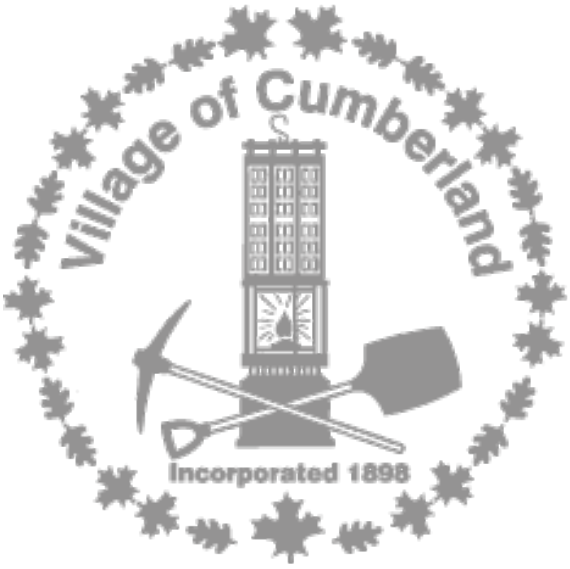


DCC Background Report

April 2022

URBAN SYSTEMS

TABLE OF CONTENTS

APPENDICES

EXECUTIVE SUMMARY

This report presents proposed the Village of Cumberland's proposed Development Cost Charge (DCC) program. It consists of the following parts.

- **Part 1** – outlines the purpose of the DCC investigation and includes information on the guiding principles, legislation enabling DCCs, and the use of the provincial *DCC Best Practices Guide*.
- **Part 2 –** reviews the public consultation and stakeholder engagement process.
- **Part 3 –** outlines the specific capital projects and identifies DCC recoverable costs. This part discusses the timeframe for the DCC program, the municipal assist factor, grant assistance, interim financing, and the allocation of costs between existing and new development. It also includes an explanation for applying DCCs on a community-wide or area-wide basis.
- **Part 4 –** presents growth projections based on population trends over the past 25 years and discussions with staff.
- **Parts 5 to 9 –** summarizes the capital costs for each different DCC service (i.e. transportation, water, sanitary, storm, and parks). The total capital costs for each service and the total DCC program costs are shown below in Table 1.

Table 1
Village of Cumberland
Total DCC Program Recoverable Costs

Service	Total Capital Costs	Municipal Costs	DCC Recoverable Program Costs
Transportation	$24,756,307	$5,602,307	$16,518657
Water	$9,945,672	$1,519,523	$7,518,318
Sanitary Sewer (Village-Wide)	$16,150,000	$4,368,250	$4,281,750
Sanitary Sewer (Village-Core)	$22,843,000	$4,435,180	$10,907,820
Storm Drainage	$7,456,355	$1,298,472	$6,157,883
Parks	$4,471,365	$2,258,039	$2,213,325

Parts 5 to 9 also show how the DCC rates are calculated using the information from Parts 3 and 4. The proposed DCC rates are shown in Table 2.

- **Part 10 –** includes information on implementation issues such as exemptions to the Bylaw, grace periods, DCC rebates, and credits, as well as suggestions for monitoring and accounting related to the DCC Bylaw.

Table 2
Village of Cumberland
Proposed DCC Rate Summary

Land Use	Transportation	Water	Sanitary Sewer (Village-Wide)	Sanitary Sewer (Village-Core)	Storm Drainage	Parks	Total
Low Density Residential (per dwelling unit / lot)	$8,007.00	$3,725.07	$1,296.73	$5,640.17	$2,178.74	$1,032.51	$21,879.21
Medium Density Residential (per dwelling unit)	$3,524.29	$3,004.09	$1,044.95	$4,548.52	$1,176.52	$832.67	$14,131.03
High Density Residential (per dwelling unit)	$3,524.29	$2,403.27	$835.95	$3,638.82	$718.98	$666.13	$11,737.07
Commercial (per m^2 of gross floor area)	$83.28	$15.62	$5.43	$23.65	$6.97	--	$134.96
Industrial (per ha of site utilized)	$72,178.22	$21,629.46	$7,523.57	$32,749.35	$49,021.60	--	$183,102.20
Institutional (per m^2 of gross floor area)	$95.23	$13.22	$4.60	$20.01	$6.54	--	$139.60

PART 1. BACKGROUND

1.1 Purpose of this Report

The Village of Cumberland's DCC program was last reviewed and updated in 2013. The Village has identified the need to update its DCC program to account for important changes that have occurred since 2013 including the following:

- The completion of several capital projects
- Changing growth projections and development pressures
- The development of new and updated community plans
- Changes to provincial legislation and policies
- The completion of engineering studies and infrastructure master plans that provide a better understanding of what projects are required to accommodate development and growth
- Inflation and increased construction costs for capital projects

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

This report presents the proposed DCC program. However, the material provided in this report is meant to provide information only. Reference should be made to *Development Cost Charge Bylaw No. 934, 2010* (and amendments) for the Village of Cumberland's DCC rates until the Council has adopted a new DCC Bylaw.

1.2 Legislative and Regulatory Background

Development cost charges are special charges collected by local governments to help pay for infrastructure expenditures required to service growth. The *Local Government Act (LGA)* provides the authority for municipalities to levy DCCs. The purpose of a DCC is to assist the municipality in accommodating development through a dedicated source of funding for the capital costs of:

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

Municipalities wanting to collect DCCs must adopt a DCC Bylaw that specifies the amount of DCCs that will be collected. The charges may vary with respect to:

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

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

1.3 Bill 27

On May 29, 2008, the Provincial Government enacted new legislation pertaining to DCCs. The legislative changes include the option for municipalities to exempt or waive DCCs for the following classes of "eligible development":

- not-for-profit rental housing, including supportive living housing (similar provisions were in the previous legislation, but did not require a Bylaw to waive or reduce DCCs for not-for-profit rental housing)
- for-profit affordable rental housing
- subdivisions of small lots designed to result in low greenhouse gas emissions
- developments designed to result in a low environmental impact

If the Village of Cumberland wishes to provide DCC waivers or reductions, it must adopt a DCC Waiver Bylaw that establishes definitions for each class of "eligible development", corresponding rates of reduction, and requirements that must be met in order to obtain a waiver or reduction. Council, however, is not *obligated* to adopt any of these new provisions. To make up for any foregone DCC revenue, the Village of Cumberland would have to secure alternate revenue sources.

1.4 Use of DCC Best Practices Guide

The Ministry of Community Services (the "Ministry") has prepared a *DCC Best Practices Guide*. The purpose of this document is to outline an accepted process to develop a DCC program.

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

A copy of the Best Practices Guide is available online at:

- https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/finance/dcc_best_practice_guide_2005.pdf

PART 2. PUBLIC CONSULTATION & STAKEHOLDER ENGAGEMENT

2.1 Public Consultation & Stakeholder Engagement

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

PART 3. GUIDING PRINCIPLES AND KEY ELEMENTS

3.1 Guiding Principles

Some key assumptions were made at the beginning of this DCC investigation. These assumptions form an integral part of the report and are based on the following significant principles:

- **Integration** – This DCC program is just one of many broader goals and initiatives. Other goals and initiatives in the Local Government Act, other provincial legislation, regional growth strategies, and Official Community Plans should also be reflected. In dealing with land efficiency, housing affordability, and sustainability, a local government uses DCCs as one of the ways to handle these issues. Community plans, land use plans, and corporate financial and capital infrastructure strategies must be taken into consideration when developing DCCs.
- **Benefiter Pays** – Those who benefit from new infrastructure in the Village of Cumberland should pay for the installation of such systems.
- **Fairness and Equity** – Since costs should be shared amongst the benefitting parties, mechanisms should be put in place to ensure fair cost distribution between existing users and new development. For those costs allocated to new development, DCCs should be used to ensure equitable distribution of the costs between the various land uses and different development projects.
- **Accountability** – To promote accountability, all information used for the development of DCCs should be accessible and understandable by all stakeholders.
- **Certainty** – The DCC program should be designed to ensure stable charges and timely construction of infrastructure. Developers rely on the stability of DCC rates when planning their projects. Certainty in DCC revenue helps ensure that infrastructure is constructed in a timely manner and helps avoid deferring or cancelling development.

3.2 Relationship to Other Documents

This proposed DCC program has been developed to be consistent with the Local Government Act and the provincial DCC Best Practices Guide. The following documents were also reviewed and have been followed to ensure consistency where it was appropriate to do so.

- Village of Cumberland Development Cost Charge Bylaw No. 934, 2010
- Village of Cumberland Official Community Plan, 2014
- Village of Cumberland Roads Master Plan, 2007

- Village of Cumberland Sanitary Sewer Master Plan, 2010
- Village of Cumberland Sanitary Sewer Master Plan Supplemental Report, 2011
- Village of Cumberland Stormwater Drainage Master Plan, 2010
- Village of Cumberland Waster System Master Plan, 2007
- Village of Cumberland Long-Term Water Supply Strategy, 2016
- Village of Cumberland Parks and Greenways Master Plan, 2014
- Village of Cumberland Five Year Financial Plan

3.3 DCC Time Frame

The first step in determining DCC costs is to set a time frame for the DCC program. The time frame for the Village of Cumberland's proposed DCC program is to 2045 The capital expenditure forecasts outlined in this report include all DCC projects that need to be constructed to allow for anticipated development.

3.4 DCC Planning Area (Community-wide vs. Area-specific Program)

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

A community-wide DCC program is the best approach for the Village of Cumberland with the exception of an area-specific sanitary sewer DCC. This decision was made considering the following questions:

- **What does the provincial *DCC Best Practice Guide* recommend?**
  The provincial *DCC Best Practice Guide* recommends that all DCCs be established on a community-wide basis, unless a significant disparity exists between those who pay the DCC and benefiting users.
- **How are DCCs currently applied within the Village of Cumberland?**
  The current DCC Bylaw is applied on a community-wide basis.
- **Who benefits from the capital works in a direct or indirect manner?**
  All development in the community with the exception of the sanitary sewer DCC for industrial development.
- **Is a community wide DCC a fair manner to distribute the costs in relationship to the development of land throughout the Village of Cumberland?**

Generally speaking, the development will be spread out throughout the Village, however currently industrial development in the Bevan Industrial Lands do not have sanitary sewer servicing. Therefore, it would not be fair to incur capital cost burdens for a service they are not provided. As such, the sanitary sewer DCC will be collected on an area-specific basis. Sanitary sewer DCC's are applicable within the boundaries as shown on Appendix A.

- **What are the cash flow implications of collecting area-specific DCCs vs. community-wide DCCs for a municipality the size of the Village of Cumberland? How will the manner of DCC collection affect the Village's ability to get the DCC program built?**
  Community-wide DCCs would give the most flexibility in terms of accumulating and spending DCC revenues. Area-specific DCCs can limit the amount of DCCs available to fund works throughout the Village by having multiple DCC reserves with a small amount in different reserves, this can result in waiting a long time to collect a significant amount of DCCs to build any works in a timely manner.
- **What are the typical complexities and costs of establishing the community-wide vs. area-specific DCC?**
  Having a community-wide DCC can reduce the complexity of collecting the DCC and cost of administering the DCC reserves. A community-wide DCC Bylaw is often a simpler document to apply by front counter staff as well and can reduce the staff time required to assess, collect and expend the DCCs. We believe the reduced administration effort from having a community-wide DCC can be significant.

3.5 DCC Recoverable Costs

As specified by the *Local Government Act*, the DCC recoverable costs for projects include planning, engineering, and legal costs directly related to the work for which a capital cost may be incurred. The provincial *DCC Best Practices Guide* further clarifies the interpretation of the Ministry to include:

- Planning
- Public consultation
- Engineering design
- Right-of-way or parkland acquisition
- Legal costs
- Interim financing
- Contract administration
- Construction

- Contingencies

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

3.6 Grant Assistance

As per the Provincial *DCC Best Practices Guide,* grants that have not be secured have not been included as part of the DCC calculations.

3.7 Interim Financing

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

3.8 Allocation of Costs

It is often the case that new infrastructure works benefit both existing and new development, and as such, should be paid for by both parties in accordance with the benefit received by each. The costs of such works need to be allocated equitably between new and existing development.

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

- **Category 1 – Projects that are required solely to accommodate new growth**
  Projects in this category benefit new growth only. In other words, they would not be contemplated if no new growth were forecasted. One hundred percent (100%) of the benefit and cost of each project in this category have been allocated to new growth.
- **Category 2 – Projects that upgrade the level of service or resolve existing deficiencies**
  Projects in this category may provide some benefit to existing development, but they also provide benefit to new growth. Without the completion of these projects, new development would not be able to proceed. In these cases, a portion of the cost of each

DCC project is allocated to existing and new development. The following factors have been considered when determining what portion to allocate to new growth for recovery through DCCs:

- current standards of servicing required by the Village of Cumberland.
- whether the work on the project is primarily for upgrading deficiencies and upkeep of the system or whether it is primarily for increasing capacity.
- a comparison of the size of the existing population versus the size of expected new growth.
- a comparison of what the size of the project would be if the project were for the existing population, versus what the size of the project would be if the project were expanded to accommodate the new growth as well.

Table 3 (next page) indicates, in general terms, the percentage of the costs that are attributable to new growth according to the type of service. The number 100% indicates category one projects that principally benefit new growth alone. Numbers less than 100% indicate category two projects that benefit both new growth and the existing population.

