



THE CORPORATION OF THE CITY OF ROSSLAND

AGENDA

**PLANNING AND DEVELOPMENT COMMITTEE MEETING
CITY HALL COUNCIL CHAMBER
Tuesday, July 8, 2008
5:00 P.M.**

- (1) CALL TO ORDER**
- (2) ADOPTION OF AGENDA**
- (3) BUSINESS - Delegation**

1. Delegation from Bob Twerdoff, MBA, P.Eng, Senior Project Manager, UMA Engineering Ltd. Re: Draft DCC Bylaw presentation by consultant.

CLOSE OF MEETING

City of Rossland

DCC Background Report



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Project Number: 3969-004
Date: June 26, 2008

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Revision Log

REVISION	DATE	ISSUE / REVISION DESCRIPTION
1	June 26/08	Incorporate staff comments

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1.0 Introduction

This background report provides information required to support a new Development Cost Charges Bylaw (DCC Bylaw) for the City of Rossland (City), including requisite requirements to secure approval from the Inspector of Municipalities, Ministry of Community Services.

The current DCC Bylaw # 2315 was adopted by the City on February 6th, 2006.

This DCC Bylaw review considers:

- Reviewing the land use categories assessed DCCs
- Adding a new DCC category for parks acquisition and development
- Consider appropriate exemptions to DCC charges
- Updating growth projections
- Updating project cost estimates and DCC project list
- Identifying impacts of resort growth, particularly on long-term water supply
- Incorporating sustainability principles consistent with the 'Visions to Action' City of Rossland Strategic Sustainability Plan.

During this bylaw review, UMA reviewed the possibility of including the capital cost of providing employee housing to service resort activities within the City, consistent with Section 933 (2.1) of the Local Government Act. Discussions between City staff and a representative of Red Mountain Ventures were inclusive, in terms of identifying medium to long term housing needs for resort employees. Currently staff can be accommodated locally; however as Red Mountain Resort and Redstone Golf Resort grow and expand operations the need for employee housing may become an issue. A detailed housing needs assessment would be required to quantify how much accommodation is needed and when. It is recommended this issue be addressed in further detail with subsequent DCC Bylaw amendments.

Building on work previously completed relating to growth and development within the City, growth projections and DCC eligible projects were formulated. The reference materials include:

- 1) Draft Official Community Plan (OCP), April 2008
- 2) Visions to Action, January 2008
- 3) Development Yield Update Report, March 2007
- 4) Development Impact/Cost Benefit Assessment, June 2006
- 5) Sewer and Water Demand and Flow Criteria for Red Mountain and Redstone Developments, April 2006
- 6) DCC Bylaw # 2315, February 2006
- 7) Official Community Plan, January 2006
- 8) DCC Background Report, November 2005
- 9) Development Cost Charge Best Practices Guide, 2005
- 10) DCC Bylaw # 2241, December 2004
- 11) Rossland Red Mountain Expansion Area Sector Plan, April 2003

- 12) Red Mountain Area Traffic Impact Study, May 2003
- 13) Red Mountain Financial Analysis, June 2003
- 14) Red Mountain Sector Plan – Impact to City’s Sanitary Sewage System, December 2003
- 15) DCC Background Report, December 2003
- 16) Raw Water Supply Report, November 2002
- 17) Red Mountain Comprehensive Development Plan, January 1994.

This background report also incorporates the recommended approach to formulating DCC Bylaws contained in the Ministry of Community Services, Development Cost Charge Best Practices Guide, 2005.

Guiding Principles prescribed within the Best Practices Guide are summarized below.

Integration

The DCC Bylaw provides Rossland’s approach to issues with land efficiency, affordability and sustainability and it is consistent with the Official Community Plan and the Financial Plan.

Benefiter Pays

The DCC Bylaw considers the impact of infrastructure costs and attributes the cost against those who will use and benefit from the infrastructure, while providing appropriate exemptions.

Fairness and Equity

Recognizing costs should be shared amongst benefiting users, the DCC Bylaw incorporates mechanisms to distribute costs between existing users and new development in a fair and equitable manner.

Accountability

The establishment of the DCC Bylaw was a transparent process, where all information used to formulate the DCC assessments was accessible and understandable to all residents and stakeholders within the City.

Certainty

Certainty has been built into the DCC process, both in terms of stable charges and orderly construction of infrastructure, to assist the development industry in the planning of their projects, while ensuring sufficient DCC funds are collected to ensure construction of the infrastructure when needed. Some projects identified within this background report have been purposefully excluded, as being beyond the period chosen to calculate DCCs. This was done to provide an indication of long-term infrastructure needs, as the City continues to grow.

Consultative Input

Opportunities were provided to the public and stakeholders to provide meaningful, constructive, informed input during the DCC process, which included a presentation to City Council on July 8th and a stakeholder meeting with representatives of the local development community on July 9th.

