FINAL REPORT

Town of Gibsons

2007 DEVELOPMENT COST CHARGE REVIEW

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2007-10-05 -Town of Gibsons DCC Review_Final

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October 5, 2007 File: 1300.0090.01

Town of Gibsons
474 South Fletcher Road
Gibsons, BC V0N 1V0

Attention: Chris Marshall, MCIP
Director of Planning

RE: Town of Gibsons Development Cost Charge Review Report

We are pleased to provide the Town of Gibsons with 5 copies of the final report "*2007 Development Cost Charge Review*". It has been a pleasure working with you on this review, and we thank you for the assistance you provided throughout the project.

Should you have any questions or concerns about the final document, please do not hesitate to contact me at 604.273.8700.

Yours truly,

URBAN SYSTEMS LTD.

Fraser Smith, P. Eng., MBA
Principal

/al

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EXECUTIVE SUMMARY

This report presents proposed Development Cost Charges (DCCs) that reflect growth projections and DCC capital programs for the Town of Gibsons. The report consists of the following parts.

- **Part 1** of the report outlines the purpose of the DCC review and includes information on the legislation enabling DCCs, DCCs levied by other jurisdictions, and the use of the DCC Best Practices Guide.
- In **Part 2**, the public consultation process is reviewed.
- **Part 3** outlines the guiding principles used to develop the DCC program and identify DCC recoverable costs. This part discusses the time frame for the DCC program, the explanation for applying DCCs on a Town-wide basis, the allocation of costs between existing and new development, the municipal assist factor, grant assistance, interim financing, and units of charge.
- In **Part 4**, growth projections for the Town are presented. Based on the OCP, other studies and discussions with staff, the growth for the different land uses is forecast.
- **Parts 5 through 8** summarize the costs of each DCC program (i.e. roads, water, drainage, and sanitary sewer). The total capital costs for each service and the total DCC program costs are as follows:

Table 1
Total DCC Program Costs

Service	Municipal Costs	DCC Program Costs	Total Capital Costs
Roads	$ 2,531,832	$ 19,514,820	$ 22,046,652
Water	$ 659,800	$ 5,803,711	$ 6,463,511
Drainage	$ 249,893	$ 8,330,149	$ 8,580,042
Sewage	$ 49,246	$ 4,875,389	$ 4,924,635

Parts 5 through 8 also show how the DCC rates are calculated using the information from Parts 3 and 4. The proposed DCC rates are shown on the following page.

- **Part 9** includes information on implementation issues such as exemptions to the bylaw, grace periods, DCC rebates and credits, as well as suggestions for monitoring and accounting related to the DCC bylaw.

Table 2
Town of Gibsons
Proposed DCC Rate Summary

Land Use	Roads	Drainage	Water	Sanitary	Total	Units	When Payable
Single-Family Dwelling	$8,656.31	$4,205.78	$2,337.93	$2,038.27	$17,238.29	per lot/ per dwelling unit	Subdivision approval or if subdivision is not required, then at building permit issue
Townhouse / Two-Family (a)	$43.09	$18.76	$15.68	$13.67	$91.20	per m^2 floor space	Building permit issue
Apartment (b)	$56.94	$17.57	$20.12	$17.54	$112.17	per m^2 floor space	Building permit issue
Commercial or Institutional (c)	$67.89	n/a	$5.42	$4.73	$78.04	per m^2 gross building floor space	Building permit issue
Commercial or Institutional (c)	n/a	$134,584.91	n/a	n/a	$134,584.91	per net hectare	Building permit issue
Industrial (d)	$23.76	n/a	$6.45	$5.63	$35.84	per m^2 gross building floor space	Building permit issue
Industrial (d)	n/a	$84,115.57	n/a	n/a	$84,115.57	per net hectare	Building permit issue

(a) Townhouse / Two-Family development to be charged on a per m^2 floor space basis up to a maximum of $17,238.29 per dwelling unit.

(b) Apartment development to be charged on a per m^2 floor space basis up to a maximum of $11,856.00 per dwelling unit.

(c) For commercial and institutional uses, the total DCCs payable is the sum of roads, water, drainage and sanitary DCCs.

(d) For industrial uses, the total DCCs payable is the sum of roads, water, drainage and sanitary DCCs.

PART 1: BACKGROUND

Points Covered

- Purpose of this Review
- Legislative and Regulatory Background
- DCCs Levied by Other Authorities
- DCC Best Practices Guide

1.1 Purpose of this Review

The Town of Gibsons has recently completed the Upper Gibsons Neighbourhood Plan (UGNP) and is currently developing a new land use plan for the Gospel Rock area of Gibsons. As part of a comprehensive implementation strategy for the UGNP the Town is reviewing their existing Development Cost Charge (DCC) program and bylaw. The drainage section of the current DCC bylaw was last updated in December, 2001. The existing road and sanitary DCC programs were developed in 1995 and the water DCC program was last updated in 1998. The existing DCC programs are also being adjusted to reflect current conditions (e.g. revised growth projections and land use designations, increased construction costs).

Throughout the DCC review, the Town has worked to ensure consistency between the proposed DCC program and the Town's overall planning and financial objectives.

The proposed program ensures that the people who will use and benefit from the services provided pay their share of the costs in a fair and equitable manner. The proposed DCC program creates certainty by providing stable charges to the development industry and by allowing the orderly and timely construction of infrastructure.

It should be noted that the material provided in the background report is meant for information only. The Town of Gibsons Development Cost Charge Bylaw is the only source for the proposed DCC rates. Reference should be made to the bylaw for the specific DCC rate for all development within the Town.

1.2 Legislative and Regulatory Background

Development cost charges are special charges collected by local governments to help pay for infrastructure expenditures required to service growth. The *Local Government Act*, previously the *Municipal Act*, R.S.B.C 1996, c. 323 (the "*Act*") provides the authority for a municipality to levy DCCs. The purpose of a DCC is to assist the municipality in accommodating development by providing a dedicated source of funding for the capital costs of:

- providing, constructing, altering or expanding sewage, water, drainage and roads facilities (other than off-street parking); and
- providing and improving parkland.

Municipalities wanting to collect DCCs must adopt a bylaw (the "DCC Bylaw") that specifies the amount of the DCCs. The charges may vary with respect to:

- different zones or different defined or specific areas;
- different uses;
- different capital costs as they relate to different classes of development; and
- different sizes or different numbers of lots or units in a development.

Funds collected through DCCs must be set in a separate reserve account. These monies may only be used to pay for the capital costs of the works and short-term financing costs of a debt incurred for capital works identified in the DCC program. The costs for capital works include not only the actual construction of the works but also the planning, engineering and legal costs which are directly related to the works, as well as improving parkland if a parkland acquisition and development DCC is established. The administration cost of reviewing the DCC program from time to time may also be included as a charge against the program.

1.3 DCCs Levied by Other Authorities

The Sunshine Coast Regional District (SCRD) does not currently levy regional DCCs for water and sanitary in the Town of Gibsons. The Town of Gibsons is considering joining the SCRD Water Function for the Zone 3 pressure service area. Should the Town join the SCRD for this service the SCRD Water DCCs will be payable for development in this service area. It is our understanding that the School District does not have a school land acquisition charge in the Town of Gibsons.

1.4 Use of DCC Best Practices Guide

The Ministry of Community Services (the "Ministry") has prepared a Development Cost Charge Best Practices Guide (the "Best Practices Guide"). The purpose of this document is to outline an accepted process to develop a DCC program. Municipalities that follow this recommended process qualify for streamlined Ministry review of their DCC program.

This report was developed in consideration of the Best Practices Guide, which was followed where it was appropriate to do so.

PART 2: PUBLIC PARTICIPATION

Points Covered

- Consultation Process
- Comments Received

2.1 Public Participation Process

Although the *Act* does not require a public participation process, the Best Practices Guide does suggest that an opportunity for public participation be included as part of the development of the DCC program. The purpose of such a process is to allow those people that are interested in or affected by the proposed DCC to offer comments and input. The Best Practices Guide does not set a recommended format to be followed for public participation; instead, the type of public participation to be used is to be decided by the municipality itself.

The Town of Gibsons' consultation process consisted of one public presentation to Town Council and members of the development community as well as a public open house that was held on August 8th, 2007. Six people attended the public open house. The open house included a presentation by Urban Systems on the proposed DCC rates and principles involved in the calculation of the DCC rates. The Town also invited comments and suggestions from those that attended the open house. The information provided to the public is included in Appendix C.

2.2 Public Open House Comments Received

While no written comments were received from those who attended the public open house, the Town did receive verbal requests to disaggregate the "Multi-Family Residential" DCC rates into separate rates for different multi-family housing types. Accordingly, the Town's new DCC bylaw will include separate charges based on floorspace for townhouses and apartments.

PART 3: DEVELOPING THE DCC PROGRAM AND COSTS – GUIDING PRINCIPLES

Points Covered

- Relationship to Other Municipal Documents
- DCC Time Frame
- Town-Wide DCCs
- Recoverable Costs
- Grant Assistance
- Interim Financing
- Allocation of Costs
- Municipal Assist Factor
- Units of Charge

3.1 Relationship to Other Municipal Documents

This DCC program has been developed to be consistent with the following legislation, plans, and policy guides:

- *Local Government Act*
- Development Cost Charges Best Practices Guide
- Upper Gibsons Neighbourhood and Strategic Servicing Plan, Urban Systems October 6, 2006
- Official Community Plan Bylaw No. 985 (Town of Gibsons)
- Town of Gibsons Population Projections (confirmed by Town staff)
- Town of Gibsons Water Supply Strategic Plan
- Draft Gospel Rock Neighbourhood Plan

3.2 DCC Time Frame

The first step in determining DCC costs is to set a time frame for the DCC program. The time frame for the Gibsons DCC program is based on the projected build-out population of 10,000 people and for capital expenditures to meet their needs. The capital expenditure forecasts include all of the DCC projects that need to be constructed to allow for anticipated development to a capacity of 10,000 people.

3.3 Town-Wide DCC Charges

In a Town-wide DCC the same DCC rate is applied for each land use deemed to generate a similar or same capital cost burden regardless of the location of the development. An area-specific DCC typically divides the community into different areas according to geographic or other distinctive areas based on technical reasons. For example, it would be appropriate to establish an area-specific DCC for an area that is serviced by a vacuum sanitary sewer system, which can only service that particular area due to topographic constraints.

The questions we answered in concluding that a Town-wide DCC is the best alternative for the Town of Gibsons DCC include the following:

1. What does the Provincial DCC Best Practise Guide (BPG) recommend?
2. How is the existing DCC bylaw applied?
3. Who benefits from the capital works in a direct or indirect manner?

4. Is a Town-wide DCC a fair manner to distribute the costs in relationship to the development of land throughout the Town?
5. What are the cash flow implications of collecting area-specific DCCs vs. Town-wide DCCs on a community the size of Gibsons with the specific Gibsons DCC capital program? How will the manner of DCC collection affect the Town's ability to get the DCC program built?
6. What are the typical complexities and costs of establishing the Town-wide vs. area-specific DCC? How would this approach work for the UGNP area?
7. Does a Town-wide DCC support growth throughout the Town in a more cost effective manner?

The answers to the questions above helped us conclude that a Town-wide DCC rate structure is the best option for Gibsons at this time.

The provincial BPG recommends that the roads, parks, water, sanitary and storm DCCs be established on municipal wide basis unless there is a significant disparity between those who pay the DCCs and those who benefit. The DCC infrastructure program will benefit all areas of growth throughout the Town. Certain infrastructure and services such as roads are accessible and potentially available for all to use. Our experience is that there is little data to show the benefit of area specific DCCs for these services unless there are geographic constraints that absolutely prohibit movement around a community. For water, sanitary and storm sewers the DCC program will benefit users in all parts of the Town. These programs are currently based on Town wide impacts. There are no significant technical or topographic constraints that justify establishing these utilities on an area-specific basis in Gibsons.