Table 3
Village of Cumberland
Allocation of Costs Attributable to New Growth

DCC Type	Benefit Allocation %
Transportation	50% to 100%
Storm drainage	50% to 100%
Sanitary Sewer	50% to 100%
Water	50% to 100%
Parks and Open Space	50% to 100%

In each of the DCC programs (Parts 5 through 9), the exact percentage of the benefit that can be attributed to new growth is indicated in the column entitled "Benefit Allocation %". That allocation is applied to the estimated costs to arrive at the amount that can be recovered by DCCs before the municipal assist factor is applied. That information can be found in the column entitled "Benefit Allocation" in all the DCC programs.

3.9 Municipal Assist Factor

The *Local Government Act* stipulates that an assist factor will be included as part of the calculation of DCCs. An assist factor represents a municipalities contribution towards the capital costs for projects that are attributed to new development. This contribution is in addition to the costs that are allocated to the existing population. The portion of the costs that the Village of Cumberland will have to cover because of the assist factor will have to be financed through other means (e.g. existing taxpayers).

The actual level of the assist factor is determined by the municipality. A municipality can have a different assist factor for each type of capital works (e.g. sanitary sewer vs. roads projects); however, a municipality cannot have a municipal assist factor that varies for different land uses within the District, (e.g. single-family residential vs. multi-family residential vs. commercial)

As outlined in Section 1.2 of this report, the Local Government Act also stipulates that a municipality consider the following factors when setting DCC rates:

- future land use patterns and development
- the phasing of works and services
- whether the charges are excessive in relation to the capital costs of prevailing standards of service
- whether the costs will deter development

- whether the charges will discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land

The matters above have been considered and the assist factor for the proposed DCC program has been set at 1% for each type of DCC (see Table 4 below). This is consistent with Village of Cumberland's current DCC program.

Table 4
Village of Cumberland
Municipal Assist Factor by DCC Type

DCC Type	Municipal Assist Factor
Road	1%
Water	1%
Sanitary Sewer	1%
Storm drainage	1%
Parks and Open Space	1%

PART 4. GROWTH PROJECTIONS

4.1 Residential

The Village of Cumberland's population is expected to grow to approximately 8869 people by 2046. Approximately 50% of this future population is expected to be the result of new growth. This projection is based on a review of historic growth rates and an analysis of the development potential of existing areas that will likely develop from now to 2046. This includes existing lands currently zoned but not developed or remaining lands in planned neighbourhoods where the type of land use is known. Based on input provided by staff, it has been forecasted that residential development will likely consist of:

- **60% low density dwelling units** – this means detached single-family dwellings as defined by the Village of Cumberland current bylaws.
- **20% medium density dwelling units** – this means patio homes, duplexes, townhouses, rowhouses, mobile home parks, and manufactured homes as defined by the Village of Cumberland's current bylaws.
- **20% high density dwelling units** – this means apartment dwellings and multi-family dwellings as currently defined by the Village of Cumberland's current bylaws.

Table 5 (below) provides a breakdown of the expected that future development. Average household sizes are based on a review of historic averages available through Statistics Caranda. Average household size has been increased to 3.1 people per unit from a historical average of 2.5 to account for secondary suites which are currently permitted in all low-density residential zones.

Table 5
Village of Cumberland
Residential Growth by Dwelling Type

Dwelling Type	Future Distribution	Average Household Size	New Population	New Dwelling Units
Low Density	60%	3.1	2,979	961
Medium Density	20%	2.5	803	321
High Density	20%	2.0	640	320
TOTAL	**100%**	**n/a**	**4,422**	**1,602**

4.2 Commercial, Industrial, and Institutional

Commercial, industrial, and institutional development have historically been sporadic in the Village of Cumberland. Because of this, past development trends cannot reliably be extrapolated into the future. Instead, commercial, industrial, and institutional development projections have been established based on a review of available land, discussions with senior Village staff, and an analysis of typical developments in other parts of the Comox Valley. These development projections are summarized in Table 6 (below).

Table 6
Village of Cumberland
Commercial, Industrial, and Institutional Development Projections

Land Use	New Development by 2046
Commercial	8,000 m^2 of new gross floor area *For scale and reference, a typical grocery store in the surrounding Comox Valley area is approximately 4,000 m^2*
Industrial	65 hectares of new site area used *For scale and reference, most existing light industrial developments along Cumberland road utilize approximately 0.75 to 1.50 ha of land each.*
Institutional	3,800 m^2 of new gross floor area *For scale and reference, a typical elementary school in the surrounding area is approximately 3,500 m^2.*

PART 5. TRANSPORTATION DCCS

5.1 Transportation DCC Program

The Transportation DCC program includes a variety of capital works including road widening, traffic circles, traffic calming, sidewalks, and active transportation corridors. The location of the works is shown on Map 1 and summarized in Table 10. Detailed project sheets are provided in Appendix B.

Table 7
Village of Cumberland
Transportation DCC Program Costs

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$5,602,307	$16,518,656	$24,756,307

The total cost of the transportation projects is approximately $24.7 million of which approximately $16.5 million is DCC recoverable. These costs include the construction of new road infrastructure plus engineering, contingency, and project administration.

5.2 Traffic Generation and Calculation of Road Impact

For transportation works, costs are distributed based on the trips generated by each land use. The weighted trip ends used are presented in Table 8 below. They have been developed based on a review of the Institute of Transportation Engineers, *Trip Generation Manual,* 10th Edition, 2019 and a review of weighted trip ends used in other neighbouring municipalities DCC programs. The rates used (see Table 8) are for the most part consistent with the Town of Comox. For commercial development the rate is similar to the one used by the City of Courtenay. It is a customized rate that accounts for commercial infill development that generates lower traffic volumes.

Table 8
Village of Cumberland
Equivalent Units for Transportation

Land Use	Base Unit	Equivalent Generation (Rate Per Base Unit)
Residential (Low Family)	Lot	13.20
Residential (Medium Density)	Dwelling Unit	5.81
Residential (High Density)	Dwelling Unit	5.81
Commercial	Gross Floor Area (m^2)	0.1373
Industrial	Utilized Area (ha)	118.990
Institutional	Gross Floor Area (m^2)	0.1570

5.3 Transportation DCC Calculation

The Transportation DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. Calculation based on a standard transportation assumption of 30% FAR. The basic calculation is shown in Equation 1.

Equation 1
Village of Cumberland
Transportation DCC Calculation

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

↓

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

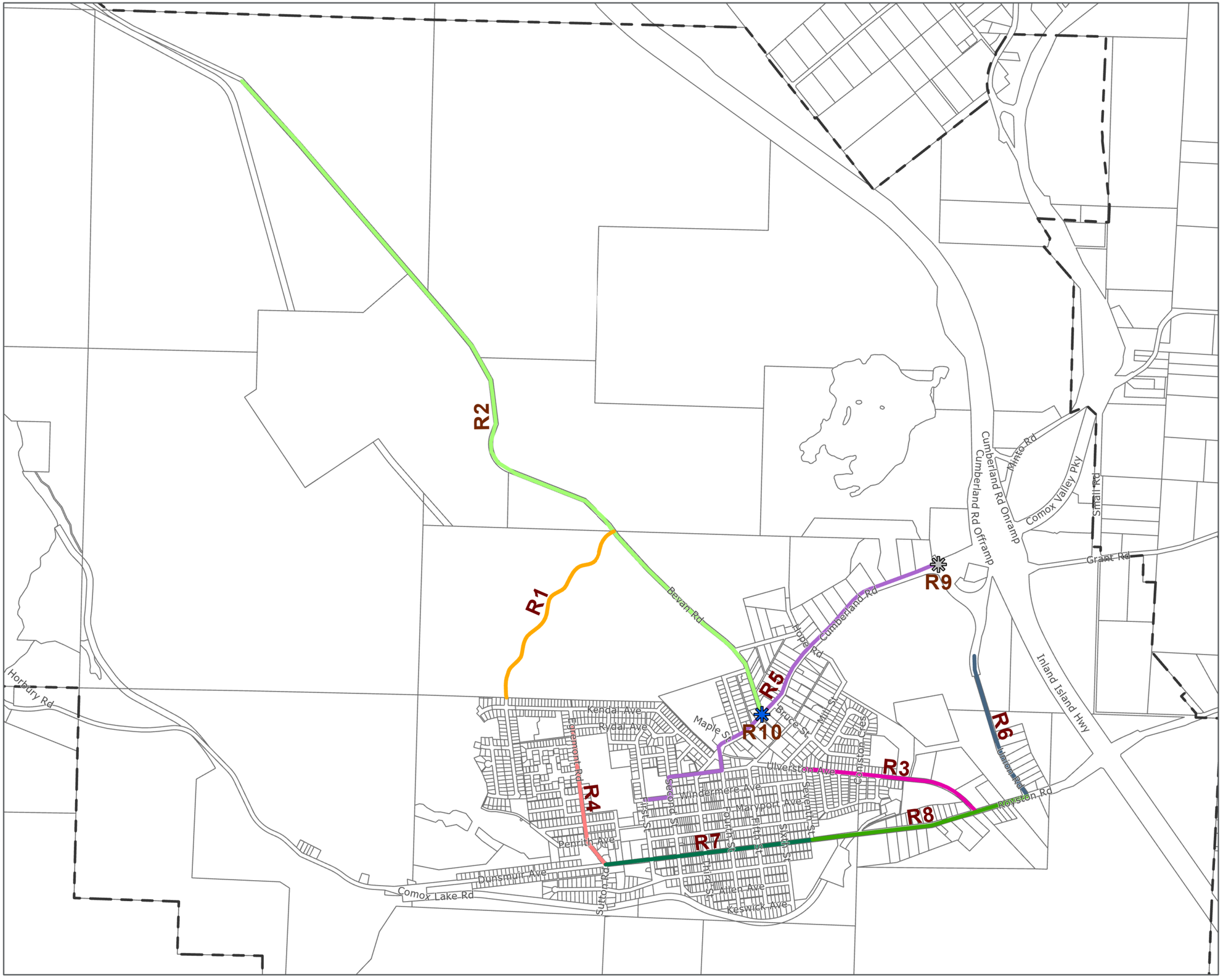
↓

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

The proposed Transportation DCC rates are shown in Table 9. The detailed Transportation DCC calculations are shown on Table 10 and Table 11.

Table 9
Village of Cumberland
Proposed Transportation DCC Rates

Land Use	DCC Rate	Unit
Residential (Low Density)	$8,007.00	per Lot
Residential (Medium Density)	$3,524.29	per Dwelling Unit
Residential (High Density)	$3,524.29	per Dwelling Unit
Commercial	$83.28	per m^2 of Gross Floor Area
Industrial	$72,178.22	per hectare of Land Utilized
Institutional	$95.23	per m^2 of Gross Floor Area



Village of Cumberland
Incorporated 1898

DCC Bylaw Review

Transportation

Legend

- Municipal Boundary
- R1
- R2
- R3
- R4
- R5
- R6
- R7
- R8
- R9
- R10

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 250 500
Metres

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:17,500
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	Final
Revision:	A
Date:	2022 / 4 / 4

URBAN systems

FIGURE 1

Table 10
Village of Cumberland
Transportation DCC Program

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
R1	Bike Lane - Bevan Rd Connector	$832,360	$0	$832,360	75%	$624,270	$6,243	$618,027	$214,333
R2	Corridor Improvement - Bevan Rd	$7,716,300	$0	$7,716,300	100%	$7,716,300	$77,163	$7,639,137	$77,163
R3	Corridor Improvement - Ulverston Ave	$1,601,000	$0	$1,601,000	60%	$960,600	$9,606	$950,994	$650,006
R4	Corridor Improvement - Egremont St. (Dunsmuir Ave. to Ulverston Ave.)	$1,224,058	$0	$1,224,058	50%	$612,029	$6,120	$605,909	$618,149
R5	Corridor Improvement - Cumberland Rd. (Union Rd. to 1st St.)	$2,895,967	$1,528,318	$1,367,648	50%	$683,824	$6,838	$676,986	$690,662
R6	Corridor Improvement - Union Rd. (Royston Rd. to 600m south of Cumberland Rd)	$1,568,000	$0	$1,568,000	60%	$940,800	$9,408	$931,392	$636,608
R7	Corridor Improvement - Dunsmuir Ave. (Egremont St. to 7th St.)	$3,408,842	$1,107,025	$2,301,817	50%	$1,150,908	$11,509	$1,139,399	$1,162,418
R8	Corridor Improvement - Dunsmuir Ave. (7th St to Union Rd.)	$2,826,000	$0	$2,826,000	50%	$1,413,000	$14,130	$1,398,870	$1,427,130
R9	Intersection Upgrade - Cumberland Rd. at Union Rd.	$1,241,890	$0	$1,241,890	100%	$1,241,890	$12,419	$1,229,471	$12,419
R10	Intersection Upgrade - Cumberland Rd. at Bevan Rd.	$1,241,890	$0	$1,241,890	100%	$1,241,890	$12,419	$1,229,471	$12,419
R11	Transportation Master Plan	$200,000	$0	$200,000	50%	$100,000	$1,000	$99,000	$101,000
		$24,756,307	**$2,635,344**	**$22,120,963**		**$16,685,512**	**$165,855**	**$16,518,657**	**$5,602,307**

Table 11
Village of Cumberland
Transportation DCC Rate Calculation

A: Transportation Generation Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Base Unit of Measurement**	**Equivalent Generation (Rate Per Base Unit)**	**Trip Ends**
Residential (Low Density)	961	dwelling / lot	13.200	12685.2
Residential (Medium Density)	321	dwelling	5.810	1865.0
Residential (High Density)	320	dwelling	5.810	1859.2
Commercial	8,000	m^2 gross floor area	0.137	1098.4
Industrial	65	ha of site utilized	118.990	7734.4
Institutional	3,800	m^2 gross floor area	0.157	596.6
			Total Trip Ends	2843.7 (a)
B: Unit Transportation DCC Calculations				
Net DCC Program Recoverable		$16,518,656.50	(b)	
Existing DCC Reserve Monies		$845,107.50	(c)	
Net Amount to be Paid by DCCs		$15,673,549.00	(d) = (b) - (c)	
DCC per Equivalent Person		$606.59	(e) = (d) / (a)	
C: Resulting Transportation DCCs				
Residential (Low Density)		**$8,007.00**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$3,524.29**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$3,524.29**	**per dwelling unit**	(e) x Col. (3)
Commercial		**$83.28**	**per m^2 gross floor area**	(e) x Col. (3)
Industrial		**$72,178.22**	**per ha of site utilized**	(e) x Col. (3)
Institutional		**$95.23**	**per m^2 gross floor area**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

PART 6. WATER DCCS

6.1 Water DCC Program

The Water DCC Program includes waterworks projects and improvements related to the distribution of water within the Village of Cumberland's boundaries. The location of the works is shown on Map 2 and summarized in Table 15. Detailed project sheets are provided in Appendix B.