2.0 Existing DCC Bylaw # 2315

City of Rossland Existing Development Cost Charges

Land Use	Unit Charged	Water	Sanitary Sewer	Roads	Total
Single Detached	Per Parcel	\$1,791	\$1,054	\$484	\$3,329
Duplex	Per Parcel	\$3,582	\$2,108	\$968	\$6,658
Townhouse	Per Townhouse	\$1,182	\$696	\$320	\$2,197
Apartment (50 m ² or greater)	Per Apartment	\$1,182	\$696	\$320	\$2,197
Apartment (> 50 m ²)	Per Apartment	\$591	\$348	\$160	\$1,099
Hotel or Motel	Per Unit	\$591	\$348	\$160	\$1,099
Commercial	Per m ² gross floor area	\$8.96	\$5.27	\$2.42	\$16.65

* The existing DCC Bylaw # 2315 is referenced in Appendix A.

Minor changes to the existing bylaw wording have been incorporated into the draft bylaw (refer to Appendix B for copy of the draft bylaw). In summary, the changes include:

- Apartment definition has been expanded to incorporate hotel and motel uses
- Non-profit seniors housing definition has been added
- Secondary suites definition has been added
- Clarification has been added for projects containing more than one land use
- Exemption provided for construction of a building, or part, which is used for public worship
- Exemption provided for residential units 29 m² or less has been added - consistent with the "Green" Legislation recently submitted by the Ministry of Community Services
- Exemption provided for building permits less than \$200,000 has been added.

3.0 Consultation

Section to be completed upon receipt of consultative input.

DRAFT

4.0 Bylaw Development

Extent of Application

The extent to which DCCs will be applied within the City have been considered during this review. The existing bylaw assesses sewer and roads DCCs on an 'area-specific' basis (i.e. Red Mountain Resort), while water is assessed on a 'municipal-wide' basis. Water infrastructure projects benefit existing residents and future growth within the entire City. The DCC projects being considered for this bylaw review are similar to the existing DCC projects, therefore no changes from the current DCC Bylaw are contemplated in the draft bylaw for water, sewer and roads. A new parks category is being considered with this bylaw review. Park DCCs will be established on a municipal-wide basis, as improvements will benefit the entire City. Schedules to the bylaw will define the area-specific boundary for sewer and roads DCC charges.

Program Time Frame

The time frame for the DCC program was considered during this bylaw review. The existing bylaw provides a program time frame based on 1,000 unit, or 10 to 15 years. A development rate of about 70 units per year was used to calculate the DCC charges, which suggests a 15 year program time frame – a 'revolving' DCC program. However, when calculating sewer DCC needs, projects well beyond the 15 year time frame and beyond 1,000 units were considered. A portion of three sewer projects required beyond 2023 was allocated to the existing sewer DCC program.

Further the water DCC program time frame in the existing bylaw considers 'full build-out' when calculating water DCCs.

The program time frame should be applied consistently with across all types of infrastructure when considering DCCs; hence the draft DCC Bylaw is based on a revolving program, incorporating projects over a 20-year period to support long-term development plans, principally within the City's resort communities of Red Mountain Resort and Redstone Golf Resort. This is consistent with the draft OCP.

The Financial Plan will be updated to reflect the projects identified within this report.

Categories of Land Use

Categories of land uses charged DCCs within the existing DCC bylaw include: single detached dwelling, duplex, townhouse, apartments greater than or equal to 50 m², apartments less than 50 m², hotel or motel units and commercial.

The current DCC Bylaw includes a separate land use category for hotel or motel units; however, the DCC assessments are identical to small apartments less than 50 m² gross floor area. To simplify the bylaw the apartment definition has been amended to include hotel and motel units within the 'small apartment' category.

The current bylaw does not address projects containing more than one land use category. This bylaw review addresses this oversight. Mixed-use projects will be calculated separately for each portion of the development attributable to two or more land use categories, being the sum of the DCCs for each type of land use category.

A new category for non-profit seniors housing has been added to the proposed bylaw amendment. Non-profit seniors housing will be defined as a multiple unit residential building where there is a housing agreement between the City of Rossland and the owner, specifying that the multiple unit residential building will be restricted to seniors accommodation.

Further, in order to encourage residential intensification within the City, while recognizing sustainability objectives, a new category for secondary suites has been added in the proposed bylaw.

As infrastructure systems are designed to accommodate peak loadings/requirements, the type of tenure, whether fully or seasonally occupied, will not affect the calculation of DCCs.

The DCC bylaw does not include industrial and institutional land use categories as the anticipated growth for these uses are expected to be negligible over the period of the bylaw – this is consistent with the current bylaw.