The existing DCC bylaw is applicable throughout the Town. This model gives the Town the most flexibility in terms of accumulating and spending DCC revenues. Area-specific DCCs can limit the amount of DCCs available to fund works throughout the Town by having multiple DCC reserves with a small amount in different reserves, this can result in waiting a long time to collect a significant amount of DCCs to build any works in a timely manner.

Having DCCs collected Town-wide gives the Town the flexibility to construct DCC works anywhere in the Town. This can be beneficial should development shift from one area in the Town to another area over time. If all areas develop in a slow manner the DCCs available in a Town-wide DCC program will allow the Town to respond to changes in development patterns throughout the Town.

Having a Town-wide DCC can reduce the complexity of collecting the DCC and cost of administering the DCC reserves. A Town-wide DCC bylaw is often a simpler document to apply by front counter staff as well and can reduce the staff time required to assess, collect and expend the DCCs. We believe the reduced administration effort from having a Town-wide DCC can be significant.

3.4 DCC Recoverable Costs

As specified by the *Local Government Act*, the DCC recoverable costs for the projects include construction costs, contingency, engineering, administration and net GST. The capital costs included in this report do not include charges for interim financing or interest on long-term debt financing.

While interest on long-term debt has not been included in the capital costs presented in this report, it should be noted that the definition of "capital costs" (Section 932 of the *Act*) has been recently amended to include interest in exceptional circumstances where borrowing is required. The Inspector of Municipalities will only allow interest costs in exceptional circumstances that necessitate the construction of specific infrastructure projects in advance of sufficient DCC cash flows (e.g. fixed-capacity infrastructure, out-of-sequence projects, or greenfield developments). In these cases, local governments or developers are required to front-end the cost of the growth-related infrastructure, and recover their costs through DCCs as growth occurs. However, the Ministry continues to encourage local governments to adopt DCC programs that limit the need for borrowing to exceptional cases.

3.5 Grant Assistance

We have not identified any grant assistance for the DCC program. All costs identified are funded from DCCs or other Town contributions.

3.6 Interim Financing

The capital costs shown in the report do not include interim financing.

3.7 Allocation of Costs

For each proposed infrastructure project, costs are allocated between the existing development and new growth. To determine the proper allocation for each project, individual projects can be divided into two broad categories:

1. Projects that upgrade the level of service or resolve existing deficiencies; and
2. Projects that are required solely to accommodate new growth.

Projects in the first category provided some benefit to existing development, but they also benefit 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 (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. For projects in this category, the benefit to growth varies from 50% to 75%.

Projects in the second category benefit new growth only. In other words, they would not be contemplated if no new growth were forecasted. One hundred percent (100%) of the benefit and cost of each project in this category has been allocated to new growth.

The following table indicates, in general terms, the percentage of the costs that are attributable to new growth according to the type of service. Numbers less than 100% indicate category one projects that benefit both new growth and the existing population. The number 100% indicates category two projects that principally benefit new growth alone.

Table 3
Allocation of Costs Attributable to New Growth

DCC Type	Benefit Factors %
Roads	57% - 100%
Water	57% - 100%
Drainage	50% - 100%
Sanitary Sewer	50% - 100%

In each of the DCC programs (Sections 5 through 8), the exact percentage of the benefit that can be attributed to new growth is indicated in the column entitled “Benefit Factor %”. That factor is applied to the estimated costs to arrive at the amount that can be recovered by DCCs before the municipal assist factor is applied. That information can be found in the column entitled “Benefit to New Development” in all of the DCC programs.

3.8 Municipal Assist Factor

The *Act* recognizes that it would be unfair to impose on new development all of the costs that are attributable to new development. As such, the *Act* stipulates that an assist factor will be included as part of the calculation of the DCCs. An assist factor represents the Town's contribution towards the capital costs for the projects that are attributed to new development. This contribution is in addition to the costs that were allocated in the calculations to the existing population and that are to be paid by the Town. The portion of the costs that the Town will have to cover because of the assist factor will have to be financed through other means available to the Town, such as general tax revenue.

The actual level of the assist factor is determined by the Town. While the Town can have a different assist factor for *each type of capital works*, i.e. sanitary and roads, the Town cannot have a municipal assist factor that varies for *different land uses* within the Town, i.e. single family residential, townhouse residential, commercial, etc.

According to the *Act*, the Town should consider the following factors when setting DCC rates:

- future land use patterns and development;
- the phasing of works and services;
- whether the charges are excessive in relation to the capital costs of prevailing standards of service;
- whether the costs will deter development; or
- whether the charges will discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land.

In consideration of all of the above matters, the assist factor has been set at the following rates for each type of DCC:

Table 4
Municipal Assist Factor by DCC Type

DCC Type	Municipal Assist Factor
Roads	1%
Water	1%
Drainage	1%
Sanitary Sewer	1%

3.9 Units of Charge

Single family residential DCCs will be levied at subdivision based on the number of lots created by subdivision. The other residential land uses (townhouse and apartments), commercial land uses, institutional land uses, and industrial land uses will be levied the DCC at the building permit stage of development. The DCCs for townhouse and apartment uses will be levied on a square metre of floor space basis. Commercial, institutional, and industrial DCCs will be levied based on the gross building floor space of the building permit for all DCCs except for drainage, which will be levied on net hectare of site area.

It is easiest to collect the detached dwelling DCCs at the time of subdivision. Collecting the DCC at this point ensures the DCC is collected as early as possible to help in funding needed infrastructure. For multi-family residential development the size and number of townhouses or apartments is often not known at the time of subdivision. Therefore, collection of the multi-family DCCs at the building permit stage is more accurate in assessing the impact of the development.

For townhouses and apartments, DCC rates based on floor space were derived by converting a DCC rate per dwelling unit to a rate per square metre of floor space. The conversions were based on an average townhouse size of 130 m^2 (1400 ft^2) and an average apartment size of 79 m^2 (850 ft^2). The total DCC for townhouses is $11,856.00 per dwelling unit, which translates into a DCC of $91.20 per square metre of floor space. The total DCC for apartments is $8,861.62 per dwelling unit, which translates into a DCC of $112.17 per square metre of floor space. The apartment rate per square metre of floorspace is greater than the rate for townhouses because of the following reasons:

- DCC costs are allocated based on relative infrastructure impacts, which are estimated on a per dwelling unit basis (e.g., for sanitary and water services, impact is measured by the number of people per dwelling unit) – with the data available, it is impractical to estimate relative impacts on infrastructure by square metre of floor space. Therefore, DCC costs are not allocated to townhouses or apartments in a linear fashion. For example, a townhouse that is twice the size of an apartment is not expected to generate twice the impact on the water system. This is because the townhouse is not expected to house twice the number of people that would live in the smaller apartment.
- The average apartment size is 79 m^2. Since the size of the average apartment is significantly lower than the size of the average townhouse (130 m^2) and the relationship between infrastructure impact and floorspace is not linear, even though the DCC rate per dwelling unit is lower for apartments than townhouses, once the conversion is completed,

the rate per square metre of floorspace for apartments is larger than the rate for townhouses.

To alleviate the potential that an apartment would pay more per dwelling unit than a townhouse, apartments will be charged up to a maximum of the townhouse rate per dwelling unit. Townhouses will be charged up to a maximum of the single family rate per dwelling unit to ensure townhouses are not charged more than a single family home. It is expected that an apartment complex will pay less, per unit, than a townhouse complex, which is a reasonable reflection of relative impact on infrastructure.

PART 4: GROWTH PROJECTIONS

Points Covered

- Residential
- Commercial
- Industrial
- Institutional

4.1 Residential

In total, the population of Gibsons is expected to grow by roughly 5,400 residents. Through the examination of the Official Community Plan, 2004, the Upper Gibsons Neighbourhood and Strategic Plan (UGNP), 2006, a review of the growth projections used in various DCC background reports from 1995, 1998 and 2001, and discussions with Town staff, it is possible to distribute this new growth among dwelling types (Table 5).

The multi family growth projection is based on 453 units from the UGNP area (commercial/ mixed use (146 units), townhouse (150 units), live-work (20 units), small lot cluster (137 units)) and 877 multi family units from the remainder of the Town of Gibsons. The single family growth projection includes 227 cottage units, 137 small lot cluster units and 98 single family units from the UGNP area and the remainder of the single family units are projected to be developed throughout the Town of Gibsons. Based on discussions with Town staff, it has been assumed that 70% of multi-family growth will be in the form of apartments and 30% will be in the form of townhouses.

Table 5
Distribution of Population Growth by Dwelling Type

Dwelling Type	New Units	Persons per Unit	New Population
Single Family	1,160	2.50	2,900
Townhouse/Two-Family	399	2.18	870
Apartment	931	1.7	1,583
		Total	**5,353**

As shown in Table 6, the residential growth projections are the same across DCC programs.

Table 6
Residential Growth Projections

DCC	Dwelling Type	New Development (dwelling units)
Roads	Single Family	1,160
	Townhouse/Two-Family	399
	Apartment	931
Water	Single Family	1,160
	Townhouse/Two-Family	399
	Apartment	931
Drainage	Single Family	1,160
	Townhouse/Two-Family	399
	Apartment	931
Sanitary Sewer	Single Family	1,160
	Townhouse/Two-Family	399
	Apartment	931

While no growth estimates were provided for two-family dwelling development, two-family dwelling development will be levied DCCs equivalent to the townhouse rate.

4.2 Commercial

To estimate future commercial development potential we reviewed the basis of the current DCC bylaw and reviewed the amount of available commercial space available for development. Town staff provided the background information and confirmed our estimates. As shown in Table 7, 24,000 square metres of new commercial floorspace (which translates to 3.5 hectares of site area) is expected to be developed in a build-out scenario.

Table 7
Commercial Growth Projections

DCC	New Development
Roads	24,000 m^2 gross building floor space
Water	24,000 m^2 gross building floor space
Drainage	3.5 hectares site area
Sanitary Sewer	24,000 m^2 gross building floor space

4.3 Industrial

Like the commercial growth projections, the industrial growth projections were based on discussions with Town staff. As shown on Table 8, the Town is expected to experience 4.9 hectares of new industrial development over the DCC program timeframe. Assuming an FSR of 0.65, industrial floor space is expected to grow by 32,000 square metres.

Table 8
Industrial Growth Projections

DCC	New Development
Roads	32,000 m^2 gross building floor space
Water	32,000 m^2 gross building floor space
Drainage	4.9 hectares site area
Sanitary Sewer	32,000 m^2 gross building floor space

4.4 Institutional

Given the unpredictable nature of institutional development, reliable estimates of future institutional development were not available. However, since institutional development is expected to impact infrastructure in much the same was as commercial development impacts infrastructure, institutional development will be levied DCCs equivalent to those levied on commercial uses.

PART 5: ROADS DCCS

Points Covered

- Roads DCC Program
- Traffic Generation and Calculation of Road Impact
- Roads DCC Calculation

5.1 Roads DCC Program

The Roads DCC program includes a variety of capital works including major road construction, road widening, intersection improvements and traffic signals (see Figure 1).

Each Roads DCC Program identifies the proportion of the costs attributable to future growth and to the existing residents. A municipal assist factor of 1% was applied to that amount in order to determine the amount recoverable by DCCs.

Table 9
Roads DCC Program Costs

Total Cost	DCC Recoverable	Municipal Responsibility (total cost – DCC recoverable)
$ 22,046,652	$ 19,514,820	$ 2,531,832

The total cost of the roads projects is approximately $22 million, of which $19.5 million is DCC recoverable. These costs include the construction of new road infrastructure plus engineering, contingency, and project administration.

