

City of Delta

Development Cost Charges Bylaw No. 7560, 2017
Background Report

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1. Introduction

1.1. Background

The last major revision to Delta's Development Cost Charges (DCC) Bylaw occurred in 2000. The revision focused on the inclusion of a new intensive agricultural DCC and updated DCC rates for residential, commercial and industrial sectors. In 2013, Delta's Development Cost Charges (DCC) Bylaw underwent a minor amendment to add new projects to, delete projects from, and amend projects on Delta's DCC Project List. In 2016, Delta undertook a review of its Development Cost Charge Program and staff recommended that a major revision be undertaken to overhaul the DCC Project List so that it was aligned with future development and reflected current construction costs.

1.0 Guiding Principles

Delta's DCC bylaw process was guided by the following six significant principles:

1. **Integration** – the DCC program is aligned with the development goals of Delta's Financial Plan, Capital Works Plans, Official Community Plan, and the GVRD Regional Growth Strategy.
2. **Benefiter Pays** – infrastructure costs in Delta will be borne upon those who will use and benefit from the installation of such systems.
3. **Fairness and Equity** – development costs will be shared amongst all benefiting parties. The revised DCCs are distributed between existing users and new development in a fair manner. In addition, equitable distribution of cost between various land uses and different development projects was considered.
4. **Accountability** – the DCC revision process will be fully transparent. Information regarding Delta's DCC program has been made accessible for stakeholders and interested parties. Stakeholders will be given an opportunity to comment on the bylaw and background report after it has received first and second reading.
5. **Certainty** – Delta's planning and technical staff has built certainty into the DCC review process. The Community Planning and Development department has carefully considered previous growth trends in the municipality and has used this data to project population, commercial and industrial growth over the next ten years. The Engineering department has compiled and reviewed an extensive list of capital works projects related to this projected growth. The most relevant have been selected for the DCC Bylaw.

1.1 Use of Development Cost Charge Best Practices Guide

In 2005, the Province established the *Development Cost Charges Best Practices Guide*, third edition to provide local governments with a list of best practices to consider when developing a DCC bylaw or conducting a minor or major amendment to an existing DCC bylaw. Delta's staff used this guidebook extensively throughout the DCC revision process – the guide's policy manual facilitated Delta's approach to DCCs, and the guide's technical manual assisted with DCC rate calculations.

2. Developing Delta's DCC Program

2.1. Legislative and Regulatory Background

Development Cost Charges are an important component of municipal infrastructure planning. Division 19 – Development Costs Recovery in the *Local Government Act* defines and sets out the regulations concerning DCC bylaws. Delta's Development Cost Charges Bylaw No. 7560, 2017 was developed in compliance with these provincial regulations.

2.2. Relationships to Other Municipal Documents

The DCC Program was compiled using background information and technical data from the following key municipal and regional documents:

- Delta's Official Community Plan including the North Delta Area Plan, Tsawwassen Area Plan, Ladner Area Plan, East Ladner Area Plan, Riverside Area Plan
- Delta's Financial Plan
- Delta's Long Range Sanitary Sewer System Plan
- Delta's Long Range Drainage Plan
- Delta's Long Range Water System Plan
- Park Model and System Review
- Winskill Master Plan
- Metro Vancouver Regional Growth Strategy

2.3. DCC Program Time Frame

Delta has chosen a 10-year time frame for the DCC Program.

2.4. Community-Wide and Area-Specific DCC Charges

A municipal-wide DCC means that the same DCC rate is applied for a particular type of land use deemed to generate a similar or same capital cost burden, throughout the municipality regardless of the location of any specific development. An area-specific DCC divides the municipality into areas according to geography or any other distinctive quality and charges only for projects that are a capital cost burden for that specific area. Delta will continue to apply a municipal-wide DCC rate across the municipality because it provides more flexibility in terms of accumulating and spending DCC revenues. The only exception to this is Annacis Island developments which are only charged the Road DCC rate because the industrial park has the sanitary, drainage and water capacity to accommodate additional growth. The Park DCC rate is not charged to Industrial, Commercial, and Agriculture Intensive developments because these land uses typically do not use municipal parks. Due to limited growth anticipated in the institutional sector, Delta has chosen not to charge institutional DCCs.

2.5. Allocation of Costs

For each proposed infrastructure project, costs are allocated between the existing development and new growth. In order to allocate the degree of benefit equitably between the existing population and the new growth, the new growth is expressed as a percentage factor: the amount of new growth divided by total future population (or equivalents) that was then applied to the estimated costs of the projects in order to determine how much benefit would be attributed to new growth.

Delta has assigned a percentage factor for every project based upon the following rationale:

- 100% development related – the project is required solely to accommodate new growth
- 75% development related – the project is primarily required to accommodate new growth but will partially benefit existing users
- 50% development related – the project is required to accommodate new growth but will also provide an equivalent benefit to existing users
- 25% development related – the project is partially required to accommodate new growth but will primarily benefit existing users

Delta considered the following factors when determining what percentage to allocate to new growth:

- Current standards of servicing required by the Municipality;
- Whether the work on the project is primarily for upgrading deficiencies and upkeep of the system or whether it is primarily for increasing capacity;
- A comparison of what the size of the project would be if the project was for the existing population, versus what the size of the project would be if the project was expanded to accommodate the new growth as well; and
- The proximity of the project in relation to where development is anticipated to occur within the Municipality and the degree to which the development depends on the project in order to ensure that development occurs.

2.6. Municipal Assist Factor

The Ministry of Municipal Affairs and Housing requires local governments to provide a level of financial assistance in their DCC bylaws so that not all development related costs are charged to new development. The Ministry offers little guidance as to the percentage of the “assist factor” required. Instead, it offers a best practice which suggests that the municipal assist factor should be a reflection of the community’s support towards the financing of infrastructure required to serve development. At a minimum, the assist factor must be at least one percent – almost every municipality within the lower mainland applies the one percent assist factor on DCC projects. Delta is applying a 10% assist factor to send a clear signal to developers that Delta is “Open for Business”.

2.7. Grant Assistance

One of the drainage projects in the DCC Program (Project D-008) will be partially funded by a Building Canada Fund grant. The details are provided in Drainage DCC Projects list (Table 17).

2.8. Timing of DCC Charges

Development Cost Charges can be collected at any point of the development process. Delta will collect Low Density Residential DCCs at the subdivision stage of development. Townhouses, Apartments, Commercial, Industrial, and Intensive Agricultural DCCs will be collected at the building permit stage of development.