Units for Charges

The existing DCC bylaw calculates DCCs on a unit basis for all residential land uses and for hotel and motel uses, and on a floor area basis for commercial projects. No changes to the current DCC Bylaw are contemplated. It is proposed to calculate DCCs for non-profit seniors housing and secondary suites on a unit basis. This practice is consistent with the Development Cost Charge Best Practices Guide.

Project Eligibility

DCC projects must directly or indirectly service new development. When considering infrastructure needs to support growth, each potential DCC project was reviewed to verify its applicability. Works that would normally be constructed and paid for by a single developer have been excluded and projects, which would normally be associated with ongoing maintenance and asset replacement due to age, have also been excluded. Further the Financial Plan contains projects necessary to serve existing residents within the City – those projects have similarly been excluded.

The new park DCC includes a component for construction of new trails, plus improvements to existing trails, as identified within the draft OCP.

Land acquisition costs were not considered when costing eligible projects due to uncertainties with regard to the amount of land and cost required in the future. This aspect may be revisited with future DCC Bylaw amendments.

Recoverable Costs

Project costs include construction estimates to complete the scope of work in a competitive environment. An allowance has been included to account for planning, engineering design and contract administration, and contingency. These costs are consistent with the Financial Plan.

Interim financing and long-term debt financing have not been considered for DCC recovery with this bylaw review.

Other sources of funding are identified in the DCC calculation where available – approved grant applications have been appropriately identified. In accordance with the Best Practices Guide, even if projects may qualify for grant funding, grant monies are not included until approved. If a grant is subsequently approved, the DCC Bylaw will be amended accordingly.

Municipal Assist Factor

No changes to the current DCC Bylaw are contemplated; a 1% municipal assist factor has been applied to each DCC category.

Exemptions

Exemptions, which were not included within the existing DCC bylaw, have been added to the draft DCC Bylaw for the following applications:

- Exemption for construction of a building, or part, which is used for public worship (consistent with Section 933 (4) (a) of the Local Government Act)
- Exemption for residential units 29 m² or less (consistent with the April 15th, 2008 BC News Release pertaining to “Green Legislation”)
- Exemption for building permits less than \$200,000 in construction value (consistent with Section 933 (4.1) (b) of the Local Government Act). By increasing the threshold for DCC charges from \$50,000 to \$200,000, the City is encouraging revitalization and upgrades to existing dwellings and commercial businesses.

No other exemptions will be permitted under the DCC Bylaw.

Collection of charges remains unchanged, as does monitoring, accounting and use of DCC reserve funds.

Equivalency Factors

Current Bylaw

Land Use	Equivalent Unit	Equivalency FACTOR
Single Detached Dwelling	dwelling unit	1.00
Duplex	parcel	1.00
Townhouse	dwelling unit	0.66
Apartment (greater than or equal to 50 m ² gross floor area)	dwelling unit	0.66
Apartment (less than 50 m ² gross floor area)	dwelling unit	0.33
Commercial gross floor area	m ²	0.005

The Corporation of Delta DCC Background Report (June 30, 2000) provides a detailed analysis of equivalency factors for each type of infrastructure against each land use category. The Delta report mirrors the methodology contained in the Best Practices Guide when determining equivalency factors for DCC calculations. Comparing the Delta analysis to the equivalency factors referenced above yielded similar results; hence, no changes are contemplated with this DCC Bylaw review.

The proposed new land use categories for non-profit seniors housing and secondary suites have similar infrastructure impacts as small apartment units less than 50 m² in size. The equivalency factors for this bylaw review are shown below.

Proposed Bylaw

Land Use	Equivalent Unit	Equivalency FACTOR
Single Detached Dwelling	dwelling unit	1.00
Duplex	parcel	1.00
Townhouse	dwelling unit	0.66
Apartment (greater than or equal to 50 m ² gross floor area)	dwelling unit	0.66
Apartment (less than 50 m ² gross floor area)	dwelling unit	0.33
Secondary suites	dwelling unit	0.33
Non-profit Seniors	dwelling unit	0.33
Commercial gross floor area	m ²	0.005

Grace Period

Because of the substantial increase in DCC charges, a suitable grace period will be necessary in order to mitigate the impact on existing development projects. The DCC Bylaw incorporates a provision where the new DCC rates proposed would not effect in-stream development applications, provided a complete application has been filed with the City, for a period of 6 months following adoption of the amended DCC Bylaw.

Upon third reading of the DCC Bylaw, the City will place notices in the newspaper, at City Hall and on the City's website advising interested stakeholders of the pending DCC Bylaw changes. This background report will be used to communicate the intentions of the new DCC Bylaw, once adopted by Council.

