Memo

City of Kelowna

Date: April 13, 2011

File: 0220-02

To: City Manager

From: R. Cleveland, Director, Infrastructure Planning

Subject: 2030 - 20 Year Servicing Plan & Financing Strategy/Development Cost Charges Bylaw #10515
Report Prepared by: Jim Wunderlich

Recommendation:

THAT Council receives, for information, the Report from the Director of Infrastructure Planning dated April 13, 2011 with respect to the 2030-20 year Servicing Plan and Financing Strategy and Development Cost Charges Bylaw #10515;

AND THAT Council endorse the new 2030-20 Year Servicing Plan and Financing Strategy for the infrastructure required to support new growth within the City of Kelowna as projected in the 2030 Official Community Plan;

AND THAT Council approve expansion of the Water Sector boundary to Lots 1 and 2, Plan 65503, as well as 1650 Glenmore Road, the SE Quarter, Section 17, Township 23, and 1630 Glenmore Road, the SW Quarter, Section 16, Township 23; per the attached map dated January 26, 2011;

AND THAT Council approve expansion of the Wastewater Sector boundary to Lots 1 and 2, Plan 65503 as well as 1650 Glenmore Road, the SE Quarter, Section 17, Township 23, and 1630 Glenmore Road, the SW Quarter, Section 16, Township 23, and to Lot 1, Plan 2237, Twp. 23, Land District 4; Free Form Legal: Section 9 & 16 & 21, Except Plan KAP45841, West of Glenmore Road AND Lot 5, KAP63448, Twp 23, Land District 41,Free Form Legal: Section 15, 16, 21 & Section 22, per the attached maps dated January 26, 2011 and November 23, 2010;

AND FURTHER THAT Council give readings consideration to the Development Cost Charge Bylaw 10515 to become effective the date of final adoption and to repeal the City of Kelowna "Development Cost Charges Bylaw No. 9095" and all amendments thereto upon adoption of Bylaw 10515.

Purpose:
To provide an opportunity for Council to consider the 20-Year Servicing Plan & Financing Strategy to accommodate growth anticipated in the draft 2030 Official Community Plan (OCP) along with the consequential Development Cost Charges Bylaw. This is required by legislation in order to advance the OCP to final reading.

Background:
Development of the 2030-20 Year Servicing Plan and Financing Strategy has been in progress since April 2010. The major objectives of the Plan are:

- Project infrastructure requirements relative to roads, water, wastewater and the acquisition of park land over the 20-year planning horizon;
- Confirm the overall affordability of the infrastructure required to support projected growth;
- Allocate infrastructure costs between the existing population and new growth units based on the relative benefit of the infrastructure;
- Integrate the plan into the City's financial planning documents and the OCP;
- Continue to structure DCCs so as to encourage the development of a compact, liveable and walkable community serviced with green infrastructure (parks and trees), sidewalks, bicycle lanes and transit.

The 2030 20-year plan has been developed in consultation with Council as follows:

- May 20, 2010: Council Workshop identifying key transportation infrastructure planning issues arising from draft OCP;
- June 23, 2010: Council Workshop on Central Okanagan Multi-modal Corridor from Spall to UBCO; Hollywood Road N Extension to East Kelowna; and Lakeshore Road widening from Richter Street to Barnaby Road;
- October 4, 2010: Council Report on proposed 2030 Plan for Water, Wastewater Trunks, Wastewater Treatment and scenarios for parkland acquisition;
- October 18, 2010: In-camera discussion of parkland acquisition recommendations;
- November 1, 2010: Council Report on alternative parkland acquisition and park development policies;
- November 18, 2010: Information Memo and PowerPoint presentation provided to Council on November 1 posted to City website;
- January 24, 2011, Council Report on final parkland acquisition and park development policies;
- January 24, 2011: Council Report on proposed 2030 Plan for Transportation Networks.

The 2030 20-year plan has been developed with input from the Urban Development Institute (UDI) as follows (see Annex 1):

- June 14, 2010: City provided UDI construction unit cost calculations for roads, water and sewer services as well as the methodology used for the development of unit costs;
- June 24, 2010: City provided UDI with revisions to the road construction unit cost calculations;
- June 28, 2010: UDI responded to the construction unit cost submissions;
- July 1, 2010: City provided a response to the June 28 letter from UDI;
- July 5, 2010: City met with UDI regarding the process for incorporating the unit costs into the 2030 Servicing Plan and Financing Strategy;
- October 6, 2010: City provided draft 2030 DCC Unit Rates based on the 2030 Servicing Plan for Water, Wastewater Trunks, Wastewater Treatment and revised construction unit prices for Water, as well as boundary changes for the Water and Wastewater Sector Plans;
- November 22, 2010: UDI responded to the October 6 letter and requested additional detail;
- November 22, 2010: UDI responded to the City regarding the October 27 report to Council regarding parkland acquisition and park development policy options;
- November 22, 2010: UDI copied the City on its letter to School District #23 regarding the School Site Acquisition Charge to be administered with the City's Development Cost Charge program. Note the School District responded directly to this letter and copied the City;

- February 2, 2011: City provided draft 2030 DCC Unit Rates based on the 2030 Servicing Plan for the Transportation Network and revised rates for parkland acquisition in response to UDI's November 22 letter;
- February 17, 2011: City provided transportation network maps associated with the February 2 letter;
- March 4, 2011: UDI requested meeting to review details;
- March 10, 2011: City hosted with UDI a meeting on OCP, 20-year plan and school site acquisition charge;
- March 17, 2011: Detailed cost estimates for the South West Mission area DCC roads were provided to a group of developers in the South West Mission at their request for review and comment;
- March 23, 2011: Southwest Mission developers wrote to the City regarding the Upper South Mission DCC Roads program, resulting in 2 information meetings.
- March 23, 2011: UDI wrote to Mayor and Council on Development Cost Charges;
- March 31, 2011: UDI met with the City for further discussion regarding the allocation of costs in the transportation network plan;
- April 1, 2011: City responded to UDI request at March 10, 2011 meeting, for information.
- April 6, 2011: City responded to UDI letter of March 23.
- April 8, 2011: Final Project Cost Binder provided to UDI.
- April 15, 2011: Final response to SWM developers with resolution of issues.

The total cost of providing infrastructure in the 2030 Plan is $709.0 million, $7.1 million more than the $701.9 million initial draft presented to Council on January 24th, 2011. This difference is attributable to net changes made in the Transportation program since the January presentation, as a result of discussions with various stakeholders and staff. To summarize, increases in costs include the addition of Burtch 4 (Sutherland - Hwy 97) and Hwy 33(1) (Clement - Enterprise) for a total $4.8 M., Hollywood Roads ($2.4 M.), Highway 33 ($1.3 M), Lakeshore 3 & 4 ($1.3 M.) and John Hindel ($0.8 M.) as well as some smaller increases, offset by net reductions in the Southwest Mission ($2.2 M.); Guisachan 2 ($1.1 M.) and Rutland 2 ($0.9 million). As well, the criteria surrounding the existing benefits component of taxation was re-examined. This resulted in a net increase in taxation of $11.5 million since the January presentation. Non-tax funding was also reviewed, resulting in a decrease under the 'By Developer' funding of $1.4 million and an increase in Provincial Assist of $2.8 million. The overall impact is substantial DCC rate decreases in Sectors A, B and E with C and D relatively unchanged since the January 24th Council presentation.

The overall 2030 DCC program now shows a decrease of $206.9 million or 22.6% from the current program total of $915.9 million. Summary Cost Sharing Models are included as Exhibit "A" to "E". This corresponds well with anticipated reductions in population growth since the 2020 OCP. A summary of existing and revised Development Cost Charge rates by growth area of the City are included for 4 development types in Schedules 1-4. Schedule 5 shows the updated DCC rates for the various service areas.

The summary of program costs relative to the 2020 plan follows. It reflects the 20.6% reduction in anticipated growth units, the reduction in construction costs observed in 2010 projects, qualitative improvements to the level of service in the water service and the impact of fixed costs in the wastewater treatment service divided by reduced growth projections.

2030 Plan relative to 2020 Plan								
	Funding Sources ($ Millions)							
Service	BC Grant	Developer Construct	DCCs Reserves	Taxation	Utility Rates	2030 Totals	2020 Totals	%change from 2020
Arterials	26.6	50.9	186.1	136.8		400.4	588.5	-32.0
Water		5.4	23.0		30.7	59.1	48.1	22.8
WasteWater		4.9	23.6		9.4	37.9	43.3	-12.5
Treatment			66.6		19.5	86.1	92.0	-6.3
Parkland	5.4		107.1	13.0		125.5	144.1	-12.9
2030 Totals	32.0	61.2	406.4	149.8	59.6	709.0	915.9	-22.6
2020 Totals	43.2	99.0	577.5	154.9	41.5	915.9		
% change From 2020	-25.9	-38.2	-29.6	-3.3	43.5	-22.6		

The program changes result in an overall reduction in the DCC rates. The following compares the Residential 1 rate for the two City DCC sectors that receive all services from the City. The remaining 10 sectors are either not served by the City water utility or the City sewer utility, or both. The differences between these two sectors reflect the different costs associated with low vs. high density areas and the impact of hillside developments on costs. Approximately 50% of current residents live in the Inner City and 60% of the residential growth is anticipated in the Inner City.

Service	B: South Mission	I: Inner City
Roads	**$21,540**	**$7,530**
Roads 2020	$23,743	$9,176
Water	**$679**	**$998**
Water 2020	$1,289	$1,757
Wastewater	**$1,903**	**$1,294**
Wastewater 2020	$1,979	$1,562
Treatment	**$3,723**	**$3,723**
Treatment 2020	$3,044	$3,044
Parks	**$5,300**	**$5,300**
Parks 2020	$5,069	$5,069
2030 Program	**$33,145**	**$18,844**
2020 Program	$35,124	20,608
% change from 2020 Program	-5.6%	-8.6%

City staff are pleased with the cooperation received from the public and stakeholders in completing the 2030 - 20 Year Servicing Plan and Financing Strategy update. We wish to thank all who took the time to review, comment and discuss the Plan with the participating departments.

Internal Circulation:

Director, Policy & Planning
Director, Financial Services

Legal/Statutory Authority:
The Development Cost Charge (DCC) Bylaw sets out the charges imposed for public roads, water, sanitary sewer, drainage and public park infrastructure when subdividing or constructing, altering or extending a building, pursuant to Chapter 323, Part 26, Division 10 of the Local Government Act (R.S.B.C., 2000).

A development cost charge is a means provided by Sections 932 through 937 of the *Local Government Act* to assist local governments in paying the capital costs of installing certain local government services, the installation of which is directly or indirectly affected by the development of lands and/or the alteration/extension of buildings (Section 933(1) and (2)). DCCs can be specified according to different zones or specified areas as they relate to different classes and amount of development, but charges should be similar for all developments that impose similar capital cost burdens on a local government (Section 934(2) and (3)).

The *Local Government Act* permits DCCs to be established for providing, constructing, altering, or expanding facilities related only to the following local government services: roads, other than off-street parking; sewage; water; drainage; and parkland acquisition and improvement (Section 933 (2)).

DCCs are payable by parties obtaining an approval of subdivision or a building permit, as the case may be (Section 933(1) and (5)).

DCCs are established within a layered governance structure. At the most direct level, DCCs are subject to the policy and technical bulletins issued by the Ministry whose responsibility it is to review and approve the bylaws submitted by local government. This level lies under the legislative framework described by the Sections 932 - 937 of the *Local Government Act* related to DCCs. The provincial legislation is enacted under the authority of the provincial government as set out in the Canadian Constitution.

Legal/Statutory Procedural Requirements:
Section 882 of the *Local Government Act* regarding the adoption procedures for the Official Community Plan specifies that:

> *(3) After first reading of a bylaw under subsection (1), the local government must, in sequence, do the following:*
> *(1) consider the plan in conjunction with*
> *(i) its financial plan....*

Consideration of the 2030 20-year servicing plan and financing strategy as reflected in the DCC Bylaw is therefore required prior to final consideration of the 2030 OCP.

The *Local Government Act* (Section 937(1)) requires the Inspector of Municipalities to approve local government DCC bylaws. The following steps reflect the typical process required for developing a DCC program.

- Council passes a motion to consider a DCC program and the development of a DCC bylaw based on the *DCC Best Practices Guide*.
- Staff, in conjunction with consultants, develop a bylaw and calculate the DCC rates.
- During the bylaw development phase, input is obtained from the public and interested parties.
- The proposed bylaw is presented to Council for first reading.
- If Council wishes, they may request additional public input or revisions prior to second and third reading.
- Following third reading the DCC bylaw and supporting documentation is forwarded to the Inspector of Municipalities for review and approval.
- If no revisions are required, the bylaw is returned for adoption and the DCC bylaw takes effect.

Further to the above, the 20-year Servicing Plan and Financing Strategy have been revised to reflect the impact of the new 2030 OCP on the City's municipal infrastructure. The Bylaw has been re-written to reflect these changes. The new 2030 20-year plan has:

- Updated project costs to reflect more recent construction costs
- Removed projects in the 2020 plan that have been completed
- Removed, revised the scope and added projects that respond to the locations and magnitude of projected growth in the 2030 OCP
- Recalculated the DCC charges based on the planned projects divided by the anticipated units of residential and Industrial, Commercial and Institutional (ICI) construction in each sector.

The revised bylaw, following public consultation requirements and then approved by Council, will be submitted to the Inspector of Municipalities for ratification. This is scheduled for April 2011 so that ratification can be available prior to the public hearings regarding the OCP scheduled for May 25 & 26, 2011.

Existing Policy:
2020 20-Year Servicing Plan and Financing Strategy

Financial/Budgetary Considerations:
DCCs contribute to the initial capital cost of growth-related infrastructure, along with taxpayer contributions that account for the benefit of the new infrastructure to the existing community. The subsequent operation, maintenance, capital renewal and the eventual replacement of all infrastructures accrues to general taxation or utility rates. The expectation is that the property taxes generated by the new development will pay the costs beyond the original capital construction. Historically in Canada, property taxation has not been adequate to cover asset management costs resulting in a growing deficit between the need to replace aging infrastructure at the end of its service life and property tax revenues. As a result, municipalities are developing new approaches to infrastructure development and asset management that are more affordable over the long term. Kelowna will need to address asset management cost issues over the next few years through the development of a renewed long-term capital plan.

External Agency/Public Comments:
Staff conducted joint public open houses on both the *draft* OCP and the *draft* DCC Plan simultaneously as follows:

- Thursday February 17th at St David's Presbyterian Church in Glenmore;
- Saturday, February 19th at the Laurel Packinghouse;
- Monday, February 21st at the Rutland Centennial Hall; and
- Wednesday February 23rd at St Paul's United Church in the Mission.

Exit surveys were available at the open houses as well as on the City's website, for written input. Staff requested that all submissions, questions and comments be received by March 18, 2011. A total of 460 people attended the 4 open houses and 628 people completed the feedback form. In summary, 86% of respondents agree (strongly/somewhat) to the Parkland Acquisitions plan; 83% agree with the Transportation plan; 80% agree with the Water priorities and 79% agree with the Wastewater priorities (see also the report to Council from the Policy & Planning Department dated March 23, 2011 and presented to Council on March 28, 2011). Respondents provided approximately 240 written comments to the open ended questions related to Infrastructure Planning (see Annex 2). Staff have thoroughly reviewed and considered each of the comments in drafting the proposed 2030 Servicing Plan and Financing Strategy.