Table 12
Village of Cumberland
Water DCC Program Costs

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$1,519,523	$7,518,318	$9,945,672

The total cost of the improvements is approximately $9.9 million of which approximately $7.5 million is DCC recoverable. These costs include the construction of new water infrastructure plus engineering, contingency, and project administration.

6.2 Water Demand and Calculation of Equivalent Population

The Water DCC is based on the need for additional services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands for water services. For non-residential land uses, an equivalency is used. The equivalent factors used are presented in Table 13 below. They are consistent with the equivalent factors used during the Village of Cumberland's last major DCC update in 2013.

Table 13
Village of Cumberland
Equivalent Units for Water

Land Use	Base Unit	Equivalent Population Per Base Unit
Residential (Low Density)	Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0
Commercial	Gross Floor Area (m^2)	0.013
Industrial	Utilized Area (ha)	18.0
Institutional	Gross Floor Area (m^2)	0.011

6.3 Water DCC Calculation

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

Equation 2
Village of Cumberland
Water DCC Calculation

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

↓

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

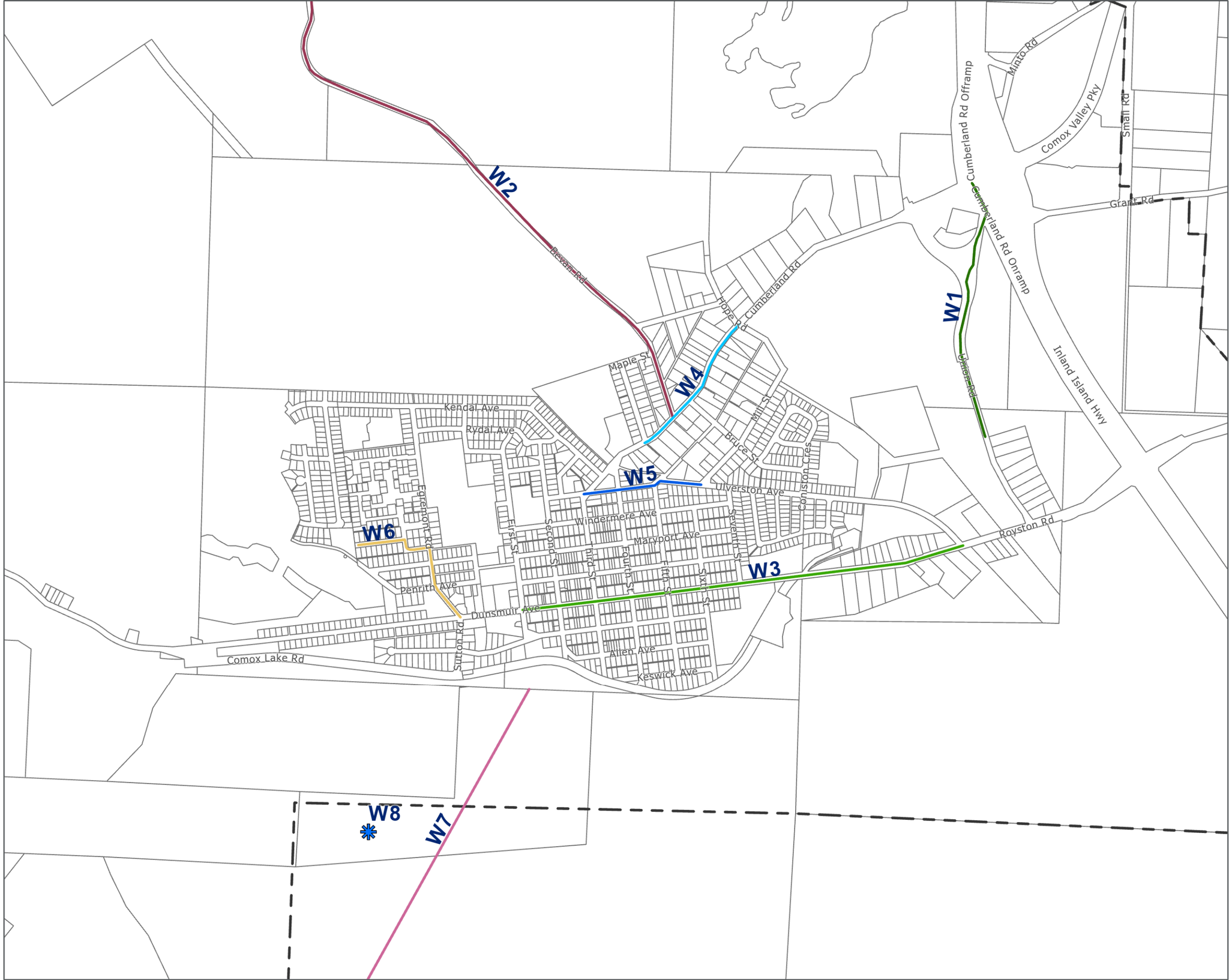
↓

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

The proposed Water DCC rates are shown in Table 14. The detailed Water DCC calculations are shown on Table 15 and Table 16.

Table 14
Village of Cumberland
Proposed Water DCC Rates

Land Use	DCC Rate	Unit
Residential (Low Density)	$3,725.07	per Lot
Residential (Medium Density)	$3,004.09	per Dwelling Unit
Residential (High Density)	$2,403.27	per Dwelling Unit
Commercial	$15.62	per m^2 of Gross Floor Area
Industrial	$21,629.46	per hectare of Land Utilized
Institutional	$13.22	per m^2 of Gross Floor Area



Village of Cumberland
incorporated 1898

DCC Bylaw Review

Water Projects

Legend

- Municipal Boundary
- W1
- W2
- W3
- W4
- W5
- W6
- W7
- W8

0 100 200 300
Meters

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:13,000
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	**Final**
Revision:	A
Date:	2022 / 2 / 10

URBAN systems

FIGURE 2

Table 15
Village of Cumberland
Water DCC Rate Calculation

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	Description	Total Cost Estimate	Grants Amount	Village Cost	Benefit Factor	Benefit to New Development	Municipal Assist Factor (1%)	DCC Recoverable	Total Municipal Responsibility
W1	Watermain Looping - Union Rd. (Cumberland Rd. to North of Royston Rd.)	$764,400	$0	$764,400	100%	$764,400	$7,644	$756,756	$7,644
W2	New Watermain - Bevan Rd. (Cumberland Rd. to 1500m North of Landfill)	$2,842,000	$0	$2,842,000	100%	$2,842,000	$28,420	$2,813,580	$28,420
W3	Watermain Upgrade - Dunsmuir Ave. (1st St. to Ulverston Ave)	$3,157,661	$738,017	$2,419,645	75%	$1,814,733	$18,147	$1,796,586	$623,058
W4	Watermain Upgrade - Cumberland Rd. (Primrose St. to Hope Rd.)	$405,610	$169,813	$235,797	85%	$200,427	$2,004	$198,423	$37,374
W5	Watermain Upgrade - Ulverston Ave. (3rd St. to Mill St.)	$344,700	$0	$344,700	50%	$172,350	$1,724	$170,627	$174,074
W6	Watermain Upgrade - Windermere Ave. (Egremont St. to 2592 Windermere Ave.)	$332,300	$0	$332,300	50%	$166,150	$1,662	$164,489	$167,812
W7	Main Water Supply Main Upgrade	$1,949,000	$0	$1,949,000	80%	$1,559,200	$15,592	$1,543,608	$405,392
W8	Water Master Plan	$150,000	$0	$150,000	50%	$75,000	$750	$74,250	$75,750
		$9,945,672	**$907,830**	**$9,037,842**		**$7,594,261**	**$75,943**	**$7,518,318**	**$1,519,523**

Table 16
Village of Cumberland
Water DCC Rate Calculation

A: Water Generation Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Base Unit of Measurement**	**Equivalent Generation (People Per Base Unit)**	**Equivalent Population**
Residential (Low Density)	961	dwelling / lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m^2 gross floor area	0.013	104.0
Industrial	65	ha of site utilized	18.0	1170.0
Institutional	3,800	m^2 gross floor area	0.011	41.8
			Total Equivalent Population	5737.4 (a)
B: Unit Water DCC Calculations				
Net DCC Program Recoverable		$7,518,318.36	(b)	
Existing DCC Reserve Monies		$624,048.01	(c)	
Net Amount to be Paid by DCCs		$6,894,270.35	(d) = (b) - (c)	
DCC per Equivalent Person		$1,201.64	(e) = (d) / (a)	
C: Resulting Water DCCs				
Residential (Low Density)		**$3,725.07**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$3,004.09**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$2,403.27**	**per dwelling unit**	(e) x Col. (3)
Commercial		**$15.62**	**per m^2 gross floor area**	(e) x Col. (3)
Industrial		**$21,629.46**	**per ha of site utilized**	(e) x Col. (3)
Institutional		**$13.22**	**per m^2 gross floor area**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

PART 7. SANITARY SEWER DCCS

7.1 Sanitary Sewer DCC Program

The Sanitary Sewer DCC Program incorporates sanitary sewer projects and improvements related to the collection of wastewater. This includes two separate DCC areas, one Village-Wide DCC area and one area-specific DCC referred to as the Village-Core DCC. DCCs are calculated in the respective areas to ensure developments are not being charged for works that will not benefit them. The map in Appendix A shows the location of the Village-Core DCCs and the Village-Wide DCCs and the projects are shown on Map 3 and summarized in Table 22 and Table 23. Detailed project sheets are provided in Appendix B.[1]

Table 17
Village of Cumberland
Sanitary Sewer DCC Program Costs (Village-Wide)

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$4,368,250	$4,281,750	$16,150,000

For the Village-Wide DCC, the total cost of the improvements is approximately $16.2 million of which approximately $4.2 million is DCC recoverable. These costs include the construction of a new sewage treatment plant and the creation of a sanitary sewer master plan plus engineering, contingency, and project administration where applicable.

Table 18
Village of Cumberland
Sanitary Sewer DCC Program Costs (Village-Core)

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$4,435,180	$10,907,820	$22,843,000

For the Village-Core DCC, the total cost of the improvements is approximately $22.8 million of which approximately $10.9 million is DCC recoverable. These costs include the construction of new sewer infrastructure plus engineering, contingency, and project administration.

[1] Note that the Village-Wide DCC program includes 2 out of the 4 sanitary sewer projects and the Village-Core DCC includes all 4 sanitary sewer projects

7.2 Sanitary Sewer Demand and Calculation of Equivalent Population

The sanitary sewer DCC is based on the need for additional services to meet the demands of population growth. For residential demand, occupancy rates can be used to project demands for sanitary sewer services. For non-residential land uses, an equivalency is used. The equivalent factors used are presented in Table 19 below. They are consistent with the equivalent factors used during the Village of Cumberland's last major DCC update in 2013.