DRAFT

5.0 Growth Projections

An important component of establishing a DCC Bylaw is the consideration of growth opportunities and projections. Creating unrealistically high growth expectations leads to lower than anticipated DCC revenues; conversely, an extremely conservative growth projection may result in qualified projects being left off the DCC project list, to maintain 'reasonable' DCC rates.

In conjunction with this review, sources of information used to determine appropriate growth projections included:

- Current DCC Bylaw
- Development Yield Update Report, Urban Systems, March 2007
- Development Impact/Cost Benefit Assessment, Grant Thornton, June 2006
- Discussion with Red Mountain Ventures, April 2008
- Building Permit Activity 2002 – 2007
- Draft OCP, April 2008
- BC Municipal Population Estimates 1996 – 2007, BC Stats, Ministry of Labour and Citizens' Services.

A DCC Background Report was prepared by Urban Systems, November 2005 to support the current DCC Bylaw. That report uses a threshold of 1,000 units at Red Mountain Resort to calculate DCC assessments – a period of 10 – 15 years was assumed for development of the 1,000 units. A development rate of 70 equivalent units per year was chosen to calculate the DCC assessments (equivalent to a 14.3-year period). The current bylaw also assumes negligible growth outside of the Red Mountain Resort (i.e. within the City and Redstone Golf Resort) during the DCC period.

No basis was provided in that background report for determining the 1,000 unit (70 equivalent units per year) growth prediction; rather it appears 1,000 units was chosen as a trigger point to invest in further infrastructure upgrades required to support development on Red Mountain. With approximately 100 existing units at Red Mountain, an increase of 900 units over 14.3 years is equivalent to an average annual growth rate of 17.5%.

Urban Systems completed a Development Yield Update Report, March 2007. That report analyzes growth potential within various sectors in the City with the following results:

Area of Rossland	Existing Development Yield (EU)	Development Yield < 20 years (EU)
City Centre	1425	353
Happy Valley	12	5
Redstone Golf Resort	0	400
Red Mountain Resort	100	1056
Rossland Totals	1537	1814

That report uses equivalent units to project growth, rather than specific types of land uses. There is limited basis provided within that report to support the growth projections provided above. These projections equate to a growth rate of 118% over a 20-year period, or an annual rate of 4%. The report acknowledges building permit activity of 91 equivalent units per year “could be seen as being rather aggressive”.

A Development Impact/Cost Benefit Assessment Report prepared by Grant Thornton, September 2006 analyzes the impact of growth on the City's financial well being and other factors. This report states 390 residential units are planned from 2006 – 2009, for an average of 98 units per year – the report does not provide a basis for these growth projections (assumed to be based on information provided by developers).

A discussion with Red Mountain Ventures is summarized below:

- Red Mountain Resort has not conducted long-term growth projections
- Red Mountain CDP does not contain population projections and the mix of accommodation types is not specified
- Transportation is key – in order to attract European, American and Canadian interest in Rossland's outdoor recreational opportunities, a reliable transportation system is crucial – the Castlegar Airport is not reliable as it only averages 65% destined landings during the winter months due to poor visibility
- Red Mountain Resort coordinates international marketing efforts through the Spokane Airport – a 2 ½ hour drive from Rossland
- A dedicated shuttle service from the Spokane Airport is provided by Red Mountain Resort
- BC and Alberta residents have a variety of similar winter and summer resort destinations to choose from with easier access; hence Red Mountain's target market area is north and south of Rossland
- Recent changes to border crossing procedures, an increase in the value of the Canadian dollar and general US market slow-down will impact development potential at Red Mountain in the short term
- Long-term growth will likely be noticeably less than the 70 equivalent units stated in the current DCC Bylaw
- Majority of sales will be seasonal occupants – recent trends indicate up to 1/3 may choose full time residency.

Since the last DCC review conducted in November 2005, market conditions and development opportunities have changed within the City of Rossland. A new golf resort, Redstone Golf Resort, plus a recent development proposal by Red Mountain Ventures to construct a second golf resort near the base of Red Mountain Ski Resort will draw attention to the region for summer resort activities. These exciting developments are enticing recreational enthusiasts to consider Rossland for full-time and seasonal residence. As a result, growth is anticipated to occur within the Red Mountain and Redstone resort communities, which will include predominantly occasional or seasonal occupants, with some spill-over into existing City neighbourhoods. This 'surge' is supported by the increase in building permit activity since 2005; however, this level of activity will likely not be sustained over the long term (20 years).

Residential Building Permit Activity

Year	Population*	No. of Building Permits
2002	3,736	14
2003	3,688	20
2004	3,575	44
2005	3,572	42
2006	3,469	83
2007	3,508	51

* reflects permanent residents only – source BC Statistics

The recent increase in building permit activity since 2005, coupled with a declining population as measured by BC Statistics, can be explained as representing growth in seasonal occupants and second home ownership. An average of 42 residential building permits per year has been issued since 2002, while the permanent population has dropped by 6.1%, according to BC Statistics.