Considerations not applicable to this report Personnel Implications:
Community & Media Relations Comments:
Alternate Recommendation:

Submitted by:

R. Cleveland, Director, Infrastructure Planning

Approved for inclusion: J. Paterson, General Manager, Community Sustainability

cc: General Manager, Community Services
General Manager, Corporate Sustainability
Director, Financial Services
Director, Policy and Planning

2030 20-YEAR SERVICING PLAN & FINANCIAL STRATEGY: DCC BYLAW #10515

City of Kelowna

Council : 2011 April 18

INTEGRATED 2030 OCP + DCC TEAM

AGENDA

- Context
- Network Solutions
- Program Costs & DCC Rates
- Next Steps & Recommendations

LEGISLATIVE CONTEXT FOR DCC

OCP
- Establishes Overall Vision of Best mid-size City
- Anticipates & Manages Growth

DCC
- Evaluates public infrastructure to support growth
- Sets Development Costs Charges (DCC)

Do It!
- Zoning and Development Bylaw
- Subdivision, Development & Servicing Bylaw
- Capital Plans

WHO PAYS FOR WHAT?

Financing Source	Pays For:
Development Costs paid in part by developer	New Water, Wastewater Trunks, Wastewater Treatment, Park Land Acquisition, Transportation networks required to increase system capacity to accommodate growth
Taxation & Utility/User Rates	Operation, maintenance, capital upgrades and eventual replacement of all DCC infrastructure, AND Acquisition, operation, maintenance, capital upgrades and replacement of: • Park construction, linear parks, natural areas • Non DCC local roads and highway urbanization • All buildings (operations, community protection, recreation/culture, airport)

Every DCC acquisition becomes an on-going liability to taxation.

DEVELOPMENT COST CHARGE ELEMENTS

20-year Servicing Plan and Financing Strategy (2030)

- Network Changes
- Project Descriptions
- Service Network Maps
- Service Cost Models

DCC Bylaw #10515

- Service Sector Maps
- DCC Sector Rates by service type correlated with each building type

CONSULTATION PROCESS

- Council Reports: 8 (May 2010-Jan 2011)
- Public Open Houses: 4 (2011 Feb 17,19,21,23)
- UDI Consultation: 20 (June 2010-April 2011)

OCP CHAPTER7 INFRASTRUCTURE PRINCIPLES

- Life Cycle Analysis
- Integrated Resource Management Strategy
- GHG Reduction
- Multiple Bottom Line Assessment
- Integrated Regenerative Design Processes
- Maximize Infrastructure Utilization

OCP SERVICE OBJECTIVES

- Transportation: Balanced/healthy choice
- Utilities: Resource Conservation
- Active/Natural & Linear Parks: Connectivity, quality

CHALLENGE: DEVELOPMENT FORECAST

Residential Unit comparison for 2020 & 2030 OCP

OCP	RES UNIT GROWTH	% CHANGE
2020	25,144	N/A
2030	19,952	-20.6%

Residential Units by 2030 Transportation Sector

SECTOR	A: SE Kelowna	B: South Mission	C: North East of 'I'	D: N. Hwy #33	E. North of 'I'	I: Inner City ('I')
Units	45	2,117	691	1,657	2,146	9,851
% of Total	0.3%	12.8%	4.2%	10.0%	13.0%	59.7%

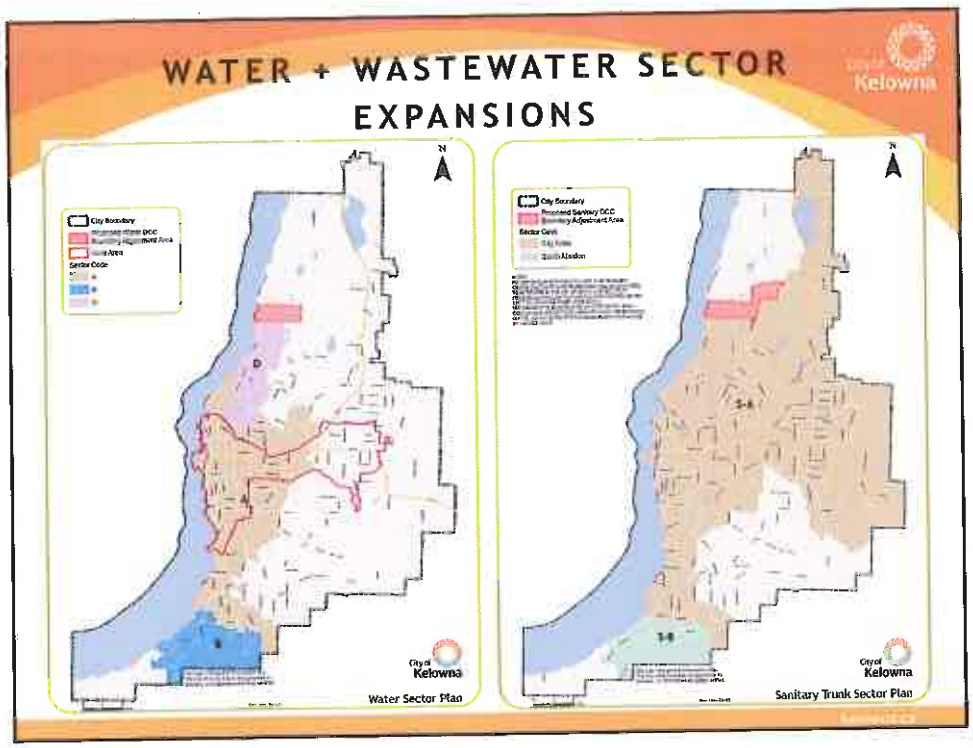
Growth triggers build out solutions in fixed increments BUT burden may be shouldered by fewer units. Suburban growth needs infrastructure support equally in South Mission, Black Mtn/Tower Ranch and Glenmore/UBCO.

GOAL- PRIORITIZE HIGHER DENSITY 'HOUR GLASS' OF URBAN CORE

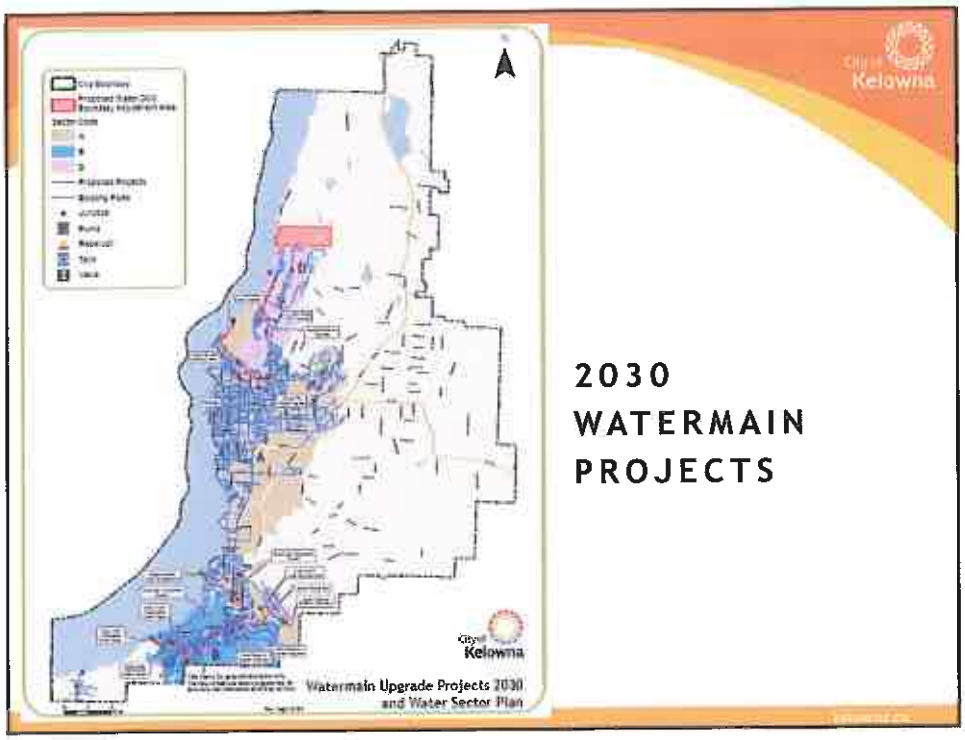
PROGRAM SECTOR EXPANSIONS & NETWORKS

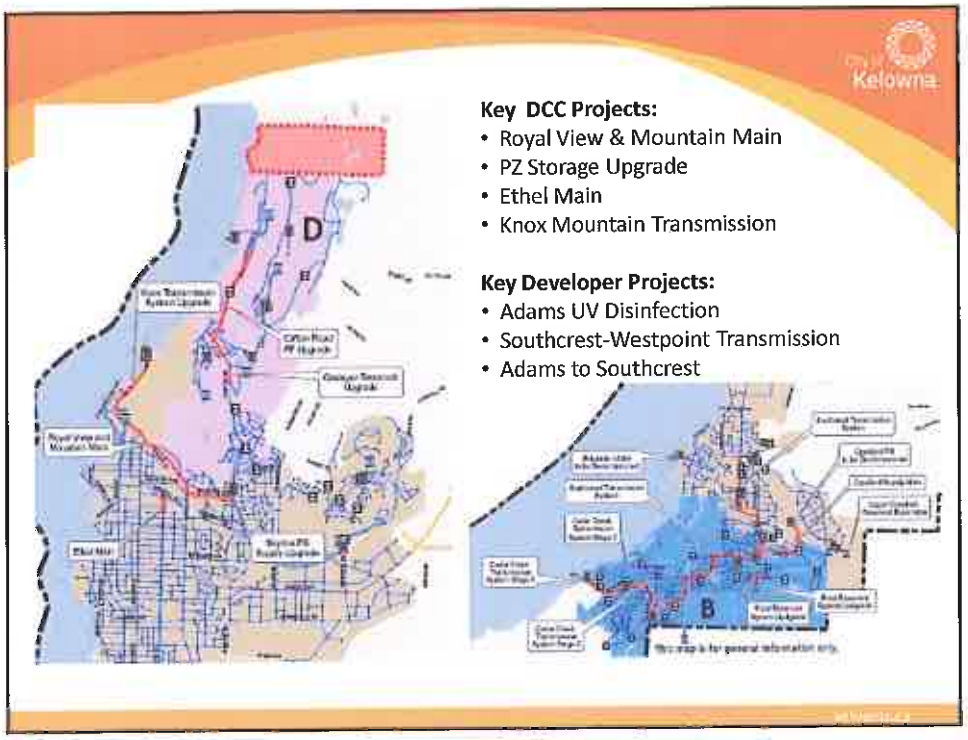
City of Kelowna

Council Workshop: 2011 January 24


WATER + WASTEWATER SECTOR EXPANSIONS
Kelowna
City Boundary
Sector Code
N
City of Kelowna
Water Sector Plan
City Boundary
Sector Catchment
N
City of Kelowna
Sanitary Trunk Sector Plan


NETWORK SOLUTIONS
City of Kelowna
Council Workshop: 2011 January 24

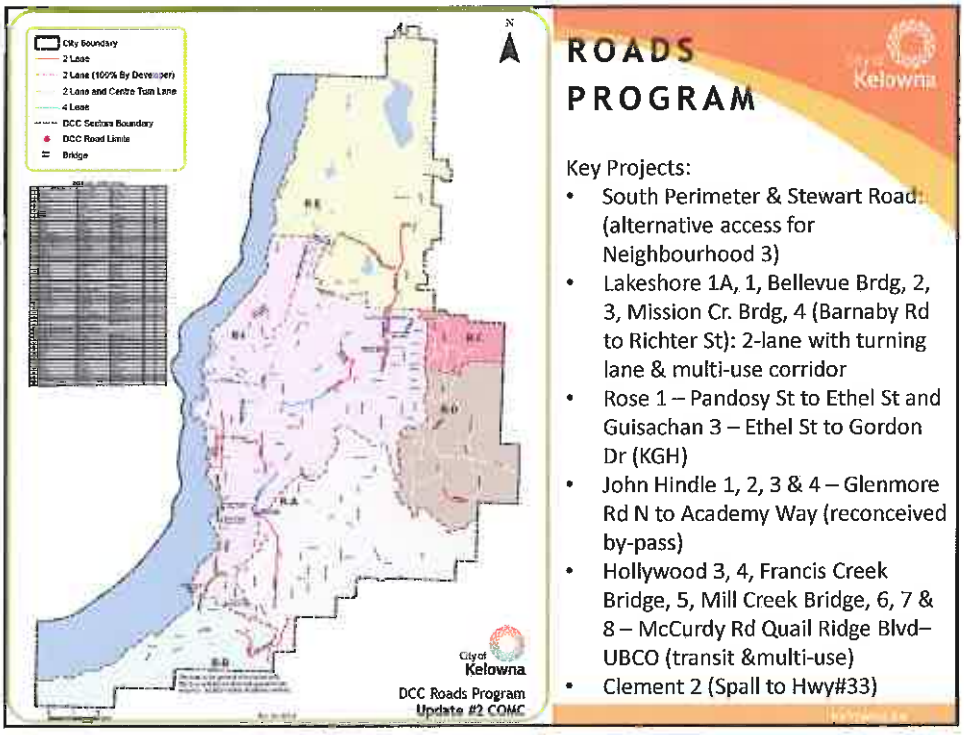

Kelowna
2030
WATERMAIN
PROJECTS
Kelowna
Watermain Upgrade Projects 2030
and Water Sector Plan


Kelowna
Key DCC Projects:
• Royal View & Mountain Main
• PZ Storage Upgrade
• Ethel Main
• Knox Mountain Transmission
Key Developer Projects:
• Adams UV Disinfection
• Southcrest-Westpoint Transmission
• Adams to Southcrest
D
B

2030 WASTEWATER TRUNK PROJECTS

Key DCC Projects:
- Lakeshore Trunk-Gyro Lift Station
- Byrns Baron Phase 2
- Airport Gravity

Key Developer Projects
- Kinnickinnick
- Glenmore Connector
- Rose Ave Lift Station (KGH-$1.2M)



ROADS PROGRAM

Key Projects:
- South Perimeter & Stewart Road: (alternative access for Neighbourhood 3)
- Lakeshore 1A, 1, Bellevue Brdg, 2, 3, Mission Cr. Brdg, 4 (Barnaby Rd to Richter St): 2-lane with turning lane & multi-use corridor
- Rose 1 – Pandosy St to Ethel St and Guisachan 3 – Ethel St to Gordon Dr (KGH)
- John Hindle 1, 2, 3 & 4 – Glenmore Rd N to Academy Way (reconceived by-pass)
- Hollywood 3, 4, Francis Creek Bridge, 5, Mill Creek Bridge, 6, 7 & 8 – McCurdy Rd Quail Ridge Blvd– UBCO (transit &multi-use)
- Clement 2 (Spall to Hwy#33)

Connectivity

5-minute walking radius on 2020 park acquisition plan

2030 PARKLAND ACQUISITION STRATEGY

DCC PARK TYPE	HECTARES
City	12
Community	20
Neighbourhood	23
Recreation	40
TOTAL	95

PROGRAM COSTS & DCC RATES

City of Kelowna

Council Workshop: 2011 January 24

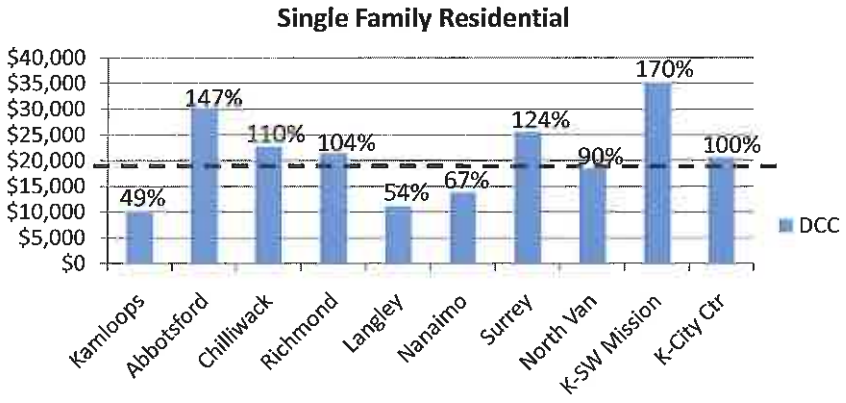
TOTAL DCC PROGRAM COST (COSTS IN MILLIONS)