2.9. In-Stream Applications

The Development Cost Charge rates in Delta's Development Cost Charges Imposition Bylaw 5830, 2000 will apply to all subdivision of land applications and building permits applications that have been received before the Effective Date of Delta's Development Cost Charges Bylaw No. 7560, 2017, but which are also completed within one year of the Effective Date.

2.10. Public Participation Process

The Province's Development Cost Charges Best Practices Guide recommends that municipalities undertake public consultation when introducing changes to a development cost charges bylaw. As such, staff undertook the following public consultation activities:

- Delta posted a notice on its corporate website indicating that the city was proceeding with a major amendment to Delta's Development Cost Charges Imposition Bylaw 5830, 2000;
- Following first and second reading of Delta Development Cost Charge Bylaw 7560, 2017, proposed DCC rates and associated background report were posted to Delta's corporate website for a five-week consultation period;
- A notice was placed at the Community Planning and Development department front counter outlining the proposed DCC rates;
- An information email was circulated to all local Delta developers advising of the DCC amendment; and
- The DCC bylaw and associated background report was sent to the Urban Development Institute who included it in their newsletter.

To date, Delta has not received any stakeholder feedback related to Delta Development Cost Charges Bylaw No. 7560, 2017.

2.11. Repeal of Bylaw 5830, 2000

Delta Development Cost Charge Imposition Bylaw. 5830, 2000, and all amendments thereto will be repealed on Effective Date except in the case of applications for subdivision of land that are in-stream on the Effective Date and which are completed within one year of the Effective Date, and building permits that are in-stream on the Effective Date and which are issuable within one year of the Effective Date. In these cases, Delta Development Cost Charge Imposition Bylaw. 5830, 2000, and all amendments thereto, shall apply. Delta Development Cost Charge Imposition Bylaw. 5830, 2000, and all amendments thereto, shall be wholly repealed one year from the Effective Date.

3. Delta's Growth Projections and Planning Assumptions

3.1. Estimation of New Development

Delta's Community Planning and Development Department provided growth projections by taking into account OCP development policies, the availability of development sites and Canadian census data. It is anticipated that over the next 10 years, new housing will be multiple family units rather than low density units and the bulk of industrial development will occur on the demolition, land-clearing and construction waste landfill sites along River Road. Table 1 summarizes the 2017-2027 growth projections by land use category for Delta.

Table 1: Delta's Growth Projections for 2017 - 2027

Land Use Type	2017-2027 Growth Projections
Low Density	1000 units
Townhouses	1500 units
Apartments	2000 units
Congregate Care	200 units
Commercial	20,500 m ² gross floor space
Industrial	250 ha gross site
Agriculture - Intensive	200 ha gross site

3.2. Residential Development Units

Estimates for low density, townhouses, apartments and congregate care development are based on a review of current housing forecasts, growth trends over the last 10 years, and existing residential development projects underway in Delta. These indicators suggest that the municipality could expect to grow by 4,500 units over the next ten years.

3.3. Commercial Development Projection

Estimates for commercial development are based on a review of current commercial development forecasts and market research, growth trends over the last 10 years, and existing commercial development projects underway in Delta. Over the last ten years, the rate of commercial growth has leveled off at an average of 1,300 m² gross floor area/year. Delta has this increased this stable indicator to project development anticipated over the next ten years.

3.4. Industrial Development Projection

Estimates for industrial development are based on a review of current industrial forecasts and market research, growth trends over the last 10 years, and existing industrial development projects underway in Delta. It is anticipated over the next decade that the municipality could expect 250 hectares of industrial growth; much of this growth will likely occur in the Tilbury Industrial Area and at Boundary Bay Airport. There is a high demand for industrial land in these two areas because of their close proximity to the South Fraser Perimeter Road.

3.5. Agricultural – Intensive Development Projection

Estimates for intensive agricultural development are based on a review of current agricultural forecasts, agricultural growth trends over the last 10 years, and proposed intensive agricultural development projects in Delta. Over the next decade, the municipality could see up to 200 hectares of intensive agricultural growth within the Agriculture Land Reserve areas of Delta.

4. Roads DCC Program

Roads DCC Program

The Roads DCC Program includes a variety of capital works including: new roads, road widening, capacity improvements, sidewalk and street improvements, turning bays, roundabouts, and signalization. Table 2 summarizes the costs of the Roads DCC Program and shows the proportion of the road costs attributable to future growth and to existing residents.

Table 2 – Summary of Roads DCC Program

Total Capital Costs	Grants	DCC Recoverable Program Costs	Municipal Costs	
			DCC Non-Recoverable	Assist Factor (10%)
\$100,310,763	\$0	\$37,476,391	\$62,834,372	4,164,043

Trip Generation and Road Impact

Traffic generation and road impact calculations were based on the Institute of Transportation Engineer's (ITE) Trip Generation 5th Edition, 1991 estimates for Average Vehicle Trip Ends (AVTE) and using data from transportation reports for Delta. As per the Development Cost Charges Best Practices Guide, the P.M. Peak Hour AVTE statistics were used to develop a guide the development of a weighted trip rate for all land uses categories in Delta. The DCC road equivalency factors for Delta are outlined in Table 3.

Table 3 – Average Vehicle Trip Ends – P.M. Peak Hour

Land Use	Base Unit	AVTE	ITE Planning Codes
Low Density	dwelling unit	1.2	Low Density (210)
Townhouse	dwelling unit	0.68	Townhouse (233)
Apartment	dwelling unit	0.66	Apartment (220)
Congregate Care	sleeping unit	0.25	Congregate Care Facility (253)
Commercial	m ² gross floor area	0.0078	Trip rates from Office Park (750), Shopping Centre (820), Business Park (770), Junior/Community College (540) were used to develop an AVTE that reflects the commercial and institutional mix in Delta.
Industrial	hectare	20	Industrial Park (130)
Agricultural - Intensive	hectare	2.8	Nursery – Wholesale / Nursery – Garden Center (817)

Road DCC Calculations

Table 4 – Road DCC Calculations

A. Traffic Generation Calculation				
Land Use	Estimated New Development	Development Unit	AVTE	Total Trip Ends
Low Density	1000	per dwelling units	1.2	1200
Townhouse	1500	per dwelling units	0.68	1020
Apartments	2000	per dwelling units	0.66	1320
Congregate Care	200	per m2 gross floor	0.25	50
Commercial	20500	per ha gross site	0.0078	160
Industrial	250	per dwelling units	20	5000
Agriculture – Intensive	200	per ha gross site	2.8	560
Total Trip Ends				9310