5.2 Traffic Generation and Calculation of Road Impact

For roads, the cost of development is distributed based on the trips generated by each land use. Relative impacts and equivalent units have been calculated as follows:

Table 10
Equivalent Units for Roads

Land Use	Base Unit	Trip Rate
Single Family	Lot	1.02
Townhouse/Two-Family	Dwelling unit	0.66
Apartment	Dwelling unit	0.53
Commercial	Gross building floor space (m^2)	0.008
Industrial	Gross building floor space (m^2)	0.0028

5.3 Roads DCC Calculation

The Roads DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 1.

Equation 1
Road DCC Calculation

Total New Growth (by land use) x Trip Ends per Land Use = Total Trip Ends

↓

DCC Recoverable Costs / Total Trip Ends = DCC Costs per Trip End

↓

DCC Costs per Trip End x Trip End per Land Use = DCC Costs per Land Use

↓

DCC Costs per Unit / Average Unit Size = DCC per sq. m. (applies to only apartments and townhouses/two-family)

The proposed Roads DCC rates are shown in Table 11. The detailed Roads DCC calculations are included in the series of Tables appended at the end of this section.

Table 11
Proposed Road DCC Rates

Land Use	DCC Rate	Unit
Single Family	$8,656.31	Per lot
Townhouse/Two-Family	$43.09	Per m^2 floor space
Apartment	$56.94	Per m^2 floor space
Commercial/Institutional	$67.89	Per m^2 of gross building floor space
Industrial	$23.76	Per m^2 of gross building floor space

The proposed DCC rates are levied per lot for detached dwellings and per square metre of floor space for multi family (townhouses/two-family and apartments). Commercial, institutional, and industrial development are levied DCCs per square metre of gross building floor space.

Table 12
TOWN OF GIBSONS
ROADS DCC PROGRAM

Project No.	Column	Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2) x Col. (3)	Col. (5)	Col. (6) = Col. (4) - Col. (5)	Col. (7) = Col. (2) - Col. (6)
	Location / Project Name	Description	Cost Estimate [1]	Benefit Factor [2]	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
1	Gibsons Way - Payne to North	Overhead wire elimination, street lights, (46m) sidewalk	$1,011,780	57%	$576,715	$5,767	$570,947	$440,833
2	Gibsons Way - North to Gower Point	Overhead wire elimination, street lights, sidewalks, bike lanes	$1,587,020	57%	$904,601	$9,046	$895,555	$691,465
3	Marine Drive - Jack Lane to Town boundary	Rebuild sidewalks, curbs and roads, minor culvert upgrades	$423,000	57%	$241,110	$2,411	$238,699	$184,301
4	Gower Point Road - Winn to S. Fletcher	Upgrade to standard cross section	$821,396	57%	$468,196	$4,682	$463,514	$357,882
5	Gower Point Road - S. Fletcher to Franklin	Upgrade to standard cross section	$906,368	57%	$516,630	$5,166	$511,463	$394,905
6	North Road - Reed to Highway 101	Sidewalks, overhead street lights	$650,000	100%	$650,000	$6,500	$643,500	$6,500
7	Reed Road - North to Payne	Includes 1/2 cost of full road to ultimate road standards	$1,271,368	100%	$1,271,368	$12,714	$1,258,654	$12,714
8	Mahon Road - Highway 101 to Town boundary	Upgrade to standard cross section	$545,000	100%	$545,000	$5,450	$539,550	$5,450
9	Shaw Road - Highway 101 to Inglis	Ornamental street lights both sides	$230,000	57%	$131,100	$1,311	$129,789	$100,211
10	Inglis Road - Shaw Road to Town boundary	Upgrade to standard cross section	$466,470	100%	$466,470	$4,665	$461,805	$4,665
11	School Road - Highway 101 to Gower Point	Ornamental street lights both sides, sidewalk one side	$450,000	57%	$256,500	$2,565	$253,935	$196,065
12	Park Road & Gibsons Way	Closure of Park Road at Gibsons Way	$123,500	100%	$123,500	$1,235	$122,265	$1,235
13	New Collector Roadway Connection	Park Road to Venture Way (200m)	$783,000	100%	$783,000	$7,830	$775,170	$7,830
14	Venture Way at Gibsons Way	Reconfigure Venture Road - provide left-turn lane	$14,500	100%	$14,500	$145	$14,355	$145
15	Sunnycrest Road & Gibsons Way	New traffic signal control	$217,500	100%	$217,500	$2,175	$215,325	$2,175
16	Sunnycrest Road & Gibsons Way	New eastbound left-turn lane on Gibsons Way	$261,000	100%	$261,000	$2,610	$258,390	$2,610
17	School Road / North Road & Gibsons Way	New northbound left-turn lane on School Road (100m)	$130,500	100%	$130,500	$1,305	$129,195	$1,305
18	Reed Road & North Road	New traffic signal control	$217,500	100%	$217,500	$2,175	$215,325	$2,175
19	Kiwanis Way	Upgrade to collector standard (200m)	$406,000	100%	$406,000	$4,060	$401,940	$4,060
20	Sunnycrest Road	Upgrade to collector standard (200m)	$333,500	100%	$333,500	$3,335	$330,165	$3,335
21	Aurora Way	Traffic calming (speed humps)	$29,000	100%	$29,000	$290	$28,710	$290
22	Park Road	Upgrade to collector standard (700m)	$1,805,250	100%	$1,805,250	$18,053	$1,787,198	$18,053
23	Sunnycrest Road	Construct extension to collector standard (600m)	$2,552,000	100%	$2,552,000	$25,520	$2,526,480	$25,520
24	"Road C"	Construct extension to collector standard (1000m)	$3,915,000	100%	$3,915,000	$39,150	$3,875,850	$39,150
25	Sunnycrest Road & "Road C"	Roundabout construction	$290,000	100%	$290,000	$2,900	$287,100	$2,900
26	Park Road & "Road C"	Roundabout construction	$290,000	100%	$290,000	$2,900	$287,100	$2,900
27	Gospel Rock Neighbourhood Plan Servicing	New collector road - Inglis Road to Chaster Road	$1,316,000	100%	$1,316,000	$13,160	$1,302,840	$13,160
28	Gower Point Road	Pedestrian improvements - Franklin Road to Town Boundary	$1,000,000	100%	$1,000,000	$10,000	$990,000	$10,000
TOTALS			**$22,046,652**		**$19,711,939**	**$197,119**	**$19,514,820**	**$2,531,832**

Notes

(1) Cost estimate from the Town of Gibsons, Road DCC Background Report (ITEMS 1 - 11), June 7, 1995 Aplin and Martin (A&M). UGNP (ITEMS 12-26) October 6, 2006 completed by USL. Gospel Rock cost estimates January 15, 2007 by Kerr Wood Leidel.

Items #1 - 11 - Estimates are from the A&M study and have been increased by 46% to reflect 2006 costs (Item #1 has been increased by 26% to reflect that some work has been done in 2006).

Items #12 - 26 - Capital costs include 45% for engineering (10%), contingency (35%).

Items #27, 28 - Capital costs include 40% for engineering and contingency. Bonding and insurance (1.5%) and mobilization and demobilization (3.5%) included in base cost. Item 28 new cost estimate from Town February 9, 2007.

(2) Benefit factor of DCC program has been set at 100% and in some cases 57% to reflect the works are for the benefit of growth to different amounts.

(3) Description of work for ITEMS 1 - 11 from Aplin and Martin, 1995 Report. Some refinements from Town on ITEMS 1, 6, 8, 9.

Table 13
TOWN OF GIBSONS
ROADS DCC RATE CALCULATION

A: Traffic Generation Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Unit**	**Wt. Trip Rate**	**Trip Ends**
Single Family Residential	1,160	Lots	1.02	1,183
Townhouse / Two-Family	399	Dwelling Units	0.66	263
Apartment	931	Dwelling Units	0.53	493
Commercial	24,000	Gross Building Floor Space (m2)	0.008	192
Industrial	32,000	Gross Building Floor Space (m2)	0.0028	90
			Total Trip Ends	2,222 (a)
B: Unit Road DCC Calculation				
Net Road DCC Program Recoverable		$19,514,820.09	(b)	
Existing DCC Reserve Monies		$661,282.00	(c)	
Net Amount to be Paid by DCCs		$18,853,538.09	(d) = (b) - (c)	
DCC per Trip End		$8,486.58	(e) = (d)/(a)	
C: Resulting Road DCCs				
Single Family Residential		$8,656.31	per Lot	(e) x Col. (3)
Townhouse / Two-Family		$5,601.14	per Dwelling Unit	(e) x Col. (3)
		$43.09	per m^2 Floor Space	
Apartment		$4,497.89	per Dwelling Unit	(e) x Col. (3)
		$56.94	per m^2 Floor Space	
Commercial		$67.89	per m^2 Gross Building Floor Space	(e) x Col. (3)
Industrial		$23.76	per m^2 Gross Building Floor Space	(e) x Col. (3)

Notes

PART 6: WATER DCCS

Points Covered

- Water DCC Program
- Water Demand and Calculation of Equivalent Population
- Water DCC Calculation

6.1 Water DCC Program

The Water DCC Program includes several watermain upsizing projects (see Figure 2).

Table 14
Water DCC Program Costs

Total Cost	DCC Recoverable	Municipal Responsibility (total cost – DCC recoverable)
$ 6,463,511	$ 5,803,711	$ 659,800

The total cost of the improvements is approximately $6.46 million, of which approximately $5.80 million is DCC recoverable. These costs include the construction of new water infrastructure including water reservoir, trunk grid mains, PRVs plus engineering, contingency, and project administration.

6.2 Water Demand and Calculation of Equivalent Population

The waterworks DCC is based on the need for additional services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands for water services. For non-residential land uses, an equivalency is used. Typically the equivalency is based on a population per gross area. These are based on average population densities. For the DCC calculation, equivalent populations per square metre are established.

Table 15
Equivalent Units for Water

Land Use	Base Unit	Equivalent Population Per Base Unit
Single Family	Lot	2.5
Townhouse/Two-Family	Dwelling unit	2.18
Apartment	Dwelling unit	1.7
Commercial	Gross building floor space (m^2)	0.0058
Industrial	Gross building floor space (m^2)	0.0069

6.3 Water DCC Calculation

The Water DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 2.

Equation 2
Water DCC Calculation

Total New Growth (by unit or sq. m.) x Equivalent Population (per unit or sq. m.) = Total Equivalent Population

↓

DCC Recoverable Costs / Total Equivalent Population = DCC Costs per Equivalent Population

↓

DCC Costs per Equivalent Population x Equivalent Population (per unit or sq. m.) = DCC Costs per Unit or sq. m.

↓

DCC Costs per Unit / Average Unit Size = DCC per sq. m. (applies to only apartments and townhouses/two-family)

The proposed Water DCC rates are shown in Table 16. The detailed Water DCC calculations are included in the series of tables appended at the end of this section.

Table 16
Proposed Water DCC Rates

Land Use	DCC Rate	Unit
Single Family	$2,337.93	Per lot
Townhouse/Two-Family	$15.68	Per m^2 floor space
Apartment	$20.12	Per m^2 floor space
Commercial/Institutional	$5.42	Per m^2 of gross building floor space
Industrial	$6.45	Per m^2 of gross building floor space

The proposed DCC rates are levied per lot for detached dwellings, and per unit for multi family (townhouses/two-family and apartments). Commercial, institutional, and industrial development are levied DCCs per square metre of gross building floor space.

