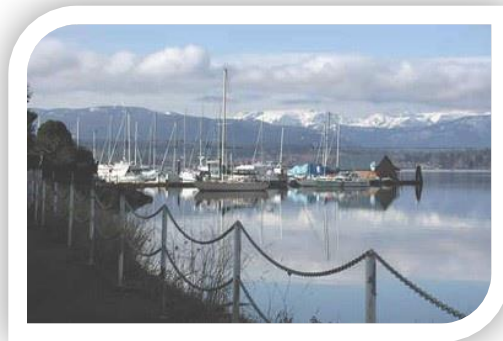




Town of Comox

Development Cost Charge Bylaw 1526 Update



Technical Report

April 2016



**KOERS
& ASSOCIATES
ENGINEERING LTD.**
Consulting Engineers



**KOERS
& ASSOCIATES
ENGINEERING LTD.**
Consulting Engineers

P.O. BOX 790
194 MEMORIAL AVENUE
PARKSVILLE, B.C. V9P 2G8
Phone: (250) 248-3151
Fax: (250) 248-5362
kael@koers-eng.com
www.koers-eng.com

April 5, 2016
1456-09

Town of Comox
1809 Beaufort Ave
Comox, BC V9M 1R9

Attention: Ms. Shelley Ashfield, PEng
Municipal Engineer

**Re: Town of Comox DCC Bylaw Update
Final Report**

We are pleased to submit a PDF copy of our Town of Comox Development Cost Charge Bylaw 1256 Update, Final Report. Comments provided by staff on the previous versions have been incorporated into this final report.

This report constitutes a major update to the Town's DCC bylaw. It has been prepared in accordance with the Development Cost Charge Best Practise Guide published by the BC government.

The report has been divided into the three parts each with a different focus to aid the reader in finding information. The divisions are:

Part 1 – DCC Concepts & Policy Issues

This section provides a general overview of the purpose of the DCCs. It is a summary of information presented in Part 1 of the provincial government 'Development Cost Charge - Best Practices Guide' (BPG), 3rd Edition 2005.

Part 2 – Specific Items

This section discusses DCC items unique to the Town of Comox under various development conditions.

Part 3 – DCC Calculations

This is the technical component of the document. It details the information and equations used in calculating the DCC rates for each land-use category.

DCCs are based on the development growth projections over the coming 10 years, during which the Town's population is projected to increase by 1,654 (approximately 1.15% per year), requiring the construction of 752 dwelling units (75 per year).

The capital projects identified in this report are from the most recent Master Plan reports. The costs for the projects in those reports have been updated to 2015 dollars based on the increase in the Engineering News Record Construction Cost Index (ENR CCI).

.../2



April 5, 2016
1456-09

2

Town of Comox
Ms. Shelley Ashfield, PEng

One of the Town's main objectives in carrying out this update was to review the use of the six land-use categories in the existing DCC Bylaw to ensure the charges are adequate and equitable to the provisions of service necessary to support the growth projected in the OCP. In concert with Town staff, the number of categories has expanded to 14. The new categories include the Downtown Vitalization area which was created in response to the Town's 2012-2014 strategic plan to increase the area's social and environmental vitality by encouraging mixed-use commercial and residential development.

The proposed DCCs do not include a separate charge for Coach Houses and Secondary Suites. As discussed with Town staff, the infrastructure servicing requirements have been incorporated into the Single Family land use category.

Of the five municipal services for which DCCs can be applied (transportation, water, sanitary sewer, storm and parks), charges are proposed for only three. No DCCs are proposed for either water or storm drainage as the amount of funds presently in the reserve fund for each is greater than the portion of the estimated capital cost attributed to new development.

It is worth noting that the elimination of water and storm drainage charges results in a decrease in DCCs for: Single Family Residential; Multi-Family Residential; Congregate Care; and Industrial land-uses. The increase for the Commercial and Institutional land-use categories is in response to the increase in road infrastructure works. For Commercial properties, lower road DCCs have been calculated for those within the Downtown Vitalization area to reflect reduced vehicle use and more reliance on: public transportation; electric scooters; cycling; and walking as per the OCP.

The same municipal Assist Factor (1%) used in the current DCC Bylaw calculation has been applied in calculating the proposed rates. The amount of the Assist Factor is a political decision that is made by Council as part of the adoption of the updated DCC Bylaw.

Yours truly,

KOERS & ASSOCIATES ENGINEERING LTD.

Chris Holmes, PEng
Project Engineer

Chris Downey, PEng
Project Manager



TOWN OF COMOX
DEVELOPMENT COST CHARGE
BYLAW 1256, UPDATE
TECHNICAL REPORT
April 2016

TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal	
TABLE OF CONTENTS	i
1 INTRODUCTION	
1.1 Background	1
1.2 Report Layout	2
1.3 Acknowledgements	2
 <u>PART 1 – DCC CONCEPTS & POLICY ISSUES</u> 	
2 BYLAW DEVELOPMENT & IMPLEMENTATION OVERVIEW	
2.1 Purpose of DCCs.....	4
2.2 Waivers, Reductions & Exemptions.....	5
2.2.1 Waives & Reductions	5
2.2.2 Exemptions.....	6
2.3 Bylaw Approval Process & Stakeholder Input	7
2.4 Service Area & Time Frame	7
2.5 Recoverable Costs.....	8
2.6 Municipal Assist Factor	8
2.7 Bylaw Administration.....	8
2.7.1 Time of Collection	9
2.7.2 Separate Accounts	9
2.8 Grace Period & In-Stream Applications	9
2.8.1 Subdivision Applications	10
2.8.2 Building Permit, Development Permit & Rezoning Applications	10
2.9 Credits, Rebates & Latecomers Agreement.....	10
2.9.1 Credits	10
2.9.2 Rebates.....	11
2.9.3 Latecomers Agreements	11

TABLE OF CONTENTS (Cont'd)

	<u>Page</u>
2.10 Amendment Process (Minor vs Major).....	11

PART 2 – SPECIFIC ITEMS

3	COMOX SPECIFIC ITEMS	
3.1	Re-Developed, Rezoned, Expanded Development	13
3.2	Infill Development	13
3.3	Affordable Housing	13
3.4	Reductions	14
3.5	Exemptions	14
	3.5.1 Public Worship	14
	3.5.2 Construction Value Threshold.....	14
	3.5.3 Construction Size Threshold.....	14
3.6	Downtown Revitalization.....	14
3.7	Definitions.....	15

PART 3 – DCC CALCULATIONS

4	DEVELOPMENT GROWTH PROJECTION	
4.1	Service Area & Time Frame	19
	4.1.1 Service Area.....	19
	4.1.2 Time Frame	19
4.2	Population.....	20
	4.2.1 Historic	20
	4.2.2 Projected	21
4.3	By Land-Use	25
	4.3.1 Residential, Single Family & Multi-Family	25
	4.3.2 Commercial/Institutional	28
	4.3.3 Institutional	29
	4.3.4 Industrial	30
5	PROJECT COST ALLOCATION	
5.1	Introduction	31
5.2	Project Cost.....	31
5.3	Government Grants	32
5.4	Benefit to Existing Users	32
5.5	Municipal Assist Factor	32
5.6	DCC Reserve Funds	33

TABLE OF CONTENTS, Cont'd

	Page
6	DCC CALCULATION METHOD
6.1	Common Unit Calculation Method..... 34
7	TRANSPORTATION DCCs
7.1	Proposed Transportation Projects..... 35
7.2	Calculation Unit..... 35
7.3	Cost Charge Calculations 37
8	STORM DCCs
8.1	Proposed Storm Drainage Projects..... 39
8.2	Calculation Unit..... 39
8.3	Cost Charge Calculations 42
9	WATER DCCs
9.1	Proposed Water Works..... 43
9.2	Calculation Unit..... 43
9.3	Cost Charge Calculations 45
10	SANITARY DCCs
10.1	Proposed Sanitary Projects..... 47
10.2	Calculation Unit..... 47
10.3	Cost Charge Calculations 48
11	PARKS & RECREATION DCCs
11.1	Proposed Parks & Recreation Projects 50
11.2	Calculation Unit..... 50
11.3	Cost Charge Calculations 51
12	SUMMARY OF DCCs
12.1	Summary..... 52
 <u>TABLES</u>	
1	Master Planning Documents Time Frame 19
2	Population & Dwelling Count, 2001 – 2011 20
3	Growth Projections, 2025 & 2031 23
4	Projected Population & Dwelling Unit Growth, 2015 – 2025..... 24
5	Dwelling Unit Construction, 2005 – 2014..... 26
6	Projected 10 Year Growth of Accommodation Units 27
7	Existing Congregate Care Facilities 27
8	Projected 10 Year Commercial Development 29
9	Projected 10 Year Growth by Land-Use 30
10	DCC Reserve Fund Balance 33
11	Institute of Transportation Engineers Vehicle Trip Generation Rates by Land-use 36

TABLE OF CONTENTS, Cont'd

TABLES

Transportation

12 Land-Use Traffic Generation Summary 37
 13 Transportation DCC after 38
 14 Summary of Transportation DCCs by Land-Use 38

Drainage

15 Impervious Areas for Various Multi-Family Developments 40
 16 Equivalent Drainage Unit Summary 41
 17 Storm Drainage DCC after 42
 18 Summary of Storm DCCs by Land-Use 42

Water

19 Annual Water Usage by Land-Use 44
 20 Unit Water Demand per DCC Land-Use Category 45
 21 Water Distribution DCC after 46
 22 Summary of Water DCCs by Land-Use 46

Sanitary

23 Sanitary Sewer Equivalent Population Demand Summary..... 48
 24 Sanitary Sewer DCC after 49
 25 Summary of Sanitary DCCs by Land-Use 49

Parks & Recreation

26 Parks Equivalent Population Demand Summary 50
 27 Parks & Recreation DCC..... after 51
 28 Summary of Park DCCs by Land-Use 51

DCC Summary

29 DCC Cost Summary after 52
 30 Annual Cost Summary – Existing Users after 52

FIGURES

1 Downtown Vitalization Area..... 15
 2 Population & Dwelling Units, Historic and 10 Year Projection..... after 27
 4 STF (5 year) Growth Nodes and Proposed Drainage Improvement Projects after 39
 5 Proposed (Water) Improvements..... after 43
 6 Sanitary DCC Service Area after 47
 14 Recommended (Sanitary) Projects Five Year Capital Plan..... after 47

APPENDICES

A Ministry Submission Summary Checklist

1 INTRODUCTION

1.1 BACKGROUND

In 2006, the Town of Comox merged its single function bylaws (water, sewer, storm, roads, and parks) into one bylaw; the current Bylaw No 1256. In 2008, a review of the DCC rates was carried out in response to rapidly rising construction costs. The review, carried out by Koers & Associates Engineering Ltd. indicated the DCCs rates were approximately appropriate for the capital works plan at that time. As there was no perceived need for amendment to the DCC Bylaw, none was carried out.

Since 2008, the Town of Comox has since completed the updating of a number of documents and studies, which identify works required to meet needs of the Town's Official Community Plan. These studies include:

- Official Community Plan May 2011
- Transportation Study July 2011
- Water System Study September 2013
- Sanitary Sewer System Study January 2014
- Storm Drainage System Study March 2014

The Town desires to incorporate the findings and recommendations of these reports in to a major update of their DCC Bylaw. The update is to ensure compliance with good engineering practices, including, but not limited to the following Provincial Government documents:

- Development Finance Choices Guide, 2000
- Development Cost Charge Best Practices Guide, 2005
- Community Charter, 2003 (and most recent amendments)
- Local Government Act, 2003 (and most recent amendments)

The Town also desires for the updated DCC bylaw to be developed with consideration of the following Town and Comox Valley Regional District bylaws:

- Town of Comox Zoning Bylaw 1377
- Town of Comox Affordable Housing Reserve Bylaw 1737
- CVRD Water System DCC Bylaw 2342
- CVRD Sewage System DCC Bylaw 2445

The updating of the DCCs is to be based on growth over the coming 10 year time frame and the resulting capital works required.

1.2 REPORT FORMAT

This report is divided into three parts, each with a different focus as follows:

Part 1 – DCC Concepts & Policy Issues

This is a general overview of the purpose of DCCs. It is a summary of information presented in Part 1 of the provincial government 'Development Cost Charge - Best Practices Guide' (BPG), 3rd Edition 2005.

Part 2 – Comox Specific Items

This section discusses DCC items unique to the Town of Comox under various development conditions.

Part 3 – DCC Calculations

This is the technical component of the document. It details the information and equations used in calculating the DCC rates for each land-use category.

1.3 ACKNOWLEDGEMENTS

We gratefully acknowledge with thanks the assistance provided by the following Town of Comox staff during the course of data collection, analyses, and report preparation:

- Ms Shelley Ashfield, PEng, Municipal Engineer
- Mr Marvin Kamenz, MCIP, Municipal Planner
- Mr Glenn Westendorp, Superintendent of Public Works
- Mr. Allan Fraser, Superintendent of Parks

PART 1

DCC CONCEPTS & POLICY ISSUES

2 BYLAW DEVELOPMENT & IMPLEMENTATION OVERVIEW

2.1 PURPOSE OF DCCs

Development Cost Charges (DCCs) are intended to facilitate development by providing a method to finance capital projects related to roads, drainage, sewerage systems, waterworks, and parks. They are enacted by local government bylaw, pursuant to the Local Government Act (1996) Sections 932 through 937 which are under Part 26 – Planning and Land Use Management and Division 10 – Development Cost Recovery.

Section 933 (2) of the Local Government Act allows local governments to use DCC to assist in the payment of capital projects associated with:

- providing;
- constructing;
- altering; or,
- expanding

highway facilities, storm drainage systems, sewage systems, and water systems, and for providing and improving parkland.

DCCs are monies collected from developments to offset some of the infrastructure expenditures incurred to service the needs of the development while not adversely affecting existing users. The remainder of the required funding will come from the Town of Comox users (tax payers) and possibly from senior government by way of infrastructure grant funding programs, if or when they are available and for which Town of Comox project(s) qualify for and are approved.

DCCs allow monies to be pooled from many developments so funds can be raised to construct the necessary services in an equitable manner. Those who will use and benefit from the projects should pay infrastructure costs. Recognizing that costs should be shared amongst benefiting parties, a breakdown between existing users and new development should be provided.

The 'Development Cost Charge - Best Practices Guide' (BPG), 3rd Edition 2005 is a publication by the BC Ministry of Community Services. The objective of the BPG is to standardize general practices in the formation and administration of DCC bylaws, while allowing flexibility to meet specific needs as allowed by the Local Government Act. The BPG consists of the following two sections:

Section 1 A guidebook for councillors and administration staff responsible for developing and adopting policies.

Section 2 A technical manual detailing procedures and calculations for the technical personnel who will carry out the DCC calculations and prepare the bylaw.

DCC bylaws must be approved by the provincial government's Ministry of Community, Sport and Cultural Development. The Ministry has indicated that expedient approval of DCC bylaws will be received when prepared in accordance with the BPG. To assist Ministry staff in the review of the proposed DCC bylaw, a Ministry Submission Summary Checklist is included in the BPG. A copy of the checklist is included in this report in

Appendix A. It requires finalization before attaching it to the bylaw approval package to be submitted to the Inspector of Municipalities.

DCCs are to be developed in accordance with the LGA. The BPG is based on six principles which are recommended to be followed in the development of a DCC Bylaw:

- 1) **Integration** – A DCC program is subordinate to the broader goals of a community.
- 2) **Benefiter Pays** – Infrastructure costs should be paid by those who will use and benefit from the installation of such systems.
- 3) **Fairness and Equity** – Costs should be distributed between existing users and new development in a fair manner.
- 4) **Accountability** – All information on which DCC's are based on should be accessible and understandable by stakeholders.
- 5) **Certainty** – The DCC program should provide both stable charges and orderly construction of infrastructure
- 6) **Consultative Input** – Must provide adequate opportunity for meaningful and informed input from the public and other interested parties.

Maintenance & Rehabilitation Projects

Maintenance and rehabilitation of existing infrastructure (e.g., street repairs; watermain flushing; and storm and sanitary main cleaning or repairs), and replacement due to age are not included in DCCs as per the BPG.

2.2 WAIVERS, REDUCTIONS & EXEMPTIONS

Section 933 of the LGA describes circumstances when a development can have DCCs waived or reduced (Section 933.1) or are exempt from paying (Section 933(4)). A brief overview of each is presented below.

2.2.1 Waivers & Reductions

In 2008 with the passage of Bill 27 (Local Government – Green Communities), the provincial government enacted legislation that allowed for the waiver or reduction of DCCs. This is now Section 933.1 of the LGA which provides municipal governments with the ability to waive or reduce DCCs within a broad range of one or more of the following classes of “eligible developments”:

- (a) not-for-profit rental housing, including supportive living housing;
- (b) for-profit affordable rental housing;
- (c) a subdivision of small lots that is designed to result in low greenhouse gas emissions; and
- (d) a development that is designed to result in a low environmental impact.

Council may adopt further bylaw(s) that provide specific detail of the type of development that qualify(s), the amount of the waiver or reduction, and requirements that must be met in order to obtain a waiver or reduction.

The BPG states “the intent of the legislation is that the cases where the DCC is waived or reduced, the amount waived is to be entirely supported by the existing development.” By providing a waiver or reduction, council is signaling that this specific type of development is encouraged and financially supported by the local community.

2.2.2 Exemptions

Section 933 of the Local Government Act describes circumstances when development is exempt from paying DCCs. These specific cases are:

- i) where a building permit authorizes the construction, alteration, or extension of a building, or part of a **building which is solely for public worship** such as a church;
- ii) where a building permit is issued for the construction, alteration, or extension of a building that contains **less than two dwelling units (See paragraph below on 2004 amendment)**, and the building is exclusively for residential use;
- iii) where the value of the work covered by the building permit does not exceed **\$100,000 (See paragraph below on 2004 amendment)**; and
- iv) the construction, alteration or extension of self-contained dwelling units in a building authorized under a building permit if
 - a. each unit is no larger in area than 45 m² (square metres) **(See paragraph below on 2004 amendment)**, and
 - b. each unit is to be put to no other use other than the residential use in those dwelling units
- v) where a building is destroyed by fire or demolished for the purpose of redevelopment of the land, in which case the calculation of the development cost charges payable on issuance of a building permit will be reduced by the amount of any charge applicable to the most recent use of the property prior to building permit application.

In 2004, the exemptions for less than four dwelling units, the maximum \$50,000 building permit value, as well as the unit area of 29 m², were amended to provide more flexibility for the local government. Local governments are able to amend their DCC bylaw to charge DCCs on developments of fewer than four dwelling units.

For the purposes of this DCC the Town of Comox Staff in accordance with the OCP has identified that the exemption for less than four dwelling units will be removed and that construction costs have increased since the previous DCC where currently the Town’s building inspector uses a value of 1,450 per m² to estimate new work. Based on this information, Town Staff recommend that the value of work threshold be raised to \$100,000. Town staff have identified that the area of 29 m² for construction, alteration or extension of a self-contained dwelling does not suit the Town of Comox as no such units have been built since October 2008. Therefore Town Staff recommend this value be increased to 45 m² as this would assist with providing affordable housing.

2.3 BYLAW APPROVAL PROCESS & STAKEHOLDER INPUT

When a DCC bylaw is implemented or amended, developers or those parties paying DCCs will be affected by the new charges. The BPG recommends a suitable period of notification before the new or amended DCC bylaw is in effect. This is known as a “Grace Period” (see Section 2.8 for further discussion). Newspaper articles and notices, information circulars, and verbal communications should be provided to the residents, taxpayers, and land developers, so they are aware of the proposed update, the anticipated charges, and the approximate timing of the new/amended bylaw’s implementation.

The BPG recommends opportunities for stakeholder input be provided at two points during DCC bylaw development:

- i) before first reading by the Council, and
- ii) before third reading by the Council.

In addition, a public information meeting is recommended between the second and third readings of the bylaw, such that stakeholders can be involved in any revision(s) of the bylaw, and concerns arising from the public meeting can be considered in any revision(s).

2.4 SERVICE AREA & TIME FRAME

DCC are to be charged on either a ‘**municipal wide**’ or ‘**area specific**’ basis. The composition of the DCC program and the resulting charges can vary significantly between the two options, which can be summarized as follows:

- A **municipal wide** DCC applies the same rate for a particular type of land use regardless of the location of any specific development.
- An **area specific** DCC divides the Town into separate areas based on specific features such as geographic boundaries or a municipal service boundary.

When developing the bylaw, an appropriate time frame for the DCC program has to be considered. The DCC can be established on either a “**build out**” or “**revolving**” basis. These are defined as:

- **Build out** applies to the construction of all necessary infrastructure to accommodate development to the full extent of the Official Community Plan, which generally has a long-term time horizon of 20 to 25 years.
- **Revolving** applies to construction of the necessary infrastructure to accommodate development for a defined period of time, such as five, 10 or 15 years. A number of revolving time windows would be required to reach the OCP build-out.