B. Unit Road DCC Calculations	
Net Road DCC Program Recoverable	\$37,476,391
Existing Road DCC Reserve Monies (December 31, 2016)	\$12,753,092
Net Amount to be Paid by DCCs	\$24,723,300
DCC per Trip End	\$2,655.59

C: Resulting Road DCCs		
Low Density (units)	\$3,187	per dwelling units
Townhouse (units)	\$1,806	per dwelling units
Apartments (units)	\$1,753	per dwelling units
Congregate Care (units)	\$664	per sleeping units
Commercial (m ²)	\$20.71	per m ² gross floor area
Industrial (ha)	\$53,112	per hectare gross site
Agriculture – Intensive (ha)	\$7,436	per hectare gross site

Roads DCC Projects

Table 5 – Roads DCC Project List

Project No.	Project Title	Location	Total Project Cost	Benefit Factor %	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Municipal Cost
R-001	72 Avenue	From Highway 91 to 120 Street	\$10,550,900	25	\$2,637,725	\$263,773	\$2,373,953	\$8,176,948
R-002	112 Street	72 Avenue to 92A Avenue	\$14,779,088	25	\$3,694,772	\$369,477	\$3,325,295	\$11,453,793
R-003	84 Avenue Improvements	110 Street to 116 Street	\$2,010,353	25	\$502,588	\$50,259	\$452,329	\$1,558,023
R-004	92 Avenue Intersection Improvements	119A Street to 120 Street	\$1,203,793	25	\$300,948	\$30,095	\$270,853	\$932,939
R-005	Roundabout and 78 Intersection	Ladner Trunk Road from 78 Street to 80 Street	\$4,069,607	100	\$4,069,607	\$406,961	\$3,662,646	\$406,961
R-006	Ladner Trunk Road	Elliott Street to 112 Street	\$13,919,188	25	\$3,479,797	\$347,980	\$3,131,817	\$10,787,370
R-007	River Road West	Church Street to 46A Street	\$3,456,011	25	\$864,003	\$86,400	\$777,602	\$2,678,409
R-008	28 Avenue Intersection Improvements	28 Avenue and 53 Street	\$461,703	25	\$115,426	\$11,543	\$103,883	\$357,819
R-009	56 Street	6 Avenue to 19 Avenue	\$13,830,915	25	\$3,457,729	\$345,773	\$3,111,956	\$10,718,959
R-010	Tilbury Access Road (Phase I)	92 Street to 96 Street	\$7,325,628	75	\$5,494,221	\$549,422	\$4,944,799	\$2,380,829
R-011	River Road	Admiral Boulevard to Highway 91 Connector	\$15,573,280	25	\$3,893,320	\$389,332	\$3,503,988	\$12,069,292
R-012	Boundary Bay Airport	South of Churchill Street	\$3,530,300	100	\$3,530,300	\$353,030	\$3,177,270	\$353,030
R-013	Traffic Studies	Municipal Wide	\$100,000	100	\$100,000	\$10,000	\$90,000	\$10,000
R-014	Land Acquisition	Municipal Wide	\$9,500,000	100	\$9,500,000	\$950,000	\$8,550,000	\$950,000
			\$100,310,763	-	\$41,640,435	\$4,164,043	\$37,476,391	\$62,834,372

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5. Water DCC Program

The Water DCC Program includes new and upgraded water mains, booster stations, and pump stations. Table 6 summarizes the costs of the Water DCC Program and shows the proportion of the water costs attributable to future growth and to existing residents.

Table 6 – Summary of Water DCC Program

Total Capital Costs	Grants	DCC Recoverable Program Costs	Municipal Costs	
			DCC Non-Recoverable	Assist Factor (10%)
\$18,754,500	\$0	\$7,346,363	\$11,408,138	\$816,263

Equivalent Population Units for Water

Delta's equivalent populations units for water were derived using the Development Cost Charges Best Practices Guide and are summarized in Table 7.

Table 7 – Equivalent Population Units for Water DCC Program

Land Use	Equivalent Population Per Base Unit	Base Unit
Low Density	3.2	dwelling unit
Townhouse	2.5	dwelling unit
Apartment	1.7	dwelling unit
Congregate Care	1.4	sleeping unit
Commercial	0.009	m ² gross floor area
Industrial	45	hectare
Agricultural	45	hectare

Water DCC Calculations

Table 8 – Water DCC Program Calculations

A. Water Impact Calculation				
Land Use	Estimated New Development	Density or Equivalent Population Factor	Development Unit	Equivalent Population
Low Density	1000	3.2	per dwelling unit	3,200
Townhouse	1500	2.5	per dwelling unit	3,750
Apartments	2000	1.7	per dwelling unit	3,400
Congregate Care	200	1.4	per dwelling unit	280
Commercial	20500	0.009	per m2 gross area	185
Industrial	250	45	per ha gross site	11,250
Agriculture – Intensive	200	45	per ha gross site	9,000
Total Equivalent Population				31,065

B. Unit Water DCC Calculations	
Net Water DCC Program Recoverable	\$7,346,363
Existing Water DCC Reserve Monies (December 31, 2016)	\$3,484,258
Net Amount to be Paid by DCCs	\$3,862,105
DCC per Equivalent Water Unit	\$124.33

C: Resulting Water DCCs		
Low Density	\$398	per dwelling unit
Townhouse	\$311	per dwelling unit
Apartments	\$211	per dwelling unit
Congregate Care	\$174	per dwelling unit
Commercial	\$1.12	per m ² gross floor area
Industrial	\$5,595	per ha gross site
Agriculture – Intensive	\$5,595	per ha gross site