Table 17
TOWN OF GIBSONS
WATER DCC PROGRAM

Project Area	Column / Name	From	To	Col.(1) Cost Estimate w/ Cont., Eng., & Admin. (1)	Col. (2) Benefit Factor % (2)	Col. (3) =Col. (1) x Col. (2) Benefit to New Development	Col. (4) Municipal Assist Factor 1%	Col. (5) = Col. (3) - Col. (4) DCC Recoverable	Col. (6) = Col.(1) - Col. (5) Total Municipal Responsibility
1	UGNP 1500m^3 reservoir			$870,000	100%	$870,000	$8,700	$861,300	$8,700
2	UGNP 300mm PVC Trunk (Reservoir to Payne)	Reservoir	Payne Road	$760,875	100%	$760,875	$7,609	$753,266	$7,609
3	UGNP 300mm PVC Trunk (Payne to Park) - "Road C"	Payne	Park Rd	$202,638	100%	$202,638	$2,026	$200,612	$2,026
4	UGNP 250mm PVC Trunk (Park to North) "Road C"	Park Rd	North Rd	$219,313	100%	$219,313	$2,193	$217,120	$2,193
5	UGNP 200mm PVC Loop ("Road C" to Sunnycrest)	Road "C"	Sunnycrest Rd	$79,750	100%	$79,750	$798	$78,953	$798
6	Gower Point Road 200mm	Glassford Rd	S. Fletcher	$253,000	57%	$144,210	$1,442	$142,768	$110,232
7	Gower Point Road 250mm	Glassford Rd	Dougall Rd	$56,000	57%	$31,920	$319	$31,601	$24,399
8	Shaw Rd PRV			$77,000	57%	$43,890	$439	$43,451	$33,549
9	Shaw Rd 200mm	Inglis Rd	110m S	$48,000	100%	$48,000	$480	$47,520	$480
10	O'Shea Road 250mm	School Rd	150m SW	$69,000	100%	$69,000	$690	$68,310	$690
11	School Road 250mm	O'Shea Rd	Gower Pt Rd	$267,000	100%	$267,000	$2,670	$264,330	$2,670
12	South Fletcher Road 200mm	Wiinn Rd	250m NE	$111,000	57%	$63,270	$633	$62,637	$48,363
13	South Fletcher Road 200mm	Wiinn Rd	Gower Pt Rd	$170,000	57%	$96,900	$969	$95,931	$74,069
14	Winn Road 200mm	Gower Pt Rd	S. Fletcher	$53,000	57%	$30,210	$302	$29,908	$23,092
15	North Fletcher Road 200mm	Gibsons Way	School Rd	$218,000	57%	$124,260	$1,243	$123,017	$94,983
16	Well #5			$446,000	100%	$446,000	$4,460	$441,540	$4,460
17	School Road PRV	School Rd	Wildwood Cres.	$178,000	100%	$178,000	$1,780	$176,220	$1,780
18	Chaster PRV			$111,000	100%	$111,000	$1,110	$109,890	$1,110
19	Upgrade Zone 2 Booster Pump (School Rd)			$252,000	57%	$143,640	$1,436	$142,204	$109,796
20	North Road PRV			$125,000	100%	$125,000	$1,250	$123,750	$1,250
21	North Road Upgrade 200mm PVC	Gibsons Way	N. of Hillcrest Rd	$134,000	57%	$76,380	$764	$75,616	$58,384
22	Sunnycrest Watermain Loop	Gibsons Way		$51,000	57%	$29,070	$291	$28,779	$22,221
23	200mm loop - Payne Road	Venture Way	Payne Road	$23,085	57%	$13,158	$132	$13,027	$10,058
24	Upgrade SCRD Connection			$101,250	100%	$101,250	$1,013	$100,238	$1,013
25	Gospel Rock Trunk	Inglis Rd	Gower Pt Rd	$1,323,000	100%	$1,323,000	$13,230	$1,309,770	$13,230
26	Gospel Rock Trunk	Gower Pt Rd		$264,600	100%	$264,600	$2,646	$261,954	$2,646
Totals				**$6,463,511**		**$5,862,334**	**$58,623**	**$5,803,711**	**$659,800**

Notes

(1) Cost estimates from the UGNP (ITEMS 1 - 5) October 6, 2006 completed by Urban Systems; Capital and Operations Plan (ITEMS 6-24), December 2005, Delcan, USL Water DCC Report, 1998; and Gospel Rock NP development (ITEMS 25-26), January 15, 2007, Kerr Wood Leidel

Items #1 - 5 - Capital costs include 45% for engineering (10%), contingency (35%).

Items #6-24 - Capital costs include 40% for engieering and contingency.

Items #25-26- Capital costs include 40% for engineering and contingency. Bonding and insurance (1.5%) and mobilization and demobilization (3.5%) included in base cost.

(2) Benefit factor of DCC program for items 6 - 21 from July 1998 report.

Table 18
TOWN OF GIBSONS
WATER DCC RATE CALCULATION

A: Water DCC Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Unit**	**Person per unit (residential)/ Equivalent Population/hectare (other land uses)**	**Multiple**
Single Family Residential	1,160	Lots	2.5	2,900
Townhouse / Two-Family	399	Dwelling Units	2.18	870
Apartment	931	Dwelling Units	1.7	1,583
Commercial	24,000	Gross Building Floor Space (m2)	0.0058	139
Industrial	32,000	Gross Building Floor Space (m2)	0.0069	221
			Total Equivalent Population	5,713 (a)
B: Unit Water DCC Calculation				
Net Waterworks DCC Program Recoverable		$5,803,711.11	(b)	
Existing DCC Reserve Monies		$461,513.00	(c)	
Net Amount to be Paid by DCCs		$5,342,198.11	(d) = (b) - (c)	
DCC per person		$935.17	(e) = (d)/(a)	
C: Resulting Water DCCs				
Single Family Residential		$2,337.93	per Lot	(e) x Col. (3)
Townhouse / Two-Family		$2,038.68	per Dwelling Unit	(e) x Col. (3)
		$15.68	per m^2 Floor Space	
Apartment		$1,589.80	per Dwelling Unit	(e) x Col. (3)
		$20.12	per m^2 Floor Space	
Commercial		$5.42	per m^2 Gross Building Floor Space	(e) x Col. (3)
Industrial		$6.45	per m^2 Gross Building Floor Space	(e) x Col. (3)

Notes
(1) DCC reserve balance from Town staff December 19, 2006.

PART 7: SANITARY SEWER DCCS

Points Covered

- Sanitary Sewer DCC Program
- Sewer Generation and Calculation of Equivalent Population
- Sanitary Sewer DCC Calculation

7.1 Sanitary Sewer DCC Program

The Sanitary Sewer DCC program is summarized in Table 19 and shown on Figure 3.

Table 19
Sanitary Sewer DCC Program Costs

Total Cost	DCC Recoverable	Municipal Responsibility (total cost – DCC recoverable)
$ 4,924,635	$ 4,875,389	$ 49,246

The total cost of the improvements is approximately $5 million, of which $4,875,389 is DCC recoverable. These costs include the construction of new sanitary sewer infrastructure including trunk sewers, pump stations and force mains plus engineering, contingency, and project administration.

7.2 Sewage Generation and Calculation of Equivalent Population

The sanitary sewer DCC is based on the need for expanded services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands. For non-residential land uses, an equivalency is used. Typically the equivalency is based on a population per gross area. These are based on average population densities. For the DCC calculation, equivalent populations per square metre have to be established.

Table 20
Equivalent Units for Sanitary Sewer

Land Use	Base Unit	Equivalent Population Per Base Unit
Single Family	Lot	2.5
Townhouse/Two-Family	Dwelling unit	2.18
Apartment	Dwelling unit	1.7
Commercial	Gross building floor space (m^2)	0.0058
Industrial	Gross building floor space (m^2)	0.0069

7.3 Sanitary Sewer DCC Calculation

The Sanitary Sewer DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 3.

Equation 3
Sanitary Sewer DCC Calculation

Total New Growth (by unit or sq. m.) x Equivalent Population (per unit or sq. m.) = Total Equivalent Population

↓

DCC Recoverable Costs / Total Equivalent Population = DCC Costs per Equivalent Population

↓

DCC Costs per Equivalent Population x Equivalent Population (per unit or sq. m.) = DCC Costs per Unit or sq. m.

↓

DCC Costs per Unit / Average Unit Size = DCC per sq. m. (applies to only apartments and townhouses/two-family)

The proposed Sanitary Sewer DCC rates are shown in Table 21. The detailed Sanitary Sewer DCC calculations are included in the series of tables appended at the end of this section.

Table 21
Proposed Sanitary Sewer DCC Rates

Land Use	DCC Rate	Unit
Single Family	$2,038.27	Per lot
Townhouse/Two-Family	$13.67	Per m^2 floor space
Apartment	$17.54	Per m^2 floor space
Commercial/Institutional	$4.73	Per m^2 of gross building floor space
Industrial	$5.63	Per m^2 of gross building floor space

The proposed DCC rates are levied per lot for single family dwellings, and per square metre of floor space for multi family residential (townhouses/two-family and apartments). Commercial, institutional, and industrial development are levied DCCs per square metre of gross building floor space.

Table 22
TOWN OF GIBSONS
SANITARY DCC PROGRAM

Project Area	Column	Col.(1)	Col. (2)	Col. (3) =Col. (1) x Col. (2)	Col. (4)	Col. (5) = Col. (3) - Col. (4)	Col. (6) = Col.(1) - Col. (5)
	Name	**Cost Estimate w/ Cont., Eng., & Admin. (1)**	**Benefit Factor %**	**Benefit to New Development**	**Municipal Assist Factor 1%**	**DCC Recoverable**	**Total Municipal Responsibility**
1	North Road Trunk (300mm)	$348,000	100%	$348,000	$3,480	$344,520	$3,480
2	Sewage Outfall 800m, 450mm	$1,812,500	100%	$1,812,500	$18,125	$1,794,375	$18,125
3	UGNP West Catchment	$206,100	100%	$206,100	$2,061	$204,039	$2,061
4	UGNP Centre Catchment	$215,000	100%	$215,000	$2,150	$212,850	$2,150
5	UGNP East Catchment	$583,035	100%	$583,035	$5,830	$577,205	$5,830
6	Gospel Rock Sanitary Sewer (from S/D boundary to PS)	$310,000	100%	$310,000	$3,100	$306,900	$3,100
7	Gospel Rock Sanitary Pump Station	$440,000	100%	$440,000	$4,400	$435,600	$4,400
8	Gospel Rock Sanitary Force Main (from PS to WWTP)	$660,000	100%	$660,000	$6,600	$653,400	$6,600
9	Prowse Road Sanitary Pump Station (2 pumps, motors, power supply, wet well expansion	$350,000	100%	$350,000	$3,500	$346,500	$3,500
Totals		**$4,924,635**		**$4,924,635**	**$49,246**	**$4,875,389**	**$49,246**

Notes

(1) Cost estimate from the Town of Gibsons, Sanitary Sewer DCCs Background Report, December 1995, (ITEMS 1,2) cost estimates revised January 23, 2007 (include 35% cont., 10% eng.) UGNP (ITEMS 3-5) October 6, 2006, Urban Systems and Gospel Rock estimates (ITEMS 6-8) January 15, 2007, Kerr Wood Leidel and cost estimate (ITEM 9) from Town for two pumps c/w motors, controls, power supply and wet well expansion.

Table 23
TOWN OF GIBSONS
SANITARY DCC RATE CALCULATION

A: Sanitary DCC Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Unit**	**Person per unit (residential)/ Equivalent Population/hectare (other land uses)**	**Multiple**
Single Family Residential	1,160	Lots	2.5	2,900
Townhouse / Two-Family	399	Dwelling Units	2.18	870
Apartment	931	Dwelling Units	1.7	1,583
Commercial	24,000	Gross Building Floor Space (m2)	0.0058	139
Industrial	32,000	Gross Building Floor Space (m2)	0.0069	221
			Total Equivalent Population	5,713 (a)
B: Unit Sanitary DCC Calculation				
Net Sanitary DCC Program Recoverable		$4,875,388.65	(b)	
Existing DCC Reserve Monies		$217,918.00	(c)	
Net Amount to be Paid by DCCs		$4,657,470.65	(d) = (b) - (c)	
DCC per person		$815.31	(e) = (d)/(a)	
C: Resulting Sanitary DCCs				
Single Family Residential		$2,038.27	per Lot	(e) x Col. (3)
Townhouse / Two-Family		$1,777.37	per Dwelling Unit	(e) x Col. (3)
		$13.67	per m^2 Floor Space	
Apartment		$1,386.03	per Dwelling Unit	(e) x Col. (3)
		$17.54	per m^2 Floor Space	
Commercial		$4.73	per m^2 Gross Building Floor Space	(e) x Col. (3)
Industrial		$5.63	per m^2 Gross Building Floor Space	(e) x Col. (3)

Notes
(1) DCC reserve balance from Town staff December 19, 2006.