Table 19
Village of Cumberland
Equivalent Units for Sanitary Sewer

Land Use	Base Unit	Equivalent Population Per Base Unit
Residential (Low Density)	Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0
Commercial	Gross Floor Area (m^2)	0.013
Industrial	Utilized Area (ha)	18.0
Institutional	Gross Floor Area (m^2)	0.011

7.3 Sanitary Sewer DCC Calculation

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

Equation 3
Village of Cumberland
Sanitary Sewer DCC Calculation

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

↓

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

↓

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

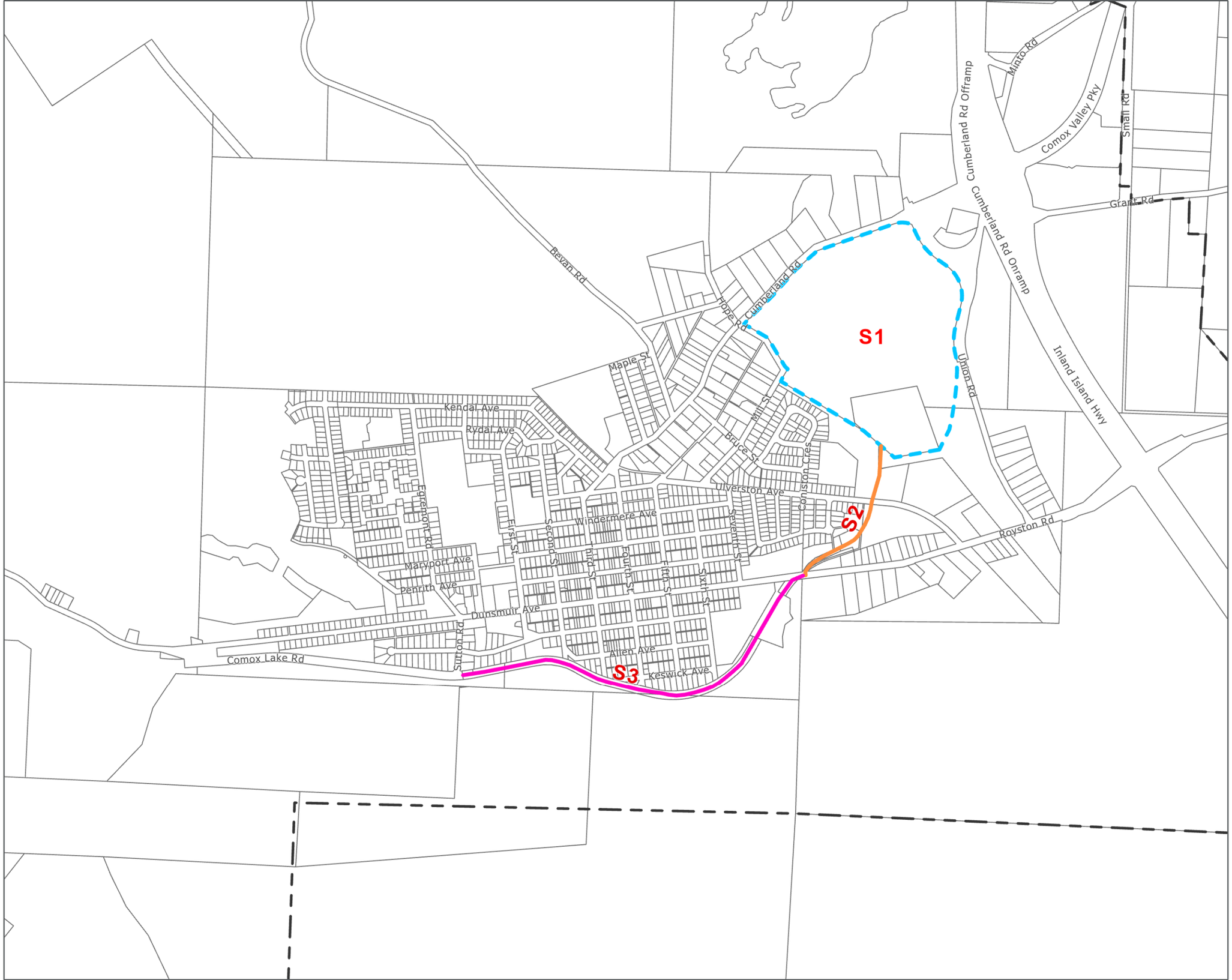
The proposed Sanitary Sewer DCC rates are shown in Table 20 and Table 21. The detailed Sanitary Sewer DCC calculations are shown on Tables 22 to 25.

Table 20
Village of Cumberland
Proposed Sanitary Sewer DCC Rates (Village-Wide)

Land Use	DCC Rate	Unit
Residential (Low Density)	$1,295.73	per Lot
Residential (Medium Density)	$1,044.94	per Dwelling Unit
Residential (High Density)	$835.95	per Dwelling Unit
Commercial	$5.43	per m^2 of Gross Floor Area
Industrial	$7,523.57	per hectare of Land Utilized
Institutional	$4.60	per m^2 of Gross Floor Area

Table 21
Village of Cumberland
Proposed Sanitary Sewer DCC Rates (Village-Core)

Land Use	DCC Rate	Unit
Residential (Low Density)	$5,640.17	per Lot
Residential (Medium Density)	$4,548.52	per Dwelling Unit
Residential (High Density)	$3,638.82	per Dwelling Unit
Commercial	$23.65	per m^2 of Gross Floor Area
Industrial	$32,749.35	per hectare of Land Utilized
Institutional	$20.01	per m^2 of Gross Floor Area



Village of Cumberland
incorporated 1898

DCC Bylaw Review

Sanitary Projects

Legend

- Municipal Boundary
- S1
- S2
- S3

0 100 200 300
Meters

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:13,000
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	**Final**
Revision:	A
Date:	2022 / 2 / 10

URBAN systems

FIGURE 3

Table 22
Village of Cumberland
Sanitary Sewer DCC Program (Village-Wide)

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	**Description**	**Total Cost Estimate**	**Grants Amount**	**Village Cost**	**Benefit Factor**	**Benefit to New Development**	**Municipal Assist Factor (1%)**	**DCC Recoverable**	**Total Municipal Responsibility**
S1	Sewage Treatment Plant Upgrades (additional population)	$16,000,000	$7,500,000	$8,500,000	50%	$4,250,000	$42,500	$4,207,500	$4,292,500
S4	Sanitary Sewer Master Plan	$150,000	$0	$150,000	50%	$75,000	$750	$74,250	$75,750
		$16,150,000	**$7,500,000**	**$8,650,000**		**$4,325,000**	**$43,250**	**$4,281,750**	**$4,368,250**

Table 23
Village of Cumberland
Sanitary Sewer DCC Program (Village-Core)

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	**Description**	**Total Cost Estimate**	**Grants Amount**	**Village Cost**	**Benefit Factor**	**Benefit to New Development**	**Municipal Assist Factor (1%)**	**DCC Recoverable**	**Total Municipal Responsibility**
S1	Sewage Treatment (additional population)	$16,000,000	$7,500,000	$8,500,000	50%	$4,250,000	$42,500	$4,207,500	$4,292,500
S2	Trunk Upgrade - Dunsmuir Ave. to Lagoon (700m of 900mm)	$1,957,000	$0	$1,957,000	100%	$1,957,000	$19,570	$1,937,430	$19,570
S3	Trunk Upgrade - Sutton Rd. to Dunsmuir Ave. (Twinning)	$4,736,000	$0	$4,736,000	100%	$4,736,000	$47,360	$4,688,640	$47,360
S4	Sanitary Sewer Master Plan	$150,000	$0	$150,000	50%	$75,000	$750	$74,250	$75,750
		$22,843,000	**$7,500,000**	**$15,343,000**		**$11,018,000**	**$110,180**	**$10,907,820**	**$4,435,180**

Table 24
Village of Cumberland
Sanitary Sewer DCC Rate Calculation (Village-Wide)

A: Sanitary Sewer Generation Calculation				
Land Use	Col. (1) Estimated New Development	Col. (2) Base Unit of Measurement	Col. (3) Equivalent Generation (People Per Base Unit)	Col. (4) = (1) x (3) Equivalent Population
Residential (Low Density)	961	dwelling / lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m^2 gross floor area	0.013	104.0
Industrial	65	ha of site utilized	18.0	1170.0
Institutional	3,800	m^2 gross floor area	0.011	41.8
			Total Equivalent Population	5737.4 (a)
B: Unit Sanitary Sewer DCC Calculations				
Net DCC Program Recoverable		$4,688,640.00	(b)	
Existing DCC Reserve Monies[2]		$2,290,542.36	(c)	
Net Amount to be Paid by DCCs		$2,398,097.64	(d) = (b) - (c)	
DCC per Equivalent Person		$417.98	(e) = (d) / (a)	
C: Resulting Sanitary Sewer DCCs				
Residential (Low Density)		**$1,295.73**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$1,044.94**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$835.95**	**per dwelling unit**	(e) x Col. (3)
Commercial		**$5.43**	**per m^2 gross floor area**	(e) x Col. (3)
Industrial		**$7,523.57**	**per ha of site utilized**	(e) x Col. (3)
Institutional		**$4.60**	**per m^2 gross floor area**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

[2] Accounts for 83% of existing sanitary sewer DCC reserves. In previous DCC program, projects considered Village-Wide accounted for approximately 83% of the sanitary sewer DCC program.

Table 25
Village of Cumberland
Sanitary Sewer DCC Rate Calculation (Village-Core)

A: Sanitary Sewer Generation Calculation				
Land Use	**Col. (1)** **Estimated New Development**	**Col. (2)** **Base Unit of Measurement**	**Col. (3)** **Equivalent Generation (People Per Base Unit)**	**Col. (4) = (1) x (3)** **Equivalent Population**
Residential (Low Density)	961	dwelling / lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
Commercial	8,000	m^2 gross floor area	0.013	104.0
Industrial	65	ha of site utilized	18.0	1170.0
Institutional	3,800	m^2 gross floor area	0.011	41.8
			Total Equivalent Population	5737.4 (a)
B: Unit Sanitary Sewer DCC Calculations				
Net DCC Program Recoverable		$10,907,820.00	(b)	
Existing DCC Reserve Monies[3]		$469,147.23	(c)	
Net Amount to be Paid by DCCs		$10,438,672.77	(d) = (b) - (c)	
DCC per Equivalent Person		$1,819.41	(e) = (d) / (a)	
C: Resulting Sanitary Sewer DCCs				
Residential (Low Density)		**$5,640.17**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$4,548.52**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$3,638.82**	**per dwelling unit**	(e) x Col. (3)
Commercial		**$23.65**	**per m^2 gross floor area**	(e) x Col. (3)
Industrial		**$32,749.35**	**per ha of site utilized**	(e) x Col. (3)
Institutional		**$20.01**	**per m^2 gross floor area**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

[3] Accounts for 17% of existing sanitary sewer DCC reserves. In previous DCC program, projects within the Village-Core area (shown in Appendix A) accounted for approximately 17% of the sanitary sewer DCC program.

PART 8. STORM DRAINAGE DCCS

8.1 Storm Drainage DCC Program and Rates

The storm drainage DCC program is comprised of drainage facilities, including piping and detention ponds. The location of the works is shown on Map 4 and summarized in Table 29. Detailed project sheets are provided in Appendix B.

Table 26
Village of Cumberland
Storm Drainage DCC Program Costs

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$1,298,472	$6,157,883	$7,456,355

The total cost of the improvements is approximately $7.4 million of which approximately $6.1 million is DCC recoverable. These costs include the construction of new storm drainage infrastructure plus engineering, contingency, and project administration.

8.2 Calculation of Equivalent Units for Storm Drainage

In general terms, the impact on the storm drainage system of developing a parcel of land is expressed as the amount of stormwater run-off that must be accommodated by the system. The accepted parameter for expressing imperviousness in stormwater run-off calculations is the “run-off coefficient”. Generally speaking, the run-off coefficient reflects the ratio between the impervious area on a parcel and the total area of the parcel. Run-off coefficients are then used to determine equivalency factors necessary to develop Equivalent Storm Drainage Units (EDUs), the basis for calculating storm drainage DCCs. The equivalent factors used are presented in Table 27 below. They are consistent with the equivalent factors used in the provincial DCC Best Practices Guide. They are also consistent with the equivalent factors used during the Village of Cumberland’s last major DCC update in 2013.

Table 27
Village of Cumberland
Equivalent Units for Storm Drainage

Land Use	Base Unit	Equivalent Storm drainage Unit Per Base Unit
Residential (Low Density)	Lot	1114.0
Residential (Medium Density)	Dwelling Unit	75.6
Residential (High Density)	Dwelling Unit	45.9
Commercial	Gross Floor Area (m^2)	25.6
Industrial	Utilized Area (ha)	1462.5
Institutional	Gross Floor Area (m^2)	11.4

8.3 Storm Drainage DCC Calculation

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

Equation 4
Village of Cumberland
Storm Drainage DCC Calculation

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

↓

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

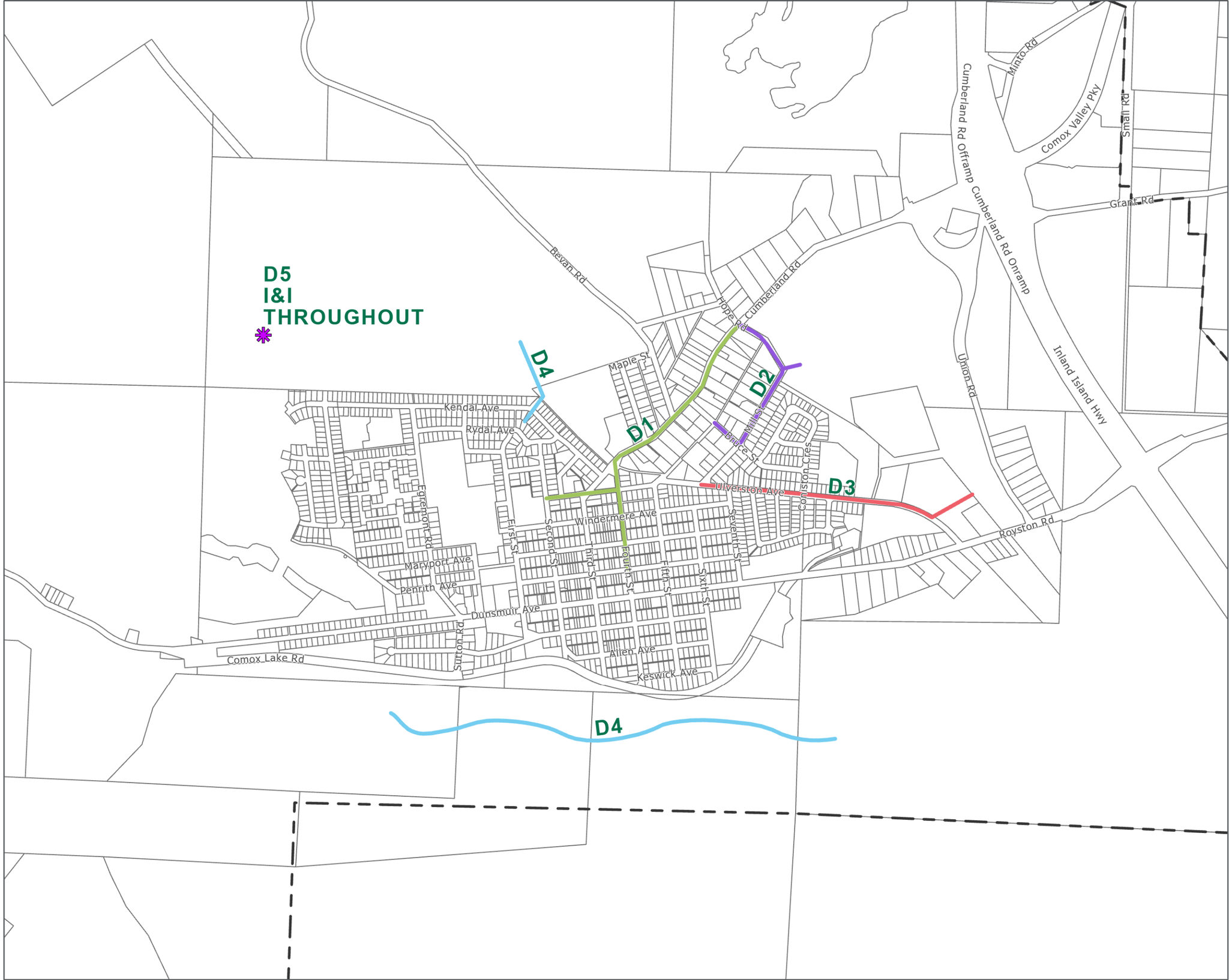
↓

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

The proposed Storm drainage DCC rates are shown in Table 28. The detailed Storm Drainage DCC calculations are shown on Table 29 and Table 30.