2.5 RECOVERABLE COSTS

The BPG states recoverable DCC costs should be clearly identified in the DCC documentation and must be consistent with Ministry provisions. According to the Local Government Act, the recoverable capital costs associated with DCC projects include planning, engineering, and legal costs (Section 935(4)). In practice, this section has been interpreted by the Ministry to include all of the following activities:

- planning,
- public consultation,
- engineering design,
- right-of-way or land acquisition,
- legal costs,
- interim financing,
- contract administration and site inspection services,
- construction costs,
- contingencies, and
- Provincial Sales Tax (PST) in full.

Ministry policy does not consider inflation and long term debt financing eligible for DCC recovery. However, Section 935(3) (c) of the Local Government Act does allow funds in DCC reserve accounts to be used to pay for the interest and principal on a debt resulting from DCC project costs.

2.6 MUNICIPAL ASSIST FACTOR

Section 933 (2) of the Local Government Act states the purpose of DCCs is to provide funds to “assist” local government in paying the costs of infrastructure. By not allowing 100% of the growth related costs to be charged to new developments, the legislation implicitly requires an “assist factor”. This assist factor is separate from the allocation of project costs between new development and existing users, which is considered on a project specific basis.

The assist factor chosen reflects the Town’s Council desire to encourage development, and is largely a political decision. Most DCC bylaws use assist factors in the 1% to 10% range. The Local Government Act requires a minimum 1% assist.

2.7 BYLAW ADMINISTRATION

Once the Inspector of Municipalities has granted statutory approval of the DCC bylaw and the Council has adopted it, ongoing administration will be required. This will involve collection of charges, monitoring and accounting, credits and rebates, and the process for bylaw amendment.

2.7.1 Time of Collection

Section 933 (5) of the Local Government Act states DCCs are payable at either the time of subdivision approval or at issuance of building permit. The BPG recommends charges be applied as follows:

- i) **Single Family** – at the subdivision approval stage, per building parcel being created, and upon the issue of building permit authorizing the construction, alteration or extension of a building that will contain fewer than four residential units.
- ii) **Multi-Family** - either at the subdivision approval stage for each dwelling unit permitted to be constructed pursuant to zoning, or upon issue of building permit per dwelling being built.
- iii) **Commercial/Institutional** - upon issue of building permit based on square metre of gross building area.
- iv) **Industrial** - upon issue of building permit based on hectares of lot area under development.

Schedule A of the Town’s DCC Bylaw No. 1526 and the CVRD Bylaw No. 2342 and No. 2445 defines when DCC are due and follows the recommendations of the BPG.

2.7.2 Separate Accounts

Section 935 (1) of the Act stipulates DCCs shall be deposited in a separate special DCC reserve fund. The monies collected (together with reserve fund interest) shall then be used to pay for the capital projects within the DCC program. DCC accounts should be set up in a manner that allows easy reporting of:

- how much money has been collected from DCCs,
- the amount of government grants, if any, received towards the capital DCC projects,
- amounts designated as DCC “credits” or “rebates”,
- the amount of funds representing the Town’s share of project costs in the DCC program,
- interest earned,
- under/overages, and
- identification of completed projects.

2.8 GRACE PERIOD & IN-STREAM APPLICATIONS

When a DCC bylaw is implemented or amended, it affects those parties paying DCCs. The BPG recommends a suitable period of notification before a new DCC bylaw is in effect. This is known as a “Grace Period”.

The “Grace Period” should not be confused with “In-Stream Protection”. The “Grace Period” serves to allow enough time for people to be notified of the new DCC rates as related to building permit applications. “In-Stream Protection” seeks to provide stability

for developers with an application in process during the introduction or amendment of DCCs provided the application meets certain time criteria as noted below.

2.8.1 Subdivision Applications

Section 943 of the Local Government Act provides “In-Stream Protection” for a subdivision application for a 12 month period after the DCC Bylaw is adopted if:

- an application for a subdivision of land within a municipality has been submitted to a designated municipal officer and the applicable subdivision fee has been paid before the bylaw was adopted

unless the applicant agrees in writing that the bylaw should have effect.

2.8.2 Building Permit, Development Permit, and Rezoning Applications

Implemented in May 2014, Section 937.001 of the LGA provides “In-Stream Protection” for building permits as well as for “precursor applications” for a building permit, a development permit and a rezoning application if:

- (a) a building permit authorizing that construction, alteration or extension is issued within 12 months of the date the DCC bylaw is adopted, and
- (b) a precursor application to that building permit is in-stream on the date the DCC bylaw is adopted,

unless the applicant for that building permit agrees in writing that the bylaw should have effect.

2.9 CREDITS, REBATES & LATECOMERS AGREEMENT

There are no specific references to “DCC credits” or “DCC rebates” in the Local Government Act. The intent of Clause (8) of Section 933 is that developers providing trunk services beyond the local servicing needs of the development shall have those costs deducted from the applicable DCCs payable. To implement the provisions of the legislation, the concepts of a “DCC Credit” and a “DCC Rebate” are introduced. Policies regarding when the Town should offer a credit versus a rebate should be carefully considered. In either case, the DCC accounting system should allow credits and rebates to be monitored and tracked.

2.9.1 Credits

The DCC program is compiled to service new development in an orderly manner. A situation is likely to arise where a developer desires to proceed with a development before the required trunk services are installed in that area. This type of development can be considered to be “out of sequence”. If the Town cannot afford the financial burden of additional infrastructure requirements, the Approving Officer would decline the development for the present time. Alternatively, the developer can construct the necessary trunk services, in advance of the proposed timing. In this case, the “out of sequence” development would be offered a DCC credit, where the cost of constructing the required trunk works is deducted from the amount of DCCs that would have otherwise been payable. The DCC credit cannot exceed the amount of DCC payable. Should the developer submit a development by phases, each phase will be reviewed independently.

2.9.2 Rebates

The DCC program allows for facility oversizing for cost recovery, that is the difference in the capital cost between a local service and a trunk service that is 'oversized' to service lands/facilities beyond the services for each phase required for the local development area(s). Should a developer wish to proceed with a development before the trunk services fronting his property are installed, the Town may allow the developer to construct the necessary portion of the works to a trunk. The Town would then offer a DCC rebate for the incremental portion of the cost beyond the local requirement. The incremental cost portion is the cost for the 'oversizing' of the service. The rebate cannot exceed the amount of the DCC payable. Should the developer submit a development by phases, each phase will be reviewed independently.

2.9.3 Latecomers Agreement

Where a development constructs trunk works which benefit other development(s), the oversizing costs may be considered for inclusion in a Latecomers Agreement if the project is not a DCC project because it is not within the service area for which DCCs are applied. The agreement would be in accordance with the provisions of the Local Government Act. In this scenario, the development would be responsible for setting up the agreement and the costs associated to do so. The agreement would be administered by the Town.

2.10 AMENDMENT PROCESS (Minor vs Major)

The average cost of a typical unit of development should not change significantly over time except for the effects of inflation or changes in standards, provided development projections are accurate. However, periodic revision(s) of the OCP, the Town's financial situation, changing infrastructure needs, and other factors affecting new development that are beyond the Town's control, will require amendments to the DCC Bylaw. In general there are two levels of amendments; **minor** and **major**.

A **minor amendment** is generally associated with an updating based on changes in construction costs and inflationary effects. This type of bylaw amendment requires provincial statutory approval, but due to its nature is anticipated to receive expeditious Ministry approval. This amendment should be carried out no more than once a year and perhaps once every two to three years.

A **major amendment** involves a full review of the DCC methodology, including:

- Underlying DCC assumptions,
- Broad policy considerations,
- Updated development projections,
- DCC program costs,
- Timing of proposed capital works
- Addition of new projects to the DCC program, when necessary, and
- Removal of completed projects or that are no longer required.

In accordance with the BPG recommendation, the major amendment to the DCC bylaw should be completed once every five years.

PART 2

COMOX SPECIFIC ITEMS

3 COMOX SPECIFIC ITEMS

3.1 Re-Develop, Rezoned, Expanded Development

In accordance with the principal of the Benefiter pays, DCC should be charged on properties that are redeveloped, rezoned or expanded for that portion of the additional capacity of the infrastructure required to service the development, whether it be; transportation; storm drainage; water; sanitary sewer; or parks and recreation services.

If the re-development, rezoning or expanded development does not create an increased service need, that is, the development does not impose a new capital cost burden, then Section 933(3) of the LGA states a DCC is not payable.

3.2 Infill Development

The Town has a number of vacant, undeveloped properties in fully serviced subdivisions that were developed many years ago before the introduction of DCCs. The LGA and the BPG are silent on how these properties are to be dealt with regarding DCCs. For the purpose of this DCC these properties would not be charged DCCs, however if a parcel is subdivided the additional properties would be DCC eligible as well if the property is rezoned then the property would be DCC eligible.

3.3 Affordable Housing

The LGA does not provide a definition of affordable housing. What is considered “affordable” housing in one community may not be “affordable” in another. The Canadian Mortgage and Housing Corporation’s (CMHC) definition of “affordable” housing is any form of dwelling unit that costs less than 30% of before-tax household income. As the household income varies not only across the country, but also from province to province and from community to community, the “affordable” threshold should be determined on a community basis within which DCCs are applied.

The term “**affordable housing**” is often used interchangeably with “social housing”; however, social housing is just one category of affordable housing and usually refers to rental housing subsidized by the government. Affordable housing is a much broader term and includes housing provided by the private, public and not-for-profit sectors as well as all forms of housing tenure (i.e., rental, ownership and cooperative ownership). It also includes temporary as well as permanent housing. The range of affordable housing according the CMHC includes:

- Emergency Shelters
- Transitional Housing
- Supportive Housing
- Subsidized Housing
- Market Rental Housing
- Market Ownership Housing

The Town's OCP definition of affordable housing is:

"Housing where the cost of accommodation does not exceed 30% of a household's gross income. This typically includes a subsidy that reduces the rent below the market rate."

Council has the authority to use affordable housing reserve funds to pay for applicable DCC rates.

3.4 Reductions

The Town's OCP, Environmental Policies, Section 2.3.13 (u) states:

The Town will give consideration to reduced development cost charges for developments that provide a significant reduction in off-site infrastructure impacts when updating its Development Cost Charge Bylaw.

3.5 Exemptions

3.5.1 Public Worship

The construction, alteration or extension of a building, or part of a **building which is solely for public worship** such as a church.

3.5.2 Construction Value Threshold

The Construction Value threshold has increased to \$100,000 for all land types to reflect increased construction cost (See Section 2.2.2 for more details on cost).

3.5.3 Construction Size Threshold

The maximum construction size threshold has increased to 45 m² to allow for a dwelling unit consisting of one bedroom, living area, two person eating area, kitchen, and a bathroom with a shower (See Section 2.2.2 for more details on the area).

3.6 Downtown Vitalization Program

Comox Downtown Vitalization was specified as one of the priorities in the Town's 2012-2014 Strategic Plan. A range of incentive tools were chosen, and in June 2014 Council adopted several bylaws to encourage Downtown Vitalization. Increasing residential density in the Downtown was identified as a key element of the Downtown Vitalization Program. The incentives encourage mixed-use commercial and residential development, to support and increase not only Downtown businesses, but also the area's social and environmental vitality.

The Downtown Vitalization Area is shown shaded on the map below.

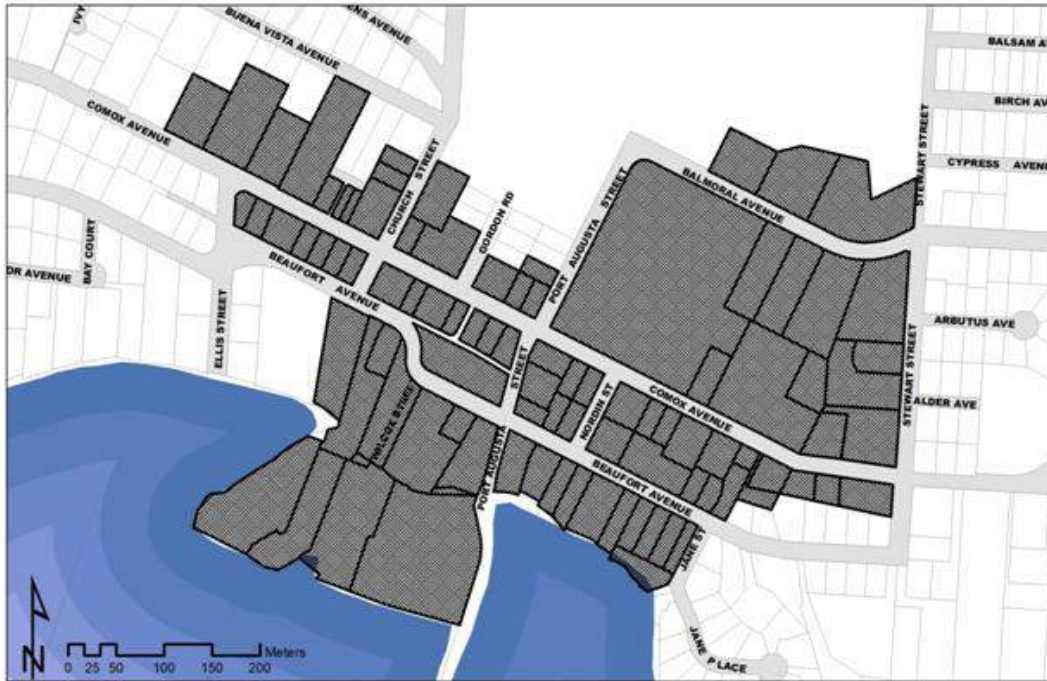


Figure 1 – Downtown Vitalization Area

3.7 Definitions

The definitions of each of the above land-use category are based on the Town's Zoning and OCP Bylaws and are summarized below.

Affordable Housing: Housing where the cost of accommodation does not exceed 30% of a household's gross income. This typically includes a subsidy that reduces the rent below the market rate.

Building: A structure having a roof supported by columns or walls, and used for the shelter or accommodation of persons or property.

Cellars: That portion of a building situated between the top of any floor and the top of the floor next above it having no more than 0.6 metres of its height above ground level, and a height from floor to ceiling of less than 2.1 metres.

Coach House: A building consisting of one dwelling unit. Coach houses shall:

- 1) Only be permitted on a parcel on which a single family dwelling exists;
- 2) Only be permitted on a parcel where either the single family dwelling or the coach house is owner occupied;
- 3) Be located only in a rear yard;
- 4) Be limited to one (1) per parcel;
- 5) Have a gross floor area not exceeding 90 m²; and
- 6) Not be located on a parcel containing more than 2 dwelling units.

Commercial: means (1) a use located in a commercial or marine zone classified as such in section 4.1 of the Town's zoning bylaw, other than a residential use, or (2) a non-residential use located in a residential or multi-family residential zone classified as such in section 4.1 of the Town's zoning bylaw.

Commercial Accommodation: means a commercial use where rooms are offered for use as temporary accommodation.

Community Care Facility: An establishment licenced as a community care facility under the Community Care Facility Act of British Columbia.

Congregate Care: means a building or part thereof providing dwelling units in conjunction with central kitchen and dining services and with or without common shared areas.

Downtown: means all parcels of land located within the Town of Comox as defined in Figure 1 – Downtown Vitalization Area.

Dwelling Unit: One or more rooms (1) constituting a self-contained unit with only one cooking facility and (2) occupied as the permanent residence of one household.

Gross Floor Area: The total floor area of all buildings on a parcel measured between the exterior faces of the exterior walls of each building including stairwells and elevator shafts; does not include parking or loading areas, driveways, bicycle parking spaces or cellars.

Household: One or more persons living together as a single domestic unit.

Industrial: means (a) utility buildings and facilities such as telephone exchanges, transformer stations and public works yards or (b) a use located in an industrial zone classified as such in section 4.1 of the Town's zoning bylaw, other than a residential use.

Institutional: means a use located in a park zone or an institutional zone classified as such in section 4.1 of the Town's zoning bylaw, other than a residential use, or utility buildings and facilities such as telephone exchanges, transformer stations and public works yards.

Intermediate Care Facility: A Community care facility where food, accommodation, and nursing care is provided.

Multi-Family, High Density: A building or part thereof consisting of more than forty (40) dwellings units.

Multi-Family, Low Density: (a) A part of a building consisting of one (1) dwelling unit; does not include a single family dwelling or (b) a building or part thereof consisting of two (2) to thirty (30) dwellings units, excluding secondary suites.

Multi-Family, Medium Density: A building or part thereof consisting of thirty one (31) to forty (40) dwellings units.

Parcel: Any lot, block, or other area in which land is held or into which it is subdivided, but does not include a highway.

Parcel Area (Gross Site Area): The area of land within the boundaries of a parcel.

Residential Use: A single family dwelling; congregate care facility; intermediate care facility; multi-family low density; multi-family medium density; multi-family high density and the use of a portion of a dwelling unit for business purposes.

Secondary Suite: A dwelling unit that is secondary to another dwelling unit. Single family dwellings containing a secondary suite shall be owner occupied.

Secondary suites shall:

- 1) Be located only in single family dwellings;
- 2) Be limited to one (1) per single-family dwelling;
- 3) Be completely contained within the principal building of the single family dwelling;
- 4) Have a dwelling unit gross floor area not exceeding 40% of the gross floor area of the principal building or 90 m² whichever is the lesser

Single Family Dwelling: A building consisting of one dwelling unit, a building consisting of two dwelling units one of which is a secondary suite, or a parcel containing a building consisting of one dwelling unit and a coach house.

Structure: Anything that is man-made that is fixed to, supported by, or sunk into land; does not include a vehicle or boat.

Utility: An organization supplying electricity, natural gas, water, sanitary sewer, storm water management, telephone or communication cable service.

In the case of a building or part thereof for which charges cannot otherwise be determined in accordance with Table 29, the use shall be deemed to be commercial. Notwithstanding, other than residential use, no charges apply to uses located in an agricultural zone classified as such in section 4.1 of the Town's zoning bylaw.

PART 3

DCC CALCULATIONS

4 DEVELOPMENT GROWTH PROJECTION

4.1 SERVICE AREA & TIME FRAME

4.1.1 Service Area

The Town's current DCC Bylaw applies Transportation, Water, and Parkland DCCs on a 'municipal wide' basis. This means the same rate is applied for a particular type of land-use regardless of its location within the Town of Comox. Sanitary and Storm DCCs are applied on an 'Area Specific' basis, meaning DCCs to development based on where they are located within the Town of Comox.

For this update, DCCs are calculated as follows:

- Municipal Wide: Water, Parkland
- Area Specific: Sanitary, Storm, Transportation

in accordance with the Town's current water, sanitary and storm Master Plan studies listed in Table 1 below and from the parkland information provided by the Town. For Transportation, area specific has been used to create a DCC rate for development downtown.

4.1.2 Time Frame

Presently, DCCs are calculated on a 'revolving' basis, using a 10 year period. This means DCCs are based on the construction of the infrastructure needed to accommodate development over a 10 year period (2015 – 2024).

Table 1 presents the end (future) year that each of the Town's master planning documents is based on.

Table 1 – Master Planning Documents Time Frame

Document	Date Published	Build-Out Year
<i>Official Community Plan</i>	<i>May 2011</i>	Year 2031
<i>Transportation Study</i>	<i>July 2011</i>	Year 2031
<i>Water System Study</i>	<i>Sept 2013</i>	Year 2031
<i>Sanitary Sewer System Study</i>	<i>Jan 2014</i>	Year 2018 & 2033 *
<i>Storm Drainage System Study</i>	<i>Mar 2014</i>	Year 2018 & 2033 **

Notes:

- * The scope of this study was to provide cost estimates for works required over the next five years (to Year 2018). Modelling was carried out for projected development to Year 2033.
- ** The scope of this study was to provide cost estimates for works required over the next five years (to Year 2018). Modelling was not carried out for projected development beyond the five year period.

Given that one of the reports has costing data only to Year 2018 (5 year period) while the remaining documents span to at least 2031 and, DCCs are recommended to undergo

a 'major' amendment once every 5 years, it is appropriate that for this study the current DCC Bylaw 'revolving' time frame of a 10 year period be applied to this study update.

4.2 POPULATION

4.2.1 Historic

The population of the Town of Comox, and that of the Comox Valley, over the last three Canada censuses (2001 to 2011) has experienced substantial growth. The majority of this growth was within the boundaries of the three municipalities of the Comox Valley; City of Courtenay, Town of Comox and Village of Cumberland.

A summary of the population count, number of occupied dwelling units, and the resulting average capita (persons) per occupied dwelling unit for the Census years 2001 and 2011 for Comox, Courtenay, Cumberland the Comox Valley Regional District is presented in **Table 2**.