Water DCC Projects

Table 9 – Water DCC Project List

Project No.	Project Title	Location	Total Project Cost	Benefit Factor (%)	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Municipal Cost
W-001	Hellings Booster Pump Station (Reservoir)	8544 116 Street	\$750,000	25	\$187,500	\$18,750	\$168,750	\$581,250
W-002	N-203 PRV Station Upgrade	River Road and 90 Avenue	\$600,000	50	\$300,000	\$30,000	\$270,000	\$330,000
W-003	Ladner Village Water Main	Chisholm Street - Georgia Street to Elliott Street (incl. section on Elliott and Georgia)	\$427,500	25	\$106,875	\$10,688	\$96,188	\$331,313
W-004	28 Avenue Water Main	Arthur Drive (53 Street) to 57B Street	\$1,050,000	25	\$262,500	\$26,250	\$236,250	\$813,750
W-005	48 Avenue Water Main	48 Avenue (Garry Street to 47A Street incl. a section on 47A Street)	\$446,000	25	\$111,500	\$11,150	\$100,350	\$345,650
W-006	Ladner Trunk Road I Water Main	52A to 54A Street	\$728,000	25	\$182,000	\$18,200	\$163,800	\$564,200
W-007	Ladner Trunk Road II Water Main	96 Avenue to 104 Avenue	\$1,920,000	25	\$480,000	\$48,000	\$432,000	\$1,488,000
W-008	53 Street Water Main	45 Avenue to Linden Drive	\$1,045,000	25	\$261,250	\$26,125	\$235,125	\$809,875
W-009	64 Street Water Main	Ladner Trunk Road to Highway 99	\$1,500,000	25	\$375,000	\$37,500	\$337,500	\$1,162,500
W-010	44 Avenue Water Main	80 Street to 96 Street	\$3,300,000	25	\$825,000	\$82,500	\$742,500	\$2,557,500
W-011	96 Street Water Main	44 Avenue to Hornby Drive	\$830,000	25	\$207,500	\$20,750	\$186,750	\$643,250
W-012	Tilbury Access Road (Phase I)	Aldrich Road to 92 Street	\$3,138,000	75	\$2,353,500	\$235,350	\$2,118,150	\$1,019,850
W-013	Tilbury Access Road (Phase II)	92 Street to 96 Street	\$2,040,000	75	\$1,530,000	\$153,000	\$1,377,000	\$663,000
W-014	Boundary Bay Airport	Boundary Bay Airport	\$980,000	100	\$980,000	\$98,000	\$882,000	\$98,000
			\$18,754,500	-	\$8,162,625	\$816,263	\$7,346,363	\$11,408,138

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6. Sanitary DCC Program

The Sanitary DCC Program includes new and upgraded sanitary mains, force mains, and pump stations. Table 10 summarizes the costs of the Sanitary DCC Program and shows the proportion of the road costs attributable to future growth and to existing residents.

Table 10 – Summary of Sanitary DCC Program

Total Capital Costs	Grants	DCC Recoverable Program Costs	Municipal Costs	
			DCC Non-Recoverable	Assist Factor (10%)
\$20,144,500	\$0	\$7,157,363	\$12,987,138	\$795,263

Equivalent Units for Sanitary

Delta's equivalent populations units for sanitary were derived using the Development Cost Charges Best Practices Guide and are summarized in Table 11.

Table 11 – Equivalent Population Units for Sanitary DCC Program

Land Use	Equivalent Population Per Base Unit	Base Unit
Low Density	3.2	dwelling unit
Townhouse	2.5	dwelling unit
Apartment	1.7	dwelling unit
Congregate Care	1.4	sleeping unit
Commercial	0.013	m ² gross floor area
Industrial	64.3	hectare gross site

Sanitary DCC Calculation

Table 12 – Sanitary DCC Program Calculations

A. Sanitary Impact Calculation				
Land Use	Estimated New Development	Density/ Equivalent Population Factor	Development Unit	Equivalent Population
Low Density	1000	3.2	per dwelling unit	3,200
Townhouse	1,500	2.5	per dwelling unit	3,750
Apartments	2,000	1.7	per dwelling unit	3,400
Congregate Care	200	1.4	per dwelling unit	280
Commercial	20,500	0.013	per m ² gross area	267
Industrial	250	64.3	per ha gross site	16,075
Total Equivalent Population				26,972

B. Unit Sanitary DCC Calculations	
Net Sanitary DCC Program Recoverable	\$7,157,363
Existing Sanitary DCC Reserve Monies (December 31, 2016)	\$4,315,548
Net Amount to be Paid by DCCs	\$2,841,814
DCC per Equivalent Sanitary Unit	\$105.36

C: Resulting Sanitary DCCs		
Low Density	\$337	per dwelling unit
Townhouse	\$263	per dwelling unit
Apartments	\$179	per dwelling unit
Congregate Care	\$148	per dwelling unit
Commercial (m ²)	\$1.37	per m ² gross floor area
Industrial (ha)	\$6,775	per ha gross site

Sanitary DCC Projects

Table 13 – Sanitary DCC Project List

Project No.	Project Title	Location	Total Project Cost	Benefit Factor (%)	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Municipal Cost
S-001	112 Street Sanitary Main	112 Street (80 Avenue - 82 Avenue)	\$671,500	25	\$167,875	\$16,788	\$151,088	\$520,413
S-002	109B Street Sanitary Main	84 Avenue to Nordel Way	\$1,499,200	25	\$374,800	\$37,480	\$337,320	\$1,161,880
S-003	River Road Sanitary Main	Terrace Drive to Delwood Drive	\$154,700	25	\$38,675	\$3,868	\$34,808	\$119,893
S-004	Ladner Village Sanitary Main	47 Avenue from 47A Street to Garry Street	\$725,000	25	\$181,250	\$18,125	\$163,125	\$561,875
S-005	16 Avenue Sanitary Main	56 Street to Gillespie Road	\$657,900	25	\$164,475	\$16,448	\$148,028	\$509,873
S-006	Gillespie Sanitary Pump Station	Gillespie Road	\$2,200,000	50	\$1,100,000	\$110,000	\$990,000	\$1,210,000
S-007	56 Street Sanitary Main	12 Avenue to 16 Avenue	\$2,084,200	25	\$521,050	\$52,105	\$468,945	\$1,615,255
S-008	South Delta Forcemain I	72 Street to 80 Street	\$6,000,000	25	\$1,500,000	\$150,000	\$1,350,000	\$4,650,000
S-009	South Delta Forcemain II	57 Street to east side of Highway 17A (South of 44 Avenue Road Dedication)	\$1,669,000	25	\$417,250	\$41,725	\$375,525	\$1,293,475
S-010	Tilbury Access Road	92 Street to 96 Street	\$3,983,000	75	\$2,987,250	\$298,725	\$2,688,525	\$1,294,475
S-011	Boundary Bay Airport Sanitary	Boundary Bay Airport	\$500,000	100	\$500,000	\$50,000	\$450,000	\$50,000
			\$20,144,500		\$7,952,625	\$795,263	\$7,157,363	\$12,987,138

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7. Drainage DCC Program

The Drainage DCC Program includes new and upgraded storm mains, pump stations, and interceptor canals. Table 14 summarizes the costs of the Drainage DCC Program and shows the proportion of the drainage costs attributable to future growth and to existing residents.