Service	Grant	Dev Build	DCC's	Tax	Utility Rates	2030 Totals	2020 Totals	% change
Arterials	26.6	50.9	186.1	136.8		400.4	588.5	-31.6
Water		5.4	23.0		30.7	59.1	48.1	+22.8
Trunks		4.9	23.6		9.4	37.9	43.3	-12.5
Treat't			66.6		19.5	86.1	92.0	-6.3
Parks	5.4		107.1	13.0		125.5	144.1	-12.9
2030	32.0	61.2	406.4	149.8	59.6	709.0	915.9	-22.6
2020	43.2	99.0	577.5	154.9	41.5	915.9		
% change	-25.9	-38.2	-29.6	-3.3	43.5	-22.6		

2030 DCC RATE STATUS (WORK IN PROGRESS)

System	Current City Centre	2030 City Centre	% Change	Current South Mission	2030 South Mission	% Change
Water	$1,757	$998	-43.2%	$1,289	$679	-47.3%
Wastewater Trunks	$1,562	$1,294	-17.2%	$1,979	$1,903	-3.8%
Wastewater Treatment	$3,044	$3,723	+22.3%	$3,044	$3,723	+22.3%
Parks	$5,069	$5,300	+4.6%	$5,069	$5,300	+4.6%
Transportation	$9,176	$7,530	-17.9%	$23,743	$21,540	-9.3%
TOTAL	**$20,608**	**$18,844**	-8.6%	**$35,124**	**$33,145**	-5.6%

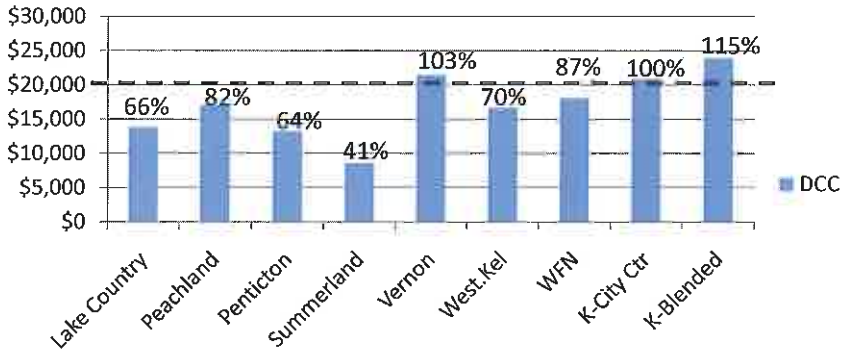
DCC RATES - JULY 2010



Percentages reflect rates relative to Kelowna City Centre as base-line

DCC RATES-OKANAGAN VALLEY-JULY 2010

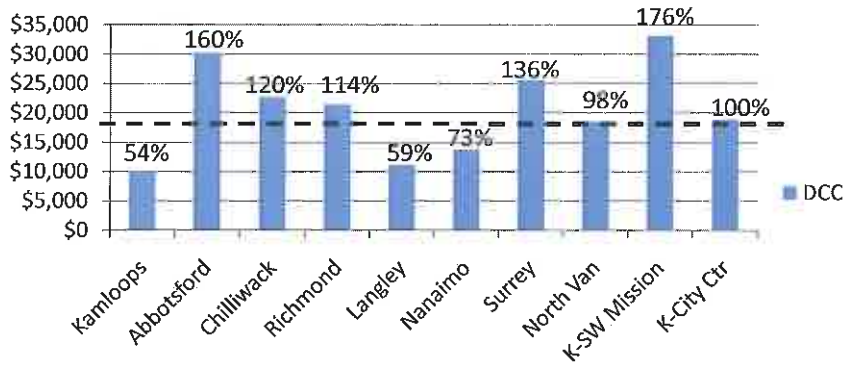
Single Family Residential DCC



Percentages reflect rates relative to Kelowna-South-West Mission as base-line
West Kelowna DCC is roads and parks only, water and waste-water under development;
RDCO utility charges to WFN used to approximate comparables

DCC RATES - PROPOSED 2030 KELOWNA

Single Family Residential



Percentages reflect rates relative to Kelowna City Centre as base-line

NEXT STEPS & RECOMMENDATIONS

City of Kelowna

Council Workshop: 2011 January 24

RECOMMENDATIONS

- Endorse 2030 20-year Servicing Plan & Financing Strategy
- Approve Water Sector Boundary Expansion
- Approve Wastewater Sector Boundary Expansion
- Give readings consideration to DCC Bylaw #10515; eventual repeal of DCC Bylaw #9095

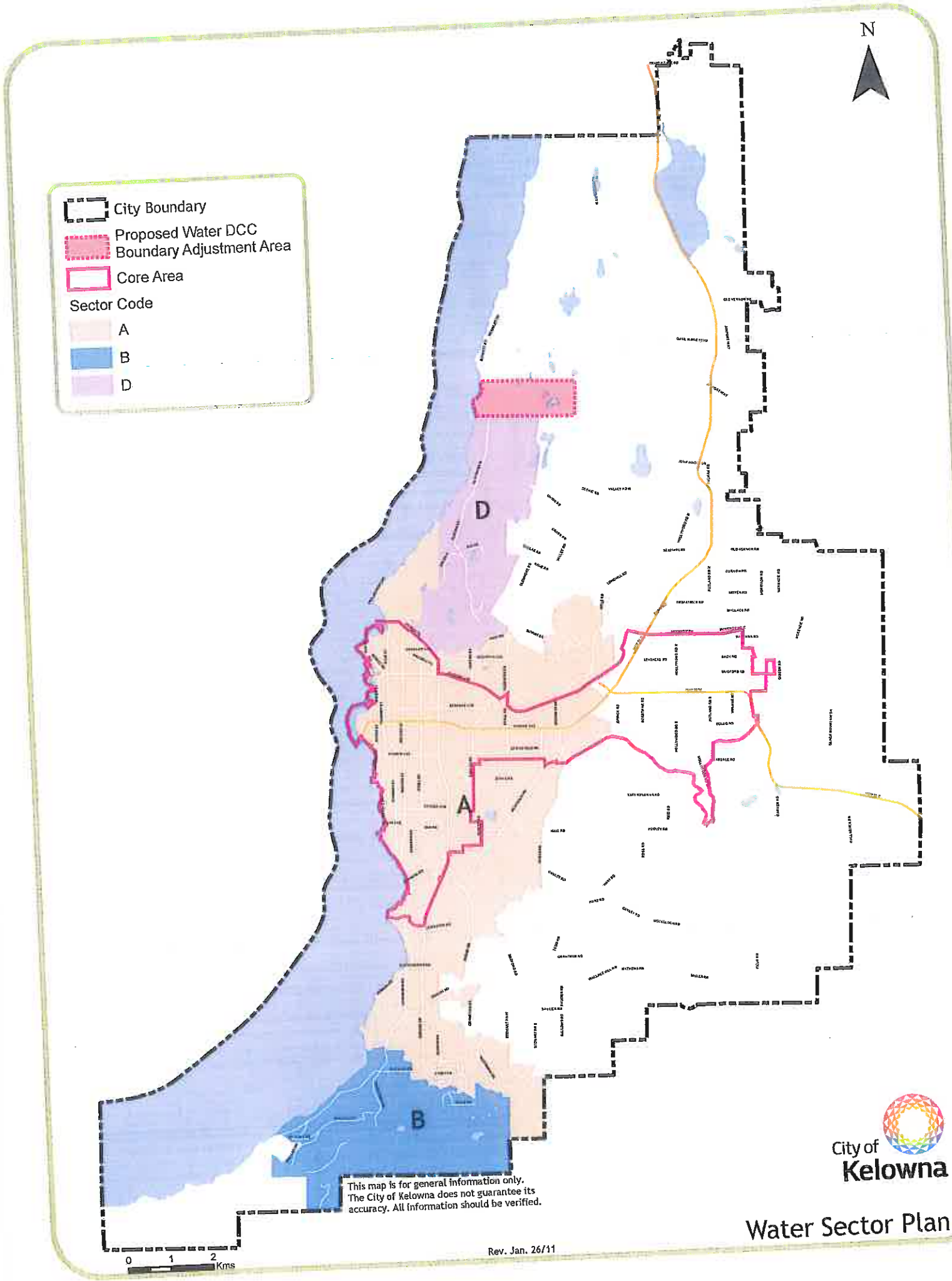
TENTATIVE SCHEDULE FOR 2030 OCP & 20-YEAR DCC BYLAWS

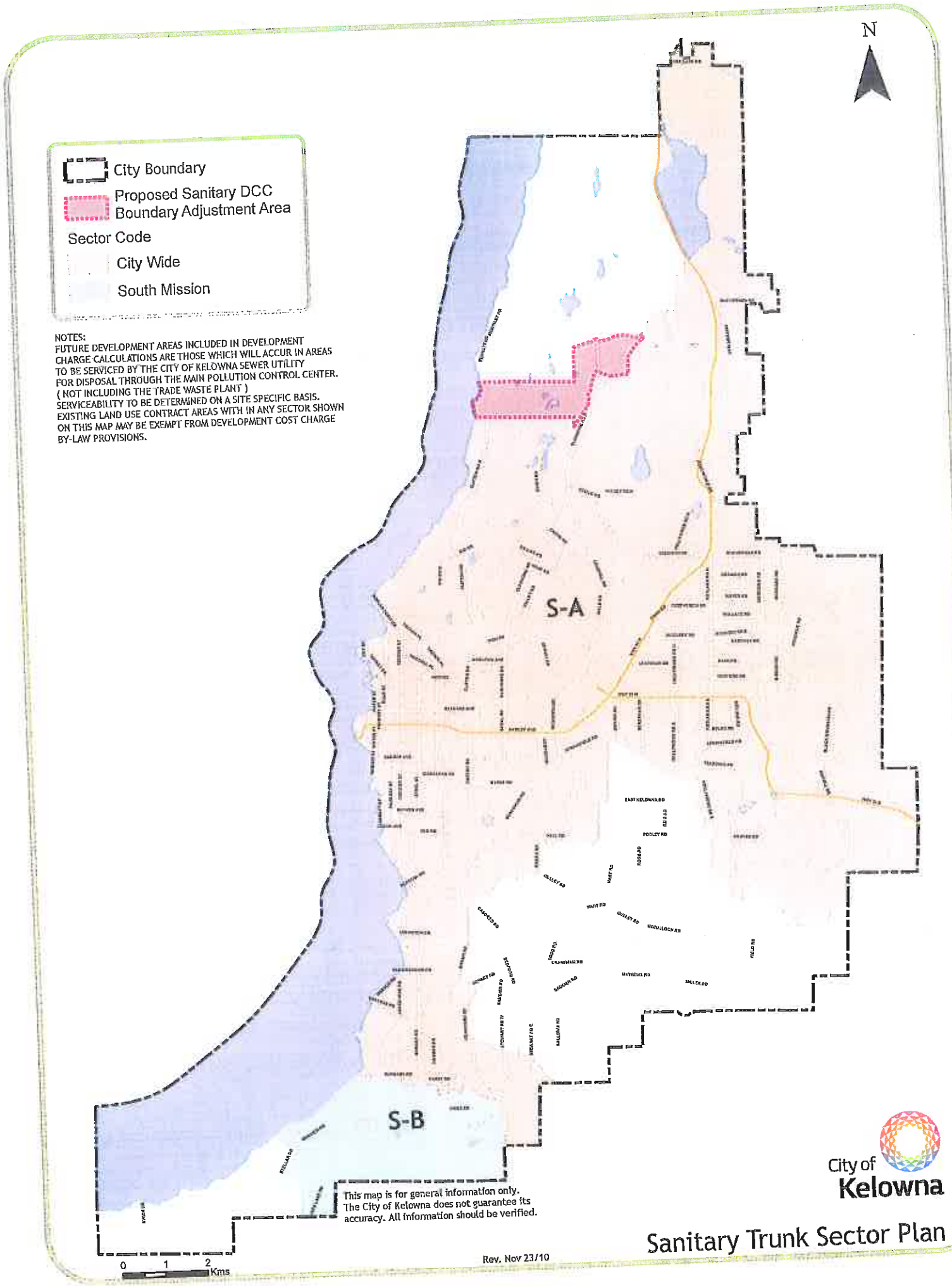
- April 11: OCP 1st Reading
- April 18: DCC Bylaw 1st Reading
  - Refer OCP Bylaw to ALC
  - Refer DCC Bylaw to MCRD
- May 24-25, 2011: Public Hearings
- After Public Hearings: 4th Readings

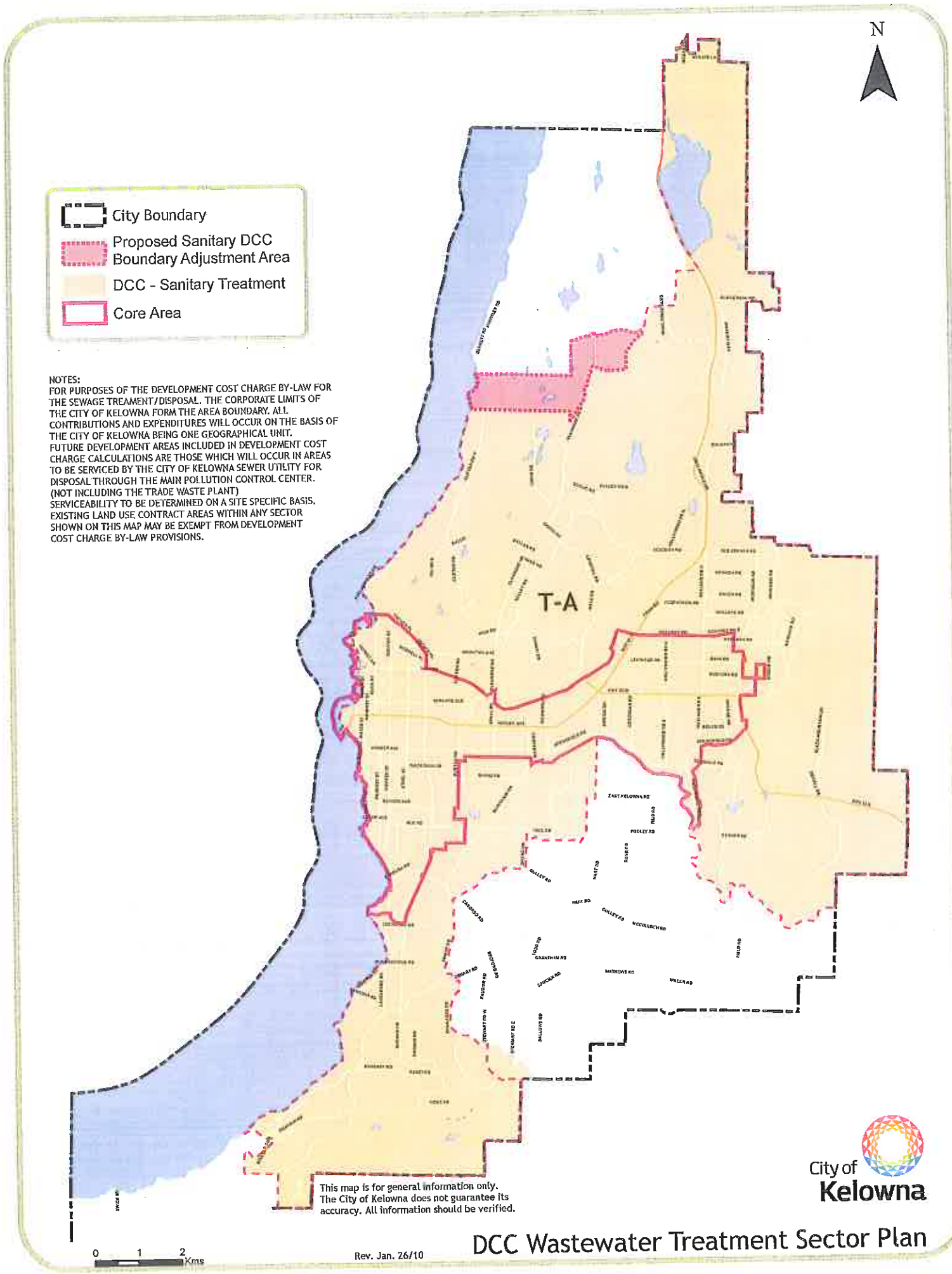
City of Kelowna

20 YEAR SERVICING PLAN AND FINANCING STRATEGY – 2030 REVIEW

MAPS


N
City Boundary
Proposed Water DCC Boundary Adjustment Area
Core Area
Sector Code
A
B
D
D
A
B
This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.
0 1 2 Kms
Rev. Jan. 26/11
City of Kelowna
Water Sector Plan