Table 2 – Population & Dwelling Count, 2001 – 2011

Year	Canada Census ⁽¹⁾			Comox Valley Regional District	
	Town of Comox	City of Courtenay	Village of Cumberland	BCStats	Canada Census
Population					
2001	11,172	18,304	2,633	56,371	- ⁽²⁾
2011	13,627	24,099	3,398	64,417	63,538
Increase #	2,455	5,795	765	8,046	-
%	22%	32%	29%	14%	-
Occupied Dwelling Units ⁽³⁾					
2001	4,873	8,330	1,099	23,234	- ⁽²⁾
2011	5,974	10,889	1,404	28,269	27,882
Increase #	1,101	2,559	305	5,035	-
%	23%	31%	28%	22%	-
Capita per Dwelling Unit ⁽³⁾					
2001	2.29	2.20	2.40	2.39	- ⁽²⁾
2011	2.28	2.21	2.42	2.28	2.28

Notes:

- (1) All three municipalities had boundary expansions during this 10 year period, resulting in a corresponding decrease in the service area of the Comox Valley Regional District.
- (2) Canada Census data does not exist as the Comox Valley Regional District did not come into existence until February 15, 2008 when the Comox-Strathcona Regional District was separated into two regional districts; the Comox Valley Regional District and the Strathcona Regional District.

- ⁽³⁾ Includes all types of dwelling units, e.g., single family, duplex, townhomes, condominiums, apartments, care homes, etc.

4.2.2 Projected

The Town of Comox, like most municipal governments, do not generate population projections. However, the provincial government, through its central statistical agency, BCStats, does.

A review of population projection for the Town of Comox as well as the Comox Valley Regional District was carried out to ensure the growth projections for the Town were consistent with and proportional to those for the Comox Valley. A summary of the projections for the Comox Valley and the Town of Comox are presented below.

Regional Context (Comox Valley Regional District

CVRD BCStats (Sept 2014)

BCStats publishes a forecast of future population growth for the next 25 to 30 years for each regional district. It does not publish forecasts for individual municipalities, those these can be carried out by BCStats for a fee. The population forecast uses the Component/Cohort-Survival method which ages the population while applying births, deaths, and migration forecasts by age. The forecasts are based on past trends which are modified to account for possible future changes. The growth projections are updated annually.

For the next 10 years (2015 - 2025) the population of the Comox Valley Regional District is expected to increase by 7,870; including growth within the Town of Comox, the City of Courtenay, and the Village of Cumberland. Assuming the Town of Comox's population as a percentage of the CVRD remains at the same 21% as it was at the time of the 2011 Census (13,627/64,417), its population would increase by 1,665.

CVRD Rural OCP – (Nov 2014)

The Rural OCP anticipates the population of the Comox Valley will increase by more than 19,800 over the 20 year span of 2011 to 2031. Interpolation between the projections, results in a projected population increase of approximately 9,760 for the 10 year period of 2015 – 2025. It should be noted that the OCP anticipates that all of the growth will be within municipal boundaries; the populations of electoral areas A, B and C will remain unchanged. While this may seem unrealistic, the OCP notes that between the 15 year period of 1996 to 2011 the total population of Areas A, B and C actually dropped by 2,350 (9%) from 24,800 to 22,450 (page 8). This decrease is attributed to municipal boundary expansions by Courtenay, Comox, and Cumberland.

CVRD Regional Growth Strategy (2010)

The Comox Valley Regional Growth Strategy (Bylaw No. 120, 2010) has the objective to direct 90% of new residential development to *Core Settlement Areas* which is divided into five categories:

- 1 Municipalities
 - ii) City of Courtenay
 - iii) Town of Comox
 - iv) Village of Cumberland
- 2 Settlement Nodes
 - i) Union Bay
 - ii) Saratoga Miracle Beach
 - iii) Mt Washington
- 3 K'ómoks First Nations Lands
- 4 Settlement Expansion Areas (areas identified on the fringes of municipalities)
- 5 Sage Hills Sports & Education Node (No longer part of the RGS)

The RGS forecasted a population increase of 9,900 for the 10 year period of 2015 – 2025. Assuming the Town of Comox's population as a percentage of the CVRD remains at the same 21% as it was at the time of the 2011 Census (13,627/64,417), its population would increase by 2,094.

Town of Comox

Official Community Plan (2011)

The OCP predicts the Town's population to grow between 1.3% (low scenario) to 1.6% (high scenario) over the next 20 years (page 25), reaching 19,000 by 2031 (page 47). The Town expects its population to remain at approximately 20% of the Comox Valley's total population.

Interpolating between the information in the report, the Town's population would increase between 1,933 and 2,624 over the next 10 years (2015 - 2025).

Transportation Plan (2011)

This study does not provide population growth data, but indicates the study provides the framework to guide development and implementation of all transportation infrastructure over the next 20 years.

Water System Study (2013)

This study projected the service population of the water system to reach 19,000 by Year 2031 as per the population projection by the OCP.

For the 10 year period of 2015 - 2025, the service population was forecast to increase by 2,633 capita.

Sanitary Sewer Study (2013)

The scope of work for this study was restricted to the catchment area of the Jane Street pump station, which handles all of the Town's sanitary sewer flows, with the exception of sewage flows generated in the catchment areas serviced by the: Colby Road pump station, Simon Crescent pump station, and Kye Bay pump station.

For the Jane Place pump station catchment, the study modelled an equivalent service population of 18,237 by Year 2031. This is not the entire growth predicted within the Town's boundary as an equivalent population of 2,000 people is expected

to occur in catchment areas outside of the Jane Place pump station.

For the 10 year period of 2015-2025, sewage flows equivalent to a service population of 1,517 capita is anticipated within the Jane Place pump station catchment. This includes anticipated flows from an increase in residential development (permanent population) and non-residential development (commercial, institutional and industrial). Interpolation of the information in the report suggests a permanent population increase of around 1,300 within the Jane Place sewage pump station catchment area.

Storm Sewer Study, 2013

This study reviewed the ability of the storm drainage system to accommodate the anticipated growth over the short term, 5 year period, ending late 2018. The growth was restricted to the catchment area of the Jane Place sanitary sewer pump station. No modelling of growth beyond 5 years or for storm events greater than a 10 year return period was carried out due to budget constraints (page 18).

As this study is based on the same land development projections as the Sanitary Sewer Study, its permanent population increase over the 10 year period of 2015 to 2025 is approximated to be around 1,300 within the Jane Place sewage pump station catchment area. Additional growth is expected to occur outside of this area but was not modelled.

Table 3 presents a summary of the growth projection for the next 10 years (2015 – 2025) in the Town of Comox master plan documents.

Table 3 - Growth Projections, Years 2025 & 2031

Description	OCP (1.3%)	OCP (1.6%)	Transportation Study (2011)	Water System Study (2013)	Sanitary Sewer Study (2013)	Storm Sewer Study (2013)	BCStats (2014)
2015 - 2025 (10 years)							
Projected Increase	1,993	2,524	-	2,633	1,517 ⁽¹⁾	1,517 ⁽¹⁾	1,654 ⁽³⁾
Total Population	16,880	17,750	-	17,200	16,437 ⁽²⁾	16,437 ⁽²⁾	15,565 ⁽³⁾
Year 2031 (OCP Build-Out)							
Total Population	19,000	19,000	19,000	19,000	17,781 ⁽²⁾	17,781 ⁽²⁾	16,500 ⁽³⁾

Notes:

- (1) Equivalent population for the catchment area of the Jane Place sanitary sewer pump station. Based on flows generated from forecasted Residential, Commercial, Institutional land development.
- (2) Equivalent population for the catchment area of the Jane Place sanitary sewer pump station. Based on flows generated from forecasted (Residential, Commercial, Industrial, and Institutional land development. Additional development of an equivalent population of 2,000 people is expected to occur by Year 2033 in catchment areas outside of the Jane Place pump station.

- (3) Based on the Town of Comox's population as a percentage of the CVRD remaining at the same 21% as it was at the time of the 2011 Census (13,627/64,417); and BCStats annual population projections for the CVRD to Year 2041 as published in September 2014.

The BCStats growth projections data was used to estimate population and dwelling units to be constructed in the Town over the next 10 years, because it spans the 10 year revolving time period of this DCC study, it is the most current information available and is statistically developed using births, deaths and migration data. **Table 4** presents the projected annual increase in population and number of dwelling units increase in the Town for the next 10 years.

Table 4 –Projected Population & Dwelling Unit Growth, 2015 - 2025

Year	Population*		Dwelling Units**	
	Total	Increase	Total	Increase
2015	13,821	-	6,282	-
2016	13,980	159	6,355	72
2017	14,147	167	6,430	76
2018	14,314	167	6,506	76
2019	14,481	167	6,582	76
2020	14,648	167	6,658	76
2021	14,816	168	6,734	76
2022	14,983	167	6,810	76
2023	15,149	166	6,886	75
2024	15,313	164	6,961	75
2025	15,475	162	7,034	74
2015 - 2025 (10 years) Total				
	Total Increase	1,654 (12%)		752 (12%)

Notes:

- * The BCStats projected annual rate of growth over this 10 year period ranges from 1.0% to 1.2%.
- ** Dwelling unit count based on BCStats average density of 2.20 capita/dwelling unit over the 10 year period. This is slightly higher than the 2.28 capita/dwelling unit counted in the 2011 Census as noted in **Table 2**. If the average density over the 10 year period was 2.28, the total number of dwelling units to be constructed would be 725 (3.6% fewer).

Municipal Boundary Expansions

The population and dwelling unit count estimates in **Table 4** do not account for municipal boundary expansions that could occur over the next 10 years.

The Town's 2013 Sanitary Model Update Study short term (5 year) growth projection includes the development of two parcels of land in southeast Comox that are presently outside of the Town of Comox. The projected combined residential population of the two properties is 134 (page 16 of the study).

The Town's 2013 Sanitary Model Update Study long term (Year 2033) growth projection includes the development of additional lands in southeast Comox that are presently outside of the Town of Comox to accommodate 960 people (page 17 of the study).

The Town has received applications for the incorporation of three parcels of land in northwest corner (McDonald and Hector roads area); totalling 14 ha. If developed as single family residential with 14 units per ha and 2.2 capita per unit, the area would accommodate 431 people.

4.3 BY LAND-USE

Non-residential land uses are categorized separately from residential land use for DCC bylaws. In order to keep the number of designated land uses at a practical level, it is normal practice to consider the groupings under residential, commercial, industrial, and institutional categories. The Town of Comox's current DCC Bylaw has the following land-use categories:

- Single Family Residential
- Multi-Family Residential
- Congregate Care
- Commercial
- Institutional
- Industrial

The Town desires to ensure the updated DCC Bylaw addresses the varying residential land-uses and types of development that are permitted in the Town. A discussion regarding the proposed land-use categories is presented below.

4.3.1 Residential (Single Family, Multi-Family, & Congregate Care)

The current bylaw has three residential categories (Single Family, Multi-Family, and Congregate Care), but there are numerous other types of residential development for which the Town desires to ensure DCCs are applied in accordance with the six guiding principles of the BPG previously noted in **Section 2.1** (Integration, Benefiter Pays, Fairness and Equity, Accountability, Certainty, Consultative Input). To address this issue while trying to keep the number of designated land-use at a practical level for the calculation of DCC for each of the five DCC utilities/services (transportation, storm, water, sanitary sewer, and Parks & Recreation), the following residential land-use categories are proposed:

- Single Family
- Coach Houses
- Secondary Suites
- Multi-Family
 - Low Density
 - Medium Density
 - High Density
- Congregate Care

During the past 10 years (2005 – 2014), single family was the most desired form of residential housing in Comox as it accounted for 55% of new home construction. The number of new dwelling units constructed each year the past 10 years as documented by the Town is presented in **Table 5**. This information was provided by the Town of Comox and is in close correlation with data published by BCStats on their website. Not included in the data is the number of coach houses, care facilities, or affordable homes constructed. A review of the number of care units in Comox and the anticipated new development over the coming 10 years is discussed in **Section 4.2.2**.

Table 5 – Dwelling Unit Construction, 2005 - 2014

Year	Residential Development (Number of Units)			
	Single Family	Secondary Suites	Multi-Family	Total
2005	64	-	191	255
2006	64	-	126	190
2007	128	14	24	166
2008	105	10	6	121
2009	102	7	-	109
2010	105	17	5	127
2011	44	5	62	111
2012	19	11	-	30
2013	19	12	-	31
2014	18	8	38	64
Total	668	84	452	1,204
Ave/Yr	67	8	45	120
%	55%	7%	38%	100%

The development of secondary suites was in response to changes to the Town’s zoning bylaw in the fall of 2005 for the McDonald/Guthrie Road area. In response to the demand, the Town’s zoning bylaw was modified in 2012 to permit the construction of secondary suites on the majority of existing single family zoned lots without having to rezone the property.

It is assumed the same ratio for the ratio of Single Family, Secondary Suites, and Multi-Family from the past 10 years, 55%, 7% and 38%; respectively, will continue for the next 10 years (2015 – 2024). Recently, Coach Housing was added to the Town of Comox zoning bylaw as part of Single Family development. Coach Housing has therefore been

included in the growth projection. An allowance for a total of 30 units over the next 10 year has been made. This equates to 4% of the projected housing requirement and is considered to be counted as part of the 55% of Single Family housing projection.

Table 6 presents projected growth in accommodation units over the next 10 years. The population and dwelling unit growth for the past 10 years and projected for the next 10 years is graphically shown in **Figure 2**.

Table 6 – Projected 10 Year Growth of Accommodation Units

Dwelling Type	Projected		Number of Units	
	Population	Capita/Unit	(%)	(#)
Single Family	998	2.6	51 %	384
Coach Houses	36	1.2	4 %	30
Secondary Suites	62	1.2	7 %	52
Multi-family:				
- Low Density	48	2.16	3 %	22
- Medium Density	151	2.16	9 %	70
- High Density	302	2.16	19 %	140
Congregate/Intermediate Care	57	1.05	7 %	54
Total	1,654		100 %	752

It should be noted that the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category for the purposes of DCC cost charges.

Congregate Care Facilities

There are a total of 15 senior housing developments in the Comox Valley, five of which are located in Comox. There is a total of 904 units within the Comox Valley, of which 322 (36% are within the Town of Comox). A number of the developments provide subsidized housing. The five developments in the Town of Comox s are listed in **Table 7** along with the number of dwelling units in each.

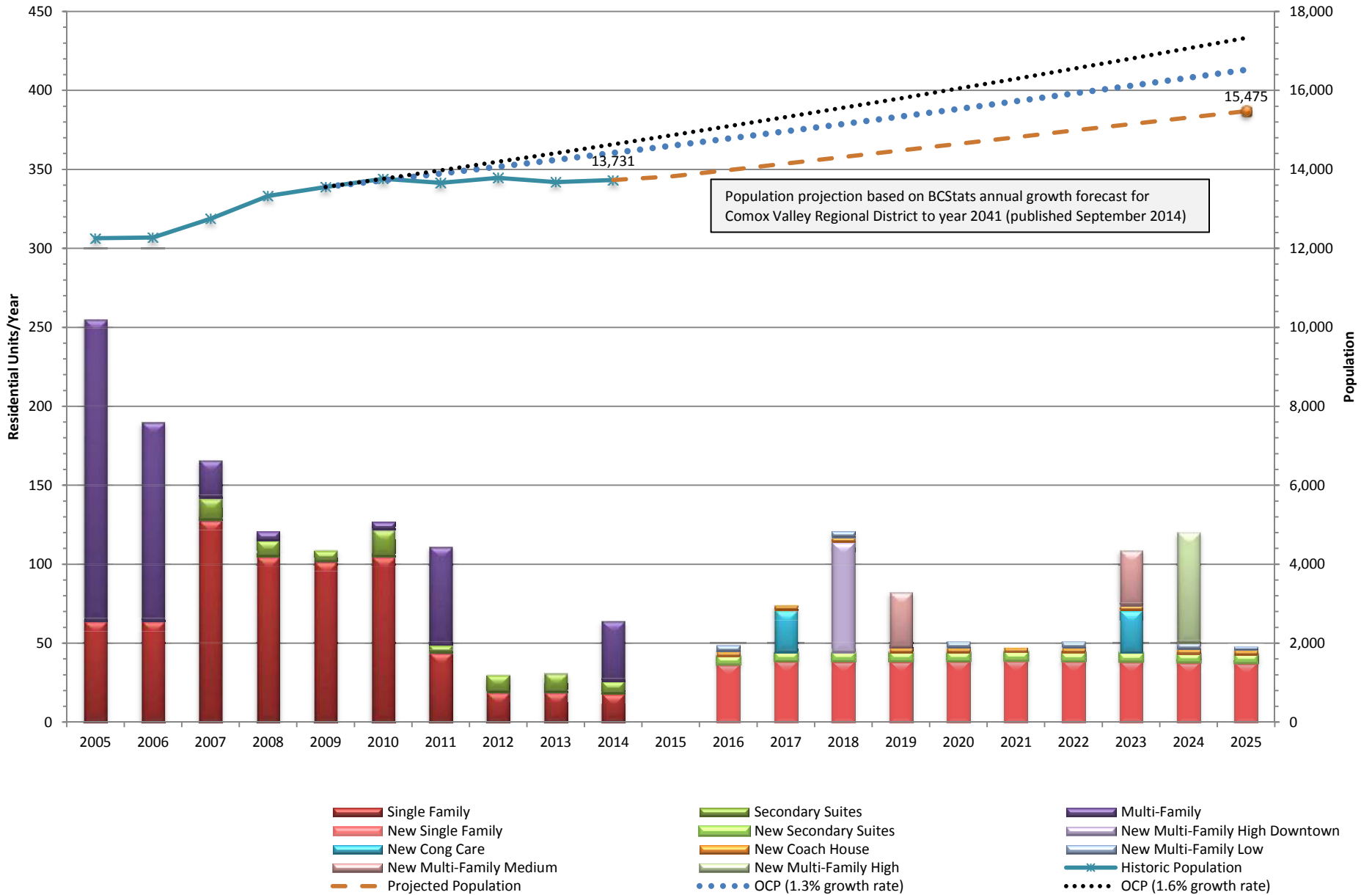
Table 7 – Existing Care Facilities

Development	No of Dwelling Units
Berwick	124
The Views (St Joseph’s Hospital)	125
Stevenson Place	33
Quadra Gardens	24
D’Esterre Gardens	16
Total	322

The most recent development is Berwick, which opened in 2009, followed by Stevenson Place which opened sometime between 1997 and 1999.

The Regional District OCP anticipates that 150 units will be constructed over the next 10 years in the Comox Valley. **Assuming the existing 36% ratio of units in Comox**

FIGURE 2
Town of Comox
Population & Dwelling Units
Historical & 10 Year Projection



compared to the entire Comox Valley will continue to apply, an additional 54 unit would be constructed in Comox. These would be part of the total number of multi-family units projected to be constructed over the next 10 years.

4.3.2 Commercial

Commercial use includes service commercial, office commercial, and mixed commercial/residential development.

Commercial Accommodation use includes commercial development with rooms for temporary use.

The BPG recommends commercial and institutional development be charged on the basis of building floor space expressed in square metres. This is the Town's current practise; to charge on the basis of gross building area expressed in square metres.

Where land uses on a site are mixed, it is intended that applicable DCCs be charged on the basis of all actual uses on a site. This may include a residential and a commercial component or some other combination.

Commercial

Existing and proposed (OCP) commercial areas of the Town of Comox are:

- Downtown,
- Comox Avenue, from Rodello to Stewart,
- Northwest Comox, Aspen Road area,
- Anderton & Guthrie
- Lazo Road at Simba Road
- McDonald & Guthrie (future development)
- Guthrie & Noel (future development)

Redevelopment of the Lorne Hotel and the Edgewater Restaurant sites that were destroyed by fire is anticipated. DCCs can only be charged on the portion of reconstruction that are in addition to the original buildings. **Town planning anticipates 6,710 m² of new commercial development over the next 10 years.** The anticipated locations, total floor area and potential year of construction start is presented in **Table 8.**

Table 8 – Projected 10 Year Growth of Commercial Development

Development (Name or Location)	Commercial Floor Area			Projected Start (year)
	Original (m ²)	Proposed (m ²)	Increase (m ²)	
Lorne Hotel	915	915	-	2015
Aspen Rd Quality Foods Area, (SW corner)	-	2,000	2,000	2017
Edgewater - hotel rooms	590 -	800 28 rooms	210 28 rooms	2018
Guthrie/Anderton (Phase 3)	-	2,500	2,500	2019
Aspen Rd Quality Foods Area (SE Corner)	-	2,000	2,000	2022
Total:	1,505	8,215	6,710	

4.3.3 Institutional

Institutional use includes government offices, recreational facilities, public and private schools, colleges and universities, and hospitals including private care facilities.

Schools

The School District No. 71 Long Range Plan, 2012 by Graham Hoffart Mathiasen Architects reviewed student enrolment projections and facility needs to year 2026. The study does not identify the construction of any new schools in Comox over the coming 10 years (2015 – 2024) as surplus capacity is projected within the existing schools.

Comox Elementary school is closed and not in use. The long-term intentions of the school and the property are not known.

No new schools are anticipated to be constructed in Comox over the next 10 years.