PART 8: DRAINAGE DCCS

Points Covered

- Drainage DCC Program
- Drainage Equivalent Units
- Drainage DCC Calculation

8.1 Drainage DCC Program and Rates

The Drainage DCC program comprises stormwater works including detention ponds, culverts, trunk mains, stormwater outfall structures and stormwater diversion structures (see Table 27 and Figure 4). The Drainage DCC rates are shown in Table 24.

Table 24
Drainage DCC Program Costs

Total Cost	DCC Recoverable	Municipal Responsibility (total cost – DCC recoverable)
$ 8,580,042	$ 8,330,149	$ 249,893

8.2 Calculation of Equivalent Units for Drainage

In general terms, the impact on the storm drainage system of developing a parcel of land is expressed as the amount of stormwater run-off that must be accommodated by the system. The accepted parameter for expressing imperviousness in stormwater run-off calculations is the "run-off coefficient". Generally speaking, the run-off coefficient reflects the ratio between the impervious area on a parcel and the total area of the parcel. Run-off coefficients are then used to determine equivalency factors necessary to develop Equivalent Drainage Units (EDUs), the basis for calculating drainage DCCs.

Equivalent drainage units are calculated based on the run-off coefficients and are shown in Table 25.

Table 25
Equivalent Units for Drainage

Land Use	Base Unit	Equivalent Population Per Base Unit
Single Family	Lot	1
Townhouse/Two-Family	Dwelling unit	0.58
Apartment	Dwelling unit	0.33
Commercial	Site area (hectares)	32
Industrial	Site area (hectares)	20

8.3 Drainage DCC Calculation

The Drainage DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 4.

Equation 4
Drainage DCC Calculation

Total New Growth (by unit or sq. m.) x Equivalent Unit (per unit or sq. m.) = Total Equivalent Unit

↓

DCC Recoverable Costs / Total Equivalent Units = DCC Costs per Equivalent Unit

↓

DCC Costs per Equivalent Unit x Equivalent Units (per unit, lot or sq. m.) = DCC Costs per Unit, Lot or sq. m.

↓

DCC Costs per Unit / Average Unit Size = DCC per sq. m. (applies to only apartments and townhouses/two-family)

The proposed Drainage DCC rates are shown in Table 26. The detailed Drainage DCC calculations are included in the series of tables appended at the end of this section.

Table 26
Proposed Drainage DCC Rates

Land Use	DCC Rate	Unit
Single Family	$4,205.78	Per lot
Townhouse/Two-Family	$18.76	Per m^2 floor space
Apartment	$17.57	Per m^2 floor space
Commercial/Institutional	$134,584.91	Per hectare site area
Industrial	$84,115.57	Per hectare site area

The proposed DCC rates are levied per lot for detached dwellings, and per square metre of floor space for multi family residential (townhouses/two-family and apartments). Commercial, institutional, and industrial development are levied DCCs per hectare of site area.

Table 27
TOWN OF GIBSONS
DRAINAGE DCC PROGRAM

Project Area	Column	Col.(1)	Col. (2)	Col. (3) =Col. (1) x Col. (2)	Col. (4)	Col. (5) = Col. (3) - Col. (4)	Col. (6) = Col.(1) - Col. (5)
	Name	Cost Estimate w/ Cont., Eng., & Admin. [1]	Benefit Factor % [2]	Benefit to New Development	Municipal Assist Factor 1%	DCC Recoverable	Total Municipal Responsibility
1	Mahon Road Storm Sewer 300mm and 450mm	292,500	100.00%	$292,500	$2,925	$289,575	$2,925
2	Detention Pond 2 - Construction	506,000	75.00%	$379,500	$3,795	$375,705	$130,295
3	Culvert replacement and channel improvements at Inglis Road	40,000	50.00%	$20,000	$200	$19,800	$20,200
4	New outfall and erosion mitigation at Inglis Road tributary outfall (Shaw Rd Sewer)	25,000	50.00%	$12,500	$125	$12,375	$12,625
5	Channel armoring upstream of Gower Point Road	27,000	75.00%	$20,250	$203	$20,048	$6,953
6	Rainfall monitoring program	15,000	100.00%	$15,000	$150	$14,850	$150
7	Stream flow monitoring program	15,000	100.00%	$15,000	$150	$14,850	$150
8	New Hillcrest Outfall	350,000	100.00%	$350,000	$3,500	$346,500	$3,500
9	150 m of 450 mm along Marine Drive in area of Beach	138,800	100.00%	$138,800	$1,388	$137,412	$1,388
10	Gospel Rock Storm sewer (from S/D boundary to outfall)	330,750	100.00%	$330,750	$3,308	$327,443	$3,308
11	Gospel Rock Storm sewer outlet structure	73,500	100.00%	$73,500	$735	$72,765	$735
12	Gospel Rock Rain gardens	3,087,000	100.00%	$3,087,000	$30,870	$3,056,130	$30,870
13	Gospel Rock Detention Pond	385,875	100.00%	$385,875	$3,859	$382,016	$3,859
14	Upgrade to 525mm dia. Payne Road	121,800	100.00%	$121,800	$1,218	$120,582	$1,218
15	Trunk diversion 450mm dia. In ROW	261,725	100.00%	$261,725	$2,617	$259,108	$2,617
16	Upgrade Park Road storm 600mm dia.	121,220	100.00%	$121,220	$1,212	$120,008	$1,212
17	Upgrade to 750mm dia. Gibsons Way and Park Road	21,692	100.00%	$21,692	$217	$21,475	$217
18	Diversion trunk - Gibsons Way 750mm dia.	375,840	100.00%	$375,840	$3,758	$372,082	$3,758
19	Extend existing Gibsons Way 750mm dia.	375,840	100.00%	$375,840	$3,758	$372,082	$3,758
20	Upgrade and extend North Road storm sewer 450mm dia.	$247,950	100.00%	$247,950	$2,480	$245,471	$2,480
21	Rebuild School Road storm sewer to outfall 900mm dia.	$1,339,800	100.00%	$1,339,800	$13,398	$1,326,402	$13,398
22	New ocean outfall	$362,500	100.00%	$362,500	$3,625	$358,875	$3,625
23	Diversion Structures	$65,250	100.00%	$65,250	$653	$64,598	$653
Totals		**$8,580,042**		**$8,414,292**	**$84,143**	**$8,330,149**	**$249,893**

Notes

(1) Cost estimate from the Town of Gibsons, Drainage - DCC Update (ITEMS 1 - 9), December 2001 updated March, 2007 and UGNP (ITEMS 14- 23) October 6, 2006 both completed by USL and Gospel Rock estimates (ITEMS 10-13) January 15, 2007, Kerr Wood Leidel.

Items #10 - 13 - Capital costs include 40% for engineering and contingency. Bonding and insurance (1.5%) and mobilization and demobilization (3.5%) included in base cost.

Items #14 -23 - Capital costs include 45% for engineering (10%), contingency (35%).

(2) Benefit factor based on 2001 DCC review.

Table 28
TOWN OF GIBSONS
DRAINAGE DCC RATE CALCULATION

A: Drainage DCC Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Unit**	**Equivalence Factor**	**Multiple**
Single Family Residential	1,160	Lots	1	1,160
Townhouse / Two-Family	399	Dwelling Units	0.58	231
Apartment	931	Dwelling Units	0.33	307
Commercial	3.5	Net Hectare Site Area	32	112
Industrial	4.9	Net Hectare Site Area	20	98
			Total Equivalent Population	1,909 (a)
B: Unit Drainage DCC Calculation				
Net Drainage DCC Program Recoverable		$8,330,149.08	(b)	
Existing DCC Reserve Monies		$302,790.00	(c)	
Net Amount to be Paid by DCCs		$8,027,359.08	(d) = (b) - (c)	
DCC per person		$4,205.78	(e) = (d)/(a)	
C: Resulting Drainage DCCs				
Single Family Residential		$4,205.78	per Lot	(e) x Col. (3)
Townhouse / Two-Family		$2,439.35	per Dwelling Unit	(e) x Col. (3)
		$18.76	per m^2 Floor Space	
Apartment		$1,387.91	per Dwelling Unit	(e) x Col. (3)
		$17.57	per m^2 Floor Space	
Commercial		$134,584.91	per Net Hectare	(e) x Col. (3)
Industrial		$84,115.57	per Net Hectare	(e) x Col. (3)

Notes
(1) DCC reserve balance from Town staff December 19, 2006.

PART 9: DCC RATES SUMMARY AND IMPLEMENTATION

Points Covered

- DCC Rates Summary
- Bylaw Exemptions
- Collection of Charges – Building Permit and Subdivision
- In-Stream Applications and Grace Periods
- DCC Rebates and Credits
- DCC Monitoring and Accounting
- DCC Reviews

9.1 Summary of Proposed DCC Rates

Table 29 summarizes the proposed Town of Gibsons DCC rates. The proposed DCC rates are levied per lot for single family dwellings, and per square metre of floor space for townhouses/two-family and apartments. Commercial, institutional, and industrial development are levied DCCs per square metre of gross building floor space for all infrastructure types except drainage, which is levied on net hectare. The single family DCCs will be levied at subdivision, while all other DCCs will be levied at building permit.

9.2 Bylaw Exemptions

The *Act* is quite clear that a DCC cannot be levied if the proposed development does not impose new capital cost burdens on the Town, or if a DCC has already been paid in regard to the same development. However, if additional further development for the same development creates new capital cost burdens or uses up capacity, the DCCs can be levied for the additional costs.

The *Act* further restricts the levying of the DCC at the time of application for a building permit if:

- the building permit is for a church or place of worship; and
- the value of the work authorized by the building permit does not exceed $50,000 or an amount as prescribed by bylaw.

Recent changes to the legislation now allow local governments to charge DCCs on residential developments of less than four units, provided such a charge is provided for in the local government's DCC bylaw. The Town of Gibsons has included this condition in their DCC bylaw.

9.3 Collection of Charges – Building Permit and Subdivision

Municipalities can choose to collect DCCs at subdivision approval or building permit issuance. The Town of Gibsons will collect DCCs for single family dwellings at subdivision approval. Of the two possible collection times, subdivision approval occurs earlier in the process. Collecting DCCs early will allow the Town to ensure timely provision of infrastructure and services.

All other DCCs will be collected at building permit, which is when the size and number of buildings to be constructed will be known. Collecting DCCs based on this more accurate information will result in more equitable distribution of growth costs.

The DCC bylaw will specify when DCCs will be collected for different development types. Where a development type has not been specified in the DCC bylaw, the DCC levied will be based on the rate of the most similar development type.

Table 29
Town of Gibsons
Proposed DCC Rate Summary

Land Use	Roads	Drainage	Water	Sanitary	Total	Units	When Payable
Single-Family Dwelling	$8,656.31	$4,205.78	$2,337.93	$2,038.27	$17,238.29	per lot/ per dwelling unit	Subdivision approval or if subdivision is not required, then at building permit issue
Townhouse / Two-Family (a)	$43.09	$18.76	$15.68	$13.67	$91.20	per m^2 floor space	Building permit issue
Apartment (b)	$56.94	$17.57	$20.12	$17.54	$112.17	per m^2 floor space	Building permit issue
Commercial or Institutional (c)	$67.89	n/a	$5.42	$4.73	$78.04	per m^2 gross building floor space	Building permit issue
Commercial or Institutional (c)	n/a	$134,584.91	n/a	n/a	$134,584.91	per net hectare	Building permit issue
Industrial (d)	$23.76	n/a	$6.45	$5.63	$35.84	per m^2 gross building floor space	Building permit issue
Industrial (d)	n/a	$84,115.57	n/a	n/a	$84,115.57	per net hectare	Building permit issue

(a) Townhouse / Two-Family development to be charged on a per m^2 floor space basis up to a maximum of $17,238.29 per dwelling unit.

