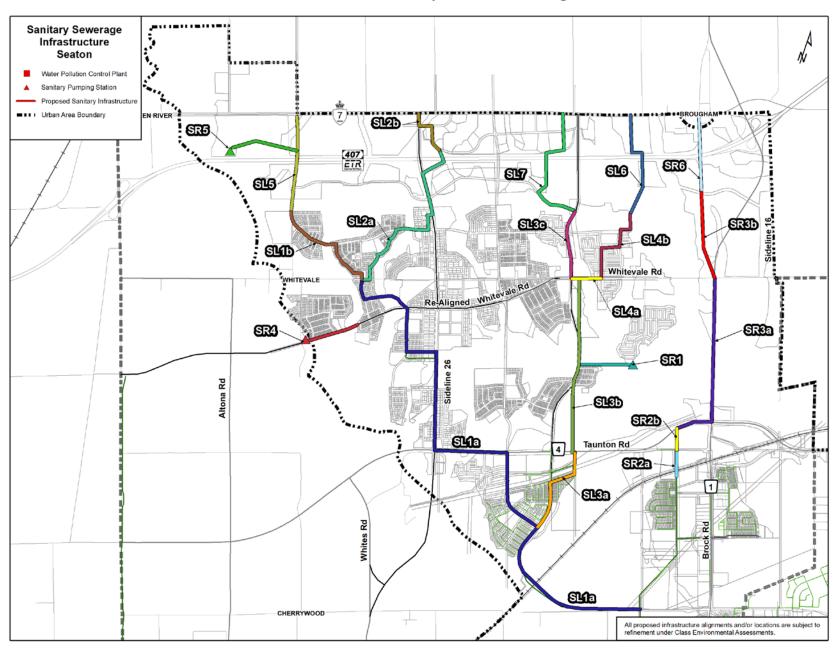
Seaton Water Supply Servicing



Appendix C

Seaton Sanitary Sewer Servicing

Seaton Sanitary Sewer Servicing



Appendix D
Seaton Well Interference Policy

Appendix D - Seaton Well Interference Policy

1. Introduction

The Region has an established Well Interference Policy as approved in the 2018 Regional Development Charge Background Study. This policy provides relief to residents 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 Area Municipal servicing impacts due to grading, stormwater management ponds, storm sewers, foundation drain collectors etc. The current policy has been Regional practice since 1999.

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: and
- construct watermains and water services to homes, i.e. only to the property line of homes that have been or will potentially be negatively impacted. Work on private property remains at the homeowner's expense; 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 included in the Seaton Area Specific Development Charge Study and are funded 100% from water area specific development charges.

2. Financial Impact

The capital costs included in the 2019-2031 forecast is \$6.1 million, to be recovered from development charges. There is no matching user rate contribution as 100% of the cost associated with the well interference policy is funded by development charges.

3. Recommendations

It is recommended that the Regional Well Interference Policy apply to the Seaton Community.

Attachment No. 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:
 - o 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 and Climate Change 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 \$100,000 and approval of the Commissioners of Works and Finance be required for works under \$100,000.

Appendix E

Proposed Seaton Area-Specific Development Charge By-law for Water and Sanitary Sewer

By-law Number **-2019

of The Regional Municipality of Durham

Being a by-law to establish Area-Specific Development Charges for the Seaton Community – Water Supply and Sanitary Sewerage Services.

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 has been completed in support of the imposition of development charges;

And Whereas the Council of The Regional Municipality of Durham has given notice and held a public meeting on April 24, 2019, 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;

Now therefore, the Council of The Regional Municipality of Durham hereby enacts as follows:

Part I

Interpretation

Definitions

- 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, other than a triplex, semi-detached duplex, semidetached triplex, townhouse or stacked townhouse, consisting of more than 3 dwelling units, which dwelling units have a common entrance to grade;
- (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 any room used, or designed or intended for use, as sleeping quarters;
- (h) "building or structure: means a permanent enclosed structure and includes an air-supported structure;
- (i) "Central Pickering Development Plan" means the development plan approved under the *Ontario Planning and Development Act* in regard to the Seaton Community;
- "commercial use" means land, buildings or structures used, or 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;
- (I) "development" includes redevelopment;
- (m) "development charges" means charges imposed pursuant to this By-law in accordance with the Act;
- (n) "duplex" means a building comprising, by horizontal division, two dwelling units;
- (o) "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;