Churches

As the Town continues to expand, it is anticipated that the need for places of worship will increase proportionately. The most recent church constructed in Comox was in 2001. As per the provincial government regulations (Local Government Act Section 933(4), **places of worship (such as a church) are exempt from DCCs.**

Hospitals

A new Comox Valley Regional hospital is being built in Courtenay, and is scheduled to be opened in the 2017. At that time the general hospital functions of St. Joseph’s hospital will be transferred to the new hospital. St. Joseph’s hospital, which was founded over 100 years ago (1913), is owned and operated by the Diocese of Victoria of the Catholic church. The hospital has formed a task force to help determine what new role the facilities and staff can serve in meeting the needs of the community. **In general, it is anticipated that the current extended care facility at St. Joseph’s hospital (the Views) will be maintained and perhaps expanded.** These units would be considered Congregate Care.

It is uncertain if any institutional development will occur in the Town over the next 10 years however after discussion with Town Staff an allowance of 250 m² institutional gross floor area has been made for the study. In accordance with the Town's Zoning Bylaw No. 1377, this could include: churches, schools, child care and recreation facilities, cultural centres, libraries, museums, etc.

4.3.4 Industrial

Industrial use as defined in the Town's OCP is limited to light industrial uses, including manufacturing, processing, warehouses, mini-storage, minor repair, fabrication and storage facilities or space, and fuel storage areas. Industrial shall also include all Utility use including BC Hydro, Fortis BC Gas, telephone, cable vision, and similar utility storage, distribution and plant facilities.

For industrial uses, which are predominantly single storey development, the BPG prefers charging on the basis of gross site area (the area of land within the boundaries of a parcel) measured in hectares, which the Town has selected for Storm Drainage and Transportation DCC's, however for Water, Sanitary Sewer, and Parks DCC's these developments will be charged on the basis of gross building area expressed in square metres as the zoning bylaw generally limits industrial uses to within a building.

The Town has 27 ha of vacant industrial land on Knight Road in the vicinity of the airport. **After discussion with Town Staff an allowance for the development of 1,000 m² of industrial gross building area (0.2 ha) over the next 10 years has been made for the study.**

The projected growth for each land use category is presented in **Table 9**.

Table 9 – Projected 10 Year Growth by Land-Use

Land Use	Projected Growth
Residential	
- Single Family	384 units
- Coach Housing	30 units
- Secondary Suites	52 units
- Multi-Family	
Low	22 units
Medium	70 units
High	140 units
- Congregate/Intermediate Care	54 units
Commercial Accommodation	28 rooms
Commercial	6,500 m ²
Commercial Downtown	210 m ²
Institutional	250 m ²
Industrial	1,000 m ² (0.2 ha)

5 PROJECT COST ALLOCATION

5.1 INTRODUCTION

With the establishment of a list of capital projects and their estimated construction costs, the portion of the project cost attributed to development is calculated using the equation:

$$\text{DCP} = \text{PC} - \text{GG} - \text{BEU} - \text{AF} - \text{RF}$$

Where:

DCP	=	Development Cost Portion
PC	=	Project Cost
GG	=	Government Grants
BEU	=	Benefit to Existing Users
AF	=	Assist Factor
RF	=	Reserve Funds

A discussion on each category and the amounts used in this study is presented below. The Town's contribution to the DCC projects consists of:

- i) total capital cost attributed to existing users (BEU),
- ii) assist factor (AF), and
- iii) portion of costs associated with developments exempt from DCCs (see previous discussion under Section 2.2).

5.2 PROJECT COST

Project construction costs in this report are preliminary, order of magnitude, estimates. No preliminary or detail engineering design work has been completed, and as such, the costs are Class D estimates. They are suitable for project control budgets, for program planning, and to obtain approval in principle. The estimates include allowances for engineering design, tendering and construction services and construction contingencies.

No allowance has been made for Town internal management or legal costs. There is no allowance for long-term financing or future inflation as this is not allowable under the Local Government Act. The impact of inflation should be reviewed regularly as time and projects proceed, and project costs adjusted accordingly as part of a minor amendment to DCCs.

Costs are Class D estimates, in 2015 dollars and are exclusive of GST.

5.3 GOVERNMENT GRANTS

Government grants, including Federal/Provincial infrastructure funding programs and Provincial revenue sharing programs, can no longer be relied upon to provide significant funding for all types of capital improvement projects. Some grants are available for projects, particularly those which contribute towards improved public health and water quality considerations, but sporadically for other priorities. When awarded, senior government grants can provide:

- A significant portion of study cost recovery.
- Provincial government funding up to 80% of a project cost.
- A total of 2/3rds combined assistance under Infrastructure Funding Programs supported through joint Federal/Provincial agreements.

The DCC does not include an allowance for the government grants. In recent years given the financial constraints of the federal and provincial government and the demand on the gas tax revenue program administered by the Union of BC Municipalities these grants are becoming more difficult to obtain. However, the Town should continue to make every effort to obtain financial assistance toward key eligible projects as funding programs become available.

5.4 BENEFIT TO EXISTING USERS

Capital costs for DCC calculations must be net costs. It is recognized that most improvements within the system provide a benefit to the existing residents and users.

The percentage benefit to existing users estimated for each project has been made. The cost for each project applicable to existing users is then deducted from the project cost, after government grants are deducted, to calculate the allowable DCC recoverable portion of the project.

The DCC study does not show all of the Transportation projects as projects identified as 100% benefit to existing users have been removed from the calculations. The Town will proceed with these projects regardless if development occurs or not. The total estimated value of transportation projects in the next ten years is \$17,800,000. The three projects identified in the study are intersection upgrades with a total estimated value of \$3,600,000 therefore the remaining \$14,200,000 will be borne by the existing users.

5.5 MUNICIPAL ASSIST FACTOR

Section 933 (2) of the Local Government Act states the purpose of DCCs is to provide funds to “assist” local government in paying costs of infrastructure. By not allowing 100% of the growth related costs to be charged to new developments, the legislation implicitly requires an “assist factor”. It is important to note that this assist factor is separate from the allocation of project costs between new development and existing users, which is considered on a project specific basis.

Most DCC bylaws use assist factors in the 1% to 10% range. Under certain conditions, the assist factor is adjusted to maintain DCC rates within a perceived affordable level. When the economy is slow, a higher assist factor, such as 10%, can be used to encourage new development. With a very healthy development climate, a low assist factor, such as 1% is considered appropriate.

A high assist factor has a direct impact on the water system users, as the contribution has to be made up from the existing tax base through general revenue such as parcel tax, long term debt, etc. If the existing users could not afford its share of the costs, development may be delayed.

A 1% assist factor has been chosen for all projects.

5.6 DCC RESERVE FUNDS

The reserve funds are the total amounts that have been collected from development and not yet spent on DCC projects. These amounts are deducted in the calculation of each DCC function.

Table 10 lists the Town’s estimated reserve fund balance for each account as of December 31, 2014.

Table 10 – DCC Reserve Fund Balance

DCC Function	Reserve Fund Balance (rounded) (\$)
Water	\$ 1,120,687
Sanitary	\$ 42,626
Storm	\$ 719,907
Road	\$ 147,497
Parks	\$ 2,426,047

6 DCC CALCULATION

6.1 COMMON UNIT CALCULATION METHOD

The BPG recommends DCCs be calculated using a common unit basis for each municipal service (roads, storm drainage, sanitary sewer, waterworks and parks). To meet this requirement, the following common unit was applied to each land use for each municipal service:

Roads – Costs are related to estimated traffic generation as defined by the number of Average Vehicle Trips Ends (AVTE) on weekdays for each land-use category.

Storm Drainage – Costs are related to the amount of impervious area for each land-use category.

Water - Costs are related based on per capita demand for each land-use category based on water meter reading data and equivalent population per land-use. A separate allowance for exterior water demand based on land-use has been accounted for with each land-use category.

Sanitary Sewer - Costs are related using an equivalent population demand, which is based on average densities and usage for each land-use category.

Parks – Costs are related using equivalent population based on average densities for each residential land-use category. No contribution for commercial, institutional, industrial land-use categories are allowed, in accordance with the BPG.

7 TRANSPORTATION DCCs

7.1 PROPOSED TRANSPORTATION WORKS

Transportation projects were identified by Town staff from the findings of the Town's 2011 (July) Transportation Study prepared by Boulevard Transportation. The Transportation study identified capital works in 5 year increments under the headings of: Major Road; Minor Roads; Road Widening; Bicycle Lanes; Sidewalks; Intersection Upgrades; and Bus Stop Upgrades. All projects with the exception of Intersection Upgrades have been excluded from the DCC project list because these are projects that are development driven. The remaining projects (sidewalks, bike lanes, road widening, road upgrades) over the next ten years total a value of \$14,200,000 and have not been included in the DCC. The Town will complete these projects regardless of growth.

Transportation DCCs are to be imposed on a municipal wide basis, in keeping with the BPG.

7.2 CALCULATION UNIT

Transportation DCCs were calculated using the common unit of Average Vehicle Trip Ends (AVTE) on weekdays for each land-use category. The AVTE for each land-use are based on the current edition of the Institute of Transportation Engineers, *Trip Generation Manual*, 9th Edition, 2012. A summary of some of the values most applicable to the Town of Comox is presented in **Table 11**.

Table 11 – Institute of Transportation Engineers Vehicle Trip Generation Rates by Land-Use

Description	(Category)	Unit	Average Vehicle Trip Ends
Residential			
Single Family	210	Dwelling Unit	9.52
Apartment	220	Dwelling Unit	6.65
Condo/Townhouse	230	Dwelling Unit	5.81
High Rise Apartment	222	Dwelling Unit	4.20
Sr. Adult Detached Housing	251	Dwelling Unit	3.68
Cong./Intermediate Care Facility	253	Dwelling Unit	2.02
Commercial			
Hotel	310	Room	8.17
Motel	320	Room	5.63
Convenience Store with Gas	853	m ²	9.102
Fast Food with Drive Thru	934	m ²	5.340
Restaurant, high turnover/sit down	932	m ²	1.369
Drugstore	880	m ²	0.969
Restaurant	931	m ²	0.968
Variety Store	814	m ²	0.689
Specialty Retail Centre	826	m ²	0.477
Shopping Centre	820	m ²	0.460
Dental Office	720	m ²	0.389
Business Park	770	m ²	0.134
Institutional			
Daycare	565	m ²	0.797
Hospital	610	m ²	0.142
Recreational Community Centre	495	m ²	0.364
Elementary School	520	m ²	0.166
Middle / Jr High School	522	m ²	0.148
High School	530	m ²	0.139
Church	560	m ²	0.098
Industrial			
Industrial Park	130	Ha	151.15
Warehousing	150	Ha	141.42
Light Industrial	110	Ha	128.00
Mini-Warehouse	151	Ha	87.55

Table 12 summarizes the AVTE 9th edition for each land use category, the total trip ends generated per category, and the combined total.

Table 12 – Land-Use Traffic Generation Summary

Land Use Category	AVTE Category	Estimated New Development	Average Vehicle Trip End (per unit)	Traffic Generation (Total Trip Ends)
Single Family	210	384 units	9.52	3,656
Coach House	251	30 units	3.68 (1)	110
Secondary Suite	251	52 units	3.68 (1)	191
Multi-Family (MF)				
MF Low	230	22 units	5.81	128
MF Medium	230	70 units	5.81	407
MF High	230	70 units	5.81	407
MF Downtown (Low/Medium/High)	230	70 units	5.23	366
Congregate/Intermediate Care	253	54 units	2.02	109
Commercial Accommodation	310	28 rooms	4.09	115
Commercial	820, 826	6,500 m ²	0.357 (2)	2,321
Commercial (Downtown)	820, 826	210 m ²	0.179 (2)	38
Institutional	520, 522, 530	250 m ²	0.151	38
Industrial	110, 150, 151	0.2 ha	118.99 (3)	24
Total Traffic Generation				7,910

Notes:

- (1) As there is no category for Coach houses or secondary suites, and the assumed population density for both is low and the same value (1.2 capita/unit as per **Table 6**), average vehicle trip ends equivalent to a sr. adult detached housing (category 251) was selected.
- (2) A combination of two commercial categories (Shopping Center, Specialty Retail Centre) was selected to reflect the type of development that would most likely be constructed. The Town has further reduced the AVTE for Commercial Downtown by 50% to reflect the lower trip ends for the downtown area.
- (3) A combination of three industrial categories (Light Industrial, Warehousing, and Mini Warehouse) were selected to reflect the type of development that would most likely be constructed.

7.3 COST CHARGE CALCULATIONS

Construction costs are based on the construction cost estimates from the Town of Comox Transportation Study, July 2011 by Boulevard Transportation. The cost estimates include a 25% allowance for engineering and contingencies. The costs have been updated to March 2015 dollars based on the increase in the Engineering News Record Construction Cost Index.

Table 13 lists all applicable projects and costs, and the resulting net DCC recoverable amount after subtraction of the DCC Reserve fund balance. This is based on three intersection improvement projects the remaining \$14,200,000 projects identified in the Town's transportation study will be borne 100% by the existing users.

For the purposes of DCC Cost Charge Calculations the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category. This will increase the average vehicle trip ends per single family unit to 10.31 for a total of 3,957 trip ends.

The portion of the total cost attributed to each land-use is calculated based on the percentage of the traffic generated by each land-use. The DCC per land-use is calculated by dividing the total project cost attributed to each land-use by the new development for each land-use. Over the next 10 years a total of \$3,600,000 in transportation works is to be carried out. Recoverable DCCs total \$3,564,000. The existing users cost is \$36,000.

Table 14 presents a summary of the proposed Transportation Development Cost Charge by Land-Use.

Table 14 – Summary of Transportation DCCs by Land-use

DCC Category	Proposed Road DCC	Current Road DCC
Single Family (1)	\$2,748.40 per unit	\$1,352.51
Multi-Family (MF) Low	\$1,551.79 per unit	\$828.18
MF Medium	\$1,550.75 per unit	\$828.18
MF High	\$1,550.75 per unit	\$828.18
MF Downtown (Low/Medium/High)	\$1,394.53 per unit	\$828.18
Congregate/Intermediate Care	\$538.37 per unit	\$285.48
Commercial Accommodation	\$1,095.43 per room	
Commercial	\$95.24 per gross floor area, m ²	\$50.74
Commercial (Downtown) See Figure 1	\$48.26 per gross floor area, m ²	\$50.74
Institutional	\$40.54 per gross floor area, m ²	\$22.05
Industrial	\$32,005.61 per gross site area, ha	\$18,533.73/ha

(1) Single Family includes Coach Houses and Secondary Suites.

TABLE 13 - TRANSPORTATION DCC

GROWTH PROJECTIONS

Permanent Population

Year	Population
2015	13,821
2024	15,475
Increase	1,654

By Land-Use

DCC Category (Land-use)	New Development		Average Vehicle Trip Ends (per unit)	Traffic Generation (Total Trip Ends)	
	Quantity (#)	Units		(#)	(%)
	Single Family (1)	384	dwelling unit	10.31	3,957
Multi-Family (MF)					
MF Low	22	dwelling unit	5.81	128	1.6%
MF Medium	70	dwelling unit	5.81	407	5.1%
MF High	70	dwelling unit	5.81	407	5.1%
MF Downtown (Low/Medium/High)	70	dwelling unit	5.23	366	4.6%
Congregate/Intermediate Care	54	dwelling unit	2.02	109	1.4%
Commercial Accommodation	28	rooms	4.09	115	1.5%
Commercial	6,500	m ²	0.357	2,321	29.3%
Commercial (Downtown)	210	m ²	0.179	38	0.5%
Institutional	250	m ²	0.151	38	0.5%
Industrial	0.2	ha	118.99	24	0.3%
Total				7,910	100%

DCC CALCULATION

LAND USE CATEGORY	Estimated New Development		Average Vehicle Trip Ends (per unit)	Traffic Generation (Total Trip Ends)		Portion of Total Cost (\$)	CALCULATED DCC	
	#	(Unit)		(#)	(%)			
	Single Family (1)	384	Dwell Unit	10.31	3,957	50.0%	\$1,055,385	\$2,748.40
Multi-Family (MF)								
MF Low	22	Dwell Unit	5.81	128	1.6%	\$34,139	\$1,551.79	per unit
MF Medium	70	Dwell Unit	5.81	407	5.1%	\$108,552	\$1,550.75	per unit
MF High	70	Dwell Unit	5.81	407	5.1%	\$108,552	\$1,550.75	per unit
MF Downtown (Low/Medium/High)	70	Dwell Unit	5.23	366	4.6%	\$97,617	\$1,394.53	per unit
Congregate/Intermediate Care	54	Dwell Unit	2.02	109	1.4%	\$29,072	\$538.37	per unit
Commercial Accommodation	28	Room	4.09	115	1.5%	\$30,672	\$1,095.43	per room
Commercial	6,500	m ²	0.357	2,321	29.3%	\$619,042	\$95.24	per m ²
Commercial (Downtown)	210	m ²	0.179	38	0.5%	\$10,135	\$48.26	per m ²
Institutional	250	m ²	0.151	38	0.5%	\$10,135	\$40.54	per m ²
Industrial	0.2	ha	118.99	24	0.3%	\$6,401	\$32,005.61	per ha
Total				7,910	100%	\$2,109,703		

(1) Single Family includes Ave Vehicle Trips and Traffic Generation of Coach Houses and Secondary Suites

PROJECT COST ALLOCATION & DCC REVENUE PROJECTION

YEAR	Project Description	PROJECT COST			COST ALLOCATION						GROWTH PROJECTION										TOTAL DCC REVENUE (\$)	DCC Fund Accum. Balance (\$)			
		Capital Cost (\$)	Government Grant		Net Cost (\$)	Exist Users Ben (%)	USERS		1% Assist (\$)	TOTAL		Pop. (#)	Single Family (#)	MF Low (#)	MF Med (#)	MF High (#)	MF High Down (#)	Cong. Care (#)	Commercial				Institutional (m ²)	Industrial (m ²)	
			(%)	(\$)			Existing (\$)	New (\$)		Municipal (\$)	Development (\$)								Accomm. (#)	(m ²)					Downtown (m ²)
2015											13,821													\$107,898	\$147,497
2016											13,980	37.0	4.0											\$107,898	\$255,395
2017	Intersection Upgrade	\$1,200,000		\$1,200,000	5%	60,000	1,140,000	11,400	\$71,400	\$1,128,600	14,147	38.0	4.0			27.0			28.0	2,000	210		1,000	\$309,449	(\$563,756)
2018											14,314	39.0	4.0		70.0									\$255,019	(\$308,736)
2019											14,481	39.0		35.0								250		\$399,557	\$90,821
2020											14,648	39.0	4.0											\$123,530	\$214,350
2021											14,816	39.0												\$107,188	\$321,538
2022											14,983	39.0	4.0								2,000			\$303,869	\$625,407
2023											15,149	38.0		35.0										\$173,251	\$798,658
2024											15,313	38.0	4.0		70.0									\$222,399	\$1,021,057
2025	Intersection Upgrade	\$1,200,000		\$1,200,000	5%	60,000	1,140,000	11,400	\$71,400	\$1,128,600	15,475	38.0	2.0											\$107,543	\$0
	TOTALS	\$2,400,000		\$2,400,000					\$142,800	\$2,257,200	1,654	384	22	70	70	70	54	28	6,500	210	250	2,000	\$2,109,703		

8.1 PROPOSED STORM DRAINAGE WORKS

Storm drainage projects are based on the Town of Comox 2013 Storm System Modelling & Capital Plan Study Update, March 2014 by McElhanney Consulting Services Ltd. The location of each project is presented on the attached **Figure 4 – STF (5 year) Growth Nodes and Proposed Drainage Improvement Projects** from the McElhanney study.

8.2 CALCULATION UNIT

The need for storm drainage work is related to the runoff generated from development. The volume and intensity of the runoff is in direct response to the amount of impervious area, e.g., roads, sidewalks, driveways, parking areas and buildings.

For this study, storm drainage DCCs were calculated based on the amount of impervious area for each land use category. The Comox Valley Regional District's IMAP program was used to measure the property size and the amount of impervious area for various land-uses. The impervious area allowance for each is discussed below.

Single Family

For Single Family Residential (R1.1), the Town's zoning bylaw allows for 35% building coverage and a minimum lot size of 650 m². Accounting for driveways and outbuildings, the average impervious area per lot is estimated to be 55%, creating 350 m² of impervious area per unit.

For the purposes of this study, this land-use category applies to both single family and duplex lots.