N
City Boundary
Proposed Sanitary DCC Boundary Adjustment Area
Sector Code
City Wide
South Mission
NOTES:
FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT CHARGE CALCULATIONS ARE THOSE WHICH WILL ACCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT) SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS. EXISTING LAND USE CONTRACT AREAS WITH IN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.
S-A
S-B
This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.
0 1 2 Kms
Rev. Nov 23/10
City of Kelowna
Sanitary Trunk Sector Plan


N
City Boundary
Proposed Sanitary DCC Boundary Adjustment Area
DCC - Sanitary Treatment
Core Area
NOTES:
FOR PURPOSES OF THE DEVELOPMENT COST CHARGE BY-LAW FOR THE SEWAGE TREAMENT/DISPOSAL. THE CORPORATE LIMITS OF THE CITY OF KELOWNA FORM THE AREA BOUNDARY. ALL CONTRIBUTIONS AND EXPENDITURES WILL OCCUR ON THE BASIS OF THE CITY OF KELOWNA BEING ONE GEOGRAPHICAL UNIT.
FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT COST CHARGE CALCULATIONS ARE THOSE WHICH WILL OCCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT)
SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS.
EXISTING LAND USE CONTRACT AREAS WITHIN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.
T-A
This map is for general information only.
The City of Kelowna does not guarantee its accuracy. All information should be verified.
0 1 2 Kms
Rev. Jan. 26/10
City of Kelowna
DCC Wastewater Treatment Sector Plan

City of Kelowna

20 YEAR SERVICING PLAN AND FINANCING STRATEGY – 2030 REVIEW

ANNEX 1

City of Kelowna

Office of the Mayor

April 6, 2011
File No. 1210-01

Mr. Randall Shier
Okanagan Chapter President
Urban Development Institute-Okanagan Chapter
300-1708 Dolphin Avenue
Kelowna, BC V1Y 9S4

Dear Mr. Shier:

re: Development Cost Charges (DCC)

Thank you for your letter dated March 23, 2011. It has been provided to City Council. The City of Kelowna recognizes the broad spectrum of UDI's membership, the impact of the development industry on the economic health of Kelowna and the collaborative partnership between UDI and the City of Kelowna. I understand that staff and UDI met on March 10, 2011 for a detailed review of the OCP Bylaw timelines, the pending School Site Acquisition Charge, as well as the 20 year Servicing Plan and Financing Strategy.

I understand your concern that DCC charges should be scrutinized during the preparation of the new Development Cost Charge Bylaw so that they reflect the true costs of growth-driven infrastructure, are fairly distributed between the beneficiaries of that infrastructure, and to the extent possible, stimulate the land development and construction sector during this time of economic downturn.

As you are well aware, the DCCs are a provincial-wide mechanism to assist municipalities in financing the capital cost of essential municipal infrastructure as a result of development. Additional capacity is required to support the demands of new growth: water treatment and distribution, wastewater collection and treatment, the arterial transportation network and parkland acquisition. It does not include the operation, maintenance, capital renewal or replacement of this infrastructure, nor does it include other municipal infrastructure such as linear park and natural open space acquisition, park development, recreational/cultural facilities, or operational facilities and capital equipment; all of which are financed through user fees and property taxes. Similarly, DCCs do not contribute towards the expansion of valued public programs and services as needed by citizens, nor new facilities for police, fire, or schools to serve an expanding population at the periphery of our City.

Kelowna has the median DCC rate of mid-sized municipalities in BC providing comparable services (Cities over 75,000 in population). In 2010, Surrey's DCC was 24 per cent higher and Abbotsford's DCC was 47 per cent higher than Kelowna's City Centre DCC rate, which is applied to over 50 per cent of the planned development in the City (our urban core). However, it is true that the Southwest Mission is the highest rate in the province, reflecting the actual cost of servicing a low-density, hillside development on the periphery of the City boundary. In terms of the rates relative to other Okanagan jurisdictions, Kelowna's City Centre DCC rate is between Penticton's and Vernon's. Kelowna's commercial rate is lower than the Westbank First Nation. In this regard, Kelowna's existing rates are already competitive both locally and provincially.

However, the fundamental principle in the determination of DCC rates is the anticipated cost of the actual infrastructure needed to support development in a specific location. This cost depends on many variables including the maturity of infrastructure build-out and the geographic (topographic, geotechnical, environmental sensitivity) attributes. In their work to date, City staff acknowledges that a 20.6 per cent decrease in equivalent residential units is anticipated relative to the growth that was projected in the 2020 Official Community Plan. As a result, new infrastructure capacity has been adjusted accordingly. (see chart below).

The DCC rates have been rising since the last full review of the DCC program in 2004, to keep pace with rapidly escalating construction costs. As you know, each of the rate increases in that period occurred one

year after the project costs were incurred which means that the program was inadequately funded during the boom years of highest growth and highest infrastructure construction. The developer contribution was considerably less than the actual costs attributed to development. Acceptable unit rate corrections based upon actual Tender results were provided to UDI in the summer of 2010 and these have been applied to the projects identified within the 2030 Servicing Plan and Financing Strategy.

Highlighted by the current economic condition, Council directed City staff to examine the new 2030 DCC program closely to identify acceptable project scope reductions that might also yield a DCC rate reduction. The result has been a significant reduction in most DCC unit rates relative to the current rates across the program.

SECTOR	City Centre	SE Kelowna	SW Mission	Hwy #33	Univ/Airport	NE Rutland
% CHANGE from current	-8.4%	-52.5%	-2.0%	-19.5%	-12.3%	+1.9%

Our proposed reductions will further widen the gap between Kelowna and the higher priced DCCs of Surrey, Abbotsford, Chilliwack and Richmond.

UDI has raised a number of other development related issues both individually with members of Council, as well as with City staff, many of which were discussed at a previous UDI Liaison Meeting with City staff held on March 10, 2011. Council has requested that City staff present a report to Council with regard to what the City is currently doing to address those issues raised by the UDI. It is my understanding that report will be on the April 18, 2011 afternoon Council agenda. Council agendas are posted at kelowna.ca/council at 4pm on Thursday afternoons for the following Monday's meeting. You are welcome to attend.

We remain confident that staff and UDI will continue to ensure that the right projects are completed to accommodate growth, that costs are appropriately allocated between beneficiaries, and that new employers and residents will be attracted to Kelowna because of the City's consistent dedication to fiscal accountability and prudence as well as transparent governance. Our relationship with UDI is very important. We look forward to a continuing constructive relationship with UDI in achieving sustainable prosperity.

Sincerely,

Sharon Shepherd

Sharon Shepherd
MAYOR

CC: City Council
Ron Mattiussi, City Manager
Jim Paterson, GM, Community Sustainability
Randy Cleveland, Director, Infrastructure Planning
Keith Grayston, Director, Financial Services

April 1, 2011
File: 0220-02

Matt Cameron
UDI-DCC Committee Chair
Urban Development Institute
#300 - 1708 Dolphin Ave.
Kelowna, BC V1Y 9S4
MCameron@ctqconsultants.ca

Dear Matt:

Re: 2030 Development Cost Charges

Further to our meeting of March 10, 2011 where we agreed to provide you a detailed breakdown of the DCC Roads existing benefits (EB), the following is our response:

Existing Benefits: The existing benefits on the financial model are broken down into the following 4 categories: (note - the standard existing population/ new population ratio for the 2030 plan is 73.4%)

- **Sidewalks:** cost is taken directly from the roads detail cost estimate and applies to all roads in Sector I only, including those where only portion of the road is considered Sector I. Additional to that amount are 5% contract fees, 10% engineering and the applicable contingency percent. Applied to the total is the standard 73.4% ratio.

- **Bike Paths:** for sector I roads only. It is the length of each side of the road at a per meter cost of $150 per meter. The per meter cost is determined by the Transportation & Mobility branch.

- **Bridges:** where there is not an existing bridge in place, one-half of the standard ratio, or 36.7%, is applied to the total cost of the bridge; the reason being that the new bridge is required mostly because of growth.

- **General:**
  For those strategic roads located in the heart of the City's existing population (the urban core), we will assign an existing benefit by applying criteria on a road by road basis to determine either a percentage EB (applied to net project cost) or a dollar amount of EB, as follows:

  - Existing Benefit of 33%:
    Applied to Clement 2, Clement 3 and Highway 33(1) as these projects are basically growth driven, however there is some benefit to existing population as congestion on Enterprise and Springfield will be reduced.

    Applied to Guisachan 2, Guisachan 3, Hollywood 3, 4, 5 & 6, Pandosy 1, Sexsmith 3 - these roads are being upgraded from rural to urban and the EB is to recognize that although these upgrades are triggered by growth, a portion of the existing population will benefit. Note, EB is not applied to Richter 1, as is being expanded to 3 lanes or Sexsmith 5, being expanded to 4 lanes, both strictly to accommodate growth.

  - Dollar amount - 4 meters of the 30 meter land right of way is applied as existing benefit as construction costs for the 2030 plan are for 26 meters. Land beyond 26 meters is included so it can be purchased as it becomes available. This applies to Lakeshore 1 and Lakeshore 2. This EB is not applied to Lakeshore 3 & 4 as the 30 meters are required in the 2030 time horizon.

- Other:
  John Hindle Drive - replaces McKinley Rd. (in the current (2020) plan at the standard of 62.5%) so in order to remain consistent we will keep the standard, now 73.4%. As well, it is a new road in a location servicing a large existing population; also recognizes the benefits to the University.

  Lakeshore Bridge - Mission Creek - the existing structure (2 lanes) needs replacing as it is at the end of its useful life so an EB of 50% has been applied. This does not apply to the Wilson Creek Bridge as the existing structure is ok.

Other Spreadsheet Categories:

By Developer: is based on development being responsible for construction of roadway fronting their property. Staff estimated, based on zoning, where development is anticipated to occur along the DCC road network by reviewing ortho photos of each road, calculating the ratio of the length of the frontage of anticipated development to total road length and applying that ratio to the total cost of the project to give the 'by developer' amount.

Highway Assist: based on past experience with the Province, determining a percentage which it is felt can be negotiated. Note - Highway 33 is an actual amount as this road is complete. A 33% Provincial Assist is applied to the following roads projects:

Houghton Active Transportation - as this corridor connects users to the Rapid Bus system
Clement 2 - for congestion reduction on Hwy 97.
Clement 3 - no Provincial Assist as cost is for land only.
Highway 33(1) - for congestion reduction on Hwy 97.

Secondary Suites: the difference between the Residential 3 rate, the rate at which secondary suites would normally be charged and the flat rate approved by Council. This is absorbed by taxation.

Please note a 15% assist factor is applied to all project costs net of all the above amounts.

Attached is an updated copy of the 2030 Roads model. The binder of all the cost estimates for the 2030 Roads program will be forwarded to you next week.

We will be providing the final report to Council on April 13, 2011 for approval of the DCC Plan.

I hope this clarifies the financial model for you. If you have any questions please do not hesitate to call.

Thank you;

Jim Wunderlich
Financial Strategist, Infrastructure Planning

cc. Randy Cleveland, Director, Infrastructure Planning
Keith Grayston, Director, Financial Services
Doug Gilchrist, Director, Real Estate & Building Services

Infrastructure Planning
1435 Water Street
Kelowna, BC V1Y 1J4
TEL 250 469-8614
FAX 25 862-3349
kelowna.ca

CITY OF KELOWNA
2030 TRANSPORTATION SERVICING PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

EXHIBIT "A" - TRANSPORTATION

(2010 Dollars X 1000)

NON DCC REVENUE SOURCES: By Devlp'r through Total Paid By Taxation; DCC SECTOR ALLOCATIONS: A through E