- (p) "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,
 - a. carried out with respect to manufacturing, producing, processing, storage or distributing of something; and
 - in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution;
- (q) "Front-Ending Agreement" means the Agreement between the Region and the Seaton Landowners in regard to the development of the Seaton Community;
- (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) "garden suite" means a one-unit detached, temporary residential structure containing bathroom and kitchen facilities that is ancillary to an existing residential structure and that is designed to be portable;

- (t) "gross floor area" means (except for the purposes of sections 9 and 15), 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 nonresidential portions of such mixed-use building or structure;
- (u) "hospice" means a building or structure used to provide not for profit palliative care to the terminally ill;
- (v) "housing services use"/ "housing services" means social housing which is rental housing provided by Durham Region Local Housing Corporation (DRLHC) or by a non-profit housing provider that receives ongoing subsidy from the Region of Durham and Affordable Housing which are rental units provided by private or non-profit housing providers that receive capital funding through a federal and / or provincial government affordable housing program;
- (w) "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;
- (x) "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;
- (y) "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*;
- (z) "medium density multiples" includes plexes, townhouses, stacked townhouses and all other residential uses that are not included in the definition of "apartment building", "apartment", "garden suites", "mobile

- homes", "retirement residence units", "single detached", "single detached dwelling" or "semi-detached dwelling";
- (aa) "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:
- (bb) "Mixed-Use Area" means the lands within the Seaton Community that are not designated Prestige Employment Lands on the land use plan of the Central Pickering Development Plan;
- (cc) "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;
- (dd) "net hectare" means the area in hectares of a parcel of land exclusive of the following:
 - (i) lands conveyed or to be conveyed to the City of Pickering or a local board thereof or the Region or a local board thereof;
 - (ii) lands conveyed or to be conveyed to the Ministry of Transportation for the construction of provincial highways;
 - (iii) hazard lands conveyed or to be conveyed to a conservation authority as a condition of development;
 - (iv) lands identified as "Natural Heritage System" pursuant to the Central Pickering Development Plan; and
 - (v) storm water management facility areas;
- (ee) "non-institutional use" means lands, buildings or structures used, or designed or intended for non-residential uses other than institutional uses;
- (ff) "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 agricultural, commercial, industrial and institutional uses;
- (gg) "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;

- (hh) "plex" means a duplex, a semi-detached duplex, a triplex or a semi-detached triplex;
- (ii) "Prestige Employment Land Area" means the lands within the Seaton Community shown on Schedule "G", which are designated Prestige Employment Lands on the land use plan of the Central Pickering Development Plan;
- (jj) "Region" means the Regional Municipality of Durham;
- (kk) "Regional Attribution Sanitary Sewerage Development Charges" means charges in regard to infrastructure for sanitary sewerage services that have been, or will be, constructed and financed by the Region under the Front-Ending Agreement;
- (II) "Regional Attribution Water Supply Development Charges" means charges in regard to infrastructure for water supply services that have been, or will be, constructed and financed by the Region under the Front-Ending Agreement;
- (mm) "Regional Seaton-Specific Sanitary Sewerage Development Charges" means charges in regard to infrastructure for sanitary sewerage services to be constructed by the Region and financed by the Seaton Landowners under the Front-Ending Agreement;
- (nn) "Regional Seaton-Specific Water Supply Development Charges" means charges in regard to infrastructure for water supply services to be constructed by the Region and financed by the Seaton Landowners under the Front-Ending Agreement;
- (oo) "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, but is not limited to, a single detached dwelling, a semi-