Coach House

For Coach House, the Town's zoning bylaw states that the gross floor area of a coach house shall not exceed 50% of the gross floor area of the single family dwelling or 70 m², whichever is less. There shall be no increase in zoning max parcel coverage and the property shall have two off-road parking spaces that must be parallel to each other (not in series/tandem)

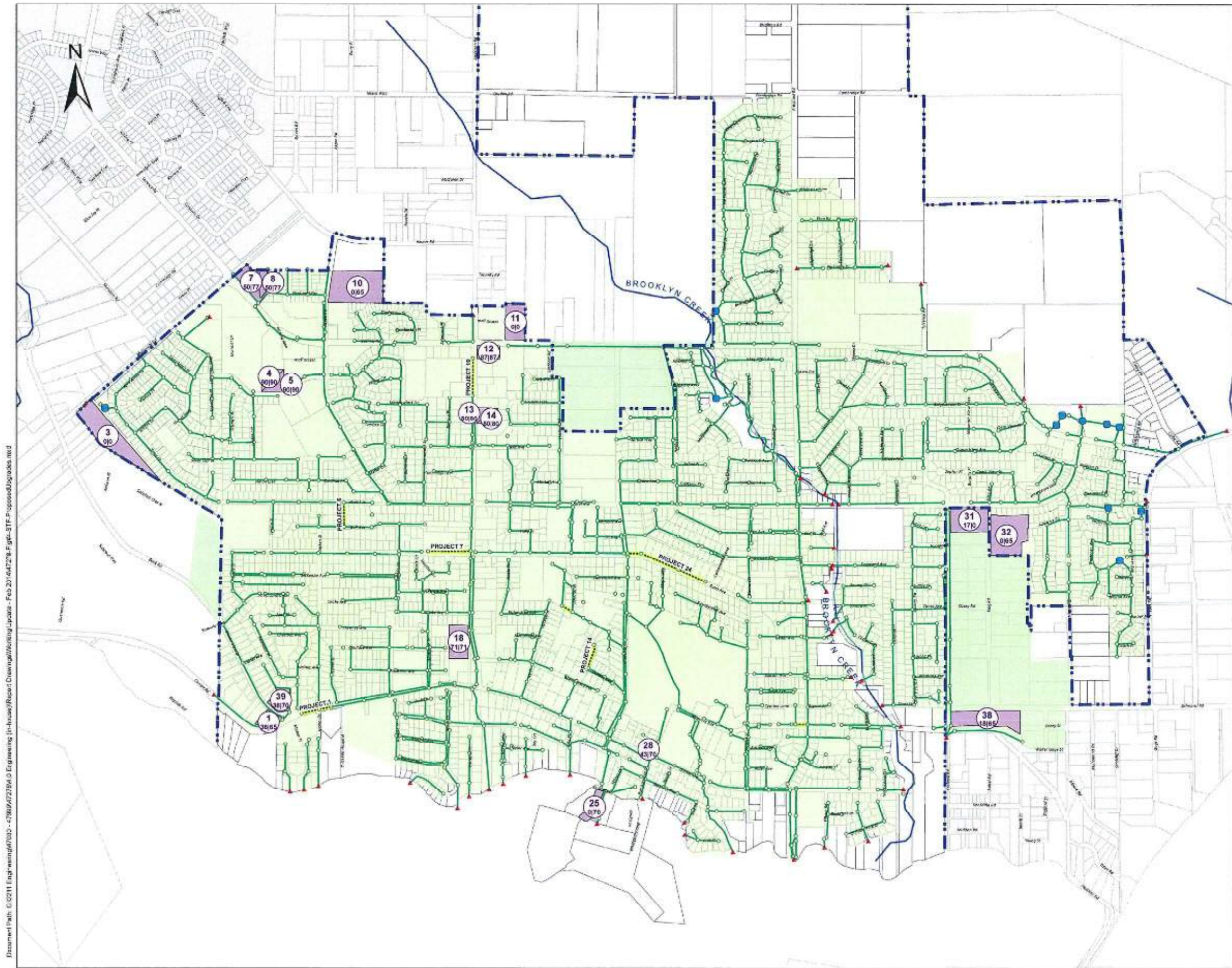
Secondary Suite

For secondary suites, the Town requires each property to have two off-road parking spaces that must be parallel to each other (not in series/tandem).

Multi-Family

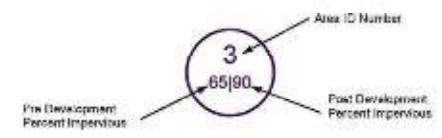
This category encompasses all other residential land uses not included within Single Family, or Congregate Care. Examples of these other types of categories are: patio home developments; triplex buildings; townhouses; apartments; and condominiums.

A review of impervious area per dwelling unit for three existing and one proposed multi-family developments was carried out. The findings are presented in **Table 15**.



Legend

- Municipal Boundary
- Ponds
- ▲ Outfalls
- Manholes
- Existing Drainage Pipe
- - - Proposed 5yr Project
- STF Growth Nodes
- Storm Model Limits
- Town of Comox
- City of Courtenay
- CVRD



Document Path: C:\2011 Engineering\7030 - 4786\47279\4.0 Engineering\In-house\Report Drawing\Working Update - Feb 2014\47279 - 4786 - STF - Proposed\log roads.mxd

Fig - 4
STF (5yr) Growth Nodes
and Proposed Drainage
Improvement Projects

2013 Storm Drainage Model Update
 December 20, 2013 Revision 0

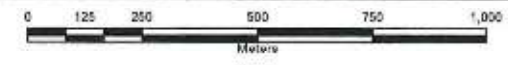


Table 15 – Impervious Areas for Various Multi-Family Developments

Development	Number of Dwelling Units (#)	Lot Size (m ²)	Impervious Area (m ²)	Impervious Area per Unit (m ² /unit)
Duplex Patio Homes	74	44,400	23,600	319
Row Houses	34	10,500	6,600	194
Apartment, 3 floors	54	11,100	5,800	107
Proposed Townhouse	7	1,760	1,230	176

Based on the findings summarized in Table 15, the following impervious area per unit (m²/unit) allowance to Multi-Family development has been made for this study:

- Low Density 300m²,
- Medium Density 200m²,
- High Density 100 m².

Congregate Care

For Congregate/Intermediate Care (zoning category RM4.1), the Town’s zoning bylaw allows for 50% lot coverage including driveways, parking areas and loading areas that are open sided and roofless. The zoning allows for a maximum building height of 10 m, indicating they are most likely to be multiple floor buildings. The two congregate care facilities in Comox, Stevenson Place and the Berwick, are both 4 storey buildings with below building parking. They have 33 units and 124 units; respectively. There is an average of 48 m² to 58 m² of impervious surface per dwelling unit.

For the purposes of this study, an allowance of 55 m² of impervious area per dwelling unit has been made.

Commercial Accommodation

For General Commercial/Accommodation (zoning category C2.2), the Town’s zoning bylaw allows for 60% lot coverage. There is presently one hotel/motel in Comox. The property includes an office building, restaurant and a swimming pool in addition to the two floor hotel buildings, resulting in approximately 106 m² of impervious area per room.

A review of three other hotel/motels in Courtenay found 71 m² of impervious area per room for a two floor motel with an outdoor swimming pool, and 84 m² and 86 m² of impervious area per room for two other hotels. The hotels had two to four floors, a restaurant, some under building parking, and a pool. The hotel with 84 m² also has a number of various sized meeting rooms, a pub, a liquor store and an area for commercial stores. One of the hotels was constructed within the past five years and the other was expanded during this same time period.

For this study, an allowance of 85 m² impervious area per dwelling unit has been made.

Commercial

For all commercial zoned lands, excluding Commercial Accommodation, storm drainage DCCs are calculated based on a per square metre of gross building floor area.

For this study, a maximum parcel coverage of 60% has been made to account for the portion of a lot covered by all buildings, structures and projections thereof as defined in the Town's Zoning Bylaw. Allowing for a total impervious coverage of 90% to account for the building as well as on-site parking, pedestrian walkways, etc., the resulting total lot imperviousness as a ratio of the gross building floor area is 1.5 (90%/60%). Thus for every 1 m² of building floor area, there will be a total of 1.5 m² of impervious surface.

For DCC calculation purposes, it is assumed all building will be single storey structures.

Institutional

For Institutional, DCCs are calculated on a per square metre of gross building floor area.

For Public Assembly (zoning category PA1.1), the Town's zoning bylaw allows for 35% lot coverage. Allowing for a total impervious coverage 70% to account for the building as well as on-site parking, pedestrian walkways, etc., the resulting total lot imperviousness as a ratio of the building floor area is 2 (70%/35%). This for every 1 m² of building area, there will be a total of 2 m² of impervious surface.

For DCC calculation purposes, it is assumed all buildings will be single storey structures.

Industrial

For Industrial, DCCs are calculated on a per square metre of gross site area.

For Industrial, the Town's zoning bylaw allows for 50% lot coverage. Allowing for a total impervious coverage 90% to account for the building as well as on-site parking, storage and loading areas, etc., the resulting total lot imperviousness as a ratio of the building floor area is 2 (90%/50%). This for every 1 m² of building area, there will be a total of 1.8 m² of impervious surface.

For DCC calculation purposes, it is assumed all buildings will be single storey structures.

Table 16 shows the equivalent drainage units for the various land-use categories.

Table 16 – Equivalent Drainage Unit Summary

Land Use Category	Estimated New Development	Per Unit Impervious Area (m ²)	Total Impervious Area (m ²)
Single Family	384 units	350	134,400
Coach House	30 units	70	2,100
Secondary Suite	52 units	46	2,392
Multi-Family (MF) Low	22 units	300	6,600
MF Medium	70 units	200	14,000
MF High	70 units	100	7,000
MF Downtown (Low/Medium/High)	70 units	100	7,000
Congregate/Intermediate Care	54 units	50	2,700
Commercial Accommodation	28 rooms	85	2,380
Commercial	6,500 m ²	1.5	9,750
Commercial Downtown	210 m ²	1.5	315
Institutional	250 m ²	2.0	500
Industrial	0.2 ha	1.8	3,600
Total Impervious Area			192,737

8.3 COST CHARGE CALCULATIONS

Construction costs are based on the construction cost estimates from the Town of Comox 2013 Storm System Modelling & Capital Plan Study Update, March 2014 by McElhanney Consulting Services Ltd. The cost estimates in the study are Class D and include a 45% allowance for engineering and contingencies. The costs have been updated to March 2015 dollars based on the increase in the Engineering News Record Construction Cost Index.

Table 17 lists all applicable projects and costs, and the resulting net DCC recoverable amount after subtraction of the DCC Reserve fund balance.

The portion of the total cost attributed to each land-use is calculated based on the percentage of the impervious area for each land-use. The DCC per land-use is calculated by dividing the total project cost attributed to each land-use by the amount of development for each land-use. For the purposes of DCC Cost Charge Calculations the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category. This will increase the impervious area per single family unit to 362 m² per dwelling unit for a total impervious area of 138,892 m².

Over the next 10 years a total of \$896,318 in storm drainage works is to be carried out.

No DCCs are required as the current balance of the DCC Reserve Fund (\$719,907) is greater than the total capital costs attributed to development (\$706,436). Revenue totalling \$189,883 is to be provided by the municipality from other sources, e.g. existing users, to carry out the capital works.

Table 18 presents a summary of the proposed storm Development Cost Charge by Land-Use compared to the current DCCs.

Table 18 – Summary of Storm DCCs by Land-use

DCC Category	Proposed Storm DCC	Current Storm DCC
Single Family (1)	\$0.00 per unit	\$3,432.35
Multi-Family (MF) Low	\$0.00 per unit	\$2,282.51
MF Medium	\$0.00 per unit	\$2,282.51
MF High	\$0.00 per unit	\$2,282.51
MF Downtown (Low/Medium/High)	\$0.00 per unit	\$2,282.51
Congregate/Intermediate Care	\$0.00 per unit	\$737.96
Commercial Accommodation	\$0.00 per unit	-
Commercial	\$0.00 per gross floor area, m ²	\$6.66
Commercial (Downtown)	\$0.00 per gross floor area, m ²	\$6.66
Institutional	\$0.00 per gross floor area, m ²	\$0.93
Industrial	\$0.00 per gross site area, ha	\$95,041.86

(1) Single Family includes Coach Houses and Secondary Suites.

TABLE 17 - STORM DRAINAGE DCC

GROWTH PROJECTIONS

Permanent Population	
Year	Population
2015	13,821
2024	15,475
Increase	1,654

By Land-Use

DCC Category (Land-use)	New Development		Per Unit Impervious Area (m ²)	Total Impervious Area	
	Quantity (#)	Units		(#)	(%)
	Single Family (1)	384	dwelling uni	362	138,892
Multi-Family (MF)					
MF Low	22	dwelling uni	300	6,600	3%
MF Medium	70	dwelling uni	200	14,000	7%
MF High	70	dwelling uni	100	7,000	4%
MF Downtown (Low/Medium/High)	70	dwelling uni	100	7,000	4%
Congregate/Intermediate Care	54	dwelling uni	50	2,700	1%
Commercial Accommodation	28	rooms	85	2,380	1%
Commercial	6,500	m ²	1.5	9,750	5%
Commercial (Downtown)	210	m ²	1.5	315	0%
Institutional	250	m ²	2.0	500	0%
Industrial	0.2	ha	1.8	3,600	2%
Total				192,737	100%

DCC CALCULATION

LAND USE CATEGORY	Estimated New Development		Impervious Area (m ²)	Total Impervious Area		Portion of Total Cost (\$)	CALCULATED DCC
	#	(Unit)		(#)	(%)		
	Single Family (1)	384	Dwell Unit	362	138,892	72%	
Multi-Family (MF)		Dwell Unit				per unit	
MF Low	22	Dwell Unit	300	6,600	3%	per unit	
MF Medium	70	Dwell Unit	200	14,000	7%	per unit	
MF High	70	Dwell Unit	100	7,000	4%	per unit	
MF Downtown (Low/Medium/High)	70	Dwell Unit	100	7,000	4%	per unit	
Congregate/Intermediate Care	54	Dwell Unit	50	2,700	1%	per unit	
Commercial Accommodation	28	Room	85	2,380	1%	per room	
Commercial	6,500	m ²	1.5	9,750	5%	per m ²	
Commercial (Downtown)	210	m ²	1.5	315	0%	per m ²	
Institutional	250	m ²	2.0	500	0%	per m ²	
Industrial	0.2	ha	1.8	3,600	2%	per ha	
Total				192,737	100%		

(1) Single Family includes the Impervious Area of Coach Houses and Secondary Suites

PROJECT COST ALLOCATION & DCC REVENUE PROJECTION

YEAR	Project Description	PROJECT COST			COST ALLOCATION						GROWTH PROJECTION										TOTAL DCC REVENUE (\$)	DCC Fund Accum. Balance (\$)						
		Capital Cost (\$)	Government Grant		Net Cost (\$)	Exist Users Ben (%)	USERS		1% Assist (\$)	TOTAL		Pop. (#)	Single Family (#)	MF Low (#)	MF Med (#)	MF High (#)	MF High Down (#)	Cong. Care (#)	Commercial				Institutional (m ²)	Industrial (m2)				
			%	(\$)			Existing (\$)	New (\$)		Municipal (\$)	Development (\$)								Accomm. (#)	m ²					Downtown (m ²)			
2015											13,821														719,907			
2016	7b Robb Rd (west of Anderton Rd)	\$116,394		\$116,394	90%	104,755	11,639	116	\$104,871	\$11,523	13,980	37.0	4.0													\$708,384		
10	Anderton Rd (Guthrie to Bolt)	102,260		102,260	10%	10,226	92,034	920	11,146	91,114																		
6	Noel Ave (Cul-de-sac to Condor)	90,550		90,550	10%	9,055	81,495	815	9,870	80,680																		
2017	TOTAL	\$192,810		\$192,810					\$21,016	\$171,794	14,147	38.0				27.0			2,000.0							\$536,590		
2018	1 Comox Ave (Aitken to 50 m east of Manor)	\$90,665		\$90,665	10%	9,067	81,599	816	9,883	\$80,783	14,314	39.0	4.0			70.0			28.0		210		1,000			\$455,807		
2019	24 Robb Ave (Cottonwood Lane to Church St)	\$242,136		\$242,136	10%	24,214	217,922	2,179	26,393	\$215,743	14,481	39.0		35.0					2,500.0							\$240,065		
12	Robb Rd (School to Douglas St)	32,968		32,968	10%	3,297	29,671	297	3,593	29,374																		
14	Queens Ave (Cul-de-sad to Church St)	63,934		63,934	10%	6,393	57,540	575	6,969	56,965																		
15	Beach Dr (Beaton Dr to outfall)	14,910		14,910	10%	1,491	13,419	134	1,625	13,285																		
13	Balmoral Ave (Pritchard to 65 m west)	32,502		32,502	10%	3,250	29,252	293	3,543	28,960																		
2020	TOTAL	\$144,313		\$144,313			144,313	1,443	\$15,730	\$128,583	14,648	39.0	4.0								250					\$111,481		
2021											14,816	39.0															\$111,481	
2022	Carthew Creek	\$110,000		\$110,000	10%	11,000	99,000	990	\$11,990	\$98,010	14,983	39.0	4.0						2,000.0							\$13,471		
2023											15,149	38.0		35.0			27.0									\$13,471		
2024											15,313	38.0	4.0		70.0									1,000		\$13,471		
2025											15,475	38.0	2.0													\$13,471		
	TOTALS	\$896,318		\$896,318					\$189,883	\$706,436	1,654	384	22	70	70	70	54	28	6,500	210	250	2,000						

9.1 PROPOSED WATER WORKS

The proposed water work projects are taken from the findings of the:

- Town of Comox Water System Study, September 2013 by Koers & Associates Engineering Ltd.

The location and proposed construction year for each project is presented on **Figure 5 – Proposed (Water) Improvements** from that Koers study.

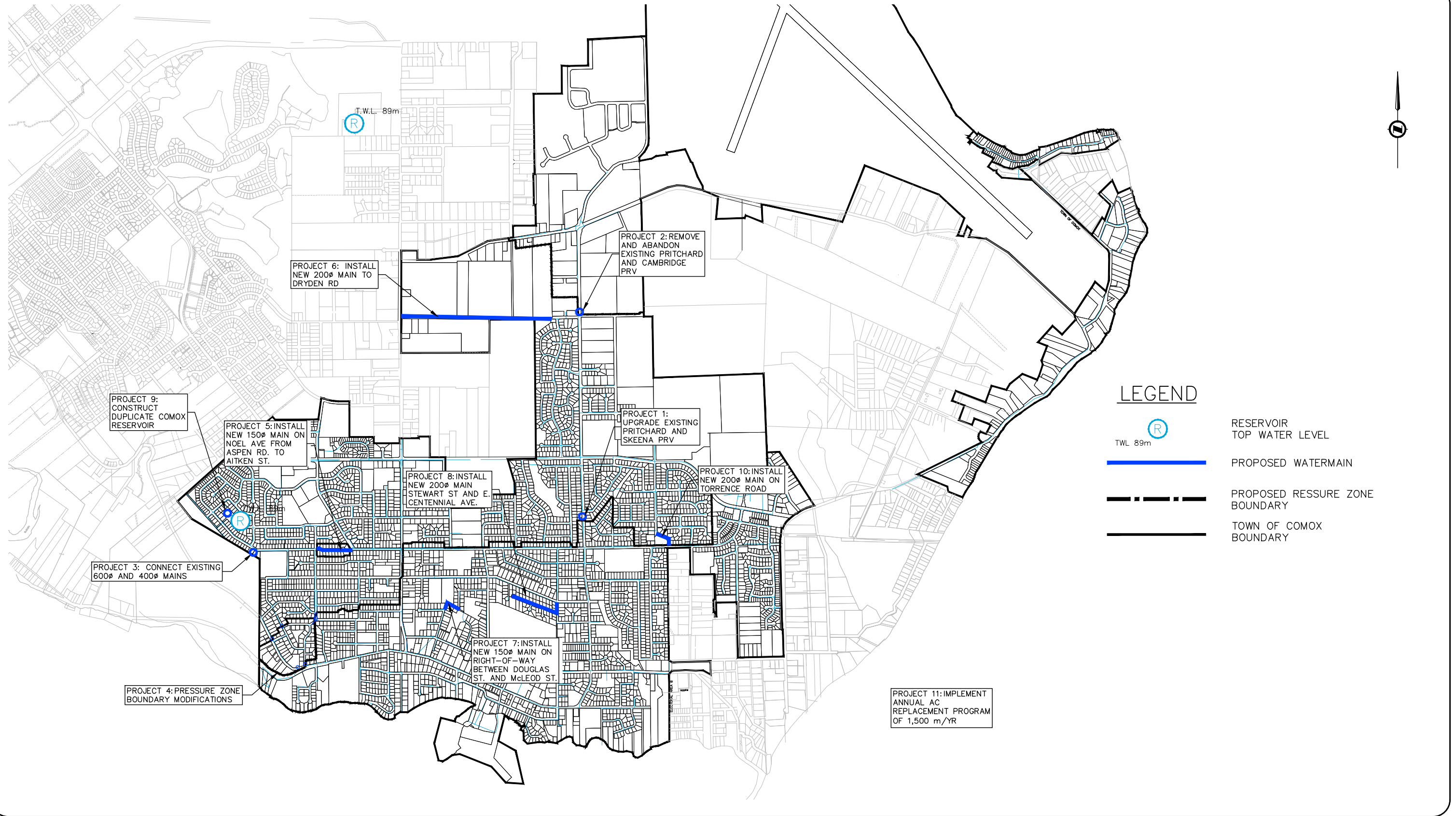
Water work DCCs are to be imposed on a municipal wide basis, in keeping with the BPG.