(b) Apartment development to be charged on a per m^2 floor space basis up to a maximum of $11,856.00 per dwelling unit.

(c) For commercial and institutional uses, the total DCCs payable is the sum of roads, water, drainage and sanitary DCCs.

(d) For industrial uses, the total DCCs payable is the sum of roads, water, drainage and sanitary DCCs.

9.4 In-Stream Applications and Grace Periods

The *Local Government Act* requires that in-stream subdivision applications, provided the application is complete and application fees have been paid prior to the adoption of the new DCC bylaw, be provided one-year protection from the proposed DCC rates. These in-stream active subdivision applications will be exempted from any increase in DCCs for one year from the date of adoption of the new DCC bylaw.

Building permits are not given any in-stream exemptions under the *Local Government Act*. Our experience based on various discussions with municipal legal counsel has advised that in-stream application status is not one of the grounds on which municipalities can vary DCCs. The Town may decide to establish a grace period for all development by setting the effective date of the DCC bylaw to some date in the future, which would be noted in the bylaw.

9.5 DCC Rebates and Credits

The *Local Government Act* stipulates that should an owner pay for specific services inside or outside of the boundaries of the land being subdivided or developed and these services are included in the calculation to determine the DCC, then the amount paid must be deducted from the class of DCC that is applicable to the service. In practice, should the Town, for example, approve an owner build a watermain outside their development and the watermain is in the DCC program, the Town will credit the owner the cost of the watermain up to the water DCCs paid.

The Town should establish a policy or practise to guide staff in the collection of DCCs and the use of DCC credits. There may be situations in which it is not in the best interests of the Town to allow an owner to build DCC services outside of their subdivision or development. Building such services may start or accelerate development in areas in which the Town is not prepared to support.

The Town may establish a DCC rebate policy to fund DCC works advanced by owners and developers prior to the Town building such services. For example, an owner may be required to service their property to the local sanitary sewer standard but the Town would request that this main be upsized to a trunk sewer. The incremental portion of costs beyond the local requirement may be offered as a DCC rebate from DCC reserves. Again, a Town policy or practise is recommended to ensure consistent application of the DCC rebate principle. Often policies for DCC credits, rebates and latecomer agreements are drafted to assist staff in development financing.

9.6 DCC Monitoring and Accounting

In order to monitor the DCC Program, the Town should enter all of the projects contained in the DCC program into its tracking system. The tracking system would monitor the status of the project from the conceptual stage through to its final construction. The tracking system would include information about the estimated costs, the actual construction costs, and the funding sources for the projects. The construction costs would be based on the tender prices received, and the land costs based on the actual price of road widening strips and or other land and improvements required for servicing purposes. The tracking system would indicate when projects are completed, their actual costs and would include new projects that are added to the program.

9.7 DCC Reviews

To keep the DCC program as current as possible, the Town should review its program annually. Based on its annual review, the Town may make minor amendments to the DCC rates. Minor amendments may include the deletion of completed projects, the addition of new projects, the deletion of estimated construction costs, with the inclusion of actual construction costs and time frame adjustments. This also requires a DCC bylaw amendment.

Major amendments of the DCC program and rates will occur when significant land use changes are made, when new servicing plans are prepared or when the information upon which the DCCs are calculated has become significantly outdated or requires significant revision. Based on experience, a major amendment to the DCC program and rates is needed every 4 to 5 years.

FIGURES

URBAN SYSTEMS

DCC Program

Town of Gibsons

north

nts

13 New connection between Park Road and Venture Way. Alignment to be determined through right-of-way negotiations.

14 Reconfigure Venture Way approach to provide a designated left turn lane

12 Closure of Park Road access to Gibsons Way

15 New traffic signal control at Sunnycrest and 16 new eastbound left-turn bay, on Gibsons Way. Further considerations and study is required to coordinate with the function of Shaw Road.

17 New northbound left turn lane on School Road.

26 New Roundabout

25 New Roundabout

18 New traffic signal control at Reed Road & North Road

21 Traffic calming on Aurora Way to minimize speeding/short cutting but maintain inter connectivity of neighbourhoods.

19 Upgrade Kiwanis Way cross-section to Collector standard.

PRATT ROAD
PAYNE ROAD
INDUSTRIAL WAY
SEAPOINT WAY
VENTURE WAY
ROAD 'C'
MAHAN ROAD
SUNSHINE COAST REGIONAL DISTRICT
TOWN OF GIBSONS
INGLIS ROAD
CHAIRMAN
PARK ROAD
CEMETARY ROAD
SUNNYCREST ROAD
DAVIS ROAD
SHAW ROAD
REED ROAD
GILMORE ROAD
SUNSHINE COAST HIGHWAY
FARNHAM RD.
ROAD 'D'
SWANS WAY
CELESTIAL PL.
AURORA WAY
NORTH ROAD
BAYVIEW HEIGHTS ROAD
DOLPHIN POINT ROAD
STEWART ROAD
GOWER POINT ROAD
SOUTH FLETCHER ROAD
SPYGLASS PLACE
LOCHAIR ROAD
GASCADE WAY
FLEASANT PL.
TRALEE PL.
MOUNTAINVIEW DR.
TRACEBROOK WAY
BROOKSIDE CRESCENT
TRICKLE COURT
CREEKSIDE CRESCENT
GLASSFORD ROAD
GOCHRANE ROAD
ALDERSPRINGS ROAD
SCHOOL ROAD
WYNGART ROAD
SARGENT ROAD
CRUCIL ROAD
MARTIN ROAD
NORTH FLETCHER ROAD
FAIRHOPE ROAD
COURTNEY
BURNS ROAD
BAY ROAD
DOGWOOD ROAD
WELLS LANE
HEADLANDS ROAD
CAMELIA WAY
SKYLINE DRIVE
GEORGIA DRIVE
EAGLECREST DRIVE
TYALON RD.
SHOAL LOOKOUT
MARINE DRIVE
BEACH ROAD
GLEN ROAD
SEAVIEW PLACE
KILLARNEY LANE
SHOAL CHANNEL

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Road

FIGURE 1

URBAN SYSTEMS

DCC Program

Town of Gibsons

north

nts

UGNP 300mm PVC Trunk (Reservour to Payne

1 New Zone 3 1500m³ Reservour

2

24 Upgrade SCRD connection

3

4

5

6

7

8 Shaw Road PRV

9

10

11

12

13

14

15

16 Well #5

17 School Road PRV

18 Chaster PRV

19 Upgrade Zone 2 Booster Pump

20 North Road PRV

21

22

23

25

26

W PROPOSED WATERMAIN

W TRUNK ITEMS

Water

FIGURE 2

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URBAN SYSTEMS

DCC Program

Town of Gibsons

north

nts

The sanitary connection between Park Road and Venture Way may be located anywhere within this zone

1 North Road Trunk

2 Sewage outfall

3

4

5

6

7 Gospel Rock Sanitary Pump Station

8

9 Prowse Road Sanitary Pump Station

PROPOSED FORCEMAIN

PUMP STATION

TRUNK ITEMS

PROPOSED SANITARY SEWER

Sanitary

FIGURE 3

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URBAN SYSTEMS

DCC Program

north

Town of Gibsons

nts

14 Upgrade to 525mm dia. Payne Road

23 Diversion control structure

15 Trunk diversion 450mm dia. in ROW.

3 Culvert replacement and channel improvements at Inglis Road

1 Mahon Road Storm Sewer

4 New outfall and erosion mitigation at Inglis Road tributary outfall (Shaw Road Sewer)

2 Dry Stormwater Detention Facility Pond 2

16 Upgrade Park Road storm 600mm dia.

Gospel Rock servicing 10 11 12 13

23 Diversion control structure

17 Upgrade to 750mm dia. Gibsons Way and Park Rd

18 Diversion trunk - Gibsons Way 750mm dia.

19 Extend existng Gibsons Way 750mm dia.

21 Upgrade School Road storm sewer all the way to Ocean outfall 900mm dia.

5 Construct outlet channel and erosion mitigation to creek edge.

23 Diversion control structure

20 Upgrade and extend North Road storm sewer 450mm dia.

8 Upgrade of Hillcrest outfall

22 New ocean outfall

9 450mm storm sewer

PROPOSED STORM SEWER

Drainage

FIGURE 4

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APPENDIX A

EXISTING DEVELOPMENT COST CHARGE BYLAW NO. 670

TOWN OF GIBSONS

DEVELOPMENT COST CHARGES BYLAW NO. 670

ADOPTED: JULY 20, 1993

INCLUDING AMENDING BYLAW NUMBERS:

800 – 04/06/96; 882 – 21/07/98; 959 – 03/12/02

This version of this bylaw is a consolidation of amendments to the original bylaw as of the date specified. This consolidation is done for the convenience of users and accurately reflects the status of the bylaw as of the specified date but must not be construed as the original bylaw and is not admissible in court unless specifically certified by the Director of Corporate Administration for the Town of Gibsons. Persons interested in the definitive wording of this bylaw and its amendments should view the original sealed bylaws at the Town of Gibsons.

CONSOLIDATED: May 17th, 2005

TOWN OF GIBSONS
BYLAW NO. 670

A bylaw to impose development cost charges
for water, sewer, drainage and roads

WHEREAS Council may by bylaw impose development cost charges;

AND WHEREAS the development cost charges may be imposed for the sole purpose of providing funds to assist the municipality in paying the capital cost of providing, altering or expanding water, sewage, drainage and highway facilities and for acquiring public open space or for any of them, in order to serve, directly or indirectly, the development in respect of which the charges are imposed;

AND WHEREAS in fixing the development cost charges imposed by this bylaw Council has taken into consideration future land use patterns and development, the phasing of works and services and determined that the charges;

(a) are not excessive in relation to the capital cost of prevailing standards of services in the community;

(b) will not deter development;

(c) will not discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land;

AND WHEREAS a development cost charge is not payable where;

(a) the development does not impose new capital cost burdens on the Town; or

(b) a development cost charge has previously been paid for the same development unless, as a result of further development, new capital cost burdens will be imposed;

NOW THEREFORE the Council of the Town of Gibsons, in open meeting assembled, enacts as follows:

CITATION

1. This bylaw may be cited as Development Cost Charges Bylaw No. 670.

DEFINITIONS

2. In this bylaw

(a) "dwelling unit" means a self-contained suite of rooms which provides accommodation for not more than one family and which suite of rooms does not contain more than one set of cooking facilities.

(b) for purposes of water and sewer development cost charges,

(i) "unit" for residential purposes means a dwelling unit.

(ii) "unit" for all purposes other than residential means 5,000 square feet, or portion thereof, of gross building floor area.

(c) for purposes of drainage development cost charges,

(i) "single family dwelling" means any detached building consisting of one dwelling unit.

(ii) "multiple family dwelling" means any building or structure which includes more than one dwelling unit.

(iii) "net hectare" means the remaining area of the land being subdivided or developed after deduction of the area to be transferred to the Town for road and park dedication.

(iv) "Gross Building Floor Space" means the total floor area in a principal building measured between the exterior faces of the exterior walls of the building at the level of each storey, below, at and/or above grade, excluding the area used for off-street unloading or parking.

DEVELOPMENT COST CHARGE

3. Every person who obtains;

(a) approval for subdivision under the Land Title Act or the Condominium Act,

OR

(b) a building permit,

shall pay to the Town at the time of approval of the subdivision or upon the issue of the building permit, as the case may be, the applicable development cost charges as set out in Schedule "A" attached to and forming a part of this bylaw.