Target Quarte	Sect	NAME	Gross Sctn	RoW (M)	Total Land Cost	Total Build Cost	TOTAL CAPITAL COSTS	By Devlp'r	Highways Assist	MOTH Max Lmt 160/yr	Existing Benefit - Bike Paths	Existing Benefit - Bridges	Existing Benefit - Sidewalks	Existing Benefit - General	Total Existing Benefit	Secondary Suites	Total Paid By Taxation	NET FOR DCC BASED CALC's	A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
											73.4%	36.7%	73.4%	-		451		16,508	45	2,117	691	1,637	2,146	16,503
Q3	A	McCulloch	RAU2L	20-30	1,416,432	1,468,480	2,884.9									14.7	14.7	2,870.2	2,870.2					
					1,416,432	1,468,480	2,884.9									14.7	14.7	2,870.2	2,870.2					
Q1	B	Deficiencies			500,106	1,866,362	2,366.5									13.6	13.6	2,352.9		2,352.9				
Q2	B	Frost 1	UCU2L	20	294,000	1,424,790	1,718.8									9.9	9.9	1,708.9		1,708.9				
Q2	B	Gordon 1 - part 1	UAD2L	30	413,500	1,369,671	1,783.2									10.2	10.2	1,772.9		1,772.9				
Q2	B	Gordon 1 - part 2	UAD2L	30	413,500	3,108,560	3,522.1									20.2	20.2	3,501.8		3,501.8				
Q4	B	Lakshr 1A	RAD2L	30		2,376,849	2,376.8									13.6	13.6	2,363.2		2,363.2				
Q4	B	S. Perimeter 1	RAU2L	30	477,525	6,107,168	6,584.7									49.3	49.3	6,535.4		6,535.4				
					2,098,633	18,253,421	20,352.1									116.8	116.8	20,235.2		20,235.2				
Q4	*B	Casorso 1	RAU4L	30	186,000	1,764,726	1,980.7									11.4	11.4	1,969.4	590.8	1,378.6				
Q4	*B	Casorso Bridge - Mission Cr.	RAD4L	30		2,743,739	2,743.7									15.7	15.7	2,728.0		2,728.0				
Q1	*B	Dehart 2	UAU2L	28	219,000	1,500,410	1,719.4						76.9		76.9	9.4	86.3	1,633.1		1,633.1				
Q3	*B	Gordon Bridge - Bellevue Cr.	UAU2L	20		454,580	454.5									2.6	2.8	452.0		452.0				
Q3	*B	Lakshr 1	UAU2L	30	1,401,694	3,596,657	4,998.4						106.4	660.4	766.7	24.3	791.0	4,207.3		4,207.3				
Q3	*B	Lakshr Bridge - Bellevue Cr.	UAD4L	30		1,428,270	1,428.3									8.2	8.2	1,420.1		1,420.1				
Q3	*B	Lakshr 2	UAU2L	30	2,708,674	3,319,973	6,028.6	602.9					114.5	1,637.0	1,751.6	21.1	1,772.7	3,653.1		3,653.1				
Q4	*B	Stewart 3	RAU2L	30	2,289,652	4,153,585	8,443.2									37.0	37.0	6,406.2	2,882.8	3,523.4				
					6,815,020	18,981,820	25,796.9	602.9					297.8	2,297.4	2,595.2	129.7	2,724.9	22,469.2	3,473.6	18,995.6				
DC	C	McCurdy 4 (Dev Credit)	RAU2L	25		5,488,931	5,488.9											5,488.9			5,488.9			
Q4	D	Lone Pine	UCU2L	20	510,691	2,366,983	2,877.7									11.6	11.6	2,866.1				2,866.1		
Q4	D	Gallagher 1	RCU2L	18-20		8,193,633	8,193.6	6,964.6								4.9	4.9	1,224.1				1,224.1		
Cmplt	D	Highway 33 (Complete)			4,200,000	17,403,685	22,924.3		11,931.4					2,188.9	2,188.9		2,188.9	8,804.1				8,603.0		2,201.0
					4,710,691	27,964,291	33,995.8	6,964.6	11,931.4					2,[illegible]	2,188.9	16.5	2,209.4	12,894.3				10,693.3		2,201.0
Q3	E	Airport	UCC2L	30	228,047	1,287,631	1,516.7	151.7								1.9	1.9	1,363.1					1,363.1	
Q1	E	John Hindle Dr. 1	UAU2L	30	114,335	2,808,392	2,922.7							2,145.3	2,145.3	1.1	2,146.4	776.4					776.4	
Q1	E	John Hindle Dr. 2	RAU2L	30	57,699	1,249,546	1,304.2							957.3	957.3	0.5	957.8	346.4					346.4	
Q1	E	John Hindle Dr. 3	RAU2L	30	1,220,503	1,941,435	3,161.9							2,320.9	2,320.9	1.2	2,322.0	839.9					839.9	
Q1	E	John Hindle Dr. 4	RAU2L	30	1	2,745,667	2,745.7							2,015.3	2,015.3	1.0	2,016.4	729.3					729.3	
Q2	E	Hollywd 7	UAD2L	25	1,216,640	779,352	1,996.0	159.7			19.3				19.3	2.5	21.7	1,814.6					1,360.9	453.6
Q4	E	Hollywd 8	UAD2L	25	1,011,033	9,626,926	10,636.5	6,383.7			242.2				242.2	4.3	246.5	4,009.3					3,007.0	1,002.3
					3,849,225	20,437,649	24,2[illegible]	6,695.1			261.5			7,438.8	7,700.3	12.4	7,712.7	9,879.0					8,423.0	1,456.0
Q3	I	Begbie Road	RCU2L	20	180,019	2,067,201	2,247.2	2,247.2																
Q4	I	Benvoulin 1	RAD4L	30	1,116,063	8,123,881	9,242.0				393.3		646.8		1,010.2	120.9	1,131.0	8,110.9						8,110.9
Q2	I	Burtch 2	RAU2L	25		4,830,221	4,830.2						120.0		120.0	69.2	189.2	4,641.1						4,641.1
Q3	I	Burtch 4	UAD2L	25	123,628	352,403	476.0						13.4		13.4	6.8	20.2	456.9						455.8
Q3	I	Clement 1	UAD4L	30	914,431	5,863,979	6,778.4	849.0			286.4		199.0		464.4	76.8	643.2	5,286.2						5,288.2
Q1	I	Clifton	RAU4L	30	1,145,000	3,490,781	4,635.8				121.1		45.0		166.1	65.6	231.7	4,404.0						4,404.0
Q4	I	Clement 2	RAD4L	38	10,634,056	35,537,263	46,121.3		11,852.4					11,305.4	11,305.4	337.0	11,642.5	22,616.4						22,616.4
Q4	I	Clement 3	RAD4L	35	2,092,862		2,092.9							690.9	690.8	20.6	711.2	1,381.6						1,381.6
Q4	I	Gordon 4	UAD4L	30		793,866	793.9	793.9																
Q2	I	Guisachan 2	UAU2L	25-28	210,031	1,879,374	2,099.4				99.1		29.5	647.1	775.6	19.3	794.9	1,294.5						1,294.5
Q2	I	Guisachan 3	UAU2L	25		2,155,466	2,155.5						48.5	705.6	754.1	21.0	775.1	1,411.4						1,411.4
Q2	I	Hollywd 3	UAU2L	25	490,360	1,246,818	1,737.2	434.3			79.3		39.8	390.7	508.7	11.6	521.4	781.5						781.5
Q2	I	Hollywd 4	UAU2L	25	1,428,172	3,258,421	4,666.6	1,171.6			182.6		91.1	1,068.6	1,343.4	31.9	1,375.3	2,139.5						2,139.6
Q2	I	Hollywd Bridge - Francis Cr.	UAU2L	26		34,853	34.9					12.8			12.8	0.3	13.1	21.7						21.7
Q2	I	Hollywd 5	UAU2L	25	1,716,921	1,726,755	3,443.7	860.9			99.1			818.6	818.7	24.4	943.1	1,639.6						1,639.6
Q2	I	Hollywd Bridge - Mill Cr.	UAU2L	25		1,062,160	1,062.2					386.1			386.1	8.8	395.9	655.2						656.2

Target Quartr	Sect	NAME	Cross Sctn	RoW (M)	Total Land Cost	Total Build Cost	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Existing Benefit - Bike Paths	Existing Benefit - Bridges	Existing Benefit - Sidewalks	Existing Benefit - General	Total Existing Benefit	Secondary Suites	Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
											73.4%	36.7%	73.4%			461		16,506	45	2,117	631	1,657	2,146	16,506
Q2	I	Hollywd 5	UAU2L	25	55,034	523,228	578.3				48.5			174.5	224.0	5.2	229.2	349.0						349.0
Q4	I	Highway 33(1)	RAD4L	35		4,307,452	4,307.5		1,435.8				40.4	934.3	974.7	27.9	1,002.5	1,869.1						1,869.1
Q4	I	Hwy Link-Gordon	UAD4L	30	1,064,958	2,377,720	3,442.7						40.8		40.8	50.0	90.9	3,351.8						3,351.8
Q1	I	Hwy Link-Pand 3	UAD4L		3,000,000		3,000.0											3,000.0						3,000.0
Q1	I	Lakshr 3	UAU2L	20	12,675,649	7,961,521	20,637.2	619.1			598.9		296.7		895.6	280.8	1,176.4	18,841.6						18,841.6
Q1	I	Lakshr Bridge - Mission Cr.	UAD4L	30		5,661,720	5,661.7	396.3						1,737.6	1,737.6	51.8	1,789.4	3,476.0						3,476.0
Q1	I	Lakshr Bridge - Wilson Cr.	UAD4L	30		1,001,080	1,001.1									14.7	14.7	986.4						986.4
Q2	I	Lakshr 4	UAU2L	30	2,720,726	1,503,704	4,224.4	1,394.1			74.9		33.3		108.1	40.0	148.1	2,682.3						2,682.3
Q4	I	McCurdy 1	RAU2L	30	1,264,641		1,264.6									18.6	18.6	1,246.1						1,246.1
DC	I	McCurdy 2 (Dev Credit)	UAU2L	30		559,600	705.4											705.4						705.4
Q3	I	Pandosy 1	UAU2L	20	1,428,747	2,272,789	3,701.5						81.8	1,221.5	1,303.3	35.2	1,338.6	2,363.0						2,363.0
Q3	I	Richter 1	UAU2L	20		7,173,112	7,173.1						441.8		441.8	98.8	540.6	6,632.5						6,632.5
Q4	I	Ridge	UAU2L	20		20,415,807	20,415.8	20,415.8																
Q3	I	Rio 1	UCU2L	20		1,285,838	1,285.8	1,285.8																
Q2	I	Rose 1	UAU2L	25	5,386,000	2,686,174	8,072.2	565.1			132.1		60.0		192.1	107.4	299.5	7,207.6						7,207.6
Q1	I	Rutland 2	UAD2L	30	1,007,786	4,201,874	5,209.8				154.1		124.6		278.7	72.4	351.1	4,858.6						4,858.6
Q1	I	Sexsmith 2	UAD2L	30	115,533	20,250	135.8				49.5				49.5	1.3	50.8	85.0						85.0
Q1	I	Sexsmith 3	UAD2L	25	178,088	1,471,716	1,649.8	659.9			86.1		65.4	328.7	480.2	7.5	487.7	502.2						602.2
Q1	I	Sexsmith 5	UAD4L	30	3,618,133	8,990,294	12,608.4	3,782.6			407.4		302.7		710.1	119.2	829.2	7,996.6						7,996.6
					52,438,860	144,978,429	197,523.1	35,575.6	13,298.2		2,765.7	398.9	2,719.6	20,023.1	25,907.3	1,747.9	27,655.2	120,994.1						120,994.1
		ACTIVE TRANSPORTATION																						
Q3	*B	Lakshr 1 - AT				415,625	415.6							305.1	305.1	1.6	306.7	109.0		109.0				
Q3	*B	Lakshr 2 - AT				459,375	459.4							337.2	337.2	1.7	338.9	120.4		120.4				
Q3	E	Airport - AT	UCD2L	30		175,000	175.0	17.5						115.6	115.6	0.1	115.7	41.8					41.8	
Q1	E	E-W Connector 1 - AT				586,250	586.3							430.3	430.3	0.2	430.5	155.7					155.7	
Q2	E	E-W Connector 2 - AT				245,000	245.0							178.8	178.8	0.1	178.9	66.1					66.1	
Q2	E	E-W Connector 3 - AT				175,000	175.0							128.5	128.5	0.1	128.6	46.5					46.5	
Q2	E	E-W Connector 4 - AT				196,875	196.9							144.5	144.5	0.1	144.6	52.3					52.3	
Q2	E	Hollywd 7 - AT				153,125	153.1							112.4	112.4	0.6	113.0	40.1					30.1	10.0
Q4	E	Hollywd 8 - AT				1,925,000	1,925.0							1,413.0	1,413.0	7.3	1,420.3	504.7					378.5	126.2
Q2	I	Abbott - AT	UCU2L	20	429,081	10,549,034	10,978.1							8,057.9	8,057.9	42.9	8,100.8	2,877.3						2,877.3
Q3	I	Casorso 3 - AT	UCU2L	20		4,241,444	4,241.4							3,113.2	3,113.2	16.6	3,129.8	1,111.7						1,111.7
Q3	I	Casorso 4 - AT	UCU2L	6	73,000	412,432	485.4							356.3	356.3	1.9	358.2	127.2						127.2
Q2	I	Ethel 1 - AT	UCU2L	20		3,003,692	3,003.7							2,204.7	2,204.7	11.7	2,216.4	787.2						787.2
Q2	I	Ethel 2 - AT	UCU2L	20		4,026,299	4,026.3							2,955.3	2,955.3	15.7	2,971.0	1,055.3						1,055.3
Q2	I	Ethel 3 - AT	UCU2L	20		2,965,501	2,966.5							2,177.4	2,177.4	11.6	2,189.0	777.5						777.5
Q2	I	Ethel 4 - AT	UCU2L	20		2,383,165	2,383.2							1,749.2	1,749.2	9.3	1,758.6	624.6						624.6
Q2	I	Glenmore 3 - AT	UAD4L	30		5,743,321	5,743.3							4,215.6	4,215.6	22.4	4,238.0	1,506.3						1,505.3
Q2	I	Glenmore 4 - AT	UAD4L	30		7,001,002	7,001.0							5,138.7	5,138.7	27.3	5,166.1	1,834.9						1,834.9
Q2	I	Glenmore 5 - AT	RAU2L	30	205,000	3,831,462	4,036.5							2,962.8	2,962.8	15.6	2,978.5	1,057.9						1,057.9
Q2	I	Hollywd 3 - AT				157,500	157.5							115.6	115.6	0.6	116.2	41.3						41.3
Q2	I	Hollywd 4 - AT				363,125	363.1							266.5	266.5	1.4	268.0	95.2						95.2
Q2	I	Hollywd 5 - AT				196,875	196.9							144.5	144.5	0.8	145.3	51.6						51.6
Q2	I	Hollywd 6 - AT				98,438	98.4							72.3	72.3	0.4	72.6	25.8						25.8
Q2	I	Hollywd 9 - AT	UAU2L	25-30		3,199,094	3,199.1							2,348.1	2,348.1	12.5	2,360.6	838.5						838.5
Q2	I	Hollywd 10 - AT	UAU2L	24-25	67,632	1,400,000	1,467.6							1,077.2	1,077.2	5.7	1,083.0	384.7						384.7
Q2	I	Hollywd 11 - AT	UCU2L	30		67,632	67.6							49.6	49.6	0.3	49.9	17.7						17.7
Q2	I	Houghton 1 - AT	UCU2L	20	2,805,320	1,359,530	4,164.8		1,374.4					2,048.2	2,048.2	10.9	2,059.1	731.4						731.4
Q2	I	Houghton Overpass - AT				3,000,000	3,000.0							2,202.0	2,202.0	11.7	2,213.7	786.3						786.3
Q2	I	Houghton 2 - AT	UCU2L	20	522,000	3,358,368	3,880.4	582.1						2,421.0	2,421.0	12.9	2,433.8	864.6						864.5
Q3	I	KLO 1 - AT	UCU2L	20		728,440	728.4	508.5						160.0	160.0	0.9	160.9	57.1						57.1
Q3	I	KLO 2 - AT	UCU2L	25-30	640,000	1,545,140	2,185.1							1,603.9	1,603.9	8.5	1,612.4	572.7						572.7
Q3	I	Lake 1 - AT	UCU2L	10-20		1,239,906	1,239.9							946.8	946.8	5.0	951.8	338.1						338.1
Q4	I	Leckie 1 - AT	UCU2L	10		379,787	379.8							278.8	278.8	1.5	280.2	99.6						99.5
Q4	I	Leckie 2 - AT	UCU2L	25		1,473,783	1,473.8							1,081.8	1,081.8	5.8	1,087.5	386.3						386.3
Q4	I	Leckie 3 - AT	UCU2L	25		2,367,941	2,367.9							1,738.1	1,738.1	9.2	1,747.3	620.6						620.6
Q1	I	Lakshr 3 - AT	UAU2L			1,190,000	1,190.0							873.5	873.5	4.6	878.1	311.9						311.9
Q2	I	Lakshr 4 - AT	UAU2L			148,750	148.8							109.2	109.2	0.6	109.8	39.0						39.0

(2010 Dollars X 1000)