The draft OCP (April 2008) considers the impact of non-permanent residential units by providing two predictions of growth within Rossland over the next 20 years as shown below. The population predictions are based on two different methods:

- i) the number of existing residential units occasionally occupied since 2001 using an average household size of 2.4 residents per unit (1.80% growth rate); and
- ii) the increase in building permit activity since 2001 using an average household size of 2.4 residents per unit (2.2% growth rate).

Draft OCP Population Projections

Year	Permanent Population Combined with Seasonal Population	
	1.8%	2.2%
2006	4,154	4,306
2007	4,229	4,401
2012	4,623	4,907
2017	5,055	5,471
2022	5,526	6,100
2027	6,042	6,775

These draft OCP growth projections were compared with historical growth (since 1996) in similar BC municipalities. During this period:

- Rossland's permanent population declined by 11% (average -1.0%/yr)
- Castlegar's population grew by 7% (average 0.6%/yr)
- Kimberley's population declined by 4.9% (average -0.4%/yr)
- Kelowna's population grew by 25% (average 2.3%/yr)
- Invermere's population grew by 19% (average 1.7%/yr)

- Vernon's population grew by 16.7% (average 1.5%/yr)
- Whistler's population grew by 30% (average 2.7%/yr)
- BC average population growth was 13% (average 1.2%/yr).

An average annual growth rate of 1.8% - 2.2%, referenced in the draft OCP, over the long term, could be considered a strong real estate market, equivalent to the Cities of Kelowna and Invermere for the period 1996 – 2007 – both cities are favoured winter/summer resort destinations for BC and Alberta residents.

Taking into account the information referenced above, it is recommended the DCC Bylaw use the recent trends in building permit activity, tempered by medium term impacts in the US market. The population projections contained in the draft OCP could be considered aggressive when compared to growth rates in other similar sized resort communities over the last decade. Further future growth in Rossland is anticipated primarily within the resort sector.

It is anticipated Rossland's growth over the next 20 years will range from 1.0% to 1.5% annually, including seasonal occupancy. As a starting point, the draft OCP provides a combined population prediction (permanent + seasonal) for 2007 of 4,229 people. Using a 1.5% annual growth rate yields approximately 1,470 new permanent and seasonal residents over the next 20 years. Assuming an occupancy rate of 2.4 persons per unit referenced in the draft OCP, this equates to 620 new residential units could be constructed within the City over the next 20 years.. This growth rate is equivalent to 31 residential building permits for new dwellings each year. This long-term growth projection is slightly less than the average of 42 building permits per year from 2002 – 2007. The current level of building permit activity (42 units/year) is not expected to be sustained over the long-term based on historic records; hence utilizing a slightly lower projection is considered realistic and prudent. Subsequent DCC bylaw reviews should review whether this prediction is realized over a longer period of time (say at least 10 years).

As indicated above, the majority of growth is anticipated within the resort sector, principally Red Mountain Resort, over the next two decades. Therefore it is assumed only 20% of new growth will occur outside of Red Mountain Resort.

It is difficult to estimate the portion of single family versus multiple family units, particularly without the benefit of historic information. As with most urban municipalities within BC, it is anticipated the portion of multiple family housing will increase over time. Further the community plans for both Red Mountain and Redstone provide a variety of housing unit types governed only by the total number of equivalent units allowed (2,000 EU for Red Mountain and 400 EU for Redstone); hence it is difficult to predict how many residential units will be single family versus multiple family. The only source of information found in the Red Mountain CDP is a calculation completed by Urban Systems for sewer design requirements – it shows approximately 30% of the units will be single family oriented. As both Red Mountain and Redstone mature, the City should track the housing types to determine whether the assumed housing mix shown in the table below is valid.

DCC Bylaw Growth Projections – 20 Years

Area	Assumed Growth by Area	Residential Units by Area	Assumed Housing Mix	Residential Unit Projections
City/Redstone	20%	124	50% single family 50% multiple family	62 single family 62 multiple family
Red Mountain	80%	500 (rounded)	30% single family* 70% multiple family*	150 single family 350 multiple family

* estimated housing mix in Red Mountain CDP sewer calculations

Commercial growth is anticipated to occur primarily at Red Mountain Resort. The CDP provides up to 7,000 m² of commercial space serving 2,000 equivalent units. It is assumed with a growth of 500 units an additional 1,600 m² of commercial space will be required.

Due to uncertainties inherent with projecting growth over 20 years, the growth assumptions utilized within this report should be monitored and adjusted over time.