REPEAL

4. Development Cost Charge Bylaws No. 363, 1983, No. 363-1, 1991 and No. 363-2, 1992 are hereby repealed.

READ a first time this 8th, day of December 1992

READ a second time this 15th day of December, 1992

READ a third time this 6th day of July 1993

APPROVED by Inspector of Municipalities this 14th day of July, 1993

RECONSIDERED and adopted this 20th day of July, 1993

T. Eric Small – Mayor

Clerk

Certified a true copy of Development Cost Charges Bylaw No. 670.

Clerk

TOWN OF GIBSONS

BYLAW NO. 670

Schedule A - Development Cost Charges

Water	On issuance of Building Permit	On Approval of Subdivision
Single Family Residential	$2,646 per unit	$2,646 per lot
Multi-Family Residential	$1,746 per unit	$1,746 per unit
Commercial	$5.10 per square metre	$5.10 per square metre
Service/Industrial	$6.12 per square metre	$6.12 per square metre

Sewer	On issuance of Building Permit	On Approval of Subdivision
Single Family Residential	$1,753 per unit	$1,753 per unit or lot
Multi-Family Residential	$1,472 per unit	Not applicable at time of subdivision
Commercial, Industrial and all other uses other than residential	$5.20 per square metre of gross building floor space	Not applicable at time of subdivision

Drainage	On issuance of Building Permit	On Approval of Subdivision
Single Family use	Not applicable	$1,033 per lot
Multiple Family use	$465 per unit	$465 per unit
Commercial use	$33,100 per net hectare	$33,100 per net hectare
Industrial and all uses other than commercial single and multiple family	$31,000 per net hectare	$31,000 per net hectare

Roads	On issuance of Building Permit	On Approval of Subdivision
Residential Uses	$2,576 per dwelling unit	$2,576 per dwelling unit or lot
Industrial Uses	$23.32 per square metre of gross building floor space	Not applicable at time of subdivision
Commercial, institutional and all uses other than residential and industrial	$35.32 per square metre of gross building floor space	Not applicable at time of subdivision

APPENDIX B

**PROPOSED TOWN OF GIBSONS COST CHARGE BYLAW NO. 670,
AMENDMENT BYLAW 1067, 2007**

TOWN OF GIBSONS

BYLAW NO. 1067

A Bylaw to amend Development Cost Charges Bylaw No. 670

WHEREAS the Council of the Town of Gibsons deems it desirable to amend Development Cost Charges Bylaw No. 670;

NOW THEREFORE the Council of the Town of Gibsons, in open meeting assembled, enacts as follows:

1. This Bylaw may be cited as “Development Cost Charges Bylaw No. 670, Amendment Bylaw No. 1067, 2007”.

2. That section 2 of Bylaw 670, *Definitions*, be deleted in its entirety and replaced with the following new section 2 *Definitions*:

   “2. In this bylaw

   "dwelling unit" means a self-contained suite of rooms which provides accommodation for not more than one family and which suite of rooms does not contain more than one set of cooking facilities.

   "single-family dwelling" means any detached building consisting of one dwelling unit.

   "townhouse" means residential use of a building comprised of three or more dwelling units separated from one another by party walls extending from foundations to roof, with each dwelling having a separate direct entrance from grade.

   "apartment" means the residential use of part or all of a building comprised of three or more dwelling units, but does not include townhouses.

   "floor space" means the habitable space within each dwelling unit measured to the extreme outer limits of the building not including exterior hallways and stairways, common areas and parking.

   "net hectare" means the remaining area of the land being subdivided or developed after deduction of the area to be transferred to the Town for road and park dedication.

"gross building floor space" means the total floor area in a principal building measured between the exterior faces of the exterior walls of the building at the level of each storey, below, at and/or above grade, excluding the area used for off-street unloading or parking."

3. That Schedule "A" to Bylaw 670, *"Schedule "A" Development Cost Charges*", be deleted in its entirety and replaced with the new *"Schedule "A" Development Cost Charges*" which is attached to this bylaw as Schedule "A".

READ a first time this the day of 2007

READ a second time this the day of 2007

READ a third time this the day of 2007

APPROVED by the Inspector of Municipalities this the day of 2007

ADOPTED this the day of 2007

Barry J. Janyk, Mayor

James A. Gordon, Corporate Officer

Certified a true copy of
"Development Cost Charges Bylaw No. 670,
Amendment Bylaw No. 1067, 2007"

Corporate Officer

Schedule "A"

to Bylaw 1067, 2007

"Schedule "A"

Development Cost Charges"

Schedule "A"

Development Cost Charges

Land Use	Roads	Drainage	Water	Sanitary	Total	Units	When Payable
Single-Family Dwelling	$8,656.31	$4,205.78	$2,337.93	$2,038.27	$17,238.29	per lot/per dwelling unit	Subdivision approval or if subdivision is not required, then at building permit issue
Townhouse/ Two-Family[(a)]	$43.09	$18.76	$15.68	$13.67	$91.20	per m^2 floor space	Building permit issue
Apartment[(b)]	$56.94	$17.57	$20.12	$17.54	$112.17	per m^2 floor space	Building permit issue
Commercial or Institutional[(c)]	$67.89	n/a	$5.42	$4.73	$78.04	per m^2 gross building floor space	Building permit issue
Commercial or Institutional[(c)]	n/a	$134,584.91	n/a	n/a	$134,584.91	per net hectare	Building permit issue
Industrial[(d)]	$23.76	n/a	$6.45	$5.63	$35.84	per m^2 gross building floor space	Building permit issue
Industrial[(d)]	n/a	$84,115.57	n/a	n/a	$84,115.57	per net hectare	Building permit issue

(a) Townhouse/Two-Family development to be charged on a per m^2 floor space basis up to a maximum of $17,238.29 per dwelling unit.

(b) Apartment development to be charged on a per m^2 floor space basis to a maximum of $11,856.00 per dwelling unit.

(c) For commercial and institutional uses, the total DCCs payable is the sum of roads, water, drainage, and sanitary DCCs.

(d) For industrial uses, the total DCCs payable is the sum of roads, water, drainage, and sanitary DCCs.

APPENDIX C

PUBLIC OPEN HOUSE INFORMATION

URBANSYSTEMS

WELCOME

TO THE TOWN OF GIBSONS
OPEN HOUSE
FOR
Proposed Development Cost Charges (DCCs)

The purpose of this Open House is to:

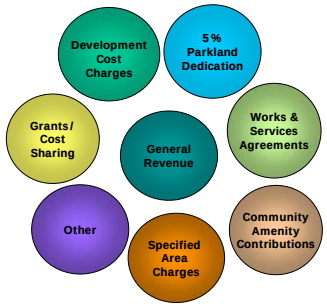
- Provide an overview of the fundamentals of developing a DCC bylaw.
- Review the proposed engineering projects for inclusion in the DCC capital program.
- Present the proposed DCC rates and possible implementation schedule
- Gather input on the proposed DCC rates from the public

If you have any questions regarding the DCCs, please ask Town staff or Urban Systems, our consultant. Also, please take some time to fill out the Open House Questionnaire.

Thank you for taking time to attend this Open House

URBANSYSTEMS

Town of Gibsons DCC
Possible Growth Cost Recovery Tools



URBANSYSTEMS

Town of Gibsons DCC
Why Do We Have DCCs?

- To pay for the costs of expanding and upgrading the Town's engineering transportation and utility infrastructure to meet the needs and impacts of growth

URBANSYSTEMS

Town of Gibsons DCC
What Works Do DCCs Pay For?

- Transportation upgrades to address additional transportation demand due to urban growth
- Intersection and road improvements
- Pedestrian and bicycle facilities
- Water mains, drainage and sanitary mains
- Water reservoirs, utility pump stations, PRVs

URBANSYSTEMS.

Town of Gibsons DCC

What Do DCCs Not Pay For?

- Operation, maintenance, and replacement of the Town's existing engineering infrastructure
- New or upgraded engineering works needed for the existing population
- New libraries, fire halls, police stations or any park and recreational buildings

URBANSYSTEMS.

Town of Gibsons DCC

Who Pays DCCs?

- **Applicants for:**
  - Subdivision approval to create single family parcels
  - Building permits to construct multi-family residential, commercial, industrial and institutional development

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Town of Gibsons DCC

Why Update the DCC Rates?

- A new neighbourhood land use plan for the Upper Gibsons Neighbourhood has recently been completed
- Last DCC updates: 1996,1998,2002
- Increased land and construction costs
- Refinements to the roads, sewer, water and stormwater capital programs have been made since the last DCC update

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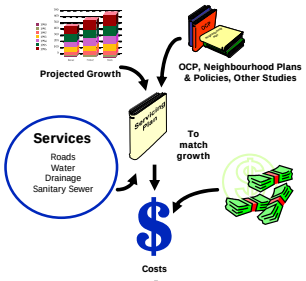
Town of Gibsons DCC

How We Calculate DCC Rates



$$DCCs = \frac{\text{Growth Costs}}{\text{Growth Units}}$$

URBANSYSTEMS.

Town of Gibsons DCC
Estimated Growth

Single Family

Lots	
TOTAL	1,160

Multi-Family

Dwelling Units	
TOTAL	1,330

Commercial

Square Metres	
TOTAL	24,000

Industrial

Square Metres	
TOTAL	45,500

URBANSYSTEMS.

Town of Gibsons DCC
What is the Municipal Assist Factor?

- The contribution from the community to assist the DCC program
- The minimum factor is 1%
- Current and proposed factor is 1%
- Increasing assist factor requires additional funding from other sources (e.g. general revenue or utility funds)

URBANSYSTEMS.

Town of Gibsons DCC
How Are the Capital Costs Established for the DCC Program?

- Costs are allocated between existing users and future users based on benefit
- Projects that benefit only future users are allocated 100% to future users
- Projects that benefit existing and future users are allocated based on impact criteria
- For example – Transportation benefit to future users varies from 57% to 100% depending on the specific project

URBANSYSTEMS.

Town of Gibsons DCC
What are the Proposed Next Steps?

- Receive public comments from this open house, refine proposed DCC as required (August)
- Present the bylaw to Council for 1st, 2nd and 3rd readings (August)
- Send draft DCC Background Report and Bylaw to the Province for approval (August/ September)
- 4th reading by Council (possible in late October)
- Implementation of Bylaw (November)

Town of Gibsons DCC

What is the Cost of the DCC Program?

Infrastructure	Proposed DCC Recoverable Costs (millions)	Proposed Town DCC Cost Responsibility (millions)
Transportation	$19.51	$2.53
Water	$5.80	$0.66
Sanitary	$4.88	$0.05
Drainage	$8.33	$0.25
TOTAL	**$38.52**	**$3.49**

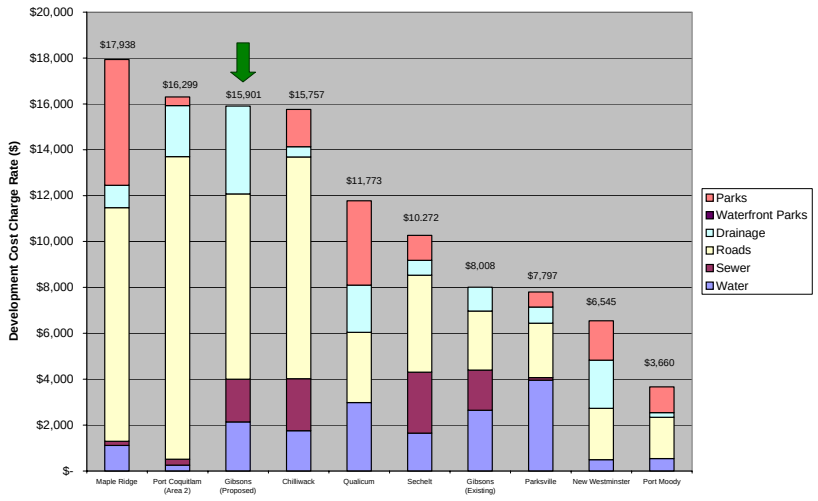
Town of Gibsons DCC

What are the Proposed DCC Rates?