- detached dwelling, a townhouse, a plex, a stacked townhouse, an apartment building, a mobile home, a retirement residence and a residential dwelling unit accessory to a non-residential use;
- (pp) "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 mini warehouses, parking facilities and secure document storage;
- (qq) "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;
- (rr) "retirement residence unit" means a unit within a retirement residence;
- (ss) "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;
- (tt) "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;
- (uu) "Seaton Landowners" means 1133373 Ontario Incorporated, Lebovic Enterprises Limited, Affiliated Realty Corporation Limited, Chestermere

Investments Limited, Hunley Homes Limited, 1350557 Ontario Limited, Zavala Developments Inc., Mattamy (Seaton) Limited, White Sun Developments Limited, and Her Majesty the Queen In Right of Ontario as represented by the Minister of Infrastructure, or their respective successors and assigns;

- (vv) "Seaton Landowners Constructed Sanitary Sewerage Development Charges" means charges in regard to infrastructure for sanitary sewerage services to be constructed and financed by the Seaton Landowners under the Front-Ending Agreement;
- (ww) "Seaton Landowners Constructed Water Supply Development Charges" means charges in regard to infrastructure for water supply services to be constructed and financed by the Seaton Landowners under the Front-Ending Agreement;
- (xx) "semi-detached duplex" means one of a pair of attached duplexes, each duplex divided vertically from the other by a party wall;
- (yy) "semi-detached dwelling" means a building divided vertically (above or below ground) into and comprising 2 dwelling units;
- (zz) "semi-detached triplex" means one of a pair of triplexes divided vertically one from the other by a party wall;
- (aaa) "services" means the services designated in section 7 of this by-law;
- (bbb) "single detached dwelling" and "single detached" means a building comprising 1 dwelling unit;
- (ccc) "stacked townhouse" means 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;
- (ddd) "storm water management facility area" means the area bounded by the limit of grading for such facility including necessary sloping, maintenance access and associated infrastructure, but does not include any maintenance access road which serves any additional purpose on the property or any portion of the facility located within the Natural Heritage System lands;

- (eee) "townhouse" means 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;
- (fff) "triplex" means a building comprising 3 dwelling units.
- 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.

Part II

Application of By-law — Rules

Circumstances Where Development Charges are Payable

- 3. Development charges shall be payable in the amounts set out in sections 8, 12, 13 and 14 of this by-law where:
 - (a) the lands are located in the area described in subsection 4(1); and
 - (b) the development of the lands requires any of the approvals set out in subsection 5(1).

Area to Which By-law Applies

- 4. (1) Subject to subsection 4(2), this by-law applies to all lands in the Seaton Community.
 - (2) 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.

Approvals for Development

- 5. (1) 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.
- (2) Council has determined that the development of the land to which this by-law applies increases the need for the services designated in section 7.
- 6. (1) No more than one development charge for each service designated in section 7 shall be imposed on land to which this by-law applies even though two or more of the actions described in subsection 5(1) are required before the land can be developed.
 - (2) Notwithstanding subsection 6(1), if two or more of the actions described in subsection 5(1) occur at different times, additional development charges shall be imposed, if the subsequent action has the effect of increasing the need for services.

Designation of Services

- 7. (1) The categories of services for which development charges are imposed under this by-law are as follows:
 - (a) water supply; and
 - (b) sanitary sewerage.
 - (2) The components of the services designated in subsection 7(1) are described on Schedule "A".

Amount of Charge

Residential

8. 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.

Exemptions

- 9. (1) In this section,
 - (a) "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;
 - (b) "other residential building" means a residential building not in another class of residential building described in this subsection;
 - (c) "semi-detached or row dwelling" means a residential building consisting of one dwelling unit having one or two vertical walls, but no other parts, attached to another structure;
 - (d) "single detached dwelling" means a residential building consisting of one dwelling unit and not attached to another structure.
 - (2) Subject to subsections 9(3) and 9(5), 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 one or two additional dwelling units within an existing single detached dwelling or on the same lot as an existing single detached dwelling;
 - (d) the creation of one additional dwelling unit within a semi-detached dwelling, a row dwelling, or any other residential building, or on the same lot as an existing semi-detached dwelling, a row dwelling, or any other residential building; or
 - (e) the creation of a garden suite.
 - (3) Notwithstanding 9(2)(c) and (d), prior to the issuance of a building permit for any additional dwelling unit located on the same lot, but not within a single detached dwelling, semi-detached dwelling, a row dwelling, or any other residential building, 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

additional dwelling unit 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 the date of building permit issuance for such additional dwelling unit, the development charges that would have otherwise been payable for such dwelling unit, shall become due and payable.