6.0 Costs Attributable to Growth

The draft OCP estimates the permanent and seasonal population of Rossland in 2007 at 4,229 persons. Growth over the next 20 years for purposes of calculating DCCs is estimated at 1,470 persons. Some water projects benefit existing residents as well as future residents. As such the DCC costs should only be shared based on the anticipated population growth of 1,470 persons. The portion attributable to growth is calculated at 35% for projects with shared benefit, i.e. 1,470 divided by 4,229.

7.0 Sustainability

The City of Rossland has recently initiated a plan towards a sustainable future, recognizing the dominant form of development within the near future will be focused around recreational opportunities. Rossland 2030 – Visions to Action for a Sustainable Future outlines eleven components, which make up a strategic plan towards accomplishing Rossland's vision. Part of building a compact, diverse and green community requires the City to implement "green" development standards.

Each DCC project has been analyzed to determine future changes in development standards, which may influence project costs. At this juncture, the primary focus has been targeted towards water conservation measures, in order to defer expensive water supply upgrades/replacements. It is envisioned through various techniques the City can realize a reduction in average and peak day water demands in the order of 20% to 30%. This could defer bringing on-line two new sources of water, being Elgood Creek and West Little Sheep Creek, within the next two decades. As a result, these significant infrastructure projects have not been included within the proposed DCC Bylaw – this assumption requires further analysis in the medium term to verify water conservation efforts are producing the desired results.

8.0 Offsite Improvements

Various development applications submitted to the City may require construction of offsite improvements. The intent of the City's DCC Bylaw is to capture the most significant offsite projects necessary to support growth; it is not intended to capture all required offsite infrastructure improvements, consequently development applications may require a blend of DCCs and offsite improvements. The extent of offsite improvements will be governed by the sufficiency of roads, water, sewer and parks along the development frontage and/or in the vicinity. Developers are advised to review the DCC project list, attached to this report, when considering development proposals.

9.0 DCC Projects

DCC Infrastructure Totals

	Current DCC Bylaw	Proposed DCC Bylaw
Sanitary Sewer	\$1,064,436	\$1,045,300
Water	\$1,809,268	\$4,728,700
Roads	\$489,000	\$1,100,000
Parks	0	\$350,000

Appendix C provides a comparison of projects contained in the current DCC Bylaw and those proposed with this bylaw amendment.

Appendix D contains a detailed listing of each DCC project categorized by infrastructure type, plus the amount of contribution attributable to growth. Appendix E provides the detailed back-up information used to calculate the cost estimate for each DCC project listed in Appendix D. These costs are consistent with the City's Financial Plan.

Net DCC Costs

Infrastructure	Project Cost Attributable to Growth	Less DCC Reserves	Municipal Assist Factor	Net DCC Costs
Water	\$4,728,700	\$262,361	1%	\$4,421,675
Sewer	\$1,045,300	\$67,390	1%	\$968,100
Roads	\$1,100,000	\$27,681	1%	\$1,061,600
Parks	\$350,000	0	1%	\$346,500

10.0 Proposed DCC Rates

Equivalent Unit Calculation

Area	Single Family Units	Equivalent Units	Multiple Family Units	Equivalent Units	Commercial (m ²)	Equivalent Units	Total Equivalent Units
City	62	62	62	41	-	-	103
Red Mountain	150	150	350	231	1,600	8	389
Totals	212	212	412	272	1,600	8	492

The number of equivalent units is calculated using the equivalency factors found in Section 4.0.

DCC Calculation

Infrastructure	No. of Equivalent Units	Net DCC Costs	DCC/Equivalent Unit
Water	492	\$4,421,675	\$8,987
Sewer	389	\$968,100	\$2,489
Roads	389	\$1,061,600	\$2,729
Parks	484*	\$346,500	\$716

* Excludes commercial

Proposed 2008 DCC Rates – Red Mountain

Land Use	Water	Sewer	Roads	Parks	Totals
Single Detached Dwelling/unit	\$8,987	\$2,489	\$2,729	\$716	\$14,921
Duplex/parcel	\$17,974	\$4,978	\$5,458	\$1,432	\$29,842
Townhouse/unit	\$5,931	\$1,643	\$1,801	\$473	\$9,850
Apartment/unit (greater than or equal to 50 m ² gross floor area)	\$5,931	\$1,643	\$1,801	\$473	\$9,850
Apartment/unit (less than 50 m ² gross floor area)	\$2,966	\$822	\$901	\$236	\$4,925
Non-profit Seniors	\$2,966	\$822	\$901	\$236	\$4,925
Secondary suite	\$2,966	\$822	\$901	\$236	\$4,925
Commercial/m ² gross floor area	\$44.94	\$12.45	\$13.65	-	\$71.04