Table 28
Village of Cumberland
Proposed Storm Drainage DCC Rates

Land Use	DCC Rate	Unit
Residential (Low Density)	$2,178.74	per Lot
Residential (Medium Density)	$1,176.52	per Dwelling Unit
Residential (High Density)	$718.98	per Dwelling Unit
Commercial	$6.97	per m^2 of Gross Floor Area
Industrial	$49,021.60	per hectare of Land Utilized
Institutional	$6.54	per m^2 of Gross Floor Area



Village of Cumberland
incorporated 1898

DCC Bylaw Review
Drainage Projects

Legend

- Municipal Boundary
- D1
- D2
- D3
- D4
- D5

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 100 200 300
Meters

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:13,000
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	**Final**
Revision:	A
Date:	2022 / 2 / 10

URBAN systems

FIGURE 4

Table 29
Village of Cumberland
Storm Drainage DCC Program

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	**Description**	**Total Cost Estimate**	**Grants Amount**	**Village Cost**	**Benefit Factor**	**Benefit to New Development**	**Municipal Assist Factor (1%)**	**DCC Recoverable**	**Total Municipal Responsibility**
D1	Drainage Corridor Improvement - Cumberland Rd.	$1,573,216	$0	$1,573,216	80%	$1,258,573	$12,586	$1,245,987	$327,229
D2	Drainage Corridor Improvement - Mill St.	$674,800	$0	$674,800	80%	$539,840	$5,398	$534,442	$140,358
D3	Drainage Corridor Improvement - Ulverston Ave.	$955,320	$0	$955,320	80%	$764,256	$7,643	$756,613	$198,707
D4	South Cumberland Discharge Area Improvements	$2,603,019	$0	$2,603,019	80%	$2,082,415	$20,824	$2,061,591	$541,428
D5	I&I Improvements	$1,500,000	$0	$1,500,000	100%	$1,500,000	$15,000	$1,485,000	$15,000
D6	Storm Drainage Master Plan	$150,000	$0	$150,000	50%	$75,000	$750	$74,250	$75,750
		$7,456,355	**$0**	**$7,456,355**		**$6,220,084**	**$62,201**	**$6,157,883**	**$1,298,472**

Table 30
Village of Cumberland
Storm Drainage DCC Rate Calculation

A: Storm Drainage Generation Calculation				
Land Use	**Col. (1)**	**Col. (2)**	**Col. (3)**	**Col. (4) = (1) x (3)**
	Estimated New Development	**Base Unit of Measurement**	**Equivalence Factor**	**Equivalent Drainage Units**
Residential (Low Density)	961	dwelling / lot	1.0	961.0
Residential (Medium Density)	321	dwelling	0.54	173.3
Residential (High Density)	320	dwelling	0.33	105.6
Commercial	8,000	m^2 gross floor area	0.0032	25.6
Industrial	65	ha of site utilized	22.5	1462.5
Institutional	3,800	m^2 gross floor area	0.003	11.4
			Total Equivalent Population	2739.4 (a)
B: Unit Storm Drainage DCC Calculations				
Net DCC Program Recoverable		$6,157,883.16	(b)	
Existing DCC Reserve Monies		$189,361.20	(c)	
Net Amount to be Paid by DCCs		$5,968,521.96	(d) = (b) - (c)	
DCC per Equivalent Person		$2,178.74	(e) = (d) / (a)	
C: Resulting Storm Drainage DCCs				
Residential (Low Density)		**$2,178.74**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$1,176.52**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$718.98**	**per dwelling unit**	(e) x Col. (3)
Commercial		**$6.97**	**per m^2 gross floor area**	(e) x Col. (3)
Industrial		**$49,021.60**	**per ha of site utilized**	(e) x Col. (3)
Institutional		**$6.54**	**per m^2 gross floor area**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

PART 9. PARK DCCS

9.1 Park DCC Program and Rates

The Park DCC program is comprised of park land acquisition and park land development projects, including playgrounds and trails. The location of the works are shown on Map 5 and summarized in Table 34. Detailed project sheets are provided in Appendix B.

Table 31
Village of Cumberland
Park DCC Program Costs

Municipal Costs	DCC Recoverable Program Costs	Total Capital Costs
$2,258,039	$2,213,325	$4,471,365

The total cost of the improvements is approximately $4.4 million, of which approximately $2.2 million is DCC recoverable. No external funding is expected. These costs include the acquisition and development of park land plus planning, engineering, contingency, and project administration.

9.2 Calculation of Equivalent Units for Parks

Equivalent park and open space units are similar to those used for sanitary sewer and water DCC calculations. There is not contribution for commercial or industrial categories in accordance with the Provincial *DCC Best Practices Guide*. Equivalencies are show in Table 32.

Table 32
Village of Cumberland
Equivalent Units for Park

Land Use	Base Unit	Equivalent Park and Open Space Unit Per Base Unit
Residential (Low Density)	Dwelling Unit/Lot	3.1
Residential (Medium Density)	Dwelling Unit	2.5
Residential (High Density)	Dwelling Unit	2.0

9.3 Park DCC Calculation

The Park DCC rates have been calculated according to the various principles and assumptions discussed earlier in this report. The basic calculation is shown in Equation 5.

Equation 5
Village of Cumberland
Park DCC Calculation

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

↓

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

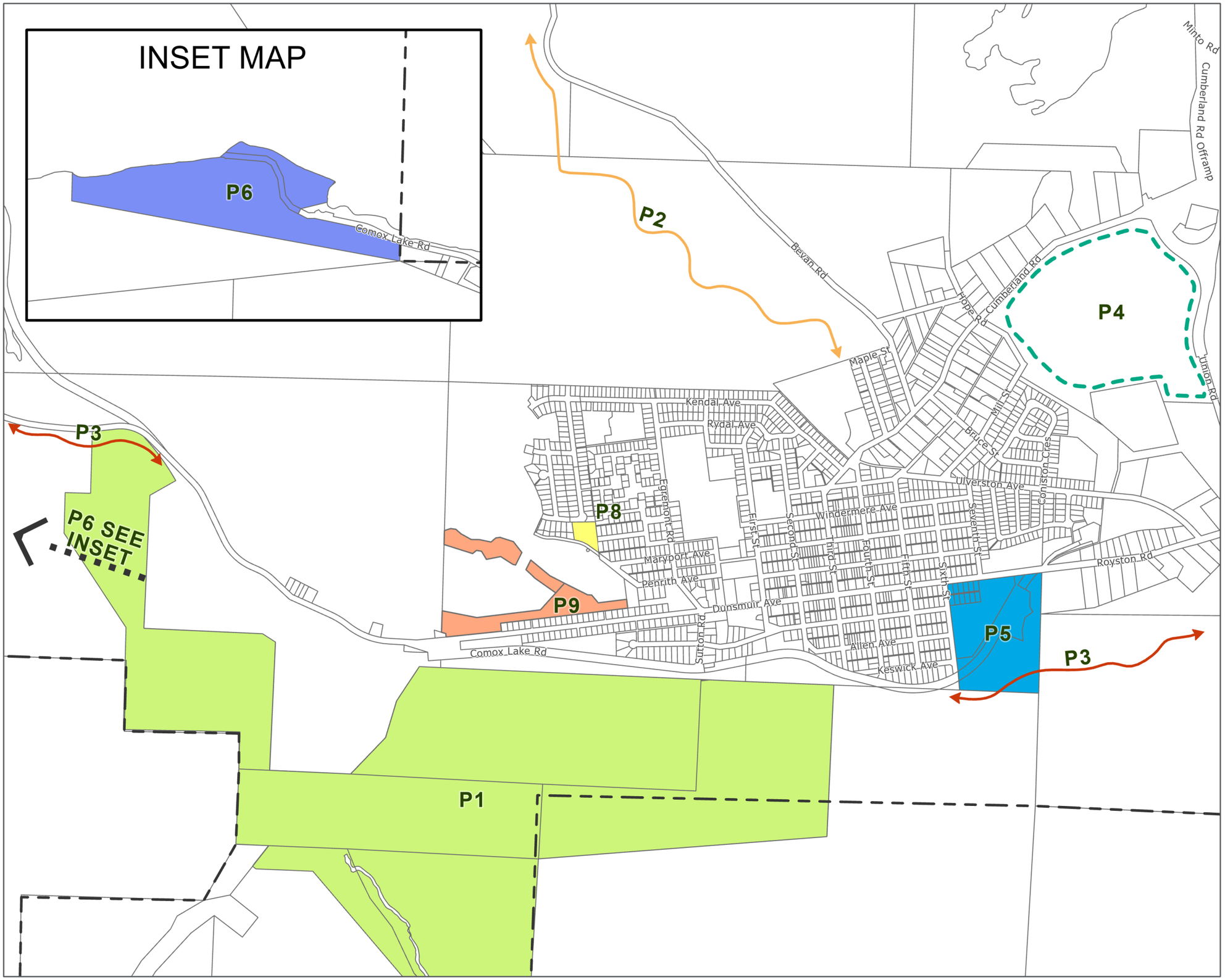
↓

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

The proposed Park DCC rates are shown in Table 33. The detailed Park DCC calculations are shown on Table 34 and Table 35.

Table 33
Village of Cumberland
Proposed Park DCC Rates

Land Use	DCC Rate	Unit
Residential (Low Density)	$1,032.51	per Lot
Residential (Medium Density)	$832.67	per Dwelling Unit
Residential (High Density)	$666.13	per Dwelling Unit



U:\Projects_VIC\3332\0006\01\D-Design\GIS\Projects\Pro_Projects\3332.0006.01 RevC.aprx\Parks

Village of Cumberland
Incorporated 1898

DCC Bylaw Review
Parks Projects

Legend

- Municipal Boundary
- P1
- P2
- P3
- P4
- P5
- P6
- P8
- P9

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 100 200 300
Metres

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:13,000
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN
- Park boundaries were digitized from the Parks map at cumberland.ca

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	Final
Revision:	A
Date:	2022 / 4 / 14

URBAN systems

FIGURE 5

Table 34
Village of Cumberland
Park DCC Program

		Col. (1)	Col. (2)	Col. (3)	Col. (4)	Col. (5) = (3) x (4)	Col. (6) = (5) x 0.01	Col. (7) = (5) - (6)	Col. (8) = (3) - (7)
Project No.	**Description**	**Total Cost Estimate**	**Grants Amount**	**Village Cost**	**Benefit Factor**	**Benefit to New Development**	**Municipal Assist Factor (1%)**	**DCC Recoverable**	**Total Municipal Responsibility**
P1	Community Forest Expansion (Acquisition and Improvement)	$931,027	$0	$931,027	50%	$465,514	$4,655	$460,858	$470,169
P2	North Wellington Colliery (Acquisition and Improvement)	$888,800	$0	$888,800	50%	$444,400	$4,444	$439,956	$448,844
P3	South Wellington Colliery (Acquisition and Improvement)	$1,199,600	$0	$1,199,600	50%	$599,800	$5,998	$593,802	$605,798
P4	Lagoon Greenway (Improvement)	$426,938	$0	$426,938	50%	$213,469	$2,135	$211,334	$215,603
P5	Village Park (Improvement)	$600,000	$0	$600,000	50%	$300,000	$3,000	$297,000	$303,000
P6	Cumberland Lake Park (Improvement)	$100,000	$0	$100,000	50%	$50,000	$500	$49,500	$50,500
P7	Parks Master Plan	$100,000	$0	$100,000	50%	$50,000	$500	$49,500	$50,500
P8	Solport Park (Improvement)	$125,000	$0	$125,000	50%	$62,500	$625	$61,875	$63,125
P9	Camp Road Greenway (Improvement)	$100,000	$0	$100,000	50%	$50,000	$500	$49,500	$50,500
		$4,471,365	**$0**	**$4,471,365**		**$2,235,682**	**$22,357**	**$2,213,325**	**$2,258,039**

Table 35
Village of Cumberland
Park DCC Rate Calculation

A: Parks Generation Calculation				
Land Use	Col. (1)	Col. (2)	Col. (3)	Col. (4) = (1) x (3)
	Estimated New Development	Base Unit of Measurement	Equivalence Factor (People Per Base Unit)	Equivalent Population
Residential (Low Density)	961	dwelling / lot	3.1	2979.1
Residential (Medium Density)	321	dwelling	2.5	802.5
Residential (High Density)	320	dwelling	2.0	640.0
			Total Equivalent Population	4421.6 (a)
B: Unit Parks DCC Calculations				
Net DCC Program Recoverable		$2,213,325.43	(b)	
Existing DCC Reserve Monies		$740,640.06	(c)	
Net Amount to be Paid by DCCs		$1,472,685.37	(d) = (b) - (c)	
DCC per Equivalent Person		$333.07	(e) = (d) / (a)	
C: Resulting Parks DCCs				
Residential (Low Density)		**$1,032.51**	**per dwelling unit / lot**	(e) x Col. (3)
Residential (Medium Density)		**$832.67**	**per dwelling unit**	(e) x Col. (3)
Residential (High Density)		**$666.13**	**per dwelling unit**	(e) x Col. (3)

Note: *Figures may not add up perfectly due to rounding*

PART 10.DCC RATES & IMPLEMENTATION

10.1 Summary of Proposed DCC Rates

Table 36 (next page) summarizes the proposed Village of Cumberland DCC rates.