9.2 CALCULATION UNIT

In 2010, the Town implemented a water conservation strategy which included a voluntary water meter installation program for any property that does not have a water meter. As of the end of September 2014, almost 3,000 dwelling units of the approximately 6,100 units in Comox are now metered. Most but not all commercial, institutional, and industrial properties are metered. A total of 74 properties are metered; 53 are commercial properties; 20 are institutional properties; and one is an industrial property.

Annual water usages based on land-use were calculated using the most recent 12 month period (October 2013 through September 2014). An average water demand per land use for each unit of projected growth noted in **Table 9**. For commercial properties, the floor areas of existing businesses were estimated using the Comox Valley Regional District's IMAP© database to measure the building outline from the 2012 aerial photograph. Google StreetView© and visual observations were used to confirm if a building contained more than one floor. The annual water usage for various land-uses is presented in **Table 19**.

File: L:\1013 Comox Town\1456 DCC Update\03 Drawings\1256-FIG 2, 6 TO 10.dwg Plot Time: Jul 29, 2015 10:20am User: cdowney



CLIENT: TOWN OF COMOX
 PROJECT: DEVELOPMENT COST CHARGE BYLAW 1256 UPDATE

TITLE: PROPOSED WATER IMPROVEMENTS
 APPROVED: CD
 DATE: JULY 2015
 PROJECT No.: 1456
 SCALE: 1:25000
 DWG No.: FIGURE 5

Table 19 Annual Water Usage by Land-Use

Land Use	Average Annual Water Usage	
Residential		
Single Family	290	m ³ per Dwelling Unit
Duplex	190	m ³ per Dwelling Unit
Congregate/Intermediate Care	160	m ³ per Dwelling Unit
Multi Family	150	m ³ per Dwelling Unit
Apartments	120	m ³ per Dwelling Unit
Senior's Housing	100	m ³ per Dwelling Unit
Commercial *		
Hotel	50	m ³ per Dwelling Unit
Bakery	14.2	m ³ per m ²
Car Wash	12.3	m ³ per m ²
Gas Station	5.0	m ³ per m ²
Seafood Processor	3.7	m ³ per m ² (total site)
Veterinary	3.3	m ³ per m ²
Restaurant	2.8	m ³ per m ²
Grocery Store	1.5	m ³ per m ²
Offices	0.6	m ³ per m ²
Institutional *		
School, grades 8 – 12	0.2	m ³ per m ²
School, grades K- 7	0.18	m ³ per m ²
Church, c/w community garden	2.9	m ³ per m ²
Church, c/w kitchen	0.7	m ³ per m ²

Note:

* per m² is based on the building gross floor area except where noted otherwise.

Table 20 presents the proposed water demand for each proposed DCC land-use category.

Table 20 – Unit Water Demand per DCC Land-Use Category

Land-Use Category	Average Annual Unit Water Demand
Single Family	290 m ³ / dwelling unit
Coach House	90 m ³ / dwelling unit
Secondary Suites	90 m ³ / dwelling unit
Multi-Family (MF) Low	150 m ³ / dwelling unit
MF Medium	150 m ³ / dwelling unit
MF High	150 m ³ / dwelling unit
MF Downtown (Low/Medium/High)	150 m ³ / dwelling unit
Congregate/Intermediate Care	160 m ³ / dwelling unit
Commercial Accommodation	50 m ³ / room
Commercial	1.5 m ³ / m ² (floor area)
Commercial (Downtown)	1.5 m ³ / m ² (floor area)
Institutional	0.5 m ³ / m ² (floor area)
Industrial	0.03 m ³ / m ² (floor area)

For both Coach House and Secondary Suite land-uses, metered flow data is not available. The annual water demand for each is based on the ratio of the population density with that of Multi-Family plus an additional allowance of 10%.

9.3 COST CHARGE CALCULATIONS

The list of waterworks projects and the calculation of development cost charges for each land-use category is presented in **Table 21**.

The project cost estimates are those presented in the *Town of Comox Water System Study, September 2013* by Koers & Associates Engineering Ltd.

The costs are Class C estimates, made without preliminary design input. They include allowances for contingencies (30%) and engineering (30%). They are exclusive of GST.

The portion of the total cost attributed to each land-use is calculated based on the percentage of water usage for each land-use. The DCC per land-use is calculated by dividing the total project cost attributed to each land-use by the amount of new development for each land-use. For the purposes of DCC Cost Charge Calculations the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category. This will increase the average water demand per single family unit to 309 m³ / dwelling unit for a total annual water demand of 118,740 m³.

Over the next 10 years a total of \$1,426,000 in water works is to be carried out. No DCCs are required as the current balance of the DCC Reserve Fund (\$1,120,687) is greater than the total capital costs attributed to development (\$646,470). Revenues of \$779,530 is to be provided by the municipality from other sources, e.g. existing users. **Table 22** presents a summary of the proposed Development Cost Charge by Land-Use.

Table 22 – Summary of Water DCCs by Land-use

DCC Category	Proposed Water DCC	Current Water DCC
Single Family (1)	\$0.00 per unit	\$636.15
Multi-Family (MF) Low	\$0.00 per unit	\$530.13
MF Medium	\$0.00 per unit	\$530.13
MF High	\$0.00 per unit	\$530.13
MF Downtown (Low/Medium/High)	\$0.00 per unit	\$530.13
Congregate/Intermediate Care	\$0.00 per unit	\$265.06
Commercial Accommodation	\$0.00 per unit	-
Commercial	\$0.00 per gross floor area, m ²	\$1.91
Commercial (Downtown)	\$0.00 per gross floor area, m ²	\$1.91
Institutional	\$0.00 per gross floor area, m ²	\$1.91
Industrial	\$0.00 per gross site area, ha	\$530.13

(1) Single Family includes Coach Houses and Secondary Suites

TABLE 21 - WATER DISTRIBUTION DCC

GROWTH PROJECTIONS

Permanent Population

Year	Population
2015	13,821
2024	15,475
Increase	1,654

By Land-Use

DCC Category (Land-use)	New Development		Ave Water Demand (m ³ /unit)	Total Annual Water Demand	
	Quantity (#)	Units		m ³	(%)
	Single Family (1)	384		dwelling unit	309
Multi-Family (MF)					
MF Low	22	dwelling unit	150	3,300	1.9%
MF Medium	70	dwelling unit	150	10,500	6.0%
MF High	70	dwelling unit	150	10,500	6.0%
MF Downtown (Low/Medium/High)	70	dwelling unit	150	10,500	6.0%
Congregate/Intermediate Care	54	dwelling unit	160	8,640	5.0%
Commercial Accommodation	28	rooms	50	1,400	0.8%
Commercial	6,500	m ²	1.5	9,750	5.6%
Commercial (Downtown)	210	m ²	1.5	315	0.2%
Institutional	250	m ²	0.50	125	0.1%
Industrial	1,000	m ²	0.03	30	0.0%
				173,800	100%

DCC CALCULATION

LAND USE CATEGORY	Estimated New Development		Ave Water Demand (m ³ /unit)	Total Annual Water Demand		Portion of Total Cost (\$)	CALCULATED DCC	
	#	(Unit)		#	(%)			
	Single Family (1)	384		Dwell Unit	309		118,740.0	
Multi-Family (MF)								
MF Low	22	Dwell Unit	150	3,300.0			per unit	
MF Medium	70	Dwell Unit	150	10,500.0				
MF High	70	Dwell Unit	150	10,500.0				
MF Downtown (Low/Medium/High)	70	Dwell Unit	150	10,500.0				
Congregate/Intermediate Care	54	Dwell Unit	160	8,640.0			per unit	
Commercial Accommodation	28	Room	50	1,400.0			per unit	
Commercial	6,500	m ²	1.50	9,750.0			per m ²	
Commercial (Downtown)	210	m ²	1.50	315.0				
Institutional	250	m ²	0.50	125.0			per m ²	
Industrial	1,000	m ²	0.03	30.0			per ha	
				173,800				

(1) Single Family includes the Water Demand of Coach Houses and Secondary Suites

PROJECT COST ALLOCATION & DCC REVENUE PROJECTION

YEAR	Project Description	PROJECT COST				COST ALLOCATION						GROWTH PROJECTION										TOTAL DCC REVENUE (\$)	DCC Fund Accum. Balance (\$)			
		Capital Cost (\$)	Government Grant		Net Cost (\$)	Exist Users Ben (%)	USERS		1% Assist (\$)	TOTAL		Pop. (#)	Single Family (#)	MF Low (#)	MF Medium (#)	MF High (#)	MF High Down (#)	Cong. Care (#)	Commercial					Institutional (m ²)	Industrial (m ²)	
			%	(\$)			Existing (\$)	New (\$)		Municipal (\$)	Development (\$)								Accomm. (#)	m ²	Downtown (m ²)					
2015											13,821															\$1,120,687
w-1	Pritchard Skeena PRV Upgrade	126,000		126,000	90%	113,400	12,600	126	113,526	12,474																
w-2	Pritchard & Cambridge PRV Removal	26,000		26,000	50%	13,000	13,000	130	13,130	12,870																
w-3	Watermain Tie-in Tutor Dr Area, 600 mm dia.	52,000		52,000	10%	5,200	46,800	468	5,668	46,332																
w-4	Pressure Zone Expansion, Aitken & Glacier	2,000		2,000	90%	1,800	200	2	1,802	198																
2016	TOTAL	\$206,000		\$206,000					\$134,126	\$71,874	13,980	37.0	4.0													\$1,048,813
w-5	Noel Ave Watermain Loop, Aitken to Aspen	188,000		188,000	10%	18,800	169,200	1,692	20,492	167,508																
w-6	Dryden Rd Watermain Loop	592,000		592,000	50%	296,000	296,000	2,960	298,960	293,040																
2017	TOTAL	\$780,000		\$780,000					\$319,452	\$460,548	14,147	38.0				27.0			2,000							\$588,265
2018	w-7 Watermain Loop, Douglas to McLeod	\$89,000		\$89,000	10%	8,900	80,100	801	\$9,701	\$79,299	14,314	39.0	4.0			70.0			28		210		1,000			\$508,966
2019	w-8 Watermain Upgrade, Stewart & East Centennial	\$351,000		\$351,000	90%	315,900	35,100	351	\$316,251	\$34,749	14,481	39.0		35.0					2,500							\$474,217
2020											14,648	39.0	4.0								250					\$474,217
2021											14,816	39.0														\$474,217
2022											14,983	39.0	4.0						2,000							\$474,217
2023											15,149	38.0		35.0			27.0									\$474,217
2024											15,313	38.0	4.0		70.0								1,000			\$474,217
2025											15,475	38.0	2.0													\$474,217
	TOTALS	\$1,426,000		\$1,426,000					\$779,530	\$646,470	1,654	38.4	22	70	70	70	54	28	6,500	210	250	2,000				

10 SANITARY SEWER DCCs

10.1 PROPOSED SANITARY SEWER WORKS

Sanitary Sewer projects are based on the Town of Comox 2013 Sanitary Model Update, January 2014 by McElhanney Consulting Services Ltd. The location of each project is presented on the attached **Figure 14 – Recommended Projects Five Year Capital Plan** from the McElhanney study.

Sanitary DCC calculations are based on the service area of the McElhanney study, which is land tributary to the Jane Place pump station. As such sanitary DCCs are to be imposed on an 'area specific' basis.

The attached **Figure 6 – Sanitary DCC Service Area** shows the specified area where Sanitary Sewer DCC are applied

10.2 CALCULATION UNIT

Sanitary DCCs were calculated using the common unit of sewage flows based on equivalent capita served for each land-use category. The methodology for determining the equivalent population factor for each land use category is as presented previously in **Section 4.3.1 and 4.3.2**.

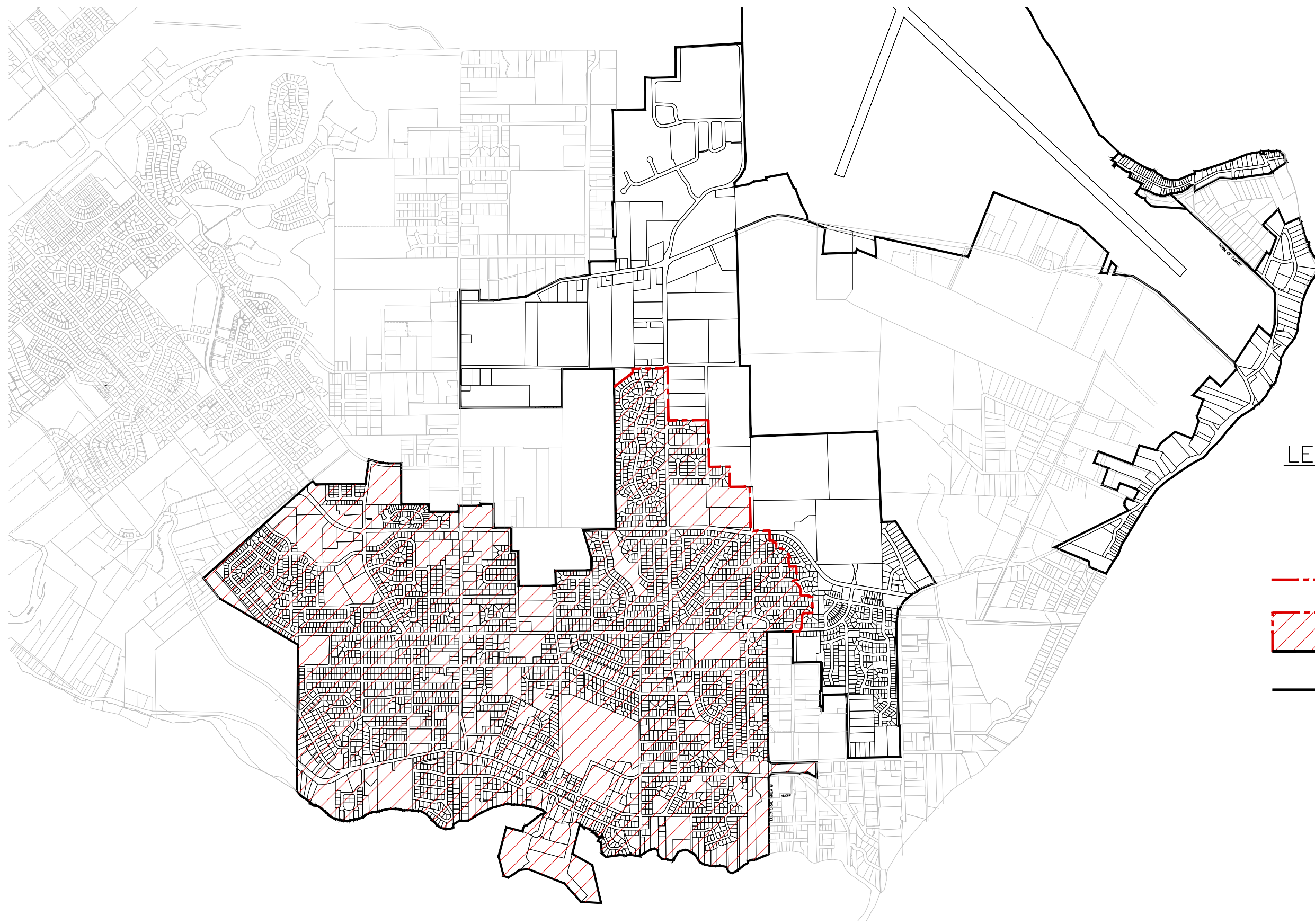
For residential land-uses of Single Family, Multi-Family, and Congregate Care, the capita per dwelling unit as presented in **Table 6** were used.

For Commercial Accommodation a capita per dwelling unit of 1.5 was used. For Commercial an equivalent sewage flow population density is assumed to be 90 persons per hectare. Allowing for 60% site coverage for building floor area, results in an equivalent population density of 0.015 persons per m² of building floor area (90/60%/10000).

For Institutional, an equivalent sewage flow population density is assumed to be 50 persons per hectare. Allowing for 35% site coverage for building floor area, results in an equivalent population density of 0.014 persons per m² of building floor area (50/35%/10,000).

For Industrial, an equivalent population density is assumed to be 2 persons per hectare.

File: H:\1013 Comox Town\1456 DCC Update\03 Drawings\1256-Fig 2_6 TO 10.dwg Plot Time: Jul 30, 2015 - 8:21am User: chearn



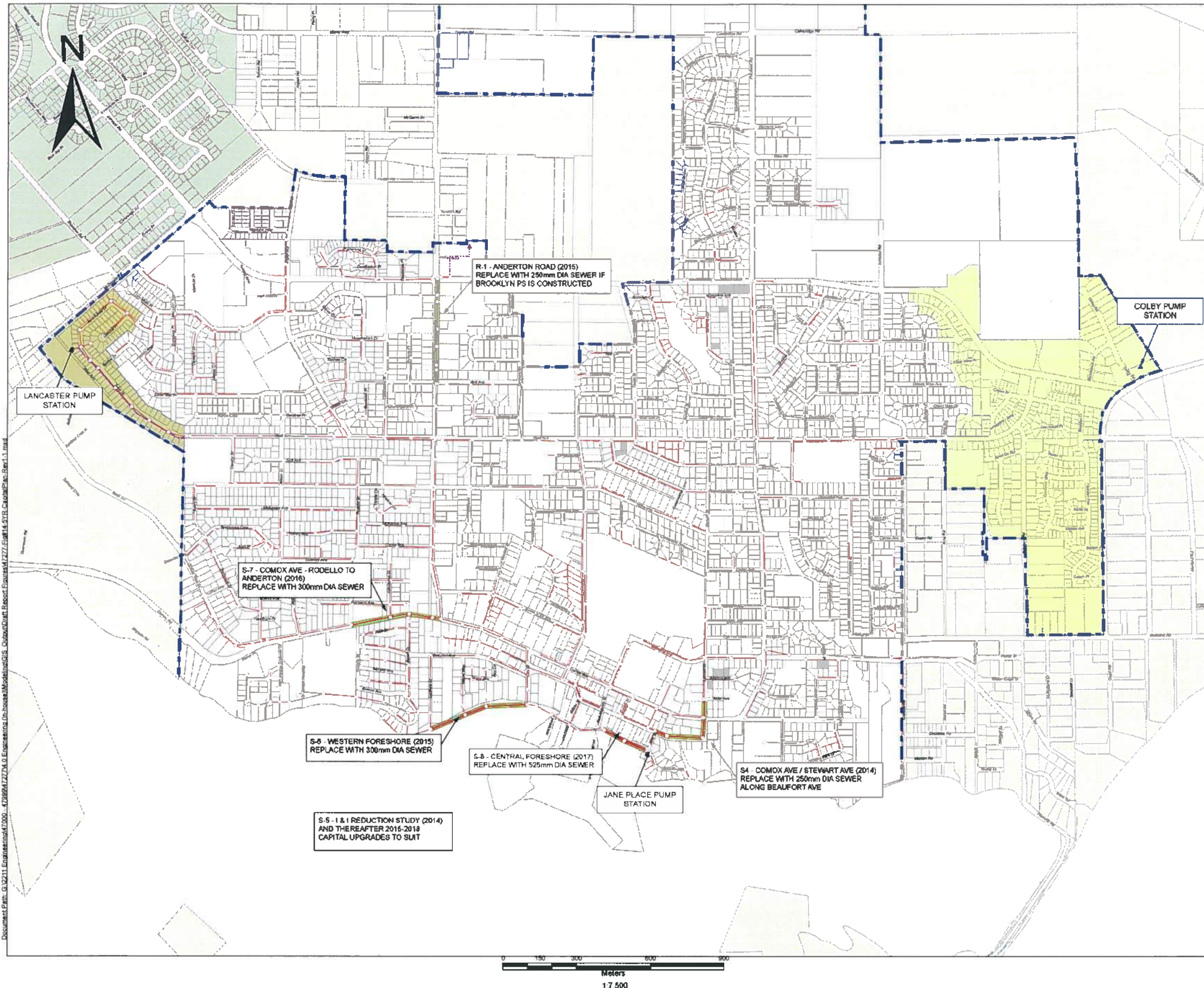
LEGEND

-  SANITARY SEWER DCC SERVICE AREA BOUNDARY
-  SANITARY SEWER DCC SERVICE AREA
-  TOWN OF COMOX BOUNDARY



CLIENT	TOWN OF COMOX
PROJECT	DEVELOPMENT COST CHARGE BYLAW 1256 UPDATE

TITLE		SANITARY SEWER DCC SERVICE AREA	
APPROVED	CD	SCALE	1:25000
DATE	JULY 2015	DWG No.	FIGURE 6
PROJECT No.	1456		



Document Path: G:\2111_Engr\mod47000_47000\GIS\Output\GIS_Report\Figures\M_272\Fig14_513_Courtenay_Rev1.1.mxd

Legend

- Town Municipal Boundary
- Junctions
- Existing Sewer Mains**
- Existing Sewer Mains
- Improvement Projects
- Jane Place PS
- Pump Stations
- Forcemain
- Colby PS Catchment
- Lancaster PS Catchment
- CVRD
- City of Courtenay

Fig - 14
RECOMMENDED PROJECTS
FIVE YEAR CAPITAL PLAN

2013 Sanitary Sewer Model Update
 February 7, 2014 Revision 1



Table 23 shows the equivalent population data used for the sanitary sewer DCC calculations.