- (4) Notwithstanding subsection 9(2)(c), development charges shall be imposed in accordance with section 8 if the total gross floor area of the additional one or two dwelling units within the existing single detached dwelling or on the same lot as the existing single detached dwelling exceeds the gross floor area of the existing dwelling unit.
- (5) Notwithstanding subsection 9(2)(d), development charges shall be imposed in accordance with section 8 if the additional dwelling unit has a gross floor area greater than:
 - (a) in the case of a semi-detached or row dwelling, the gross floor area of the existing dwelling unit; and
 - (b) in the case of any other residential building, the gross floor area of the smallest dwelling unit already contained in the residential building.

Mobile Home

- 10. (1) The development charges imposed upon a mobile home under section 8 shall be payable at the rate applicable to an apartment.
 - (2) 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.
 - (3) 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

The development charges imposed on a retirement residence unit under section 8 shall be payable at the rate applicable to an apartment.

Non-Residential

Institutional

- 12. (1) The development charges described in Schedule "C" 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.
 - (2) The development charges described in subsection 12(1) of this by-law shall apply in the Mixed-Use Area.

Non-Institutional

- 13. (1) The development charges described in Schedule "D" to this by-law shall be imposed upon non-institutional uses of lands, buildings or structures, and, in the case of a mixed use building or structure, upon the non-institutional uses in the mixed use building or structure.
 - (2) The development charges described in subsection 13(1) of this by-law shall apply in the Mixed-Use Area.

Prestige Employment Land Area

- 14. (1) The development charges described in Schedule "E" to this by-law shall be imposed upon all uses of lands, buildings or structures within the Prestige Employment Land Area.
 - (2) The development charges described in subsection 14(1) shall be calculated based upon the number of net hectares of the entire parcel of land upon which the development will occur.
 - (3) Notwithstanding sections 12 and 13 of this by-law, the development charges described in Schedules "C" and "D" shall not be imposed upon any uses of lands, buildings or structures within the Prestige Employment Land Area.

Exemption for Enlargement of Existing Industrial Building

15. (1) 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) For the purposes of subsection 15(1) the following provisions apply:
 - (a) the gross floor area of an existing industrial building shall be calculated as it existed as of July 1, 2019;
 - (b) subject to 2(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 2(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.

- (3) In this section "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.
- (4) This section does not apply to the development of land within the Prestige Employment Land Area.

Part III

Administration

Timing of Payment of Development Charges

- 16. Development charges, adjusted in accordance with section 21 of this by-law to the date of payment, are payable in full on the date on which a building permit is issued with respect to each dwelling unit, building or structure.
- 17. (1) Notwithstanding section 16, development charges, adjusted in accordance with section 21 to the date of payment, 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.
 - (2) Notwithstanding section17(1), development charges applicable to a high density or condominium block in a residential plan of subdivision are payable in accordance with section 16.
 - (3) Notwithstanding section16, 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.
 - (4) Notwithstanding any of the foregoing, for lands, buildings and structures developed for a housing services use, the Region may defer the timing of the payment of development charges from building permit issuance to a period of time not to exceed eighteen months from the date of first building permit

issuance, to be at the discretion of the Commissioner of Finance, if the owner enters into an agreement with the Region and the applicable area municipality 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.

- 18. (1) 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 17(1), the type of dwelling unit for which building permits are being issued is different than that used for the calculation and payment under subsection 17(1), 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 17(1) than for the type of dwelling unit used to calculate the payment under subsection 17(1), 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 21 of this by-law to the date of issuance of the building permit or permits.
 - (2) 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 subsection17(1), 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 subsection17(1), 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) 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 subsection17(1), the type of dwelling unit for which building permits are being issued is different than that used for the calculation and payment under subsection17(1), 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 17(1) than for the type of dwelling unit used to calculate the payment under subsection17(1), 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 21 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.