Target Quarts	Sect	NAME	Cross Sctn	RoW (M)	Total Land Cost	Total Bl'd Cost	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Existing Benefit - Bike Paths	Existing Benefit - Bridges	Existing Benefit - Sidewalks	Existing Benefit - General	Total Existing Benefit	Secondary Suites	Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
											73.4%	38.7%	73.4%			451		16,506	45	2,117	691	1,657	2,146	16,506
Q1	I	Rails w Trails - AT		10		4,398,715	4,398.7							3,228.7	3,228.7	17.2	3,245.6	1,152.9						1,152.9
Q2	I	Rose 1 - AT				262,500	262.5							192.7	192.7	1.0	193.7	68.8						68.8
Q2	I	Sutherland 1 - AT	UCU2L	20	2,697,093	3,875,789	6,572.9							4,824.5	4,824.5	25.7	4,850.2	1,722.7						1,722.7
Q2	I	Sutherland 2 - AT	UCU2L	20		4,531,281	4,531.3							3,326.0	3,326.0	17.7	3,343.7	1,187.6						1,187.6
		TOTAL ACTIVE TRANSPORTATION			7,335,996	83,983,177	91,319.3	1,106.1	1,374.4					65,206.2	65,206.2	341.9	65,548.1	23,288.7		229.4			770.1	22,289.2
		Annual MOTH								(3,000.0)								(3,000.0)						(3,000.0)
		Subtotal A			78,667,860	321,653,197	401,647.6	50,846.2	26,604.0		3,027.2	398.9	3,017.4	97,154.3	103,597.9	2,380.0	105,977.6	218,119.6	6,343.8	39,460.2	5,488.9	10,693.3	9,193.1	146,940.3
		Carry Over (2009-12-31 Reserve Balance):																(14,816.4)	(6,255.8)	(1,821.8)	(46.5)	(3,856.6)	(1,350.8)	(1,485.0)
		Subtotal B			78,667,860	321,653,197	401,647.6	50,946.2	26,604.0		3,027.2	398.9	3,017.4	97,154.3	103,597.9	2,380.0	105,977.6	203,303.2	88.0	37,638.5	5,442.4	6,836.7	7,842.3	145,455.3
		Subtotal C			78,667,860	321,553,197	401,647.6	50,946.2	26,604.0		3,027.2	398.9	3,017.4	97,154.3	103,597.9	2,380.0	105,977.6	203,303.2	88.0	37,638.5	5,442.4	6,836.7	7,842.3	145,455.3
							2,033.0	Engineering/Administration		1%								2,033.0	0.8	376.4	54.4	68.4	78.4	1,454.6
							403,680.7	Subtotal D										205,336.3	86.9	38,014.8	5,496.9	6,905.1	7,920.8	146,909.8
								Less Assist		15%								(30,800.4)	(13.3)	(5,702.2)	(824.5)	(1,035.6)	(1,168.1)	(22,036.5)
								Total for DCC										174,535.8	75.6	32,312.6	4,672.3	5,869.3	6,732.6	124,873.4

Residential 1:	Sector	1,675	15,264	6,762	3,642	3,138
	Common	7,565	7,565	7,565	7,565	7,565
	Total Roads	9,240	22,829	14,327	11,107	10,703
Residential 2:	Sector	1,574	14,349	6,356	3,329	2,960
	Common	7,111	7,111	7,111	7,111	7,111
	Total Roads	8,685	21,460	13,467	10,441	10,081
Residential 3:	Sector	1,122	10,227	4,530	2,373	2,102
	Common	5,069	5,069	5,069	5,069	5,069
	Total Roads	6,191	15,296	9,599	7,442	7,171
Residential 4:	Sector	1,056	9,616	4,260	2,231	1,977
	Common	4,766	4,766	4,766	4,766	4,766
	Total Roads	5,821	14,383	9,026	6,998	6,743
Residential 5 - per Sq Mtr: (56 sq mtrs or less):	Sector	15	134	59	31	28
	Common	67	67	67	67	67
	Sector	81	201	126	98	94
Commercial - per Sq Mtr:	Sector	6	51	22	12	10
	Common	25	25	25	25	25
	Total Roads	31	76	47	37	35
Industrial - per Hectare:	Sector	4,137	37,702	16,701	8,749	7,750
	Common	18,687	18,687	18,687	18,687	18,687
	Total Roads	22,823	56,389	35,388	27,435	26,437
Institutional - per Sq Mtr:	Sector	6	51	22	12	10
	Common	25	25	25	25	25
	Total Roads	31	76	47	37	35

URBAN DEVELOPMENT INSTITUTE- OKANAGAN CHAPTER
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udiokanagan@udi.org
www.udi.bc.ca

March 23, 2011

City of Kelowna
1435 Water Street
Kelowna, BC V1Y 1J4

Attention: Mayor Sharon Shepherd and City of Kelowna Council

Her Worship Mayor Shepherd, Sirs and Mesdames:

Re: Development Cost Charges

The Urban Development Institute (UDI) is a national association (with international affiliations) of the development industry and its related professions. The 115 corporate members of the UDI - Okanagan Chapter represent hundreds of individuals involved in all facets of land development and planning, including: developers, property managers, financial lenders, lawyers, engineers, planners, architects, appraisers, real estate professionals, local governments and government agencies.

As a Partner in Community Building, the UDI is committed to working with communities and governments to create and achieve the vision of balanced, well-planned, sustainable and affordable communities.

Over the past eight or so years, our city has experienced both periods of rapid growth in population and development as well as a more recent three year period of a slowdown and virtual halt to private sector development and growth. During the "boom years", generally attributed to 2004 through to mid 2008, Kelowna DCCs rose dramatically, given the increased demands on infrastructure from emerging neighbourhoods and development projects as well as inflationary civil construction costs. Our membership and industry at large absorbed the escalating construction and DCC costs in our business models and passed these costs through to our customers. Actual percentage increases range by service area between 70.18% and 175.53% over these boom years.

How is it possible that with such large DCC increases, which outpaced construction costs during these boom years, that there is no significant reduction in the DCC rates in a proven environment of lower construction and land costs? The DCC rates have simply not declined as one would expect.

Until the new 2030 plan was released, DCC rates have been frozen or fixed at the absolute maximum of peak levels. We do acknowledge proposed reductions in some sectors in the 2030 plan. These have primarily been achieved with future infrastructure reductions in the SE sector. There have been reductions in some unit costing, but somewhere in the program there must be costs to pay for new requirements or we have not reduced our infrastructure requirements significantly enough to keep in line with the lower projected population growth. We need to better understand how these DCCs are established and ensure the proper split (assist factor) exists between the benefit of infrastructure to existing residents versus new residents.

Our concern today is that with all indicators of population growth and anticipated development pointing to a multi-year period of conspicuously slow growth, the simple act of not reducing DCCs significantly will, itself, have its own negative impact on our fragile recovery.

The development marketplace has adjusted to declining demand with lower unit costs in an effort to bring new product to market that is as affordable and value laden as possible. Declining material costs for non-petroleum based materials, the release of embedded cascading taxes through HST, competitive pressures on skilled trades to provide service at lower rates and lower land costs all reflect an industry hanging on by a thin thread and yet prepared to invest the time and money necessary to claw its way back to some measure of economic and job growth.

We know you are familiar with the significant contribution DCCs make to funding infrastructure placement and maintenance and, as stated earlier, the development industry is prepared to pay its fair share. However, Kelowna's DCC rates seem out of step with the economic realities of the day. Our DCCs here in the Upper Mission sector are the highest in the Province. DCC rates have significantly outpaced civil costs over the last decade. Civil costs are back to approximately 2002 levels yet DCCs remain near boom time 2007 levels. DCCs actually rose in the first full recessionary year [2008] and then were fixed in 2009. Construction unit costs are down at least 12% by index and as much as 20% for major components from peak rates.

Currently, the development industry directly employs about 17% of the Kelowna workforce and contributes immensely to the overall economic vitality of the region as well as the tax bases of various sorts. Development industry employment generates better than average wages and particularly targets the rather mobile 20 - 45 year age demographic. Job creation and affordability of housing spurs retail spending in all sectors and makes any community an attractive place to live, work and do business.

Other communities are certainly starting to recognize this. Penticton and Vernon have shown great flexibility in DCC application and rates.

Our DCC Committee is currently working closely with staff on details of unit cost calculations, projections of anticipated infrastructure demands and provisions of fairness in the allocation of benefits (assist factor) that flow from the Provincial Best Practices Guide. We appreciate staff's effort and hope that as a result of this dialogue, further reductions will be forthcoming.

We ask Council to look for ways to reduce DCCs and conclude with the thought that lower DCCs will benefit the city through investment, jobs, economic activity and an ultimately increased tax base.

Thank you for your consideration.

Yours truly,

URBAN DEVELOPMENT INSTITUTE

Per:

Randall Shier
Okanagan Chapter President

RS/jr

cc: UDI Okanagan Chapter - Board of Directors

City of Kelowna

February 17, 2011
File: 0220-02

Matt Cameron
UDI-DCC Committee Chair
Urban Development Institute
#300 - 1708 Dolphin Ave.
Kelowna, BC V1Y 9S4
MCameron@ctqconsultants.ca

Dear Matt:

Re: 2030 - 20 Year Servicing Plan & Financing Strategy

Further to our letter dated February 2, 2011 please find attached 2 transportation maps - one of the DCC roads program and the second showing the DCC active transportation program.

As previously stated we would like an opportunity to meet and discuss the roads network with you at your convenience.

Thank you;

J. Wunderlich
Financial Strategist, Infrastructure Planning

Attachments

Infrastructure Planning
1435 Water Street
Kelowna, BC V1Y 1J4
TEL 250 469-8614
FAX 250 862-3363
kelowna.ca

City of Kelowna

February 2, 2011
File: 0220-02

Matt Cameron
UDI-DCC Committee Chair
Urban Development Institute
#300 - 1708 Dolphin Ave.
Kelowna, BC V1Y 9S4
MCameron@ctqconsultants.ca

Dear Matt:

Re: 2030 - 20 Year Servicing Plan & Financing Strategy

The City has now completed the transportation network and parkland acquisition proposals for the 20 year Servicing Plan & Financing Strategy. Please find attached, for your review and comments, a draft of the Transportation Financial Model, a draft of the Parks Financial Model as well as the summary sheet showing the cost of the overall 2030 DCC program in comparison to the 2020 plan.

Previously UDI was forwarded the Water and Wastewater plans; these remain the same. The 2030 Parkland acquisition plan was also approved at the January 24th, 2011 Council meeting. This report as well as the transportation network report to Council can both be found on the City website, items 12.1 & 12.2 (www.City of Kelowna/Council/Council meetings/2011-01-04).

As you will note from the overall program cost sheet, the total cost of the 2030 program is down 23% versus the 2020 program. This includes cost decreases in all services with the exception of Water. Stemming from this is a decrease in total DCC rates in most areas of the City, including Sector I which is reduced by 7.8%. We believe that this is a significant accomplishment considering that the total number of projected equivalent units has decreased almost 27%.

We would like an opportunity to meet and discuss the roads network with you anytime after February 16th when the Director of Infrastructure Planning, Randy Cleveland has returned from vacation. We will be conducting 3 public open houses in February; the schedule in this regard will be available February 7th, 2011.

We look forward to working together with you in the development of a sustainable and prosperous city.

Thank you;

T. Barton
Acting Director, Infrastructure Planning

Attachments

cc: Randall Shier, Okanagan Branch Chair
General Manager, Community Sustainability
Director, Infrastructure Planning
Director, Financial Services

Infrastructure Planning
1435 Water Street
Kelowna, BC V1Y 1J4
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kelowna.ca

EXHIBIT "E" - PARKS

CITY OF KELOWNA
2030 PARKS ACQUISITION PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

(2010 Dollars x 1000)

TYPE	ACQUISITIONS	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES: BY DEVELOPER	GOV'T ASSIST	TAXABLE BENEFIT	NET REMAINING	SECONDARY SUITES	NET FOR DCC CALCULATIONS
						19,952	793	19,159
		Total Growth Units:						
City	12 Hectares	51,547.5		5,400.0		46,147.5	1,624.1	44,523.3
Community	20 Hectares	27,226.7				27,226.7	958.2	26,268.5
Neighbourhood	23 Hectares	31,508.2				31,508.2	1,108.9	30,399.3
Recreation	40 Hectares	14,105.8				14,105.8	496.4	13,609.4
SUBTOTAL A	95 hectares	124,388.2		5,400.0		118,988.2	4,187.7	114,800.5
Less: Land Use Credits:								(5,520.1)
SUBTOTAL B		124,388.2		5,400.0		118,988.2	4,187.7	109,280.3
Carry Over (09-12-31 Reserve Balance - Committments)								1,092.8
SUBTOTAL C		124,388.2		5,400.0		118,988.2	4,187.7	110,373.2
1,092.8	Plus Administration/Engineering			@		1.00%		
125,481.0	Subtotal D							(8,829.9)
	Less Assist			@		8.00%		101,543.3
	Total for DCC							

NOTE:

NET UNIT DCC FOR:	
Residential 1:	5,300
Residential 2:	5,300
Residential 3:	5,300
Residential 4:	5,300
Residential 5 - Per Sq. M. (56 sq. m. or less):	95.13

2030 PLAN

2030 Major Services - Funding Sources ($ Millions)

Major Service	Prov. Grant	Developer Construct	DCC's / Reserves	Taxation	Utility User Rates	2030 Totals	2020 Totals	% Change from 2020
Arterial Roads	23.8	52.3	195.9	126.2		398.2	588.5	(32.3)
Water Distribution		5.4	23.0		30.7	59.1	48.1	22.8
Wastewater Trunks		4.9	23.6		9.4	37.9	43.3	(12.5)
Wastewater Treatment			66.6		19.5	86.1	92.0	(6.3)
Parkland Acquisition	5.4		107.1	13.0		125.5	144.1	(12.9)
2030 Totals	29.2	62.6	416.2	139.2	59.6	706.8	915.9	(22.8)
2020 Totals	49.2	99.0	577.5	154.9	41.5	915.9		
% Change from 2020	(40.4)	(36.8)	(27.9)	(10.2)	43.5	(22.8)		

ROADS (Res 1)

	A S.E. Kelowna	B South Mission	C NE of Inner City	D North of Hwy 33	E North of Inner City	F South of Hwy 33	I Inner City		
2020 program									
Total DCC Rate	25,529	23,743	14,505	16,932	14,203	13,678	9,176		
2030 Program									
Total DCC Rate	9,323	23,609	14,473	11,238	12,285	combined w D	7,696		
% change DCC Rates	(63.5)	(0.6)	(0.2)	(33.6)	(13.5)		(16.1)		
Roads 2020 equiv. units	553	3,701	781	1,801	2,161		13,461	22,458	
Roads 2030 equiv. units	43	2,117	689	1,657	2,143		9,847	16,496	
% change equiv. units	(92.2)	(42.8)	(11.8)	(8.0)	(0.8)		(26.8)	(26.5)	

PARKS

2020 Program	5,069
2030 Program	5,300
% change	4.6

TREATMENT

2020 Program	3,044
2030 Program	3,723
% change	22.3

TRUNKS

	Not S. Mission	S. Mission
2020 Program	1,562	1,979
2030 Program	1,294	1,903
% change	(17.2)	(3.8)

WATER

	A	B	D
2020 Program	1,757	1,289	3,054
2030 Program	998	679	3,552
% change	(43.2)	(47.3)	16.3

DCC RATES ALL PROGRAMS

sectors	S.E. Kelowna	S.W. Mission	N.E. Rutland	Highway 33	University/Airport	City Centre
2020 Program	30,598	35,124	24,180	26,607	23,878	20,608
2030 Program	14,623	35,214	24,789	21,554	22,601	19,010
$ Difference	(15,975)	90	608	(5,053)	(1,277)	(1,598)
% change	(52.2)	0.3	2.5	(19.0)	(5.3)	(7.8)

CITY OF KELOWNA
2030 ROADS SERVICING PLAN & FINANCING STRATEGY
COST SHARING MODEL

EXHIBIT "A" - ARTERIAL ROADS

(2010 Dollars X 1000)