Table 23 - Sanitary Sewer Equivalent Population Demand Summary

Land-Use Category	Estimated New Development	Service Population Factor	Equivalent Population
Single Family	384 units	2.60	998
Coach Houses	30 units	1.20	36
Secondary Suites	52 units	1.20	62
Multi-Family (MF) Low	22 units	2.16	48
MF Medium	70 units	2.16	151
MF High	70 units	2.16	151
MF Downtown (Low/Medium/High)	70 units	2.16	151
Congregate/Intermediate Care	54 units	1.05	57
Commercial Accommodation	28 rooms	1.50	42
Commercial	6,500 m ²	0.015	98
Commercial (Downtown)	210 m ²	0.015	3
Institutional	250 m ²	0.014	4
Industrial	1,000 m ²	0.0005	1
Total Equivalent Population			1,802

10.3 COST CHARGE CALCULATIONS

Construction costs are based on the construction cost estimates from the Town of Comox 2013 Sanitary Model Update, January 2014 by McElhanney Consulting Services Ltd. The cost estimates in the study are Class D and include a 45% allowance for engineering and contingencies. The costs have been updated to March 2015 dollars based on the increase in the Engineering News Record Construction Cost Index.

Table 24 lists all applicable projects and costs, and the resulting net DCC recoverable amount after subtraction of the DCC Reserve fund balance.

The portion of the total cost attributed to each land-use is calculated based on the percentage of the equivalent population serviced for each land-use. The DCC per land-use is calculated by dividing the total project cost attributed to each land-use by the amount of new development per land-use. For the purposes of DCC Cost Charge Calculations the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category. This will increase the service population factor per single family unit to 2.86 / dwelling unit for a total service population of 1,097.

Over the next 10 years a total of \$1,855,000 in sanitary sewer works is to be carried out. Total cost attributed to development is \$719,232. The existing users cost is \$1,135,768.

Table 25 presents a summary of the proposed Development Cost Charge by Land-Use.

Table 25 – Summary of Sanitary DCCs by Land-use

DCC Category	Proposed Sanitary DCC	Current Sanitary DCC
Single Family (1)	\$1,072.05 per unit	\$968.66
Multi-Family (MF) Low	\$818.76 per unit	\$807.21
MF Medium	\$809.50 per unit	\$807.21
MF High	\$809.50 per unit	\$807.21
MF Downtown (Low/Medium/High)	\$809.50 per unit	\$807.21
Congregate/Intermediate Care	\$396.11 per unit	\$403.61
Commercial Accommodation	\$562.90 per room	-
Commercial	\$5.66 per gross floor area, m ²	\$2.91
Commercial (Downtown)	\$5.36 per gross floor area, m ²	\$2.91
Institutional	\$6.00 per gross floor area, m ²	\$2.91
Industrial	\$0.38 per gross floor area, m ²	\$807.21/ha

(1) Single Family includes Coach Houses and Secondary Suites.

TABLE 24 - SANITARY SEWER DCC

GROWTH PROJECTIONS

Permanent Population	
Year	Population
2015	13,821
2024	15,475
Increase	1,654

By Land-Use

DCC Category (Land-use)	New Development		Service Population	Resulting Service Population	
	Quantity (#)	Units		#	(%)
	Single Family (1)	384	dwelling unit	2.86	1,096
Multi-Family (MF)					
MF Low	22	dwelling unit	2.16	48	2.66%
MF Medium	70	dwelling unit	2.16	151	8.38%
MF High	70	dwelling unit	2.16	151	8.38%
MF Downtown (Low/Medium/High)	70	dwelling unit	2.16	151	8.38%
Congregate/Intermediate Care	54	dwelling unit	1.05	57	3.16%
Commercial Accommodation	28	rooms	1.50	42	2.33%
Commercial	6,500	m ²	0.015	98	5.44%
Commercial (Downtown)	210	m ²	0.015	3	0.17%
Institutional	250	m ²	0.014	4	0.22%
Industrial	1,000	m ²	0.0005	1	0.06%
Total				1,802	100%

DCC CALCULATION

LAND USE CATEGORY	Estimated New Development		Service Population	Total Sewage Flow		Portion of Total Cost (\$)	CALCULATED DCC	
	#	(Unit)		#	(%)			
Single Family (1)	384	Dwell Unit	2.86	1,096	60.82%	\$411,520	\$1,071.67	per unit
Multi-Family (MF)								
MF Low	22	Dwell Unit	2.16	48	2.66%	\$18,023	\$819.22	per unit
MF Medium	70	Dwell Unit	2.16	151	8.38%	\$56,697	\$809.95	per unit
MF High	70	Dwell Unit	2.16	151	8.38%	\$56,697	\$809.95	per unit
MF Downtown (Low/Medium/High)	70	Dwell Unit	2.16	151	8.38%	\$56,697	\$809.95	per unit
Congregate/Intermediate Care	54	Dwell Unit	1.05	57	3.16%	\$21,402	\$396.33	per unit
Commercial Accommodation	28	Room	1.50	42	2.33%	\$15,770	\$563.21	per room
Commercial	6,500	m ²	0.015	98	5.44%	\$36,797	\$5.66	per m ²
Commercial (Downtown)	210	m ²	0.015	3	0.17%	\$1,126	\$5.36	per m ²
Institutional	250	m ²	0.014	4	0.22%	\$1,502	\$6.01	per m ²
Industrial	1,000.0	m ²	0.0005	1	0.06%	\$375.47	\$0.38	per m ²
Total				1,802	100%	\$676,606		

(1) Single Family includes the Service Population of Coach Houses and Secondary Suites

PROJECT COST ALLOCATION & DCC REVENUE PROJECTION

YEAR	Project Description	PROJECT COST			COST ALLOCATION							GROWTH PROJECTION										TOTAL DCC REVENUE (\$)	DCC Fund Accum. Balance (\$)			
		Capital Cost (\$)	Government Grant		Net Cost (\$)	Exist Users Ben (%)	USERS		1% Assist (\$)	TOTAL		Pop. (#)	Single Family (#)	MF Low (#)	MF Medium (#)	MF High (#)	MF High Down (#)	Cong. Care (#)	Commercial					Institutional (m ²)	Industrial (m ²)	
			(%)	(\$)			Existing (\$)	New (\$)		Municipal (\$)	Development (\$)								Accomm. (#)	(m ²)	Downtown (m ²)					
2015											13,821														42,626	
s-6	Western Foreshore Upgrade	430,000		430,000	75%	321,391	108,609	1,086	322,477	107,523																
s-5	Inflow & Infiltration Reduction	78,000		78,000	75%	58,500	19,500	195	58,695	19,305																
2016	TOTAL	\$508,000		\$508,000					\$381,172	\$126,828	13,980	37.0	4.0												\$42,929	(\$41,273)
s-7	Comox Ave Upgrade - Rodello to Anderton	386,000		386,000	75%	288,505	97,495	975	289,479	96,521																
s-5	Inflow & Infiltration Reduction	78,000		78,000	75%	58,500	19,500	195	58,695	19,305																
2017	TOTAL	\$464,000		\$464,000					\$348,174	\$115,826	14,147	38.0				27		2,000							\$62,746	(\$94,352)
r-1	Anderton - Bolt to Guthrie	400,000		400,000	10%	40,000	360,000	3,600	43,600	356,400																
s-5	Inflow & Infiltration Reduction	78,000		78,000	75%	58,500	19,500	195	58,695	19,305																
2018	TOTAL	\$478,000		\$478,000					\$102,295	\$375,705	14,314	39.0	4.0			70.0		28		210			500		\$118,853	(\$351,205)
s-8	Central Foreshore Upgrade	249,000		249,000	75%	186,108	62,892	629	186,737	62,263																
s-5	Inflow & Infiltration Reduction	78,000		78,000	75%	58,500	19,500	195	58,695	19,305																
2019	TOTAL	\$327,000		\$327,000					\$245,432	\$81,568	14,481	39.0		35.0				2,500							\$84,296	(\$348,477)
2020	s-5 Inflow & Infiltration Reduction	\$78,000		\$78,000	75%	58,500	19,500	195	\$58,695	\$19,305	14,648	39.0	4.0								250			\$46,574	(\$321,208)	
2021											14,816	39.0													\$41,795	(\$279,413)
2022											14,983	39.0	4.0					2,000							\$56,394	(\$223,019)
2023											15,149	38.0		35.0			27.0								\$79,773	(\$143,246)
2024											15,313	38.0	4.0		70.0								500		\$100,885	(\$42,362)
2025											15,475	38.0	2.0												\$42,362	
TOTALS		\$1,855,000		\$1,855,000					\$1,135,768	\$719,232	1,654	38.4	2.2	70	70	70	54	28	6,500	210	250	1,000		\$676,606		

11 PARKS & OPEN SPACE DCCs

11.1 PROPOSED PARKS & OPEN SPACE WORKS

Development cost charges can be imposed only in relation to growth induced needs for park and open space and cannot be imposed to make up past deficiencies. For this reason future park requirements should be established in direct relation to projected population growth. It is proposed that all park land cost charges be attributable to residential land uses.

The proposed parks and open space projects were provided by the Town staff.

Parks & Open Space DCCs are to be imposed on a municipal wide basis, in keeping with the BPG.

11.2 CALCULATION UNIT

Parks & Open Space DCCs were calculated based on equivalent population served for each land-use category but with no contribution for commercial, institutional, or industrial land-use in accordance with the BPG.

The methodology for determining the equivalent population factor for each land use category is as presented previously in [Sections 4.3.1 and 4.3.2](#) and presented in [Table 6](#). The resulting equivalent populations serviced for each land-use is summarized in [Table 26](#).

Table 26 – Parks Equivalent Population Demand Summary

Land Use Category	Estimated New Development	Equivalent Population Factor	Equivalent Population
Single Family	384 units	2.60	998
Coach Houses	30 units	1.20	36
Secondary Suites	52 units	1.20	62
Multi-Family (MF) Low	22 units	2.16	48
MF Medium	70 units	2.16	151
MF High	70 units	2.16	151
MF Downtown (Low/Medium/High)	70 units	2.16	151
Congregate/Intermediate Care	54 units	1.05	57
Total Equivalent Population			1,654

11.3 COST CHARGE CALCULATIONS

Construction costs and land acquisition allowances were provided by the Town.

The portion of the total cost attributed to each land-use is calculated based on the percentage of the equivalent population serviced for each land-use. The DCC per land-use is calculated by dividing the total project cost attributed to each land-use number of dwelling units for each land-use. For the purposes of DCC Cost Charge Calculations the Town has incorporated the infrastructure requirements for Coach Houses and Secondary Suites into the Single Family land use category. This will increase the service population factor per single family unit to 2.86 / dwelling unit for a total service population of 1,097.

Table 27 lists all applicable projects and costs, and the resulting net DCC recoverable amount after subtraction of the DCC Reserve fund balance.

Over the next 10 years a total of \$4,201,333 in parks & open space works is to be carried out. The cost to development totals \$3,684,120 while the existing users cost is \$517,213.

Table 28 presents a summary of the proposed Development Cost Charge by Land-Use.

Table 28 – Summary of Park DCCs by Land-use

DCC Category	Proposed Parks DCC	Current Park DCC
Single Family (1)	\$2,171.62 per unit	\$3,349.30
Multi-Family (MF) Low	\$1,658.54 per unit	\$2,791.08
MF Medium	\$1,639.78 per unit	\$2,791.08
MF High	\$1,639.78 per unit	\$2,791.08
MF Downtown (Low/Medium/High)	\$1,639.78 per unit	\$2,791.08
Congregate/Intermediate Care	\$802.40 per unit	\$1,395.54

(1) Single Family includes Coach Houses and Secondary Suites.

TABLE 27 - PARKS & RECREATION DCC

GROWTH PROJECTIONS

Permanent Population

Year	Population
2015	13,821
2024	15,475
Increase	1,654

By Land-Use

DCC Category (Land-use)	New Development		Service Population Factor	Resulting Service Population	
	Quantity (#)	Units		#	(%)
	Single Family (1)	384	dwelling unit	2.86	1,096
Multi-Family (MF)					
MF Low	22	dwelling unit	2.16	48	2.9%
MF Medium	70	dwelling unit	2.16	151	9.1%
MF High	70	dwelling unit	2.16	151	9.1%
MF Downtown (Low/Medium/High)	70	dwelling unit	2.16	151	9.1%
Congregate/Intermediate Care	54	dwelling unit	1.05	57	3.4%
Commercial Accommodation	28	rooms	1.50	n/a	
Commercial	6,500	m ²	0.015	n/a	
Commercial (Downtown)	210	m ²	0.015	n/a	
Institutional	250	m ²	0.014	n/a	
Industrial	1,000	m ²	0.0005	n/a	
Total				1,654	100%

DCC CALCULATION

LAND USE CATEGORY	Estimated New Development		Service Population Factor	Resulting Service Population		Portion of Total Cost (\$)	CALCULATED DCC	
	#	(Unit)		#	(%)			
	Single Family (1)	384	Dwell Unit	2.86	1,096	66.3%	\$833,644	\$2,170.95
Multi-Family (MF)								
MF Low	22	Dwell Unit	2.16	48	2.9%	\$36,510	\$1,659.54	per unit
MF Medium	70	Dwell Unit	2.16	151	9.1%	\$114,854	\$1,640.78	per unit
MF High	70	Dwell Unit	2.16	151	9.1%	\$114,854	\$1,640.78	per unit
MF Downtown (Low/Medium/High)	70	Dwell Unit	2.16	151	9.1%	\$114,854	\$1,640.78	per unit
Congregate/Intermediate Care	54	Dwell Unit	1.05	57	3.4%	\$43,356	\$802.88	per unit
Commercial Accommodation	28	Room	1.50	n/a				
Commercial	6,500	m ²	0.015	n/a				
Commercial (Downtown)	210	m ²	0.015	n/a				
Institutional	250	m ²	0.014	n/a				
Industrial	1,000.0	m ²	0.0005	n/a				
Total				1,654	100%	\$1,258,073		

(1) Single Family includes the Service Population of Coach Houses and Secondary Suites

PROJECT COST ALLOCATION & DCC REVENUE PROJECTION

YEAR	Project Description	PROJECT COST			COST ALLOCATION						GROWTH PROJECTION						TOTAL DCC REVENUE (\$)	DCC Fund Accum. Balance (\$)		
		Capital Cost (\$)	Government Grant		Net Cost (\$)	Exist Users Ben (%)	USERS		1% Assist (\$)	TOTAL		Pop. (#)	Single Family (#)	MF Low (#)	MF Medium (#)	MF High (#)			MF High Down (#)	Cong. Care (#)
			(%)	(\$)			Existing (\$)	New (\$)		Municipal (\$)	Development (\$)									
2015	TOTAL										13,821								2,426,047	
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2016	TOTAL	\$60,000		\$60,000					\$48,120	\$11,880	13,980	37.0	4.0						\$86,963	\$2,501,130
	Anderton to Beaufort Greenway - 1995 Comox Ave	130,500		130,500			130,500	1,305	1,305	129,195										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2017	TOTAL	\$190,500		\$190,500					\$49,425	\$141,075	14,147	38.0					27.0	\$104,174	\$2,464,229	
	Waterfront Park - 1413 Balmoral Ave	2,392,500		2,392,500			2,392,500	23,925	23,925	2,368,575										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2018	TOTAL	\$2,452,500		\$2,452,500					\$72,045	\$2,380,455	14,314	39.0	4.0			70.0		\$206,159	\$289,934	
	Waterfront Walkway - 160 Ellis St	211,667		211,667			211,667	2,117	2,117	209,550										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2019	TOTAL	\$271,667		\$271,667					\$50,237	\$221,430	14,481	39.0		35.0				\$142,094	\$210,597	
	Brooklyn Creek Park - 577 Salish St.	68,000		68,000			68,000	680	680	67,320										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2020	TOTAL	\$128,000		\$128,000					\$48,800	\$79,200	14,648	39.0	4.0					\$91,305	\$222,703	
	Brooklyn Creek Park - 583 Salish St	62,000		62,000			62,000	620	620	61,380										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2021	TOTAL	\$122,000		\$122,000					\$48,740	\$73,260	14,816	39.0						\$84,667	\$234,110	
	Brooklyn Creek Park - 562 Salish St	59,333		59,333			59,333	593	593	58,740										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2022	TOTAL	\$119,333		\$119,333					\$48,713	\$70,620	14,983	39.0	4.0					\$91,305	\$254,795	
	Brooklyn Creek Park - 568 Salish St	59,333		59,333			59,333	593	593	58,740										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2023	TOTAL	\$119,333		\$119,333					\$48,713	\$70,620	15,149	38.0		35.0			27.0	\$161,601	\$345,776	
	Brooklyn Creek Park - 1533 Cedar Ave	468,000		468,000			468,000	4,680	4,680	463,320										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2024	TOTAL	\$528,000		\$528,000					\$52,800	\$475,200	15,313	38.0	4.0		70.0			\$203,989	\$74,565	
	Neighbourhood Park Development (1 ha)	150,000		150,000			150,000	1,500	1,500	148,500										
	Greenway & Trail Development	60,000		60,000	80%	48,000	12,000	120	48,120	11,880										
2025	TOTAL	\$210,000		\$210,000					\$49,620	\$160,380	15,475	38.0	2.0					\$85,815	\$0	
	TOTALS	\$4,201,333		\$4,201,333					\$517,213	\$3,684,120	1,654	384	22	70	70	70	54	\$1,258,073		

12 SUMMARY OF DCCs

12.1 SUMMARY

To receive expedient approval of the amended DCC bylaw, the Ministry of Community Services publication *Development Cost Charge - Best Practices Guide* should be followed in amending the bylaw preparation, including stakeholder consultation and public notifications.

The completed 'Ministry Submission Summary Checklist' a copy of which is presented in Appendix A, should be completed and forwarded with the amended bylaw for the Ministry's review and approval.

The DCCs are established on a "10 year growth" basis.

A major bylaw amendment with a full review of the DCC methodology should be completed once every five years. This report and the proposed DCC are a major amendment.

A minor bylaw amendment should be carried out no more than once a year and perhaps once every two to three years to accommodate inflationary costs and changes in construction costs.

In-stream protection is to be provided to a completed subdivision application, and for "precursor applications" for a building permit, a development permit and rezoning applications.

Section 933.1 of the LGA provides municipal governments with the ability to waive or reduce DCCs within a broad range of "eligible developments".

When a DCC bylaw is implemented or amended, those parties paying DCCs will be affected by the new or amended charges. As project funding is generally arranged in the early stages of a development, sometimes even in advance of obtaining rezoning, cost increases can have a significant impact on a project's viability. As such a "grace period" is recommended before new or amended DCCs are brought in. The "grace period" is a length of time providing notification before the new or amended DCCs are adopted. The "grace period" is provided by the municipality as an acknowledgement to the development industry the impact DCCs may have on their business.

Table 30 provides a summary of the proposed DCC for each land-use category.

Table 31 provides a summary of the annual cost of the DCC program to existing system users. This covers the capital works projects' percentage benefit to existing users plus the 1% municipal assist factor applied against the developers' portion of the costs. These are the total funds the Town needs to provide in order to carry out the DCC projects listed in the tables.