Land Use		Total Proposed DCC by m^2	Total Existing DCC by m^2
Single Family	per lot	$15,909.98	$8,008
Multi Family	per dwelling unit	$10,931.80	$6,259
		Total Proposed DCC by m^2	**Total Existing DCC by m^2**
Commercial (1)	per square metre of floor area	$72.64	$45.62
Industrial (1)	per square metre of floor area	$33.22	$34.64
		Total Proposed DCC by m^2	**Total Existing DCC by m^2**
Institutional (1),(2)	per square foot of floor area	$67.68	$40.52

Note: (1) Does not include drainage DCC as existing drainage DCC is levied on lot area. (2) Existing DCC does not include a water DCC.

Town of Gibsons DCC
Comparison of DCC Single Family Rates



TOWN OF GIBSONS

BACKGROUND INFORMATION ON PROPOSED DEVELOPMENT COST CHARGES (DCCS)

The Town of Gibsons has had Development Cost Charges bylaws for many years. Development Cost Charges (DCCs) are typically updated every few years to reflect current costs, growth trends and new serving on land use plans. The following information outlines the basis of DCCs and answers a number of commonly asked questions.

What is a Development Cost Charge?

Development Cost Charges are charges levied on new development to assist in financing the cost of upgrading or providing infrastructure services or acquiring and developing parkland needed to support new development. At this time the Town is proposing revised DCCs for the Town. The Town does not have a parkland acquisition or parkland development DCC.

Who pays DCCs?

DCCs are paid by those who:

- subdivide property
- construct, alter or extend multi family and commercial buildings and industrial sites where the value of the work exceeds $50,000 or an amount defined by the DCC Bylaw

What kind of projects are the DCCs used to fund?

DCCs are used to assist in the funding of:

- new arterial roads and widening arterial roads, traffic signals, sidewalks, pedestrian and bicycle lane improvements
- water mains, drainage mains, pump stations and open channel improvements, sanitary sewer mains and pump stations
- all these works to meet the needs of growth

What are DCCs not used for?

Replacing, operating and maintaining existing parks, roads, water mains, sanitary and storm sewers already in place to serve the existing residents of the Town.

How are DCC works determined?

Using the following tools:

- transportation and utility plans are used to predict future infrastructure needs
- computer modeling of the utility works necessary to support the needs of growth
- cost estimates are prepared for each capital item
- the portion of the capital cost related to servicing growth is used in the DCC calculation

How are DCCs calculated?

The following steps outline the basic DCC calculation:

- land use and new growth are established by OCP and other planning documents
- new works and additional capacity to support new growth are determined by servicing studies
- $$DCC = \frac{Growth\ Costs}{Growth\ Units}$$

What are proposed DCC rate options?

The proposed DCC rates are shown in the attached Table.

When would the new DCCs apply?

Staff will report to Council on the results of this open house in August. Council will review the proposed DCC rates and other comments provided by the community and confirm if they support the changes to the existing DCC bylaw. Council will then give the DCC Bylaw the necessary three readings prior to submitting the DCC Bylaw to the Provincial Government for approval. It is anticipated this approval will occur in the fall. The Bylaw must receive fourth and final approval by Council before the DCC Bylaw is in effect. Council may consider a grace period until the new rates will apply except for DCCs on subdivisions currently in process. These subdivisions will have one year plus the grace period in which to be finalized before the new rates apply. Other possible options for a grace period for in-stream multi-family, commercial and industrial building permit applications may be considered by Council prior to the adoption of the new DCC bylaw.

For more information, please call Chris Marshall, Municipal Planner, at the Town of Gibsons (604) 886-2274.

Thank you for attending our open house this evening.

Town of Gibsons

Proposed DCC Rates by Service

Land Use		Transportation	Water	Drainage	Sanitary	Total
Single Family	per lot	$8,087.73	$2,136.01	$3,824.01	$1,862.23	$15,909.98
Multi Family	per dwelling unit	$5,227.41	$1,862.60	$2,217.93	$1,623.86	$10,931.80
Commercial	per square meter gross building area	$63.36	$4.96	$12.24	$4.32	$84.88
Industrial	per square meter gross building area	$22.18	$5.90	$7.65	$5.14	$40.87
Institutional	per square meter gross building area	$63.36	$4.96	$12.24	$4.32	$84.88

TOWN OF GIBSONS

PROPOSED DEVELOPMENT COST CHARGES (DCCS)

COMMENT SHEET

We appreciate you taking the time to come to the Public Open House on the proposed Development Cost Charges. Please provide your written comments to the Town of Gibsons, Chris Marshall, Municipal Planner by August 16, 2007. Fax: (604) 886-9735. Thank you.

Open House

Proposed

Development Cost Charges (DCCs)

August 8, 2007

URBAN SYSTEMS.

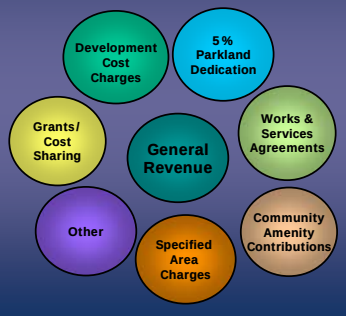
Open House
Proposed DCC

The purpose of this presentation is to:

1. Present the basis of the proposed DCC rates.
2. Review the proposed engineering projects for inclusion in the DCC capital program.
3. Present the proposed DCC rates and possible implementation schedule.
4. Gather input on the proposed DCC rates from the public.

Open House
Proposed DCC

POSSIBLE GROWTH COST RECOVERY TOOLS



Open House
Proposed DCC

WHY DO WE HAVE DCCs?

- To pay for the costs of expanding and upgrading the Town's engineering transportation and utility infrastructure to meet the needs and impacts of growth
- To purchase and develop new parkland in developing areas to meet the needs of growth (not applicable in Gibsons at this time)

Open House
Proposed DCC

WHAT WORKS DO DCCs PAY FOR?

- Transportation upgrades to address additional transportation demand due to urban growth
- Intersection and road improvements
- Pedestrian and bicycle facilities
- Water mains, drainage and sanitary mains
- Water reservoirs, utility pump stations, PRVs

Open House
Proposed DCC

WHAT ITEMS DO DCCs NOT PAY FOR?

- Operation, maintenance, and replacement of existing Town engineering infrastructure
- New or upgraded engineering works needed for the existing population
- New libraries, fire halls, police stations or any park and recreational buildings

Open House
Proposed DCC

WHO PAYS DCCs?

- Applicants for:
  - subdivision approval to create single family parcels
  - building permits to construct multi-family residential, commercial, industrial and institutional development

Open House
Proposed DCC

WHY UPDATE THE DCC RATES?

- A new neighbourhood land use plan for the Upper Gibsons Neighbourhood has recently been completed
- Last DCC updates: 1996, 1998, 2002
- Increased land and construction costs
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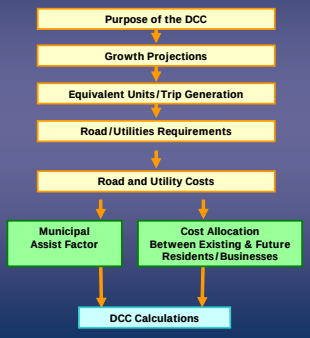
Open House
Proposed DCC

DETAILS OF DCC CALCULATIONS



Open House
Proposed DCC

ESTIMATED GROWTH

Land Use	Growth Projection	Persons Per Unit
Single Family	1,160 lots	2.50
Townhouse	1,330 units	2.18
Commercial	24,000 m^2 total floor area	
Industrial	45,500 m^2 total floor area	

Open House
Proposed DCC

HOW ARE THE CAPITAL COSTS ESTABLISHED FOR THE DCC PROGRAM?

- Costs are allocated between existing users and future users based on benefit.
- Projects that benefit only future users are allocated 100% to future users.
- Projects that benefit existing and future users are allocated based on impact criteria.
- For example – Transportation benefit to future users varies from 57% to 100% depending on the specific project.

Open House
Proposed DCC

DCC CAPITAL PROGRAMS

- Transportation
- Utilities
  - Water
  - Sanitary
  - Stormwater

Open House
Proposed DCC

WHAT ARE THE BENEFIT FACTORS FOR THE DCC PROGRAM?

- Roads 57%, 100%
- Water 57%, 100%
- Sanitary 100%
- Drainage 50%, 75%, 100%

Open House
Proposed DCC

TRANSPORTATION DCC PROGRAM

- Traffic signals and intersection improvements
- Selected new arterials and collector improvements for added capacity
- Pedestrian and bicycle improvements

Open House
Proposed DCC

UTILITIES DCC PROGRAM

- Water:
  - Major reservoirs and pump stations
  - Supply mains, pressure reducing valve stations
- Drainage
  - Stormwater ponds
  - Trunk mains and major culverts
  - Open channel improvements
- Sanitary
  - Trunk mains
  - Pump station upgrades and force mains

Open House
Proposed DCC

WHAT IS THE COST OF THE DCC PROGRAM?

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TOTAL	$38.52	$3.49

Open House
Proposed DCC

WHAT IS THE MUNICIPAL ASSIST FACTOR?

- The contribution from the community to assist the DCC program The minimum factor is 1%
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- Increasing assist factor requires additional funding from other sources (i.e. general revenue or utility funds)

Open House
Proposed DCC

WHAT ARE THE PROPOSED DCC RATES BY SERVICE?

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Open House
Proposed DCC

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Note (1) Does not include drainage DCC as existing drainage DCC is levied on lot area. (2) Existing DCC does not include a water DCC.

Open House
Proposed DCC

EXAMPLE DCC

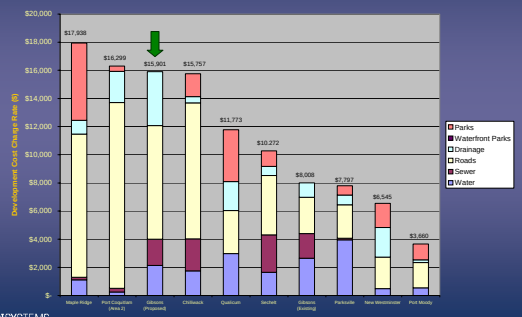
Single Family (per lot)
$15,900

Multi Family (per unit)
$10,932

Commercial (per m^2)
$84.88

Open House
Proposed DCC

COMPARISON OF DCC SINGLE FAMILY RATES



Open House
Proposed DCC

HOW HAVE THE DCC RATES CHANGED RELATIVE TO TYPICAL HOUSE COSTS?

	Average Single Family House Value	DCC (per lot)	DCC as % of House Cost
2002	Approx. $200,000	$ 8,008	4.0%
2007	$402,000	$ 15,901	3.96%

Open House
Proposed DCC

WHAT ARE THE PROPOSED NEXT STEPS?

- Receive public comments from this open house (by August 16), refine proposed DCC as required (August)
- Present the bylaw to Council for 1st, 2nd and 3rd readings (August)
- Send draft DCC background report and Bylaw to the Province for approval (August/ September)
- 4th reading by Council (possible in October)
- Implementation of Bylaw (November)

Open House
Proposed DCC

WHEN WILL THE NEW DCC RATES APPLY?

- In-stream residential subdivisions with a complete application have a one-year grace period by legislation.
- New DCC rates apply immediately after Bylaw passed for building permits for multi-family, commercial, industrial and institutional developments unless optional effective date given.
- All new subdivision applications and building permits levied the new DCC rates from the date the Bylaw is given 4th reading.

Open House
Proposed DCC

QUESTIONS ?

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