Table 14 – Summary of Drainage DCC Program

Total Capital Costs	Grants	DCC Recoverable Program Costs	Municipal Costs	
			DCC Non-Recoverable	Assist Factor (10%)
\$51,469,500	\$5,400,000	\$21,281,963	\$24,787,538	\$2,364,663

Equivalent Population Units for Drainage

The equivalent population units for drainage were derived using the Development Cost Charges Best Practices Guide are summarized in Table 15.

Table 15 – Equivalent Population Units for Drainage DCC Program

Land Use	Equivalent Population Per Base Unit	Base Unit
Low Density	1.0	dwelling unit
Townhouse	0.54	dwelling unit
Apartment	0.33	dwelling unit
Congregate Care	0.33	sleeping unit
Commercial	0.003	m ² gross floor area
Industrial	22.50	hectare
Agricultural - Intensive	6.25	hectare

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Drainage DCC Calculation

Table 16 – Drainage DCC Program Calculations

A. Drainage Impact Calculation							
Land Use	Density/ FSR/Site Coverage	Runoff Coefficient	Impervious Area/ Unit Development (m2)	Equivalence Factor	Estimated New Development	Development Unit	Equivalent Drainage Units
Low Density	10	0.40	400	1.00	1000	per dwelling units	1,000
Townhouse	30	0.65	217	0.54	1500	per dwelling units	813
Apartments	60	0.80	133	0.33	2000	per dwelling units	667
Congregate Care	60	0.80	133	0.33	200	per m2 gross floor	67
Commercial	70%	0.90	1.29	0.003	20,500	per ha gross site	66
Industrial	100%	0.90	9000	22.5	250	per dwelling units	5,625
Agriculture - Intensive	100%	0.25	2500	6.25	200	per ha gross site	1,250
Total Equivalent Drainage Units							9,487

B. Unit Drainage DCC Calculation	
Net Drainage DCC Program Recoverable	\$21,281,963
Existing Drainage DCC Reserve Monies (Feb 2, 2017)	\$5,699,042
Net Amount to be paid by DCCs	\$15,582,921
DCC per Equivalent Drainage Unit	\$1,643

C. Resulting Drainage DCCs		
Low Density	\$1,643	per dwelling unit
Townhouse	\$890	per dwelling unit
Apartments	\$548	per dwelling unit
Congregate Care	\$546	per dwelling unit
Commercial	\$5.28	per m ² gross area
Industrial	\$36,959	per ha gross site
Agriculture – Intensive	\$10,266	per ha gross site

Drainage DCC Projects

Table 17 –Drainage DCC Project List

Project No.	Project Title	Location	Total Project Cost	Grants	Total Project Costs Less Grants	Benefit Factor (%)	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Municipal Cost
D-001	84 Avenue Storm Main	112 Street to 116 street	\$1,104,000		\$1,104,000	25	\$276,000	\$27,600	\$248,400	\$855,600
D-016	88 Street Storm Main	South of Ladner Trunk Road between 80 Street and 96 Street	\$1,800,000		\$1,800,000	50	\$900,000	\$90,000	\$810,000	\$990,000
D-003	North East Interceptor Canal	East of Highway 91	\$3,125,000		\$3,125,000	25	\$781,250	\$78,125	\$703,125	\$2,421,875
D-004	72 Avenue Stormwater Diversion	120 Street to NE Interceptor Canal	\$4,250,000		\$4,250,000	25	\$1,062,500	\$106,250	\$956,250	\$3,293,750
D-005	88 Street and Beharrel Drainage Pump Station	South of Ladner Trunk Road between 80 Street and 96 Street	\$3,380,000		\$3,380,000	25	\$845,000	\$84,500	\$760,500	\$2,619,500
D-006	Green Slough Drainage Pump Station	River Road and Highway 99	\$3,000,000		\$3,000,000	25	\$750,000	\$75,000	\$675,000	\$2,325,000
D-007	River Road West Storm Main	Mason Drainage Pump Station to Church Street	\$4,272,000		\$4,272,000	25	\$1,068,000	\$106,800	\$961,200	\$3,310,800
D-008	12 Avenue Stormwater Management Improvements	East end of 12 Avenue along the dike	\$8,100,000	\$5,400,000	\$2,700,000	100	\$2,700,000	\$270,000	\$2,430,000	\$270,000
D-009	McDonald Drainage Pump Station	62B Street and River Road	\$4,600,000		\$4,600,000	25	\$1,150,000	\$115,000	\$1,035,000	\$3,565,000
D-010	Silda Drainage Pump Station	Approx. 9700 Block River Road	\$4,000,000		\$4,000,000	75	\$3,000,000	\$300,000	\$2,700,000	\$1,300,000
D-011	Tilbury Access Road (Phase I)	Aldrich Road to 92 Street	\$5,568,500		\$5,568,500	75	\$4,176,375	\$417,638	\$3,758,738	\$1,809,763
D-012	Tilbury Access Road (Phase II)	92 Street to 96 Street	\$3,830,000		\$3,830,000	75	\$2,872,500	\$287,250	\$2,585,250	\$1,244,750
D-013	92 Street Drainage Pump Station	River Road at Jarl (west of 92 Street)	\$1,500,000		\$1,500,000	75	\$1,125,000	\$112,500	\$1,012,500	\$487,500
D-014	Boundary Bay Airport	Boundary Bay Airport	\$2,740,000		\$2,740,000	100	\$2,740,000	\$274,000	\$2,466,000	\$274,000
D-015	Drainage Studies	Municipal Wide	\$200,000		\$200,000	100	\$200,000	\$20,000	\$180,000	\$20,000
			\$51,469,500	\$5,400,000	\$46,069,500	-	\$23,646,625	\$2,364,663	\$21,281,963	\$24,787,538

8. Parks DCC Program

The Parks Improvement DCC program includes park improvements or acquisition for various neighbourhood parks, community parks, linear parks, passive parks and trails throughout the municipality. Table 18 summarizes the costs of the Parks DCC Program and shows the proportion of the parks costs attributable to future growth and to existing residents.