10.2 Bylaw Exemptions

The *Local Government Act* is quite clear that a DCC cannot be levied if the proposed development does not impose new capital cost burdens on the Village, or if a DCC has already been paid in regard to the same development. However, if additions to the development create a new capital cost burden or use up the capacity of existing infrastructure, DCCs can be levied for the additional costs.

The *Local Government Act* further restricts the levying of the DCC at the time of application for a Building Permit if:

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

Recent changes to the legislation allow local governments to charge DCCs on residential developments of four units or less, as long as such a charge is provided for in the local government's DCC Bylaw. To enact this approach, the DCC Bylaw must include a specific provision; which the current DCC Bylaw does include.

In addition, Bill 27, as discussed in Part 1.3, has given local governments the discretionary authority to waive or reduce DCCs for certain types of development to promote affordable housing and low impact development. Under this new legislation, the Village of Cumberland will have to adopt a Bylaw to waive or reduce DCCs for not-for-profit rental housing. At this time, the Village is not going to waive or reduce DCCs for these types of development.

10.3 Collection of Charges – Building Permit and Subdivision

Municipalities can choose to collect DCCs at subdivision approval or Building Permit issuance. The Village of Cumberland will collect DCCs for detached single family residential dwellings at subdivision approval. Collecting DCCs for single-family residential developments early on at the subdivision approval stage will ensure timely provision of infrastructure and services.

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

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

Table 36
Village of Cumberland
Proposed DCC Rate Summary

Land Use	Transportation	Water	Sanitary Sewer (Village-Wide)	Sanitary Sewer (Village-Core)	Storm Drainage	Parks	Total
Low Density Residential (per dwelling unit / lot)	$8,007.00	$3,725.07	$1,296.73	$5,640.17	$2,178.74	$1,032.51	$21,879.21
Medium Density Residential (per dwelling unit)	$3,524.29	$3,004.09	$1,044.95	$4,548.52	$1,176.52	$832.67	$14,131.03
High Density Residential (per dwelling unit)	$3,524.29	$2,403.27	$835.95	$3,638.82	$718.98	$666.13	$11,737.07
Commercial (per m^2 of gross floor area)	$83.28	$15.62	$5.43	$23.65	$6.97	--	$134.96
Industrial (per ha of site utilized)	$72,178.22	$21,629.46	$7,523.57	$32,749.35	$49,021.60	--	$183,102.20
Institutional (per m^2 of gross floor area)	$95.23	$13.22	$4.60	$20.01	$6.54	--	$139.60

10.4 Collection of DCCs on Redeveloped or Expanded Developments

When an existing building or development undergoes an expansion or redevelopment, there is usually a need for additional DCC related engineering services. The new developer/ builder should pay the applicable DCCs based on the additional floor area for commercial land uses and additional developed area for industrial land uses at the DCC rates in the current DCC Bylaw. In essence, the Village is giving a DCC credit for the existing development or building. DCCs are only levied on the new development/ building area.

10.5 In-Stream Applications and Grace Periods

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

Effective January 1, 2011, Building Permits are also given the same in-stream exemptions as subdivision applications under the *LGA*. Complete Building Permit applications will also be exempt from any increase in DCCs for one year from the date of implementation of the new DCC Bylaw. In 2014, this in-stream exemption was further extended to include rezoning and development permit applications that have been submitted to a local government (in a form acceptable to the local government and fees paid).

The Village has not considered introducing a grace period in the new DCC Bylaw at this time. If no grace period is included once the proposed DCC Bylaw has been given the fourth and final reading, the proposed DCC rates will be in effect. The *Local Government Act* requirements will apply.

10.6 DCC Rebates and Credits

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

The Village should establish a policy or practice to guide staff in the collection of DCCs and the use of DCC credits. There may be situations in which it is not in the best interests of the Village to allow an owner to build DCC services outside of their subdivision or development. Building

such services may start or accelerate development in areas in which the Village is not prepared to support.

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

10.7 DCC Monitoring and Accounting

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

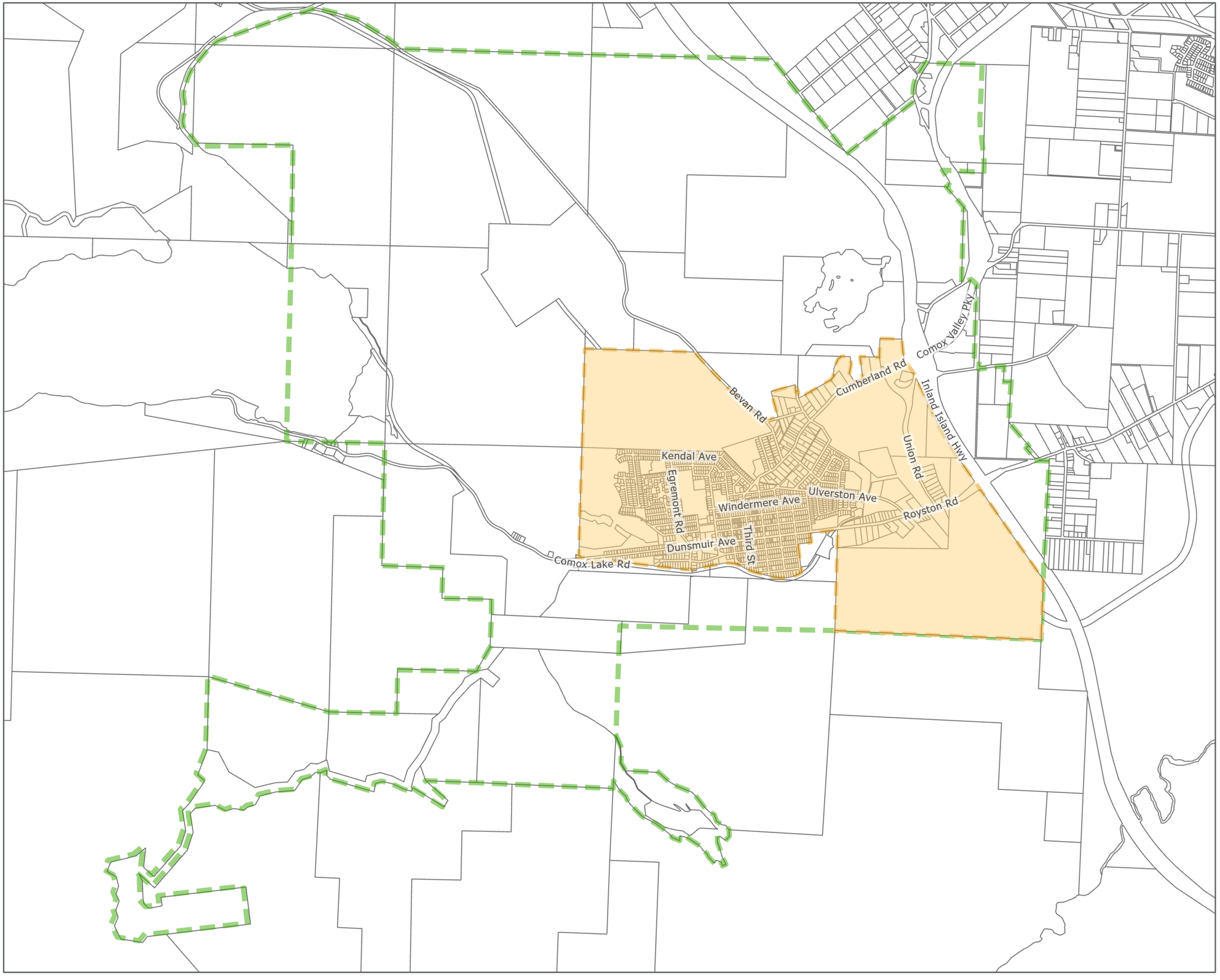
10.8 DCC Reviews

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

Major amendments of the DCC program and rates will occur when significant land use changes are made, when new servicing plans are prepared or when the information upon which the DCCs are calculated has become significantly outdated or requires significant revision. Based on experience, a major amendment to the DCC program and rates is needed every 2 to 5 years.

APPENDIX A

Sanitary Sewer DCC Areas Map



Village of Cumberland
Incorporated 1898

DCC Bylaw Review

Sanitary Sewer DCC Areas Map

Legend

- Village-Wide DCC Area (Municipal Boundary)
- Village Core DCC Area

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 250 500 750
Metres

N

Coordinate System:
NAD 1983 UTM Zone 10N

Scale: 1:30,000
(When plotted at 11"x17")

Data Sources:

- Data provided by ParcelMap BC, DataBC, NRCAN

Project #:	3332.0006.01
Author:	AK/OS
Checked:	ZH/JH
Status:	**Final**
Revision:	A
Date:	2022 / 4 / 7

URBAN systems

FIGURE 6

APPENDIX B

DCC Project Details

Bike Lane – Bevan Road Connector (R1)

Project Description

A paved bike trail that will connect new developments to the existing Village.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	$832,360
Total		$832,360

Benefits in Doing This Work

- Increased connectivity within Village's active transportation network
- Increased ability to accommodate cyclists and other forms of active transportation
- Reduction in vehicle traffic on roads due to increased levels of cycling and other forms of active transportation
- Improved safety

Estimated Allocation of Costs

New Development: 75%
Existing Users: 25%

Project Location

Beginning towards the end of Kendall Road and extending North to connect with Bevan Road south of the landfill entrance.

Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Corridor Improvement – Bevan Rd (R2)

Project Description

This project will provide corridor improvements to Bevan Road from Cumberland road to 1,600 m past Pidgeon Lake Road.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$7,716,000
Total		$7,716,000

Benefits in Doing This Work

- Increased capacity to accommodate vehicle traffic and other forms of transportation
- Increased access to the Bevan Road area to promote increased development
- Increased connectivity within Village's transportation network

Estimated Allocation of Costs

New Development: 100%

Existing Users: 0%

Project Location

Bevan Road beginning at Cumberland Road and extending to 1,600 m past Pidgeon Lake Road.

Comments

This is a new project that was not included in the previous DCC program. Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. Estimate includes:

1. Road widening and minor road upgrades including ditching on the existing paved portion of Bevan Road between Cumberland Road and Pidgeon Lake Road.
2. Upgraded roadway including asphalt surfacing of existing section from Pidgeon Lake Road to the end of the project.
3. Street lighting over the entirety of the project length.
4. The estimate includes 15% for Engineering and 35% for Contingency.

Corridor Improvement – Ulverston Ave. (R3)

Project Description

Upgraded road cross section and sidewalk improvements along the Ulverston Road corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$1,601,000
Total		$1,601,000

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

Estimated Allocation of Costs

New Development: 60%

Existing Users: 40%

Project Location

- Ulverston Avenue from 5th Street to Royston Road

Comments

This project represents two project segments from the previous DCC program that have been consolidated:

- Road improvement on Ulverston Avenue from the Chicane to Royston Road
- Sidewalk improvement on Ulverston Avenue from 5th Street to Royston Road

Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Corridor Improvement – Egremont St. (Dunsmuir Ave. to Ulverston Ave.) (R4)

Project Description

Upgraded road cross section and sidewalk improvements along the Egremont Street corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$1,224,058
Total		$1,224,058

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

- Egremont Street from Dunsmuir Avenue to Rydal Avenue

Comments

This project represents four project segments from the previous DCC Program that have been consolidated:

- Road Improvement – Egremont Street from Dunsmuir Avenue to Maryport Avenue
- Sidewalk Improvement – Egremont Street from Dunsmuir Avenue to Maryport Avenue
- Sidewalk Improvement – Egremont Street from Maryport Avenue to Ulverston Avenue
- Sidewalk Improvement – Egremont Street from Ulverston Avenue to Rydal Avenue

Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Corridor Improvement – Cumberland Rd. (Union Rd. to 1st St.) (R5)

Project Description

Upgraded road cross section and sidewalk improvements along the Cumberland Road corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$2,895,967
Grants Received		$1,528,318
Village Cost (i.e. less grants)		$1,367,648

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

Cumberland Road from Union Road to 4th Street.

Comments

For the most part, this is a new project that was not included in the previous DCC program. However, it also includes three relatively small project segments from the previous DCC program:

- Sidewalk along 2nd Street from Ulverston Avenue to Windermere Avenue
- Sidewalk along Windermere Avenue from 2nd Street to 1st Street
- Sidewalk along Ulverston Avenue from 4th Street to 2nd Street

Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland[1]. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

[1] This includes a portion of this project that has already been started (i.e. from Bevan Road to Lot 1 - Plan 59488 west of Union Road). The overall costs for this portion of the project is $1,986,101.65. However, it is assumed that only 90% of those overall costs are attributed to 'transportation' upgrades (i.e. DCC project R6) and the remaining 10% are attributed to 'water' upgrades (i.e. DCC project W4).