- (4) 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 subsection17(1), 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 subsection17(1), 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.
- (5) Notwithstanding subsections 18(3) and 18(4), a refund shall not exceed the amount of the development charges paid under section17.

Payment by Services

19. Notwithstanding the payments required under sections 16 and 17, 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.

Front-Ending Agreements

20. Council, from time to time, and at any time, may enter into front-ending agreements in accordance with the Act.

Indexing

21. 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, 2020, 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.

Credits

- 22. (1) A development charges credit arising from the construction or payment of infrastructure required for water supply services shall only be applied against a development charge imposed under this by-law for water supply services.
 - (2) A development charges credit arising from the construction or payment of infrastructure required for sanitary sewerage services shall only be applied against a development charge imposed under this by-law for sanitary sewerage services.

Schedules

23. The following schedules to this by-law form an integral part thereof:

Schedule "A" - Components of Services Designated in section 7

Schedule "B" - Residential Development Charges Schedule "C" - Institutional Development Charges

Schedule "D" - Non-Institutional Non-Residential Development Charges
Schedule "E" - Prestige Employment Land Area Development Charges

Schedule "F" - Map of Seaton Community

Schedule "G" - Map of Prestige Employment Land Area

Date By-law in Force

24. This by-law shall come into force on the 1st day of July, 2019.

Date By-law Expires

25. This 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.

Repeal

26. By-law 19-2013 is hereby repealed effective on the date this by-law comes into force.

Registration

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

Severability

28. 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

29. This By-law may be cited as the Regional Municipality of Durham Area Specific Development Charges By-law for the Seaton Community – Water Supply and Sanitary Sewerage Services.

This By-law Read and Passed on the 26th day of June, 2019.

J. Henry, Regional Chair and CEO				
R. Walton, Regional Clerk				

Schedule "A"

Designated Regional Services and Service Components Thereunder

Category of Regional Services Service Components

Water Supply

- Watermains
- Pumping Stations
- Reservoirs
- Feedermains
- Water Supply Plants and Municipal Wells
- Capital Equipment
- Studies
- Environmental Assessment
- Water Use Efficiency Strategy
- Well Interference

Sanitary Sewerage

- Sewage Pumping Stations and Forcemains
- Trunk and Sanitary Sewers
- Water Pollution Control Plants
- Sludge Storage and Disposal Facilities
- Capital Equipment
- Studies
- Environmental Assessment
- Water Use Efficiency

Schedule "B"

Residential Development Charges per Dwelling Unit

\$ per Dwelling Unit

Service Category	Single Detached & Semi- Detached	Medium Density Multiples	Apartments
Sanitary Sewerage			
(i) Seaton Landowners Constructed Sanitary Sewerage Development Charges	5,008	3,956	2,304
(ii) Regional Seaton-Specific Sanitary Sewerage Development Charges	1,863	1,472	857
(iii) Regional Attribution Sanitary Sewerage Development Charges	2,751	2,174	1,266
Subtotal – Sanitary Sewerage	9,622	7,602	4,427
Water Supply			
(i) Seaton Landowners Constructed Water Supply Development Charges	2,424	1,915	1,115
(ii) Regional Seaton-Specific Water Supply Development Charges	5,752	4,544	2,646
(iii) Regional Attribution Water Supply Development Charges	4,064	3,210	1,869
Subtotal – Water Supply	12,240	9,669	5,630
Total Development Charges	<u>\$21,862</u>	<u>\$17,271</u>	<u>\$10,057</u>

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to Section 21 of this By-law.