Table 18 – Summary of Parks DCC Program

Total Capital Costs	Grants	DCC Recoverable Program Costs	Municipal Costs	
			DCC Non-Recoverable	Assist Factor (10%)
\$46,250,000	-	\$29,587,500	\$16,662,500	\$3,287,500

Equivalent Population Units for Parks

Delta's equivalent population units for Parks were derived using the Development Cost Charges Best Practices Guide and are summarized in Table 19.

Table 19 – Equivalent Populations for Parks DCC Program

Land Use	Equivalent Population Per Base Unit	Base Unit
Low Density	3.2	dwelling unit
Townhouse	2.5	dwelling unit
Apartment	1.7	dwelling unit
Congregate Care	1.4	sleeping unit

Parks DCC Calculation

Table 20 – Parks DCC Program Calculations

A. Park Impact Calculation				
Land Use	Estimated New Development	Development Unit	Density or Equivalent Population Factor	Equivalent Population
Low Density (units)	1000	per dwelling unit	3.2	3200
Townhouse (units)	1500	per dwelling unit	2.5	3750
Apartments (units)	2000	per dwelling unit	1.7	3400
Congregate Care (units)	200	per dwelling unit	1.4	280
Total Equivalent Population				10,630

B. Unit Park DCC Calculations	
Net Park DCC Program Recoverable	\$29,587,500
Existing Park DCC Reserve Monies	\$8,402,978
Net Amount to be Paid by DCCs	\$21,184,522
DCC per Equivalent Park Unit	\$1,993

C: Resulting Park DCCs		
Low Density	\$6,377	per dwelling unit
Townhouse	\$4,982	per dwelling unit
Apartments	\$3,388	per dwelling unit
Congregate Care	\$1,423	per dwelling unit

Parks DCC Projects

Table 21 – Parks DCC Project List

Project No.	Project Title	Location	Total Project Cost	Benefit Factor (1%)	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Municipal Cost
P-001	Winskill Park Expansion	Tsawwassen	\$6,500,000	75	\$4,875,000	\$487,500	\$4,387,500	\$2,112,500
P-002	Mackie Park Expansion	North Delta	\$1,750,000	75	\$1,312,500	\$131,250	\$1,181,250	\$568,750
P-003	Neighbourhood Parkland Acquisition	Various Locations	\$25,000,000	75	\$18,750,000	\$1,875,000	\$16,875,000	\$8,125,000
P-004	Trail Network Expansion	Various Locations	\$6,500,000	50	\$3,250,000	\$325,000	\$2,925,000	\$3,575,000
P-005	Annieville Lions Park Expansion	North Delta	\$750,000	50	\$375,000	\$37,500	\$337,500	\$412,500
P-006	John Oliver Park Expansion	East Delta	\$5,750,000	75	\$4,312,500	\$431,250	\$3,881,250	\$1,868,750
			\$46,250,000	-	\$32,875,000	\$3,287,500	\$29,587,500	\$16,662,500

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9. Proposed Development Cost Charges

Table 22 - Proposed 2017 DCC Rates

	Roads	Drainage	Sanitary	Water	Parks	2017 Proposed DCC Total	
Low Density	\$3,187	\$1,643	\$337	\$398	\$6,377	\$11,942	per dwelling units
Townhouse	\$1,806	\$890	\$263	\$311	\$4,982	\$8,252	per dwelling units
Apartment	\$1,753	\$548	\$179	\$211	\$3,388	\$6,079	per dwelling units
Congregate Care	\$664	\$546	\$148	\$174	\$1,423	\$2,955	per sleeping unit
Commercial	\$20.71	\$5.28	\$1.37	\$1.12	-	\$28.48	per m ² gross floor area
Industrial	\$53,112	\$36,959	\$6,775	\$5,595	-	\$102,441	ha gross site
Industrial - Annacis	\$53,112	-	-	-	-	\$53,112	ha gross site
Agriculture - Intensive	\$7,436	\$10,266	-	\$5,595	-	\$23,297	ha gross site

Table 23 - Comparison to Previous City of Delta DCC Rates

	2000 Rates	2013 Rates	2017 Rates	Units	% Increase
Low Density	\$11,229	\$11,355	\$11,942	per dwelling units	5%
Townhouse	\$7,627	\$7,763	\$8,252	per dwelling units	6%
Apartment	\$6,008	\$6,066	\$6,079	per dwelling units	0%
Congregate Care	\$2,817	\$2,884	\$2,955	per sleeping unit	2%
Commercial	\$26.81	\$27.42	\$28.48	per m ² gross floor area	4%
Industrial	\$98,784	\$100,342	\$102,441	ha gross site	2%
Industrial – Annacis	\$68,536	\$65,461	\$53,112	ha gross site	-19%
Agriculture - Intensive	\$23,103	\$23,128	\$23,297	ha gross site	1%

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Appendix A

Delta Development Cost Charges Bylaw No. 7560, 2017

CITY OF DELTA

BYLAW NO. 7560

A Bylaw to Impose Development Cost Charges

WHEREAS:

- A. Pursuant to Section 559 of the *Local Government Act* and the regulations passed pursuant thereto, The Council of the City of Delta, by bylaw, may impose development cost charges; and
- B. The development cost charges may be imposed for the purpose of providing funds to assist the City of Delta in paying the capital costs of providing, constructing, altering, or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities, and providing and improving park land or any of them, in order to service, directly or indirectly, the development for which the charge is being imposed.

NOW THEREFORE the Council of the City of Delta, in open meeting assembled, ENACTS AS FOLLOWS:

TITLE

1. This Bylaw may be cited for all purposes as "**Delta Development Cost Charges Bylaw No. 7560, 2017**".

DEFINITIONS AND INTERPRETATION

2. For the purposes of this Bylaw, unless the context otherwise requires:

Apartment means a multi-unit residential development which does not include Low Density Residential or Townhouse. The calculation of units is determined by the maximum number of dwelling units contained in the building permit application.

Annacis Island means the area of the City of Delta outlined in black and shaded in grey on Schedule "B" which is incorporated in and forms part of this Bylaw. For development applications on Annacis Island only Roads Development Cost Charges and GVS&DD charges shall be imposed.