Corridor Improvement – Union Road (Royston Road to 600m south of Cumberland rd) (R6)

Project Description

Upgraded road cross section improvements along the Union Road corridor. This includes widening and re-aligning the road.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$1,568,000
Total		$1,568,000

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic
- Improved safety

Estimated Allocation of Costs

New Development: 60%

Existing Users: 40%

Project Location

Union Road from Royston Road to 600m South of Cumberland rd.

Comments

This is a new project that was not included in the previous DCC program. Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.

Corridor Improvement – Dunsmuir Ave. (Egremont St. to 7th St.) (R7)

Project Description

Upgraded road cross section and sidewalk improvements along the Dunsmuir Avenue corridor from Egremont Street to 7th Street.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$3,408,842
Grants Received		$1,107,025
Village Cost (i.e. less grants)		$2,301,817

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Dunsmuir Avenue from Egremont Street to 7th Street.

Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland[2]. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

[2] This includes a portion of this project that has already been started (i.e. between 2nd Street and 7th Street). The overall costs for this portion of the project is $3,038,903.65. However, it is assumed that only 60% of those overall costs are attributed to 'transportation' upgrades (i.e. DCC project R8). It assumed that another 40% are attributed to 'water' upgrades (i.e. DCC project W3).

Corridor Improvement – Dunsmuir Avenue (7th St. to Union Road) (R8)

Project Description

Upgraded road cross section and sidewalk improvements along the Dunsmuir Avenue corridor from 7th St. to Union Road.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$2,826,000
Total		$2,826,000

Benefits in Doing This Work

- Increased connectivity within Village's transportation network
- Improved capacity to accommodate new vehicle traffic, pedestrian movements, and various forms of active transportation (e.g. cycling)
- Improved safety

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Dunsmuir Avenue from 7th St. to Union Road.

Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Intersection Upgrade – Cumberland Rd. at Union Rd. (R9)

Project Description

Intersection upgrades. This includes improved alignments and new traffic signals.

Project Timing	Priority Level	Cost of Work
10 to 20	Low	$1,241,890
Total		$1,241,890

Benefits in Doing This Work

- Improved traffic flow
- Improved capacity and access to accommodate new developments
- Improved safety

Estimated Allocation of Costs

New Development: 100%

Existing Users: 0%

Project Location

Cumberland Road at Union Road Intersection.

Comments

This project represents two project segments from the previous DCC Program that have been consolidated:

- Intersection Upgrade at Cumberland Road and Union
- Traffic Signal at Cumberland and Union

Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.

Intersection Upgrade – Cumberland Rd. at Bevan Rd. (R10)

Project Description

Intersection upgrades. This includes improved alignments and new traffic signals.

Project Timing	Priority Level	Cost of Work
5 to 10	Moderate	$1,241,890
Total		$1,241,890

Benefits in Doing This Work

- Improved traffic flow
- Improved capacity and access to accommodate new developments
- Improved safety

Estimated Allocation of Costs

New Development:	100%
Existing Users:	0%

Project Location

Cumberland Road at Bevan Road intersection.

Comments

This project represents two project segments from the previous DCC Program that have been consolidated:

- Intersection Upgrade Bevan at Cumberland
- Traffic Signal Bevan at Cumberland

Project costs have been estimated by Urban Systems based on a review of current unit rates and construction costs. The estimate includes 15% for Engineering and 35% for Contingency.

Transportation Master Plan (R11)

Project Description

Developing a new Transportation Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	$200,000
Total		$200,000

Benefits in Doing This Work

- Identify improvements to the existing network
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Throughout the Village.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Watermain Looping – Union Rd. (Cumberland Rd. to North of Royston Rd.) (W1)

Project Description

A new 200mm (8 inch) watermain loop installed along Union Road from Cumberland Road to north of Royston Road. This will provide needed capacity and redundancy within the water system to accommodate for increased demand on the water system.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$764,400
Total		$764,400

Benefits in Doing This Work

- Maintain pressure in the system
- Provide adequate fire flows

Estimated Allocation of Costs

New Development: 100%
Existing Users: 0%

Project Location

Union Road from Cumberland Road to north of Royston Road

Comments

This is a new project that was not included in the previous DCC program. Cost estimates provided by the Village of Cumberland's Engineering Department (Rob Crisfield).

New Watermain – Bevan Rd. (Cumberland Rd. to 1500m North of Landfill) (W2)

Project Description

Installation of a new watermain along Bevan Road from Cumberland Road to approximately 1,500 meters north of the landfill entrance. This will serve industrial and commercial operators proposed in the lands north and east of the landfill.

Project Timing	Priority Level	Cost of Work
0 to 5 years	Immediate	$2,842,000
Total		$2,842,000

Benefits in Doing This Work

- Provision of water servicing to new development.

Estimated Allocation of Costs

New Development: 100%
Existing Users: 0%

Project Location

Bevan Road from Cumberland Road to approximately 1,500 meters north of the landfill entrance.

Comments

This is a new project that was not included in the previous DCC program. Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).

Watermain Upgrade – Dunsmuir Ave (1st St. to Ulverston Ave.) (W3)

Project Description

Watermain replacement and upsizing (from 200mm to 250mm) along Dunsmuir Avenue from 1st St. to Carlisle Lane.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$3,157,661
Grants Received		$738,017
Village Cost (i.e. less grants)		$2,419,645

Benefits in Doing This Work

- Provide additional capacity in the water distribution system

Estimated Allocation of Costs

New Development: 75%
Existing Users: 25%

Project Location

Dunsmuir Avenue from 1st St. to Ulverston Avenue.

Comments

The segment from 1st St. to Carlisle Lane was included in the previous DCC program (project number W330); however, the scope of the project has since increased to include an additional segment from Carlisle Lane to Ulverston Avenue. The expanded version of this project was first identified in the Village's Long-Term Water Supply Strategy (2016). Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland[1]. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

[1] This includes a portion of this project that has already been started (i.e. between 2nd Street and 7th Street). The overall costs for this portion of the project is $3,038,903.65. However, it is assumed that only 40% of those overall costs are attributed to 'water' upgrades (i.e. DCC project W3). It assumed that another 60% are attributed to 'transportation' upgrades (i.e. DCC project R7).

Watermain Upgrade – Cumberland Rd. (Primrose St. to Hope Rd.) (W4)

Project Description

Upgrade watermain along Cumberland Road from Primrose Road to Hope Street.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$405,610
Grants Received		$169,813
Village Cost (i.e. less grants)		$235,797

Benefits in Doing This Work

- Provide additional capacity in the water distribution system

Estimated Allocation of Costs

New Development: 85%
Existing Users: 15%

Project Location

Cumberland Road from Primrose St. to Hope Road.

Comments

This project was included in the previous DCC program (project number W170). Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland[2]. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

[2] This includes a portion of this project that has already been started (i.e. from Bevan Road to Hope Road). This segment was completed as part of a larger project. The overall costs for this portion of the project is $1,986,101.65. However, it is assumed that only 10% of those overall costs are attributed to 'water' upgrades (i.e. DCC project W4) and the remaining 90% are attributed to 'transportation' upgrades (i.e. DCC project R5).

Watermain Upgrade – Ulverston Ave. (3rd St. to Mill St.) (W5)

Project Description

Upgrade 424 meters of waterman along Ulverston Avenue from 3rd Street to Mill Street.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$344,700
Total		$344,700

Benefits in Doing This Work

- Provide additional capacity in the water distribution system

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

This project will benefit both new and existing users.

Project Location

Ulverston Avenue from 3rd Street to Mill

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Long-Term Water Supply Strategy (2016). Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).

Watermain Upgrade – Windermere Ave. (Egremont St. to 2592 Windermere Ave.) (W6)

Project Description

Upgrading the watermain (from 100mm to 200mm) along Windermere Avenue from Egremont Street to 2592 Windermere.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$332,300
Total		$332,300

Benefits in Doing This Work

- Provide additional capacity in the water distribution system

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

Windermere Avenue from Egremont Street to 2592 Windermere.

Comments

This is a new project that was not included in the previous DCC program. Cost estimates were provided by the Village of Cumberland's Engineering Department (Rob Crisfield).

Main Water Supply Main Upgrade (W7)

Project Description

Adding an additional (400mm) water supply main and upsizing the existing main (from 300mm to 400mm).[3]

Project Timing	Priority Level	Cost of Work
0 to 5 years	Immediate	$1,949,000
Total		$1,949,000

Benefits in Doing This Work

- Provide additional capacity in the water distribution system
- Provides redundancy in the system

Estimated Allocation of Costs

New Development: 80%
Existing Users: 20%

Project Location

Area south of the Village Core.

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Long-Term Water Supply Strategy (2016) Project costs have been estimated by Urban Systems based on a review of projects recently tendered within the Village of Cumberland[4]. The estimate includes 15% for Engineering and 35% for Contingency for unfinished portions of the project.

[4] This includes a portion of this project that has already been started (i.e. the twinning portion). The overall costs for this portion of the project is $650,000. The existing project costs were identified in the Village's Long-Term Water Supply Strategy as project F-5.

Water Master Plan (W8)

Project Description

Developing a new Water Master Plan that identifies improvements to the existing system as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	$150,000
Total		$150,000

Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

Throughout the Village.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Sewer Treatment Plant Upgrades (Additional Population) (S1)

Project Description

The development of a new sewage treatment plant to meet Federal and Provincial standards for sanitary sewer effluent at an additional population of 4447. This includes the addition of disinfection and treatment, expanded infrastructure, solids removal and charcoal re-bed.

Project Timing	Priority Level	Cost of Work
10-20 years	Low	$16,000,000
Grant Support		$7,500,000
Total		$8,500,000

Benefits in Doing This Work

- Capacity to accommodate growth
- Improved treatment
- Compliance with future regulations

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Near the existing sewer treatment facility

Comments

This project was included in the previous DCC program (project number S120). Project costs have been provided by the Village of Cumberland.

Trunk Upgrade– Dunsmuir Ave. to Lagoon (700m of 900mm) (S2)

Project Description

This project is to upgrade approximately 700 meters of existing sanitary sewer trunk main (to 900mm pipe) between Dunsmuir Avenue and the lagoons. This allows for the existing sanitary system to accommodate increased flows from development.

Project Timing	Priority Level	Cost of Work
0 – 5 years	High	$1,957,000
Total		$1,957,000

Benefits in Doing This Work

- Provide additional capacity in the collection system.

Estimated Allocation of Costs

New Development: 100%
Existing Users: 0%

Project Location

Near Carlisle Lane between Dunsmuir Avenue to the Village's lagoons.

Comments

This project was included in the previous DCC program (project number S301). Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Trunk Upgrade - Sutton Rd. to Dunsmuir Ave. (Twinning) (S3)

Project Description

This project is to twin the existing sanitary sewer trunk main from Sutton Road to Dunsmuir Avenue. This allows for increased capacity and necessary redundancy to meet increasing demands on the sanitary system attributed to growth.

Project Timing	Priority Level	Cost of Work
5 – 10 years	Moderate	$4,736,000
Total		$4,736,000

Benefits in Doing This Work

- Provide additional capacity in the collection system.

Estimated Allocation of Costs

New Development: 100%
Existing Users: 0%

Project Location

South of the village core along the Wellington Colliery from Sutton Road to Dunsmuir Avenue.

Comments

This project was included in the previous DCC program (project number S1). Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Sanitary Sewer Master Plan (S4)

Project Description

Developing a new Sanitary Sewer Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
0 – 5 years	High	$150,000
Total		$150,000

Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Throughout the Village.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Drainage Corridor Improvement – Cumberland Rd. (D1)

Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$1,573,216
Total		$1,573,216

Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

Estimated Allocation of Costs

New Development: 80%

Existing Users: 20%

Project Location

- Cumberland Road from 4th Street to lagoon area (via Hope)
- 4th Street from Penrith Avenue to Cumberland Road
- Ulverston Avenue from 2nd Street to 4th Street

Comments

This is a new project that was not included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.

Drainage Corridor Improvement – Mill St. (D2)

Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$674,800
Total		$674,800

Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

Estimated Allocation of Costs

New Development: 80%

Existing Users: 20%

Project Location

Mill Street from Bruce Street to Hope Road and Bruce Street from the lane to Mill Street.

Comments

his project represents two project segments from the previous DCC Program that have been consolidated:

- Bruce, lane to Mill (D330)
- Mill, Bruce to Hope (D330)

This project was included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.

Drainage Improvement – Ulverston Ave. (D3)

Project Description

Improving and upsizing drainage infrastructure throughout a major drainage corridor.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$955,320
Total		$955,320

Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

Estimated Allocation of Costs

New Development: 80%

Existing Users: 20%

Project Location

Ulverston Avenue from 7th Street to Maple Lake Creek.

Comments

This is a new project that was not included in the previous DCC program. These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs.

South Cumberland Discharge Area Improvements - (D4)

Project Description

Improvements to stormwater drainage infrastructure south of the core Village site. This includes construction of open channels, detention facilities and pipelines to control runoff from future development in the south and west of the community.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$2,603,019
Total		$2,603,019

Benefits in Doing This Work

- Improved capacity to accommodate increased levels of stormwater run-off

Estimated Allocation of Costs

New Development: 80%
Existing Users: 20%

Project Location

Wetland areas south of the Village core.

Comments

This project was included in the previous DCC program (project number D510 & D520). These specific upgrades are identified in the Village's current Storm Drainage Master Plan. Project costs identified in that plan have been taken from the Village Stormwater Drainage Master Plan (2010) and have been brought escalated to reflect current costs..