Schedule "C"

Institutional Development Charges \$ per Square Foot of Gross Floor Area

Service Category	Institutional Development Charges
Sanitary Sewerage	
(i) Seaton Landowners Constructed Sanitary Sewerage Development Charges	0.51
(ii) Regional Seaton-Specific Sanitary Sewerage Development Charges	0.19
(iii) Regional Attribution Sanitary Sewerage Development Charges	0.63
Subtotal – Sanitary Sewerage	1.33
Water Supply	
(i) Seaton Landowners Constructed Water Supply Development Charges	0.09
(ii) Regional Seaton-Specific Water Supply Development Charges	0.20
(iii) Regional Attribution Water Supply Development Charges	0.44
Subtotal – Water Supply	0.73
Total Development Charges	<u>\$2.06</u>

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to section 21 of this By-law.

Schedule "D"

Non-Institutional Non-Residential Development Charges \$ per Square Foot of Gross Floor Area

Service Category	Non-Institutional Development Charges
Sanitary Sewerage	3.00.
(i) Seaton Landowners Constructed Sanitary Sewerage Development Charges	1.46
(ii) Regional Seaton-Specific Sanitary Sewerage Development Charges	0.55
(iii) Regional Attribution Sanitary Sewerage Development Charges	1.84
Subtotal – Sanitary Sewerage	3.85
Water Supply	
(i) Seaton Landowners Constructed Water Supply Development Charges	0.25
(ii) Regional Seaton-Specific Water Supply Development Charges	0.57
(iii) Regional Attribution Water Supply Development Charges	1.26
Subtotal – Water Supply	2.08
Total Development Charges	<u>\$5.93</u>

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to section 21 of this By-law.

Schedule "E"

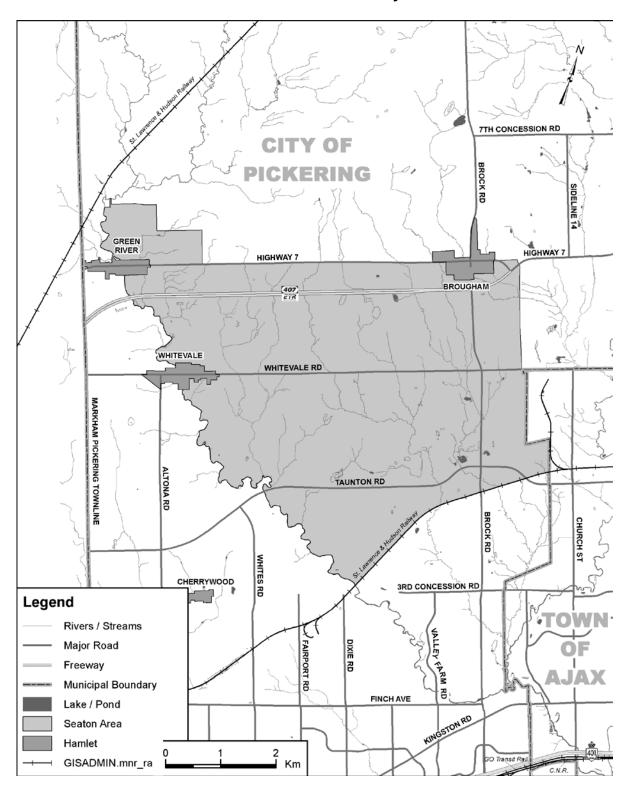
Prestige Employment Land Area Development Charges \$ per Net Hectare

Service Category	Prestige Employment Land Area Development Charges
Sanitary Sewerage	
(i) Seaton Landowners Constructed Sanitary Sewerage Development Charges	70,791
(ii) Regional Seaton-Specific Sanitary Sewerage Development Charges	26,489
(iii) Regional Attribution Sanitary Sewerage Development Charges	87,796
Subtotal – Sanitary Sewerage	185,076
Water Supply	
(i) Seaton Landowners Constructed Water Supply Development Charges	11,986
(ii) Regional Seaton-Specific Water Supply Development Charges	27,474
(iii) Regional Attribution Water Supply Development Charges	60,559
Subtotal – Water Supply	100,019
Total Development Charges	<u>\$285,095</u>

NOTE: The development charges described above shall be adjusted annually on July 1 pursuant to section 21 of this By-law.

Schedule "F"

Seaton Community



Schedule "G"

Map of Prestige Employment Land Area
(Central Pickering Development Plan – Land Use Plan)