Commercial means all Commercial development, other than Congregate Care and Intensive Agriculture. The measurement unit for Commercial development is square metres of gross floor area. The calculation of floor area of a commercial building is based on the gross floor area which is measured from the outside edge of all exterior walls, less the area used for parking of motor vehicles and bicycles within the gross floor area as identified in the building permit application.

Community Charter means the *Community Charter*, S.B.C. 2003, c.26, as amended from time to time.

Completed means, in the case of a subdivision, an application for which the servicing agreement is completed and signed, zoning is in place, all applicable fees and levies are paid, all conditions of approval are fulfilled and the final plans of subdivision are ready for approval by the Approving Officer.

Congregate Care means a multi-unit development which contains principally sleeping units without kitchen facilities, and where common dining and living areas are provided within the development. The calculation of units is determined by the maximum number of sleeping and dwelling units contained in the building permit application.

Development includes a Subdivision and a proposed Subdivision, and the construction, alteration or extension and the proposed construction, alteration or extension of a building or structure for which a building permit is or will be required.

Effective Date means the date on which this bylaw comes into force, which is established as January 1, 2018.

Industrial means all industrial uses and all greenhouses, retail nurseries, manufacturing & processing plants for agriculture related products and commercial businesses located outside of the Agricultural Water Rate Area defined as the grey bolded areas in Schedule C as amended from time to time, which is incorporated in and forms part of this Bylaw. The measurement unit for Industrial development is hectares of site area. The calculation of industrial site area is based on the gross area of the site that is proposed for development in a building permit application, including access, parking, loading and landscape areas, and excludes the undeveloped portion of the site that is being held in its pre-developed state for future additional development.

In-stream means:

- (a) in the case of an application for subdivision, one for which the application form has been completed, the application fees have been paid and all required supporting documentation necessary to make the application complete have been submitted and accepted by the Municipality as a legitimate application; and

- (b) in the case of an application for building permit, one for which the application form has been completed, the application fee has been paid, and all required supporting documentation including all applicable architectural, structural, plumbing, electrical, mechanical and site drainage drawings necessary to make the application complete have been submitted and accepted by the Municipality as a legitimate application.

Intensive Agriculture means greenhouses, retail nurseries, manufacturing and processing plants for agriculture related products, facilities used for intensive livestock operations, and commercial businesses located within the Agricultural Water Rate Area defined as the dark grey areas in Schedule C as amended from time to time, which is incorporated in and forms part of this Bylaw. Produce stands, temporary uses (less than 6 months) and retail less than 100 m² shall not be considered intensive agriculture. The measurement unit for intensive agriculture is hectares of site area. The calculation of site area is based on the gross area of the site that is proposed for development in a building permit application, including access, parking, loading, tanks, and excludes the undeveloped portion of the site that is not disturbed, ponds, residential farm facilities, and landscape areas. For intensive agriculture, where a sewer connection is required to a municipal system, the industrial sewer rate shall apply.

Low Density Residential means single family, duplex and triplex residential development. The calculation of units is determined by the maximum number of dwelling units lawfully permitted on the site being subdivided.

Mixed Use Developments means a development that contains more than one development type.

Townhouse means a multi-unit residential development where each dwelling unit has one or more exterior entrances on the ground floor, and shares one or more party walls with an adjacent dwelling unit, and does not include Low Density Residential development. The calculation of units is determined by the maximum number of dwelling units contained in the building permit application.

3. Words not specifically defined in this Bylaw shall have the same meaning as defined in Delta Zoning Bylaw, as amended from time to time.
4. If any section, clause or phrase of this Bylaw is held to be invalid by a court of competent jurisdiction, the invalid portion shall be severed and the remainder of the Bylaw shall be deemed to have been enacted without the invalid portion.

DEVELOPMENT COST CHARGES

5. Every person who obtains:

- (a) approval of a Subdivision, or
- (b) a building permit authorizing the construction, alteration or extension of a building or structure including a building permit that authorizes the construction, alteration or extension of a building or part of a building that will, after the construction, alteration or extension, contain one or more self-contained dwelling units;

shall pay to the City of Delta the development cost charge in the amounts set out in Schedule A of this Bylaw.

6. Development Cost Charges shall be paid at the time specified below:

- (a) after application for a subdivision has been made, but before the final approval of the subdivision plan has been given by the Approving Officer for Single Family Residential use parcels, or bare land strata parcels as defined under the *Condominium Act*; and
- (b) for all cases other than those described in clause 6(a), after application for a building permit has been made, but before the building permit has been issued.

7. The total Development Cost Charges imposed pursuant hereto shall be credited one unit for each existing fully serviced dwelling unit which existed prior to the Subdivision approval.

EXEMPTIONS

8. A development cost charge is not payable:

- (a) where the building permit authorizes the construction, alteration or extension of a building or part of a building that is, or will be after the construction, alteration or extension, exempt from taxation under Section 220(1)(h) or Section 224(2)(f) of the *Community Charter*;
- (b) where a development does not impose any new capital cost burden on the Municipality;
- (c) where DCC have been previously paid for the development unless, as a result of further development, new capital cost burdens will be imposed by the Municipality.

- (d) where the value of the work authorized by the building permit does not exceed \$50,000;
- (e) the area of the dwelling unit is no larger than 29m²;

MIXED USE DEVELOPMENTS

- 9. For mixed use developments, the development cost charge payable shall be calculated separately for each portion of the development contained in the building permit or subdivision application in accordance with the zones and land uses identified in Schedule A. The total payable will be the sum of the development cost charges for each portion of the development.

CHANGES TO WORK AUTHORIZED BY A BUILDING PERMIT

- 10. If a minor change to a building permit is proposed, the development cost charges will be recalculated based on the increase in building area, developed area, or dwelling units (as applicable) using the rates in the Delta Development Cost Charge Bylaw in effect at the time of issuance of the revision permit. The difference between the original development cost charge amount and the recalculated development cost charge amount shall be paid to the Municipality prior to the issuance of the revision permit.
- 11. If a substantial change to a building permit is proposed, the development cost charges will be recalculated on the entire project at the rates in the Delta Development Cost Charge Bylaw in effect at the time of issuance of the revision permit. The difference between the original development cost charge amount and the recalculated development cost charge amount shall be paid to the Municipality prior to the issuance of the revision permit.