Proposed 2008 DCC Rates – City/Redstone

Land Use	Water	Sewer	Roads	Parks	Totals
Single Detached Dwelling/unit	\$8,987	-	-	\$716	\$9,703
Duplex/parcel	\$17,974	-	-	\$1,432	\$18,690
Townhouse/unit	\$5,931	-	-	\$473	\$6,404
Apartment/unit (greater than or equal to 50 m ² gross floor area)	\$5,931	-	-	\$473	\$6,404
Apartment/unit (less than 50 m ² gross floor area)	\$2,966	-	-	\$236	\$3,202
Non-profit Seniors	\$2,966	-	-	\$236	\$3,202
Commercial/m ² gross floor area	\$44.94	-	-	-	\$44.94

Comparison to Existing DCC Rates

Land Use	2006 Rates*	2008 Rates*
Single Detached Dwelling	\$3,329	\$14,921
Duplex	\$6,658	\$29,842
Townhouse	\$2,197	\$9,850
Apartment (greater than or equal to 50 m ² gross floor area)	\$2,197	\$9,850
Apartment (less than 50 m ² gross floor area)	\$1,099	\$4,925
Commercial	\$16.65	\$71.04

* represents DCC rates for Red Mountain

11.0 Potential DCC Projects – Deferred

The period chosen for the proposed DCC Bylaw is 20 years (2008 – 2028). Careful attention has been paid to ensure only those projects required within this period are included in the DCC rate calculations. However, various consultant reports have identified potential improvements required in the future. In order to maintain a record of all identified projects, this report recognizes specific projects, which may be considered in future DCC Bylaw amendments. These projects have not been included in determining the DCC assessments.

All of the projects listed below are assumed to occur beyond the next 20 years. Where information is available, triggers have been provided in order to provide an indication when those projects would be necessary.

Water

Water projects deferred for future considerations of DCC Bylaw amendments include:

- Elgood Creek – Murphy Creek pipe connection and new intake
- West Little Sheep Creek – Star Gulch Reservoir pipe connection and new intake
- Murphy Creek Reservoir
- Record Creek – West Little Sheep Creek pipe connection and new intake
- Raise Ophir Reservoir to 23 metres freeboard

Sewer

Sewer projects deferred for future considerations of DCC Bylaw amendments pertaining to development at Red Mountain include:

- Red Mountain Lift Station – Phase 2 upgrade to 120 l/s (1,300 EU)
- Spokane Street: Third Avenue to Planer Crescent (1,355 EU)
- Washington Street: First Avenue to Third Avenue (1,498 EU).

Over the next 20 years, based on the growth predictions contained within this report, Red Mountain is anticipated to grow to approximately 480 equivalent units.

The Regional District Kootenay Boundary is considering relocating the existing regional sewage treatment plant, which serves the entire City of Rossland and others. The cost of this initiative is substantial; as a result, the City has decided to impose a sewage connection fee for \$2,500 per unit for new developments. This connection fee has not been incorporated within the DCC Bylaw. As RDKB regional sewage plans become more certain, future DCC Bylaw amendments should consider the impact of increased regional costs passed on by the District.

Roads

Road projects deferred for future considerations of DCC Bylaw amendments include:

- New intersection to Red Mountain Resort at Highway # 3B
- Northbound acceleration lane on Highway # 3B at Kirkup Street
- Upgrade Washington Street from Columbia Avenue to Highway # 3

Parks

Without a Parks Master Plan, it is difficult to forecast parkland acquisition and development requirements over the next 20 years. As a result, only trail system improvements have been incorporated within the draft DCC Bylaw.

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Appendix A
Current DCC Bylaw

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**Appendix B
Proposed DCC Bylaw**

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**Appendix C
DCC Project Comparisons**