Target Quarter	Sector	NAME	LOCATION	Cross Section	RoW (M)	Total Land Cost	Total Build Cost	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Bike Paths	Bridges	Sidewalk	Existing Benefit	Secondary Suites	Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D North of Hwy 33	E North of Inner City	J COMMON
			Growth Units									73.4%	90.7%	73.4%		461		10,406	43	2,117	660	1,057	2,143	10,490
Q3	A	McCulloch	Various	RAU2L	20-30	1,416,432	1,468,480	2,884.9								21.7	21.7	2,863.3	2,863.3					
						1,416,432	1,468,480	2,884.9								21.7	21.7	2,863.3	2,863.3					
	B	Deficiencies	Frst 2/3,Brnby 1,Kldr,S.Por 2,Stw 2,Grd 1			500,108	1,813,982	2,113.6								12.2	12.2	2,101.2		2,101.2				
Q2	B	Frost 1	Kildeer - Chute Lake	UCU2L	20	294,000	1,556,580	1,850.6								10.7	10.7	1,839.8		1,839.8				
Q2	B	Gordon 1 - part 1	Frost - South Crest Dr	UAD2L	30	413,500	1,369,671	1,783.2								10.3	10.3	1,772.8		1,772.8				
Q2	B	Gordon 1 - part 2	South Crest Dr - S. Perimeter	UAD2L	30	413,500	3,108,660	3,522.1								20.4	20.4	3,501.6		3,501.6				
Q4	B	Lakshr 1A (4L)	Vintage Terrace Rd to Barnaby Rd	RAD2L	30		2,376,849	2,376.8								13.8	13.8	2,363.1		2,363.1				
Q4	B	S. Perimeter 1	Gordon Dr to Stewart 1	RAU2L	30	477,625	8,107,108	8,584.7								49.8	49.8	8,535.0		8,535.0				
						2,098,833	18,132,191	20,230.8								117.2	117.2	20,113.6		20,113.6				
Q4	*B	Casorso 1	Benvoulin - Swamp	RAU4L	30	198,000	1,784,728	1,980.7								11.5	11.5	1,969.2	590.9	1,378.5				
Q4	*B	Casorso Bridge - Mission Cr.	Widening bridge to 4 lane	RAU4L	30		2,743,739	2,743.7								15.9	15.9	2,727.8		2,727.8				
Q1	*B	Dehart 2	Lakeshore Road - Gordon Drive	UAU2L	25	219,000	1,500,410	1,719.4						76.9		9.5	86.4	1,633.0		1,633.0				
Q3	*B	Gordon Bridge - Bellevue Cr.	Crossing - Bellevue Creek	UAU2L	20		454,590	454.6								2.8	2.6	451.9		451.9				
Q3	*B	Lakshr 1 (4L)	Dehart Rd - Vintage Terrace	UAU2L	30	1,401,594	3,311,857	4,713.4						106.4		26.7	133.1	4,580.3		4,580.3				
Q3	*B	Lakshr Bridge - Bellevue Cr.	Crossing - Bellevue Creek	UAU2L	30		1,428,270	1,428.3								8.3	8.3	1,420.0		1,420.0				
Q3	*B	Lakshr 2 (4L)	Old Meadows - DeHart	UAU2L	30	2,708,674	3,004,973	5,713.6	571.4					114.5		29.1	143.7	4,998.6		4,998.6				
Q4	*B	Stewart Rd 3	Swamp - Crawford Rd	RAU2L	30	2,289,652	4,153,565	6,443.2								37.3	37.3	6,405.9	2,882.6	3,523.2				
						8,816,020	18,361,920	25,196.9	571.4					297.6		141.0	438.8	24,186.3	3,473.4	20,713.4				
CMPLT	C	McCurdy 4 (Dev Credit)	Craig Rd - Tower Ranch (Dvlpr Crdt)				5,486,936	5,486.9										5,486.9			5,486.9			
Q4	D	Lone Pine	Highway 33 - 600m east	UCU2L	20	510,091	2,366,993	2,077.7								11.6	11.6	2,066.1				2,066.1		
Q4	D	Gallagher 1	Logovista - Gallagher Rd	RCU2L	16-20		8,193,033	8,193.6	8,964.8							4.9	4.9	1,224.1				1,224.1		
Cmplt	D	Highway 33 (Complete)	Mckenzie - Gallagher			4,200,000	17,403,665	21,603.7		11,931.4							866.4	8,803.9				6,602.9		2,201.0
						4,710,091	27,984,291	32,678.0	8,964.8	11,931.4						15.5	884.9	12,894.1				10,693.1		2,201.0
Q3	E	Airport	Hollywood Road - Highway 97			229,047	1,287,631	1,516.7	151.7							3.1	3.1	1,362.0					1,362.0	
Q1	E	E-W Connector 1	Glenmore Rd - Station 11+340	UAU2L	30	114,335	2,406,392	2,520.7	2,620.7															
Q1	E	E-W Connector 2	Station 11+340 - Station 11+900	RAU2L	30	57,566	1,078,645	1,136.2								2.5	2.6	1,133.7					1,133.7	
Q1	E	E-W Connector 3	Station 11+900 - Station 12+300	RAU2L	30	1,220,503	1,821,435	3,041.9								5.8	6.8	3,035.1					3,035.1	
Q1	E	E-W Connector 4	Station 12+300 - Station 12+750	RAU2L	30	1	2,610,687	2,610.7								5.9	5.9	2,604.8					2,604.8	
Q2	E	Hollywd 7	Sexsmith Road - Appaloosa	UAD2L	25	1,216,640	674,352	1,891.0	151.3			19.3				3.9	23.1	1,716.6					1,287.4	429.1
Q4	E	Hollywd 8	Appaloosa - Quail Ridge	UAD2L	25	1,011,033	8,308,506	9,319.5	5,591.7			242.2				7.8	250.0	3,477.8					2,608.3	869.4
						3,849,225	18,107,540	22,036.8	8,415.4			281.5				29.9	281.4	13,329.9					12,031.3	1,298.6
Q3	I	Begbie Road	Glenmore Highlands - Glenmore Rd.	RCU2L	20	150,019	2,097,201	2,247.2	2,247.2															
Q4	I	Benvoulin 1	Casorso Road - KLO Road	RAD4L	30	1,118,088	8,123,881	8,242.0				363.3		845.8		120.2	1,130.4	8,111.6						8,111.6
Q2	I	Burtch 2	KLO Road - Byrns Road	RAU2L	25		4,630,221	4,630.2						120.0		68.8	186.8	4,641.6						4,641.6
Q3	I	Burtch 4	Sutherland - Hwy 97			123,620	352,403	476.0						13.4		6.8	20.1	455.9						455.9
Q3	I	Clement 1	Ellis - Graham	UAD4L	30	914,431	5,863,079	6,776.4	940.0			286.4		198.0		78.3	542.8	5,285.7						5,285.7
Q1	I	Clifton	Clement - Mountain	UAD4L	30	1,145,000	3,490,781	4,635.8				121.1		45.0		65.3	231.4	4,404.4						4,404.4
Q4	I	COMC 2	Spall Road - Highway 33	RAD4L	35	10,534,058	35,587,285	46,121.3		11,862.4					17,129.5	250.1	17,379.6	16,879.3						16,879.3
Q4	I	COMC 3	Highway 33 - McCurdy Road	RAD4L	35	2,092,862		2,092.9							1,046.4	15.3	1,061.7	1,031.2						1,031.2
Q4	I	Gordon 4	Old Meadows Rd - Lequime	UAD4L	30		793,868	793.9	793.9															
Q2	I	Guisachan 2	Gordon - Nelson Rd	UAU2L	25-28	210,301	3,014,066	3,224.4				99.1		81.8		44.4	225.3	2,999.0						2,999.0
Q2	I	Guisachan 3	Ethel - Gordon	UAU2L	25		2,186,488	2,186.5						48.5		31.2	79.8	2,108.7						2,108.7
Q2	I	Hollywd 3	McCurdy Road - Stremel	UAU2L	25	490,360	1,138,818	1,029.2	407.3			79.3		39.8		18.1	136.2	1,088.7						1,088.7
Q2	I	Hollywd 4	Stremel - Highway 97	UAU2L	25	1,428,172	3,009,421	4,437.8	1,109.4			182.6		91.1		44.6	318.4	3,009.7						3,009.7

02/01/2011

($'000 Dollars X 1000)

Target Quarter Sector		NAME	LOCATION	Cross Section	R/W (M)			TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES									NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS					I COMMON
									By Dev'p'r	Highways Assist	MOTH Max Lmt 15$/yr	Bike Paths	Bridges	Sidewalk	Existing Benefit	Secondary Suites	Total Paid By Taxation		A S.E. Kelowna	B South Mission	C NE of Inner City	D North of Hwy 33	E North of Inner City	
Q3	I	Hollywd Bridge - Francis Cr.	Francis Creek - Crossing	UAU2L	25		34,658	34.9					12.6			0.3	13.1	21.7						21.7
Q3	I	Hollywd 5	Highway 97 - Railway Track	UAU2L	25	1,715,921	1,561,755	3,305.7	527.2			99.1				9.7	635.9	2,347.6						2,347.6
Q2	I	Hollywd Bridge - Mill Cr.	Mill Creek - Crossing	UAU2L	25		1,052,160	1,052.2					388.1			6.7	394.8	656.3						656.3
Q2	I	Hollywd 6	Cambio - Saxsmith Rd	UAU2L	25	55,024	455,726	510.8				49.5				4.0	53.5	454.5						454.5
	I	Highway 33(1)	COMC - Enterprise				4,307,462	4,307.5							40.4	62.3	102.7	4,204.8						4,204.8
Q4	I	Hwy Link-Gordon	Sutherland - Bernard	UAD4L	30	1,084,956	2,877,720	3,442.7							40.9	49.7	90.6	3,352.1						3,352.1
Q1	I	Hwy Link-Pand 3	Sutherland - Lawrence	UAD4L		3,000,000		3,000.0								43.8	43.8	2,956.2						2,956.2
Q1	I	Lkshore 3	Richter Street - Old Meadows Road	UAU2L	30	12,675,849	7,145,921	19,821.2	594.6			598.0		296.7	526.5	267.7	1,183.3	18,063.2						18,063.2
Q1	I	Lkshore 2	Mission Creek - Crossing	UAU2L	30		5,661,720	5,661.7	393.3							69.2	595.7	4,969.7						4,969.7
Q1	I	Lkshore Bridge - Mission Cr.	Wilson Creek - Crossing	UAU2L	30		1,001,060	1,001.1								14.8	14.8	986.4						986.4
Q1	I	Lkshore Bridge - Wilson Cr.	Lanfranco Road - Richter Street	UAU2L	30	2,720,755	1,071,213	3,791.9	1,251.3			74.9		33.3		35.5	143.7	2,397.0						2,397.0
Q2	I	Lkshore 4	Dilworth - COMC			1,284,841		1,284.8								18.5	18.5	1,266.2						1,266.2
Q4	I	McCurdy 1	COMC - Highway 97 (& Dev Credit)	UAU2L	30		666,650	668.9						61.9		10.1	10.1	678.8						678.8
Curr	I	McCurdy 2	Raymer - Rose	UAU2L	20	1,428,747	2,272,780	3,701.5						441.9		52.9	194.7	3,506.9						3,506.9
Q3	I	Pandosy 1	Sutherland - KLO	UAU2L	20		7,100,000	7,100.0								97.2	539.0	6,561.0						6,561.0
Q3	I	Richter 1	Cara Glen Way - Union Road	UAU2L	20		20,415,807	20,415.8	20,415.8															
Q4	I	Ridge	Clifton Road - Deer Ponds Place	UCU2L	20		1,285,836	1,285.8	1,285.8															
Q1	I	Rio 1	Pandosy - Ethel	UAU2L	25	5,366,000	2,686,174	8,072.2	665.1			132.1		60.0		105.8	298.9	7,208.2						7,208.2
Q2	I	Rose 1	Cornish Road - Old Vernon Road	UAD4L	30	1,007,708	4,201,974	5,209.8				154.1		124.8		72.0	350.7	4,859.0						4,859.0
Q1	I	Rutland 2	Snowsell - Glenmore Bypass	UAD2L	30	115,633	20,250	135.8				49.5				1.3	50.8	85.0						85.0
	I	Saxsmith 2	Glenmore Bypass - Valley Road	UAD2L	25	176,083	1,471,716	1,648.8	659.9			88.1		55.4		12.2	155.7	824.1						824.1
Q1	I	Saxsmith 3	Longhill - Rutland Road	UAD4L	30	3,618,103	3,990,264	12,008.4	3,762.5			407.4		302.7		118.5	828.6	7,997.3						7,997.3
Q1	I	Saxsmith 5																						123,146.8
						59,433,103	144,331,283	196,760.4	35,255.4	11,852.4		2,765.7	388.9	2,772.0	18,702.4	1,824.8	26,463.8	123,146.8						
		ACTIVE TRANSPORTATION																						
Q3	*B	Lakshr 1 - AT	Dehart Rd - Vintage Terrace				415,626	415.6								305.1	0.5	305.7	109.9		109.9			
Q3	*B	Lakshr 2 - AT	Old Meadows - DeHart				459,376	459.4								337.2	0.7	337.9	121.5		121.5			
Q3	E	Airport - AT	Hollywood Road - Highway 97	UCOL	30		175,200	175.0								115.6	0.2	115.8	41.7			41.7		
Q3	E	E-W Connector 1 - AT	Glenmore Rd - Station 11+340				586,250	586.3	17.6							430.3	0.9	431.2	155.0			155.0		
Q1	E	E-W Connector 2 - AT	Station 11+340 - Station 11+900				245,000	246.0								179.8	0.4	180.2	64.8			64.8		
Q2	E	E-W Connector 3 - AT	Station 11+900 - Station 12+300				175,000	175.0								128.5	0.3	128.7	46.3			46.3		
Q2	E	E-W Connector 4 - AT	Station 12+300 - Station 12+750				196,875	196.9								144.5	0.3	144.8	52.1			52.1		
Q2	E	Hollywd 7 - AT	Saxsmith Road - Appaloosa				153,125	153.1								112.4	0.2	112.6	40.5			40.5		
Q2	E	Hollywd 8 - AT	Lougheed - Quail Ridge				1,825,000	1,825.0								1,413.0	3.0	1,416.9	509.1			509.1		2,803.3
Q4	E	Hollywd 6 - AT	Rose - Lakeshore	UCU2L	20	438,091	19,540,934	19,979.1								8,057.9	16.9	8,074.9	2,803.3					1,121.7
Q1	I	Abbott - AT	Barrera - KLO	UCU2L	20		4,241,444	4,241.4								3,113.2	6.5	3,119.6	1,121.7					128.4
Q3	I	Casorso 3 -AT	KLO - Ethel	UCU2L	10-20	73,000	412,432	485.4								356.3	0.7	357.1	128.4					1,111.6
Q3	I	Casorso 4 - AT	Clement - Lawson	UCU2L	20		4,203,270	4,203.3								3,085.2	6.5	3,091.7	1,111.6					819.0
Q2	I	Ethel 1 - AT	Lawson - Springfield	UCU2L	20		3,096,899	3,096.9								2,278.1	4.9	2,277.9	819.0					408.1
Q2	I	Ethel 2 - AT	Springfield - Morrison	UCU2L	20		1,543,201	1,543.2								1,132.7	2.4	1,135.1	408.1					794.3
Q2	I	Ethel 3 - AT	Morrison - Raymer	UCU2L	20		3,003,632	3,003.7								2,204.7	4.6	2,209.3	794.3					1,516.9
Q2	I	Ethel 4 - AT	Clement - High	UAD4L	30		5,743,921	5,743.3								4,215.6	9.0	4,224.6	1,516.9					1,851.5
Q2	I	Glenmore 3 - AT	High - Dallas	UAD4L	30		7,091,002	7,091.0								5,138.7	10.6	5,149.5	1,851.5					1,067.5
Q2	I	Glenmore 4 - AT	Scenic - EW Connector	RAU2L	30	205,000	3,831,402	4,036.5								2,982.8	6.2	2,989.0	1,067.5					41.7
Q2	I	Glenmore 5 - AT	McCurdy Road - Stremel				157,500	157.5								115.6	0.2	115.8	41.7					96.0
Q2	I	Hollywd 3 - AT	Stremel - Highway 97				363,125	363.1								266.5	0.6	267.1	96.0					52.1
Q2	I	Hollywd 4 - AT	Highway 97 - Railway Track				199,875	199.9								144.5	0.3	144.8	52.1					26.0
Q2	I	Hollywd 5 - AT	Railway Track - Saxsmith Road				95,439	95.4								72.3	0.2	72.4	26.0					846.0
Q2	I	Hollywd 8 - AT	Hollydell - Hwy 33	UAU2L	25-30		3,199,094	3,199.1								2,348.1	4.9	2,353.1	846.0					388.1
Q3	I	Hollywd 9 - AT	Hwy 33 - McCurdy	UAU2L	24-25	67,632	1,400,000	1,467.6								1,077.2	2.3	1,079.5	388.1					17.9
Q3	I	Hollywd 10 - AT	Springfield - Mission Creek	UAU2L	20		57,632	57.6								49.0	0.1	49.7	17.9					1,101.4
Q2	I	Hollywd 11 - AT	Nickel - COMC 3	UCU2L	20	2,603,320	1,359,830	4,164.8								3,057.0	6.4	3,063.4	1,101.4					793.4
Q3	I	Houghton 1 - AT	Overpass @ Hwy 97				3,000,000	3,000.0								2,202.0	4.6	2,206.6	793.4					572.3
Q3	I	Houghton Overpass - AT	Hilyard - Rutland	UCU2L	20	522,000	3,369,368	3,890.4	562.1							2,421.0	5.1	2,426.0	572.3					57.6
Q2	I	Houghton 2 - AT	Abbott - Pandosy	UCU2L	20		725,440	728.4	505.5							160.0	0.3	160.3	57.6					577.9
Q3	I	KLO 1 - AT	Pandosy - College	UCU2L	25-30	640,000	1,546,140	2,186.1								1,603.9	3.4	1,607.3	577.9					341.1
Q3	I	KLO 2 - AT	Pandosy - Abbott	UCU2L	10-20		1,269,008	1,269.9								946.8	2.0	948.8	341.1					100.4
Q3	I	Lake 1 - AT	COMC 2 - Dilworth	UCU2L	20		379,787	379.8								278.8	0.5	279.3	100.4					
Q4	I	Leckie 1 - AT																						