EFFECTIVE DATE AND TRANSITIONAL PROVISIONS

- 12. This bylaw will come into force on the Effective Date.
- 13. *Delta Development Cost Charge Imposition Bylaw, 5830, 2000*, and all amendments thereto, is hereby repealed except in the case of:
 - (a) applications for Subdivision of land that are In-stream on the Effective Date and which are completed within one year of the Effective Date; and
 - (b) building permits that are In-stream on the Effective Date and which are issuable within one year of the Effective Date,

in which case *Delta Development Cost Charge Imposition Bylaw, 5830, 2000*, and all amendments thereto, shall apply. *Delta Development Cost Charge*

Imposition Bylaw. 5830, 2000, and all amendments thereto, shall be wholly repealed one year from the Effective Date.

READ A FIRST time the 16th day of **October**, 2017.

READ A SECOND time the 16th day of **October**, 2017.

READ A THIRD time the 20th day of **November**, 2017.

RECEIVED THE APPROVAL of the Inspector of Municipalities the day of , 2017.

FINALLY CONSIDERED AND ADOPTED the day of , 2017

Lois E. Jackson
Mayor

Robyn Anderson
City Clerk

**CERTIFIED CORRECT AS AT
THIRD READING:**



City Clerk
November 21, 2017

Schedule A

Development Cost Charge Rates Municipal Wide

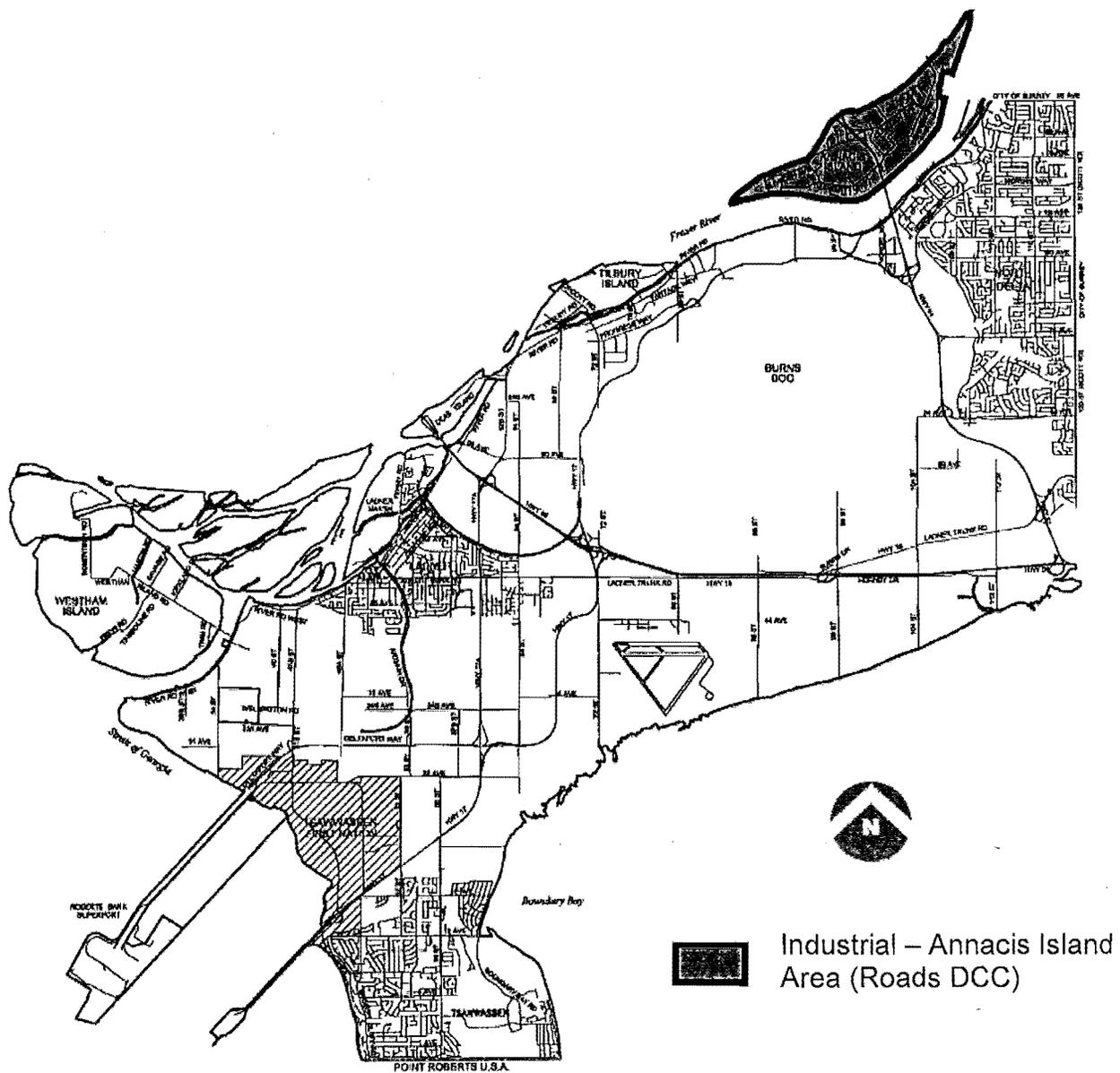
Delta Development Cost Charge Bylaw No. 7560, 2017
Effective Date: January 1, 2018

	Roads	Drainage	Sewer	Water	Parks	DCC Rates	
Low Density	\$3,187	\$1,643	\$337	\$398	\$6,377	\$11,942	per dwelling units
Townhouse	\$1,806	\$890	\$263	\$311	\$4,982	\$8,252	per dwelling units
Apartment	\$1,753	\$548	\$179	\$211	\$3,388	\$6,079	per dwelling units
Congregate Care	\$664	\$546	\$148	\$174	\$1,423	\$2,955	per sleeping unit
Commercial	\$20.71	\$5.28	\$1.37	\$1.12	-	\$28.48	per m ² gross floor
Industrial	\$53,112	\$36,959	\$6,775	\$5,595	-	\$102,441	hectare gross site
Industrial – Annacis*	\$53,112	-	-	-	-	\$53,112	hectare gross site
Agriculture – Intensive**	\$7,436	\$10,266	-	\$5,595	-	\$23,297	hectare gross site

* For Industrial development applications on Annacis Island as shown on Schedule "B" in dark grey which is incorporated in and forms part of this Bylaw, only Roads Development Cost Charges shall be imposed.

** Intensive Agriculture development applications within the Agricultural Water Rate Area, as shown in dark grey on Schedule "C", which is incorporated in and forms part of this Bylaw

Schedule B



Schedule C