City of Rosland – DCC Project Comparisons

	Project Number	Existing DCC Bylaw	Proposed DCC Bylaw
Sewer:			
Red Mountain Phase 1 lift station upgrade	SAN 2007-14	\$31,000	\$40,300
Red Mountain Phase 2 lift station upgrade	SAN 2007 - 15	\$358,000	0
Lane East of St. Paul replace pipe	SAN 2007 - 8	\$53,000	\$69,000
Third Ave: Spokane to Washington replace pipe	SAN 2007- 9	\$114,000	\$148,000
Washington St: First Ave to Columbia replace pipe	SAN 2007 – 10	\$119,000	\$398,000
Washington St: Second to Third Ave	SAN 2007 – 11	\$65,000	0
Washington St: First to Second Ave	SAN 2007 – 12	\$122,000	0
Columbia Ave: Washington to St. Paul replace pipe	SAN 2007 – 6	\$240,000	\$290,000
Spokane St: Third Ave to Planer	SAN 2007 - 13	\$166,000	0
Sewer studies	SAN 2207 – 7	0	\$50,000
Misc. upgrades	n/a	0	\$50,000
Total Bylaw Amount		\$1,064,436	\$1,045,300
Water:			
Columbia Ave: Water upgrades – 35% * \$397,000	WATER 2007 - 7	0	\$139,000
Topping Creek reconstruct intake – 35% * \$208,250 (City's portion of approved grant)	WATER 2007 – 11	0	\$73,000
Murphy Creek new intake – 35% * \$173,000 (City's portion of approved grant)	WATER 2007 – 8	0	\$61,000
Hanna Creek – Blue-Eye Diversion replace pipe – 35% * \$3,734,100	WATER 2007 – 12	\$933,208	\$1,307,000
Murphy Creek – Hanna Creek replace pipe – 35% * \$3,167,100	WATER 2007 – 13	\$876,060	\$1,108,000
Third Filter at Water Treatment Plant – 100%	WATER 2007 – 3	0	\$1,200,000
Telemetry: Ophir – Star Gulch Reservoir – 35% * \$402,500	WATER 2007 - 14	0	\$141,000
Water Treatment Plant upgrade – 100%	WATER 2007 - 10	0	\$500,000
Water studies	WATER 2007 – 9	0	\$100,000
Misc. upgrades	n/a	0	\$100,000
Total Bylaw Amount		\$1,809,268	\$4,728,700
Roads:			
New traffic signal & lane markings: Columbia Ave – Washington St.	GEN 2007 – 13/14	\$222,000	\$300,000
New traffic signal: New Red Mountain access – Highway # 3B	GEN 2007 - 15	\$267,000	\$350,000
Washington/Plewman/Kirkup/Hwy 3B traffic management	n/a	0	\$300,000
Upgrade Washington St: Columbia Ave – Highway # 3B	GEN 2007 – 12	0	0
Traffic studies	n/a	0	\$50,000
Misc. upgrades (incl. drainage)	n/a	0	\$100,000
Total Bylaw Amount		\$489,000	\$1,100,000
Parks:			
Trail development – 35% * \$1,000,000	n/a	0	\$350,000
Total Bylaw Amount		0	\$350,000

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**Appendix D
DCC Project List**

City of Rossland - DCC Project List

Sewer:	Project #	Total Cost	DCC Portion	DCC Cost
Red Mountain Phase 1 lift station upgrade	SAN 2007-14	\$40,300	100%	\$40,300
Lane East of St. Paul replace pipe	SAN 2007 - 8	\$69,000	100%	\$69,000
Third Ave: Spokane to Washington replace pipe	SAN 2007- 9	\$148,000	100%	\$148,000
Washington St: First Ave to Columbia replace pipe	SAN 2007 – 10	\$398,000	100%	\$398,000
Columbia Ave: Washington to St. Paul replace pipe	SAN 2007 – 6	\$290,000	100%	\$290,000
Sewer studies	SAN 2207 – 7	\$50,000	100%	\$50,000
Misc. upgrades	n/a	\$50,000	100%	\$50,000
Total				\$1,045,300
Water:				
Columbia Ave: Water upgrades	WATER 2007 - 7	\$397,000	35%	\$139,000
Topping Creek reconstruct intake	WATER 2007 – 11	\$208,250	35%	\$73,000
Murphy Creek new intake*	WATER 2007 – 8	\$173,000	35%	\$61,000
Hanna Creek – Blue-Eye Diversion replace pipe	WATER 2007 – 12	\$3,734,100	35%	\$1,307,000
Murphy Creek – Hanna Creek replace pipe	WATER 2007 – 13	\$3,167,100	35%	\$1,108,000
Third Filter at Water Treatment Plant	WATER 2007 – 3	\$1,000,000	100%	\$1,200,000
Telemetry: Ophir – Star Gulch Reservoir	WATER 2007 - 14	\$402,500	26%	\$104,650
Water Treatment Plant upgrade	WATER 2007 - 10	\$500,000	100%	\$500,000
Water studies	WATER 2007 – 9	\$100,000	100%	\$100,000
Misc. upgrades	n/a	\$100,000	100%	\$100,000
Total				\$4,728,700
Roads:				
New traffic signal & lane markings: Columbia Ave – Washington St.	GEN 2007 – 13/14	\$300,000	100%	\$300,000
New traffic signal: New Red Mountain access – Highway # 3B	GEN 2007 - 15	\$350,000	100%	\$350,000
Right turn lane: Kirkup – Highway # 3B	n/a	\$300,000	100%	\$300,000
Upgrade Washington St: Columbia Ave – Highway # 3B	GEN 2007 – 12	0	100%	\$0
Traffic studies	n/a	\$50,000	100%	\$50,000
Misc. upgrades (incl. drainage)	n/a	\$100,000	100%	\$100,000
Total				\$1,100,000
Parks:				
Trail development	n/a	\$1,000,000	26%	\$350,000
Total				\$350,000

* Project costs are net of grant funding

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**Appendix E
Project Costs**