**TABLE 29
DCC COST SUMMARY**

Development Category	Function	Existing Bylaw 1526	2015 Proposed	% Change
Single Family Residential (1) (per unit)	Water	\$636.15	\$0.00	
	Sanitary Sewer	\$968.66	\$1,072.05	
	Road	\$1,352.51	\$2,748.40	
	Storm Drainage	\$3,432.35	\$0.00	
	Park	\$3,349.30	\$2,171.62	
Total Single Family Dwelling:		\$9,738.97	\$5,992.07	- 38%
Multi-Family Low Density Residential (per unit)	Water	\$530.13	\$0.00	
	Sanitary Sewers	\$807.21	\$818.76	
	Roads	\$828.18	\$1,551.79	
	Storm Drainage	\$2,282.51	\$0.00	
	Parks	\$2,791.08	\$1,658.54	
Total Multi-Family Low Density Res:		\$7,239.11	\$4,029.09	- 44%
Multi-Family Medium Density Residential (per unit)	Water	\$530.13	\$0.00	
	Sanitary Sewers	\$807.21	\$809.50	
	Roads	\$828.18	\$1,550.75	
	Storm Drainage	\$2,282.51	\$0.00	
	Parks	\$2,791.08	\$1,639.78	
Total Multi-Family Medium Density Res:		\$7,239.11	\$4,000.04	- 45%
Multi-Family High Density Residential (per unit)	Water	\$530.13	\$0.00	
	Sanitary Sewers	\$807.21	\$809.50	
	Roads	\$828.18	\$1,550.75	
	Storm Drainage	\$2,282.51	\$0.00	
	Parks	\$2,791.08	\$1,639.78	
Total Multi-Family High Density Res:		\$7,239.11	\$4,000.04	- 45%
Multi-Family Downtown Low/Medium/High Density Residential (per unit)	Water	\$530.13	\$0.00	
	Sanitary Sewers	\$807.21	\$809.50	
	Roads	\$828.18	\$1,394.53	
	Storm Drainage	\$2,282.51	\$0.00	
	Parks	\$2,791.08	\$1,639.78	
Total Multi-Family Downtown (Low/Medium/High) Res:		\$7,239.11	\$3,843.82	- 47%
Congregate Care / Intermediate Care Facility (per unit)	Water	\$265.06	\$0.00	
	Sanitary Sewers	\$403.61	\$396.11	
	Roads	\$285.48	\$538.37	
	Storm Drainage	\$737.96	\$0.00	
	Parks	\$1,395.54	\$802.40	
Total Congregate Care / Intermediate Care Facility:		\$3,087.65	\$1,736.88	- 44%
Commercial Accommodation (per unit)	Water		\$0.00	
	Sanitary Sewers		\$562.90	
	Roads		\$1,095.43	
	Storm Drainage		\$0.00	
	Parks		\$0.00	
Total Commercial Accommodation:		\$0.00	\$1,658.33	

(1) Single Family includes Coach Houses and Secondary Suites

**TABLE 29
DCC COST SUMMARY**

Development Category	Function	Existing Bylaw 1526	2015 Proposed	% Change
Commercial (per m ² of floor area)	Water	\$1.91	\$0.00	
	Sanitary Sewers	\$2.91	\$5.66	
	Roads	\$50.74	\$95.24	
	Storm Drainage	\$6.66	\$0.00	
	Parks	\$0.00	\$0.00	
Total Commercial:		\$62.22	\$100.90	62%
Commercial Downtown (per m ² of floor area)	Water	\$1.91	\$0.00	
	Sanitary Sewers	\$2.91	\$5.36	
	Roads	\$50.74	\$48.26	
	Storm Drainage	\$6.66	\$0.00	
	Parks	\$0.00	\$0.00	
Total Commercial Downtown:		\$62.22	\$53.62	- 14%
Institutional (per m ² of floor area)	Water	\$1.91	\$0.00	
	Sanitary Sewers	\$2.91	\$6.00	
	Roads	\$22.05	\$40.54	
	Storm Drainage	\$0.93	\$0.00	
	Parks	\$0.00	\$0.00	
Total Institutional:		\$27.80	\$46.54	67%
Industrial (per ha of site)	Water	\$530.13		
	Sanitary Sewers	\$807.21		
	Roads	\$18,533.73	\$32,005.61	
	Storm Drainage	\$95,041.86	\$0.00	
	Parks	\$0.00		
Total Industrial:		\$114,912.93	\$32,005.61	- 72%
Industrial (per m ² of gross floor area)	Water		\$0.00	
	Sanitary Sewers		\$0.38	
	Parks		\$0.00	
Total Industrial:		\$0.00	\$0.38	

In the case of a building or part thereof for which charges cannot otherwise be determined in accordance with Table 29, the use shall be deemed to be commercial. Notwithstanding, other than residential use, no charges apply to uses located in an agricultural zone classified as such in section 4.1 of the Town's zoning bylaw.

TABLE 30
Annual Cost Summary - Existing Users

Year	Function	Existing Users Total Annual Costs
2016	Roads	
	Storm	\$104,871
	Sanitary	\$381,172
	Water	\$134,126
	Park	\$48,120
	Total	\$668,289
2017	Roads	\$71,400
	Storm	\$21,016
	Sanitary	\$348,174
	Water	\$319,452
	Park	\$49,425
	Total	\$809,468
2018	Roads	
	Storm	\$9,883
	Sanitary	\$102,295
	Water	\$9,701
	Park	\$72,045
	Total	\$193,924
2019	Roads	
	Storm	\$26,393
	Sanitary	\$245,432
	Water	\$316,251
	Park	\$50,237
	Total	\$638,312
2020	Roads	
	Storm	\$15,730
	Sanitary	\$58,695
	Water	
	Park	\$48,800
	Total	\$123,225

Year	Function	Existing Users Total Annual Costs
2021	Roads	
	Storm	
	Sanitary	
	Water	
	Park	\$48,740
	Total	\$48,740
2022	Roads	
	Storm	\$11,990
	Sanitary	
	Water	
	Park	\$48,713
	Total	\$60,703
2023	Roads	
	Storm	
	Sanitary	
	Water	
	Park	\$48,713
	Total	\$48,713
2024	Roads	
	Storm	
	Sanitary	
	Water	
	Park	\$52,800
	Total	\$52,800
2025	Roads	\$71,400
	Storm	
	Sanitary	
	Water	
	Park	\$49,620
	Total	\$121,020

Function	2016 - 2025 (10 Year) Total		
	Existing Users	New Development	Combined Total
Roads	\$142,800	\$2,257,200	\$2,400,000
Storm	\$189,883	\$706,436	\$896,318
Sanitary	\$1,135,768	\$719,232	\$1,855,000
Water	\$779,530	\$646,470	\$1,426,000
Park	\$517,213	\$3,684,120	\$4,201,333
Total	\$2,765,195	\$8,013,457	\$10,778,651

Function	2006 DCC Study		
	Existing Users	New Development	Combined Total
Roads	\$3,523,803	\$7,801,497	\$11,325,300
Storm	\$800,022	\$2,854,718	\$3,654,740
Sanitary	\$12,480	\$1,235,520	\$1,248,000
Water	\$357,109	\$1,709,641	\$2,066,750
Park	\$542,862	\$6,207,088	\$6,749,950
Total	\$5,236,276	\$19,808,464	\$25,044,740

Note: Over the next ten years existing users are contributing an additional \$14,200,000 on projects identified in the Towns transportation study that the Town anticipates completing regardless of development.

APPENDIX A

Ministry Submission Summary Checklist

**MUNICIPALITY/REGIONAL DISTRICT
MINISTRY OF COMMUNITY SERVICES
SUBMISSION SUMMARY CHECKLIST**

**TOWN OF COMOX
BYLAW No. 1526**

- Is this bylaw a New DCC Bylaw
 Major DCC Bylaw Amendment
 Minor DCC Bylaw Amendment

Please complete checklist by marking the appropriate boxes, and providing references to background material and other requested information. If DCCs are established on a basis other than the DCC Best Practices Guide, provide a brief explanation for the approach used. If space is insufficient, reference pages in submission where this is covered or append additional pages.

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference
1	Did the development of this DCC bylaw include: <input checked="" type="checkbox"/> a full public process? <input type="checkbox"/> input from stakeholders? <input type="checkbox"/> Council input only?	
	Why? To receive feedback from the public and stakeholders prior to adoption by Council	
2	Are the Road DCCs established: <input checked="" type="checkbox"/> on a municipal-wide basis? <input type="checkbox"/> on an area specific basis?	19, 35
	Why? Transportation Master Plan is a municipal wide study, and in keeping with the BPG.	
3	Are the Storm drainage DCCs established: <input type="checkbox"/> on a municipal-wide basis? <input checked="" type="checkbox"/> on an area specific basis?	19, 39, Fig - 4
	Why? Storm Drainage Master Plan works are area specific.	
4	Are the Sanitary sewer DCCs established: <input type="checkbox"/> on a municipal-wide basis? Yes <input checked="" type="checkbox"/> on an area specific basis?	19, 48
	Why? Sanitary Sewer Study was limited to flows to the Jane Place pump station catchment area.	48 Figure 6

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference
5	Are Water DCCs established: <input checked="" type="checkbox"/> on a municipal-wide basis? Yes <input type="checkbox"/> on an area specific basis?	19, 44
	Why? Water Master Plan works is a municipal wide study.	
6	Are Parkland and parkland improvement DCCs established: <input checked="" type="checkbox"/> on a municipal-wide basis? <input type="checkbox"/> on an area specific basis?	19, 51
	Why? In accordance with the BPG.	
7	Is the DCC time frame: <input checked="" type="checkbox"/> a revolving program (<u>10</u> Years)? Yes <input type="checkbox"/> a build out program (_____ Years)? <input type="checkbox"/> other?	1, 19
	Why? DCC program is tied to BCStats population growth projections for the next 10 years and infrastructure required to accommodate the growth based on the findings of the Town's infrastructure reports with time frames of 5 years or more and in accordance with the Town's OCP.	23, Table 3
8	Are residential DCC categories established on the basis of: <input checked="" type="checkbox"/> density gradient? Yes <input type="checkbox"/> building form? <input type="checkbox"/> other?	27
	Why? This is the traditional approach, with established records of average population per unit available to assist in the projection estimates.	25, 26 Table 5, Figure 2
9a	Are residential DCCs imposed on the basis of: <input checked="" type="checkbox"/> development units? Yes <input type="checkbox"/> floor space? <input type="checkbox"/> other? If single-family residential DCCs are imposed on the basis of floor space, does the local government have a bylaw in place allowing DCCs to be levied at the building permit stage on fewer than 4 self-contained dwelling units?	27 Figure 2
	Why? Unit projection information is available. In accordance with BPG.	9, 25, 26 Table 5, Figure 2

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference
9b	Are commercial and institutional DCCs imposed on the basis of: <input checked="" type="checkbox"/> floor space? Yes, per m2 of gross building floor space. <input type="checkbox"/> other?	28, 29, 30
	Why? In accordance with BPG. Facilitates straightforward calculation at the Building Permit stage.	9
9c	Are industrial DCCs imposed on the basis of: <input checked="" type="checkbox"/> gross site area? Yes, per ha of gross site area. <input type="checkbox"/> other?	20
	Why? In accordance with BPG.	9
10	Is the DCC program consistent with: <input checked="" type="checkbox"/> the <i>Local Government Act</i> ? Yes <input checked="" type="checkbox"/> Regional Growth Strategy? Yes <input checked="" type="checkbox"/> Official Community Plan? Yes <input checked="" type="checkbox"/> Master Transportation Plan? Yes <input checked="" type="checkbox"/> Master Parks Plan? As developed by Town staff <input checked="" type="checkbox"/> Liquid Waste Management Plan? (with Town Storm & Sanitary Plans) <input checked="" type="checkbox"/> Affordable Housing Policy? <input checked="" type="checkbox"/> Five Year Financial Plan? (the Town's 5 yr plan is developed using the infrastructure reports from which this DCC report is based)	3 21-22 22 22, 35, 37 51 39, 48 13 1
	Why not?	
11	Are DCC recoverable costs, consistent with Ministry policy, clearly identified in the DCC documentation: <input checked="" type="checkbox"/> Cost allocation between new and existing? Yes <input checked="" type="checkbox"/> Grant Assistance? Yes <input checked="" type="checkbox"/> Developer Contribution? Yes <input checked="" type="checkbox"/> Municipal assist Factor? Yes <input checked="" type="checkbox"/> Interim Financing? Yes <input checked="" type="checkbox"/> Other: No allowance for long-term debt. No allowance for inflation.	5, 31 32 32 31 32, 33 8, 31 8, 31
	Why? Conforms with BPG.	5
	Is capital cost information provided for: <input checked="" type="checkbox"/> Roads? <input checked="" type="checkbox"/> Storm Drainage? <input checked="" type="checkbox"/> Sanitary Sewer? <input checked="" type="checkbox"/> Water? Yes <input checked="" type="checkbox"/> Parkland? <input checked="" type="checkbox"/> Parkland improvements?	37, Table 13 42, Table 17 49, Table 24 46, Table 21 52, Table 27 52, Table 27

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference																														
12	<p>Are DCC recoverable costs which include interest clearly identified in the DCC documentation as follows:</p> <p><input checked="" type="checkbox"/> Interest on long-term debt is <i>excluded</i>? Yes <input type="checkbox"/> For specific projects, interest on long-term debt is <i>included</i>? No <input type="checkbox"/> Other?</p> <p>If interest on long-term debt is included for specific projects, does the DCC submission include:</p> <p><input type="checkbox"/> A council/board resolution authorizing the use of interest? <input type="checkbox"/> Confirmation that the interest applied does not exceed the MFA rate <u>or</u> if borrowing has already been undertaken, the actual rate providing it does not exceed the MFA rate? <input type="checkbox"/> Confirmation that the amortization period does not exceed the DCC program time frame? <input type="checkbox"/> Evidence that the current DCC reserve fund balance is insufficient for the work in question? <input type="checkbox"/> Demonstration that the project is an exceptional circumstance (fixed capacity, out-of-sequence, or Greenfield)? <input type="checkbox"/> Evidence of public consultation and disclosure in the financial plan and DCC report regarding inclusion of interest?</p>	8, 31																														
13	<p>Does the municipal assist factor reflect:</p> <p><input checked="" type="checkbox"/> the community's financial support towards the financing of services for development? Yes <input type="checkbox"/> other?</p>	32, 33																														
	<p>Why? Assist factor is considered appropriate at this time.</p>	32, 33																														
	<p>Has a municipal assist factor been provided for:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"><input type="checkbox"/> Roads? Yes</td> <td style="width: 20%;">Assist factor</td> <td style="width: 10%; text-align: center;"><u> 1 </u></td> <td style="width: 10%; text-align: center;">%</td> <td style="width: 10%;"></td> </tr> <tr> <td><input type="checkbox"/> Storm Drainage? Yes</td> <td>Assist factor</td> <td style="text-align: center;"><u> 1 </u></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Sanitary Sewer? Yes</td> <td>Assist factor</td> <td style="text-align: center;"><u> 1 </u></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Water? Yes</td> <td>Assist factor</td> <td style="text-align: center;"><u> 1 </u></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Park land? Yes</td> <td>Assist factor</td> <td style="text-align: center;"><u> 1 </u></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Park land improvements? Yes</td> <td>Assist factor</td> <td style="text-align: center;"><u> 1 </u></td> <td style="text-align: center;">%</td> <td></td> </tr> </table>	<input type="checkbox"/> Roads? Yes	Assist factor	<u> 1 </u>	%		<input type="checkbox"/> Storm Drainage? Yes	Assist factor	<u> 1 </u>	%		<input type="checkbox"/> Sanitary Sewer? Yes	Assist factor	<u> 1 </u>	%		<input checked="" type="checkbox"/> Water? Yes	Assist factor	<u> 1 </u>	%		<input type="checkbox"/> Park land? Yes	Assist factor	<u> 1 </u>	%		<input type="checkbox"/> Park land improvements? Yes	Assist factor	<u> 1 </u>	%		32, 33
<input type="checkbox"/> Roads? Yes	Assist factor	<u> 1 </u>	%																													
<input type="checkbox"/> Storm Drainage? Yes	Assist factor	<u> 1 </u>	%																													
<input type="checkbox"/> Sanitary Sewer? Yes	Assist factor	<u> 1 </u>	%																													
<input checked="" type="checkbox"/> Water? Yes	Assist factor	<u> 1 </u>	%																													
<input type="checkbox"/> Park land? Yes	Assist factor	<u> 1 </u>	%																													
<input type="checkbox"/> Park land improvements? Yes	Assist factor	<u> 1 </u>	%																													
14	<p>Are DCCs for single family developments to be collected:</p> <p><input checked="" type="checkbox"/> at the time of subdivision approval? Yes <input checked="" type="checkbox"/> other?</p>	9																														
	<p>Why? Recommended by BPG. Collection at subdivision approval creates an orderly flow of funds to allow for completion of the required works in a timely manner.</p> <p>Redevelopment over \$100,000 value to be collected at Building Permit stage.</p>	9 6																														

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference
15	<p>Are DCCs for multi-family land uses to be collected:</p> <p><input type="checkbox"/> at the time of subdivision?</p> <p><input checked="" type="checkbox"/> at the time of building permit issuance? Yes</p> <p>Why? Recommend by BPG. Charges related to floorspace and the exact number of units are easily calculated at the Building Permit stage.</p>	<p>9</p> <p>9</p>
16	<p>Is a DCC monitoring and accounting system to provide a clear basis for the tracking of projects and the financial status of DCC accounts:</p> <p><input checked="" type="checkbox"/> in place? Yes</p> <p><input type="checkbox"/> to be set up?</p>	33
	Why?	
17	<p>Is a suitable period of notification before a new DCC bylaw is in effect, known as a grace period:</p> <p><input checked="" type="checkbox"/> provided for? Yes</p> <p><input type="checkbox"/> other?</p>	9
	Why not?	
18a	<p>Does the DCC bylaw set out the situations in which a DCC credit or rebate are to be given?</p> <p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	10
18b	<p>If no, has Council adopted a policy statement that clearly identifies situations in which a DCC credit or rebate should be given or would be considered by Council?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>If yes, a copy of the policy statement is included with this submission.</p>	Ref. _____
	If no, why not?	

	DCC RECOMMENDED BEST PRACTICE	Submission Page Reference
19	<p>Has a process to provide for minor routine amendments to the DCC bylaw to reflect changes in construction and other capital costs:</p> <p><input checked="" type="checkbox"/> been established? Yes</p> <p><input type="checkbox"/> not considered necessary?</p> <p><input type="checkbox"/> other?</p>	11 – 12
	Why? To reflect changes in inflation or construction costs.	11 – 12
20	<p>Has a process to provide for major amendments to the DCC bylaw, involving a full review of DCC issues and methodology, to be completed not more than once every five years:</p> <p><input checked="" type="checkbox"/> been established? Yes</p> <p><input type="checkbox"/> not considered necessary?</p> <p><input type="checkbox"/> other?</p>	11 – 12
	Why? To review DCC assumptions, and account for updates to infrastructure studies; development patterns and projections; changes in reserve funds and other funding sources; update project timing and costs.	11 – 12
	<p>Contact _____ Position _____ Phone _____</p> <p>*Signed by _____ Position _____ (*Signature of the Head of engineering, finance or planning for the local government.)</p> <p>Signed by (second signature optional) _____ Position _____ Date _____</p>	

MUNICIPALITY
SUMMARY OF DCCs

TOWN OF COMOX
BYLAW No. 1526

DCC Function	Residential Single Family (per dwelling)	Residential Multi-Family			Congregate Care (per unit)
		Low Density (per unit)	Medium & High Density (per unit)	Downtown High Density (per unit)	
Roads	\$2,748.40	\$1,551.79	\$1,550.75	\$1,394.53	\$538.37
Storm	-	-	-	-	-
Sanitary	\$1,072.05	\$818.76	\$809.50	\$809.50	\$396.11
Water	-	-	-	-	-
Parks	\$2,171.62	\$1,658.54	\$1,639.78	\$1,639.78	\$802.40
Total	\$5,992.07	\$4,029.09	\$4,000.04	\$3,843.82	\$1,658.33

DCC Function	Commercial			Institutional (per m ²)	Industrial (per ha)
	Accommodation (per unit)	Non-Downtown (per m ²)	Downtown (per m ²)		
Roads	\$1,095.43	\$95.24	\$48.26	\$40.54	\$32,005.61
Storm	-	-	-	-	-
Sanitary	\$562.90	\$5.66	\$5.36	\$6.00	\$0.38 *
Water	-	-	-	-	-
Parks	-	-	-	-	-
Total	\$1,658.33	\$100.90	\$53.62	\$46.54	\$32,005.61 \$0.38 *

Note:

* Industrial sanitary sewer DCC is calculated on per m² of gross floor area, whereas the road DCC is calculated on per ha of site..

For amendment bylaw, please indicate nature of change	Existing Bylaw (No. 1526)	Proposed Bylaw
• New DCC service added	Road, Storm, Sanitary Sewer, Water, Parks	No Change
• Time horizon	10 Years	No Change
• Capital costs	\$25,044,740 Existing users = \$5,236,276 Development = \$19,808,464	\$10,778,651 Existing users = \$2,765,195 Development = \$8,013,457
• Weighting of types of development (residential, commercial, industrial, etc.)	SF, MF = Dwelling Units Congregate Care = Units Commercial = gross floor area Institutional = gross floor area Industrial = gross site area	Industrial San Sewer =
• Potential development	SF, MF, Congregate Care, Commercial, Institutional, Industrial	Added 2ndary Suite
• Allocation of benefit between existing and potential units of development	Yes, varies by function and project	Yes, varies by function and project
• Assist factor	1%	No Change
• Inclusion of Specific Interest Charges	No	No Change
• Provide that a charge is payable where there is fewer than 4 self-contained dwelling units	Yes	No Change
• Establish an amount higher than the \$50,000 minimum provided for in the <i>Local Government Act</i> .	No	No Change
• Is a suitable period of notification before a new DCC bylaw in effect, known as a grace period?	Yes	No Change
Other: (please list) • •		