I&I Improvements (D5)

Project Description

New storm drainage network to prevent inflow and infiltration (I&I) into the sanitary sewer system. This does not include replacing or renewing existing infrastructure.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High / Ongoing	$1,500,000
Total		$1,500,000

Benefits in Doing This Work

- Increased capacity in the sanitary sewer system because of reduced I&I

Estimated Allocation of Costs

New Development: 100%
Existing Users: 0%

Project Location

Throughout the Village of Cumberland.

Comments

This project was included in the previous DCC program (project number D530). The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Storm Drainage Master Plan (D6)

Project Description

Developing a new Storm Drainage Master Plan that identifies improvements to the existing network as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
0 – 5 years	high	$150,000
Total		$150,000

Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Throughout the Village.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Cumberland Community Forest Park (Acquisition and Improvement) (P1)

Project Description

Cumberland Community Forest Park is a well-used park providing hiking and mountain biking trails to the community. The park has experienced increased levels of usership necessitating expansion and trail improvements to accommodate growing demand. The Cumberland Community Forest Park Expansion will require land acquisition and trail development to maintain continuity with existing sections of the park. This project will benefit both new and existing users, but much of the additional capacity is designed to address future demand. It allows the Village of Cumberland (VOC) to supply adequate levels of regional parkland and reduce the negative impact of growth on existing trail networks.

Project Timing	Priority Level	Cost of Work
0 to 5 years	Immediate	$931,027
Total		$931,027

Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Existing Cumberland Community Forest Park and lands west and east

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) and were updated by Urban Systems to reflect current costs They include:

- $831,027 for Acquisition
- $100,000 for Trail Improvements

North Wellington Colliery (Acquisition and Improvement) (P2)

Project Description

The Wellington Colliery Trails provide important linkages and connectivity within Village of Cumberland's trail and parkland network. This project is about the acquisition of a key Right-of-Way and development of a trail. That will result in and expanded network.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$888,800
Total		$888,800

Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

This trail extends the length of Kendal Avenue, approximately 500 m from Cumberland Rd.

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) and updated by Urban Systems. They include:

- $200,000 for Acquisition
- $688,800 for Improvements

South Wellington Colliery (Acquisition and Improvement) (P3)

Project Description

The Wellington Colliery Trails provide important linkages and connectivity within Village of Cumberland's trail and parkland network. This project is about the acquisition of a key Right-of-Way, development of a trail, and expansion to the west. That will result in the extension of an existing trail network resulting in important linkages and an expanded network.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$1,199,600
Total		$1,199,600

Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded park area for the benefit of existing residents
- Expansion of existing trail network and important linkages

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

South of the Village core between 2nd and 6th streets, extension to the east to Cumberland's administrative boundary and extension to the west to Cumberland's administrative boundary.

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Planning and Engineering Department (Rob Crisfield) for eastward expansion and Outlook Engineering and Landscape Architecture for Westward Expansion. They include:

- $280,000 for Acquisition
- $919,600 for Improvements

Costs were adjusted by Urban Systems to reflect current costs.

Lagoon Greenway (Improvements) (P4)

Project Description

The development of a trail network throughout the Lagoon Greenway. This includes 600 meters of gravel trail (4 meters wide).

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$426,938
Total		$426,938

Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded usable park area for the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

Land around the Village of Cumberland's lagoons.

Comments

This project was included in the previous DCC program. Project costs have been updated by Urban Systems to reflect current costs. The estimate includes 15% for Engineering and 35% for Contingency.

Village Park (Improvement) (P5)

Project Description

Village Park is the main community park in Cumberland. This project includes a range of improvements to improve and expand the use of this park. Improvements include new public washrooms, storage areas, multi-use gathering areas, benches and picnic tables.

Project Timing	Priority Level	Cost of Work
5 to 10 years	Moderate	$600,000
Total		$600,000

Benefits in Doing This Work

- Increased capacity to accommodate new demand from future growth
- Expanded usable park area for the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Village Park off Dunsmuir Avenue.

Comments

This project was included in the previous DCC program. Updated cost estimates below were provided by the Village of Cumberland's Parks and Recreation Department (Kevin McPhedran):

- $400,000 for new washrooms/storage area/change rooms
- $175,000 multi-use gathering area (covered)
- $25,000 benches, picnic tables, gathering area

Cumberland Lake Park (Improvements) (P6)

Project Description

Cumberland Lake Park is located on the shores of Comox Lake. This project includes a range of minor improvements to improve and expand the use of this park. Improvements include, expanded parking infrastructure, picnic tables, benches and gathering areas.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$100,000
Total		$100,000

Benefits in Doing This Work

- Enhanced parked infrastructure to accommodate growing usership
- Improved recreation experience

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

At the end of Comox Lake Road, on the shores of Comox Lake.

Comments

This is a new project that was not included in the previous DCC program. It was first identified as a priority in the Village's Parks and Greenways Master Plan (2014). Cost estimates were provided by the Village of Cumberland's Parks and Recreation Department (Kevin McPhedran)..

Parks Master Plan (P7)

Project Description

Developing a new Parks Master Plan that identifies improvements to the existing system as well and upgrades and new projects required to accommodate future growth.

Project Timing	Priority Level	Cost of Work
10 to 20 years	Low	$100,000
Total		$100,000

Benefits in Doing This Work

- Identify improvements to the existing system
- Identify upgrades and new projects required to accommodate future growth (i.e. beyond what is identified in the current and proposed DCC program)

Estimated Allocation of Costs

New Development: 50%

Existing Users: 50%

Project Location

Throughout the Village.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Planning and Engineering Department.

Solport Park (Improvement) (P8)

Project Description

This project includes a range of minor improvements including picnic tables, benches, gathering areas, landscaping and development of neighrbouhood trails.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$125,000
Total		$125,000

Benefits in Doing This Work

- Increased capacity to accommodate new growth
- Expanded usable park area to the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

Coal Valley Estates, south of Kentmere Ave, at the end of Windemere Ave.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Parks and Recreation Department.

Camp Road Greenway (Acquisition and Improvement) (P9)

Project Description

This project includes a range of minor improvements and land acquisition to expand the use of this park. Improvements and acquisition involve the development of additional neighbourhood trails.

Project Timing	Priority Level	Cost of Work
0 to 5 years	High	$100,000
Total		$100,000

Benefits in Doing This Work

- Increased greenway capacity to accommodate new growth
- Expanded trail system to the benefit of existing residents

Estimated Allocation of Costs

New Development: 50%
Existing Users: 50%

Project Location

North of Dunsmuir Ave between Centennial Place and the end of Dunsmuir Ave.

Comments

This is a new project that was not included in the previous DCC program. The cost estimate has been developed based on discussions with staff from the Village's Parks and Recreation Department.

APPENDIX C

Existing Village of Cumberland Development Cost Charge Bylaw No. 934, 2010

CORPORATION OF THE VILLAGE OF CUMBERLAND

BYLAW NO. 934

A bylaw to establish Development Cost Charges applicable for development within the Village of Cumberland

WHEREAS Section 933 of the *Local Government Act* provides that the Council may by bylaw, impose development cost charges on every person who obtains:

a) an approval of a subdivision; or

b) a building permit authorizing the construction, alteration or extension of a building

AND WHEREAS development cost charges may be imposed for the sole purpose of providing funds to assist the Village to pay the capital costs of:

a) providing, constructing, altering or expanding sewage, water, drainage and highway facilities, other than off-street parking facilities; and

b) providing and improving park land;

to service, directly or indirectly, the development for which the charge is being imposed;

NOW THEREFORE the Council of the Village of Cumberland, in open meeting assembled, enacts as follows:

1. Development Cost Charges

Development cost charges, in the amounts prescribed in Schedule 'A' attached to and forming part of this Bylaw, shall be paid at the time of approval of the subdivision or the issue of the building permit, as the case may be.

2. Definitions

For the purpose of this bylaw, the following definitions apply. Terms contained in this bylaw and not defined herein, their context and meaning shall be as defined in the 'Village of Cumberland Zoning Bylaw No. 717, 2004', then the *Interpretation Act* and then in the Canadian Oxford dictionary.

COMMERCIAL USE	means any activity in which goods and services are exchanged for monetary gain.	#987
DWELLING UNIT	means a self contained residential unit including a cooking facility and consisting of one or more habitable rooms designed and used for the accommodation of only one person or family.	

DWELLING, APARTMENT	means any building divided into not less than three self-contained dwelling units each of which is occupied or intended to be occupied as a permanent home or residence of one family as distinct from a hotel, motel, or similar transient accommodation for the traveling public, the entrance to which shall be from a common vestibule.
DWELLING, DUPLEX	means any building divided into two dwelling units neither of which is a secondary suite and each of which is occupied or intended to be occupied as a permanent home or residence of one family, each of which has a separate and independent entrance. Neither unit shall include a mobile home as a part or a whole.
DWELLING, RESIDENTIAL MULTIPLE	means a development that results in two or more dwelling units on a single property, excluding a townhouse or mobile home development, but including residential units in a mixed use zone.
DWELLING, SINGLE FAMILY	means a detached building used for residential use for one family and consisting of one dwelling unit.
DWELLING, PATIO HOME	means a single storey dwelling unit located within a block of at least three side by side family dwelling units where each family dwelling unit is separated from each other by a party (common) wall, and where each unit has a ground floor. Neither unit shall include a mobile home as a part of a whole.
DWELLING, TOWNHOUSE OR ROWHOUSE	means a block of at least three side by side family dwelling units where each family dwelling unit is separated from each other by a party (common) wall.
GROSS FLOOR AREA (GFA)	means the total area of all the floors measured to the extreme outer limits of the building, or to the centre of the firewalls, and areas giving access thereto, such as corridors, hallways, landing, foyers, staircases, and stairwells.
INDUSTRIAL USE	means a use providing for the wholesale, processing, fabricating, warehousing, testing, assembling, service, repairs, manufacturing, distribution or maintenance of goods or materials and can include bulk storage, junkyards, wood processing, meat and fish processing and automobile service stations, fabricating, and includes wholesale and retail sales accessory to the principal use.

INSTITUTIONAL USE	means a congregate care facility, a seniors residence where a minimum of 20% of the floor area of the buildings located on the parcel is operated under a license pursuant to the *Community Care Facility Act* (British Columbia), or a non-profit use for cultural, recreational, social, religious, government, public health care or educational purposes.	
LAND DEVELOPED	means the area that is affected by the Development Permit and/or Building Permit that initiates the requirement for DCC's.	
MANUFACTURED HOME	means a transportable dwelling, which arrives at the site where it is to be occupied, complete and ready for occupancy except for placing on foundation supports, connections of utilities, and some incidental assembly, and conforms to the Canadian Standards Association's Z240 MH Series 96 and Z241 Series 92 standards, but specifically excludes recreational vehicles.	
RESIDENTIAL LOW DENSITY	includes the following dwelling units: a) dwelling, single family b) dwelling, duplex	#987
RESIDENTIAL MEDIUM DENSITY	includes the following dwelling units a) dwelling, patio home b) dwelling, townhouse or rowhouse c) manufactured home	#987
RESIDENTIAL HIGH DENSITY	includes the following dwelling units: (a) dwelling, multi family (b) dwelling, apartment	#987

3. Charges Payable

Except where prohibited by statute, every person who obtains:

1) Approval of a subdivision; or

2) A building permit authorizing the construction, alteration, or extension of a building or structure,(including a building containing only two or three self contained dwelling units);

shall pay the Village of Cumberland, the specified Development Cost Charge in the amount and at the time as set out in Schedule 'A', which is attached to and forms part of this bylaw.

4. Mixed Use Buildings

Where a proposed building is to be used for more than one class of use under this bylaw, the charge for each portion of the building used for a separate class of use shall be calculated separately, based upon the relevant charge in the schedule, and the total

amount of those charges shall be payable upon issuance of a building permit for the construction, alteration or extension of the building.

5. Repeal

The 'Corporation of the Village of Cumberland Development Cost Charges Bylaw No. 919, 2009' and all amendments thereto, are hereby repealed upon adoption of this bylaw.

6. Citation

The bylaw shall be cited for all purposes as the 'Corporation of the Village of Cumberland Development Cost Charges Bylaw No. 934, 2010.'

7. Effective Date

This bylaw comes into effect on the day of adoption.

READ A FIRST TIME this	**12th**	**day of**	**July,**	**2010**
READ A SECOND TIME this	**12th**	**day of**	**July,**	**2010**
READ A THIRD TIME this	**12th**	**day of**	**July,**	**2010**
APPROVED BY THE INSPECTOR OF MUNICIPALITIES per Section 937 of the *Local Government Act* on this	**29th**	**day of**	**July,**	**2010**
ADOPTED this	**9th**	**day of**	**August,**	**2010**

"Fred Bates"
Mayor

"Christine Mathews"
Corporate Officer

Schedule A

#987

	Residential Low Density	Residential Medium Density	Residential High Density	Industrial Use	Institutional Use	Commercial Use
	Per Dwelling Unit			*Per hectare of land utilized*	*Per metre² of GFA*	*Per metre² of GFA*
Water	$4,259	$3,435	$2,748	$24,732	$15.11	$17.86
Sanitary Sewer	$9,664	$7,794	$6,235	$56,166	$34.29	$40.53
Roads	$2,404	$1,938	$1,551	$13,957	$8.53	$10.08
Storm Sewer	$977	$528	$322	$21,985	$2.93	$3.13
Parks	$2,438	$1,966	$1,573	$0	$0.00	$0.00
Costs per unit of measure	~~$19,743~~ **$19,742***	$**15,661**	$**12,429**	~~$116,790~~ **$116,840***	~~$60.87~~ **$60.86***	$**71.60**

* unofficial correction to the bylaw

APPENDIX D

Proposed Village of Cumberland Development Cost Charge Bylaw No. _____

APPENDIX E

Council Reports and Open House Materials