02/01/2011

(2010 Dollars X 1000)

Target Quarter	Sector	NAME	LOCATION	Cross Section	RoW (M)			TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	MOTH Max Lmt 150/yr	Bike Paths	Bridges	Sidewalk	Existing Benefit	Secondary Suites	Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D North of Hwy 33	E North of Inner City	I COMMON
Q4	I	Leckie 2 - AT	Dilworth - Enterprise	UCU2L	20		1,473,785	1,473.8							1,081.8	2.3	1,084.0	369.8						380.8
Q4	I	Leckie 3 - AT	Enterprise - Springfield Rd.	UCU2L	25		2,367,911	2,367.9							1,738.1	3.7	1,741.7	626.2						626.2
Q1	I	Lkshore 3 - AT	Cook - Old Meadows Road				1,190,000	1,190.0							873.5	1.8	875.3	314.7						314.7
Q2	I	Lkshore 4 - AT	Lanfranco Road - Richter Street				148,750	148.8							109.2	0.2	109.4	39.3						39.3
Q1	I	Rails w Trails - AT	Spall - Houghton		10		4,398,716	4,398.7							3,228.7	6.6	3,235.4	1,163.3						1,163.3
Q1	I	Rose 1 - AT	Pandosy - Ethel				262,500	262.5							192.7	0.4	193.1	69.4						69.4
Q2	I	Sutherland 1 - AT	Hwy 97 - Gordon	UCU2L	20	2,597,003	3,975,799	6,572.9							4,824.5	10.1	4,834.6	1,738.2						1,738.2
Q2	I	Sutherland 2 - AT	Gordon - Lake	UCU2L	20		4,531,291	4,631.3							3,326.0	7.0	3,333.0	1,198.3						1,198.3
		TOTAL ACTIVE TRANSPORTATION				7,339,086	63,447,689	90,786.7	1,108.1						65,624.1	138.2	65,862.4	23,716.3		231.4			772.0	22,712.9
											(3,000.0)							(3,000.0)						(3,000.0)
		Annual MOTH																						
		Subtotal A				78,669,230	317,392,244	396,060.5	52,344.8	23,793.8		3,027.2	398.9	3,069.8	84,626.5	2,289.3	94,180.2	225,741.7	6,336.7	41,056.4	5,466.9	10,693.1	12,803.4	149,361.2
		Carry Over (2009-12-31 Reserve Balance):																(14,816.4)	(6,255.8)	(1,821.8)	(46.5)	(3,856.6)	(1,350.0)	(1,485.0)
		Subtotal B				78,669,230	317,392,244	396,060.5	52,344.8	23,793.8		3,027.2	398.9	3,069.8	84,626.5	2,289.3	94,180.2	210,925.3	80.9	39,236.6	5,442.4	6,836.6	11,452.6	147,876.2
		Subtotal C				78,669,230	317,392,244	396,060.5	52,344.8	23,793.8		3,027.2	398.9	3,069.6	84,626.5	2,289.3	94,180.2	210,925.3	80.9	39,236.6	5,442.4	6,836.5	11,452.6	147,876.2
								2,109.3	Engineering/Administratio		1%							2,109.3	0.8	392.4	54.4	68.4	114.5	1,478.8
								398,169.7	Subtotal D									213,034.6	81.7	39,629.0	5,496.9	6,904.9	11,567.1	149,355.0
									Less Assist		15%							(31,955.2)	(12.3)	(5,044.3)	(824.5)	(1,035.7)	(1,735.1)	(22,403.3)
									Total for DCC									181,079.4	69.4	33,584.6	4,672.3	5,869.2	9,832.1	126,951.8

		A	B	C	D	E
Residential 1:	Sector	1,627	15,913	6,777	3,542	4,589
	Common	7,696	7,696	7,696	7,696	7,696
	Total Roads	9,323	23,609	14,473	11,238	12,285
Residential 2:	Sector	1,529	14,958	6,370	3,329	4,313
	Common	7,234	7,234	7,234	7,234	7,234
	Total Roads	8,764	22,193	13,604	10,564	11,547
Residential 3:	Sector	1,090	10,662	4,540	2,373	3,074
	Common	5,156	5,156	5,156	5,156	5,156
	Total Roads	6,246	15,818	9,697	7,529	8,231
Residential 4:	Sector	1,025	10,025	4,269	2,231	2,891
	Common	4,849	4,849	4,849	4,849	4,849
	Total Roads	5,873	14,874	9,118	7,080	7,739
Residential 5 - per Sq Mtr: (56 sq mtrs or less):	Sector	14	140	60	31	40
	Common	68	68	68	68	68
	Sector	82	208	127	99	108
Commercial - per Sq Mtr:	Sector	6	53	22	12	15
	Common	25	25	25	25	25
	Total Roads	31	78	48	37	41
Industrial - per Hectare:	Sector	4,018	39,305	16,738	8,749	11,334
	Common	19,009	19,009	19,009	19,009	19,009
	Total Roads	23,028	58,314	35,747	27,758	30,343
Institutional - per Sq Mtr:	Sector	5	53	22	12	15
	Common	25	25	25	25	25
	Total Roads	31	78	48	37	41

02/01/2011

2020 ROADS COMPLETED/DROPPED

*B	Dehart 1 (2L)	Lakeshore Road - Gordon Drive	Complete
*B	Dehart 3	Gordon Rd to Swamp	Complete
*B	Gordon 2	Barnaby/Gordon Intersect to Dehart	Complete
*B	Gordon 3	Dehart Rd to Old Meadows Rd	Complete
*B	Swamp 1	DeHart Rd to Casorso	Complete
B	Chute Lake 1	Frost Rd to South Perimeter Rd	Complete
B	Chute Lake 2	Barnaby Rd to Frost Rd	Complete
B	Frost 2	Kildeer to ending of Existing Frost	Complete
B	Frost 3	End of Existing Frost to Gordon Dr.	Complete
B	Killdeer	Chute Lake Road - Frost Road	Complete
B	Lakshr 1A	Vintage Terrace Rd to Barnaby Rd	Complete
B	S. Per. 2	Lebanon Creek to Chute 1	Complete
B	Stewart Rd 1 & 2	Perimeter Rd to Crawford	Complete
C	McCurdy 4 (Dev Credit)	Craig Rd - Tower Ranch (All Dvlpr Credit)	Complete
D	Gallagher 3	Highway 33 - Treetop Road	Complete
E	UBC Flyover	Hghwy 97/Hllywd Rd/Unvrsty Wy	Complete
I	Benvoulin 2	Cooper Road - Springfield Avenue	Complete
I	Clifton 1	MacLeay - Clifton (existing)	Complete
I	COB A	Graham - Cerise	Complete
I	COB 1	Cerise - Spall	Complete
I	Enterprise 1	Banks Road - Leathead Road	Complete
I	Glenmore 1	High Road - Dallas	Complete
I	Glenmore 2	Dallas Road - Union Road	Complete
I	Glenmore 3	Union Road - Scenic Road	Complete
I	Gordon 5	Mission Creek - Casorso	Complete
I	Gordon 5B	Mission Creek Crossing	Complete
I	Gordon 6	Casorso Road - Lanfranco Road	Complete
I	High 2	Mountain Drive - Lynwood Cresent	Complete
I	Hwy 33	McKenzie - Gallagher	Complete
I	Hwy 33 1	Enterprise - Highway 97	Complete
I	Hwy 97 1	Gordon Drive - Highway 33	Complete
I	Hwy Link-Ellis	Ellis/Hwy 97 Intersection	Complete
I	Hwy Link-Pand 3	Lake - Lawrence	Complete
I	Hwy Link-Pand 3B	Mill Creek Bridge	Complete
I	Hwy Link-Richter	Sutherland - Bernard	Complete
I	KLO	Gordon Drive - Benvoulin Road	Complete
I	McCurdy 2 (Dev Credit)	Enterprise - Highway 97	Complete
I	Rio 2	Highlands - Internal Road C1	Complete
I	Sexsmith 1	Ridge Road - Millard Road	Complete
I	Springfield 2	Ziprick Road -Hollywood Road	Complete
A	Gulley 2	Spiers to Hart	Dropped
A	Hollywd 2	East Kelowna Road - Springfield	Dropped
A	Hollywd 2b	Mission Creek - Crossing	Dropped
*B	OldMws (4L)	Gordon Drive - Lakeshore Road	Dropped
B	Frost 1b	Frost - Frost	Dropped
E	Beaver Lake Rd	City Limits - East Connector	Dropped
E	McKinley 1	Glenmore Road - Highway 97	Dropped
F	Gallagher 1b	Creek - Crossing - Crossing	Dropped
I	Bernard 2	Richmond Street - Burtch Road	Dropped
I	Burtch 1	Benvoulin Road - KLO Road	Dropped
I	Burtch 5	Highway 97 - Kelglen	Dropped
I	Hwy 97 2	Highway 33 - Sexsmith	Dropped
I	McCurdy 2b	Mill Creek - Crossing	Dropped
I	McCurdy 3	Hwy 97 N - Hollywood Rd N	Dropped
I	Pandosy 2	Royal - Lake	Dropped
I	Rutland 1	Leathead - Cornish	Dropped
I	Sexsmith 4	Valley - Longhill	Dropped
I	Springfield 1	Richter Street - Ethel Street	Dropped
I	Springfield 3	Hollywood Road - Rutland Road	Dropped

TRANSITION FROM 2020 ROADS PROGRAM TO 2030 PROGRAM

			(X 1,000)	Origin
A	McCulloch	Various	2,885	2020 prog, updated cost
*B	Casorso 1	Benvoulin - Swamp	1,981	2020 prog, updated cost
*B	Casorso Bridge - Mission Cr.	Widening bridge to 4 lane	2,744	New
*B	Dehart 2	Lakeshore Road - Gordon Drive	1,719	2020 prog, updated cost
*B	Gordon Bridge - Bellevue Cr.	Crossing - Bellevue Creek	455	2020 prog, updated cost
*B	Lakshr 1 (4L)	Dehart Rd - Vintage Terrace	4,713	2020 prog, updated cost
*B	Lakshr 2 (4L)	Old Meadows - DeHart	5,714	2020 prog, updated cost
*B	Lakshr Bridge - Bellevue Cr.	Crossing - Bellevue Creek	1,428	2020 prog, updated cost
*B	Stewart Rd 3	Swamp - Crawford Rd	6,443	2020 prog, updated cost
B	Deficiencies	Frost 2/3,Brnby 1, Kldr, S. Per 2,Stwrt 2	2,114	2020 prog, updated cost
B	Frost 1	Kildeer - Chute Lake	1,851	2020 prog, updated cost
B	Gordon 1 - part 1	Frost - South Crest Dr	1,783	2020 prog, updated cost
B	Gordon 1 - part 2	South Crest Dr - S. Perimeter	3,522	2020 prog, updated cost
B	Lakshr 1A (4L)	Vintage Terrace Rd to Barnaby Rd	2,377	2020 prog, updated cost
B	S. Perimeter 1	Gordon Dr to Stewart 1	8,585	2020 prog, updated cost
C	McCurdy 4 (Dev Credit)	Craig Rd - Tower Ranch (All Dvlpr Credit)	5,489	2020 Dvlpr Credit
D	Gallagher 1	Lagovista - Gallagher Rd	8,194	2020 prog, updated cost
D	Highway 33 (Complete)	Mckenzie - Gallagher	21,604	2020 cmplt, not all pd
D	Lone Pine	Highway 33 - 500m east	2,878	2020 prog, updated cost
E	Airport	Hollywood Road - Highway 97	1,517	2020 prog, updated cost
E	E-W Connector 1	Glenmore Rd - Station 11+340	2,521	New
E	E-W Connector 2	Station 11+340 - Station 11+900	1,136	New
E	E-W Connector 3	Station 11+900 - Station 12+300	3,042	New
E	E-W Connector 4	Station 12+300 - Station 12+750	2,611	New
E	Hollywd 7	Sexsmith Road - Appaloosa	1,891	2020 prog, updated cost
E	Hollywd 8	Lougheed - Quail Ridge	9,320	2020 prog, updated cost
I	Begbie Road	Glenmore Highlands - Glenmore Rd.	2,247	2020 prog, updated cost
I	Benvoulin 1	Casorso Road - KLO Road	9,242	2020 prog, updated cost
I	Burtch 2	KLO - Byrns Rd	4,830	2020 prog, updated cost
I	Burtch 4	Sutherland Road - Highway 97	476	2020 prog, updated cost
I	Clement 1	Ellis - Gordon	6,778	2020 prog, updated cost
I	Clifton (formerly High 1)	Clement - Mountain	4,636	2020 prog, updated cost
I	COMC 2	Spall Road - Highway 33	46,121	2020 prog, updated cost
I	COMC 3	Highway 33 - McCurdy Road	2,093	2020 prog, updated cost
I	Gordon 4	Old Meadows Rd - Lequime	794	2020 prog, updated cost
I	Guisachan 2	Gordon - Nelson Rd	3,224	2020 prog, updated cost
I	Guisachan 3	Ethel - Gordon	2,186	New
I	Hollywd 3	McCurdy Road - Stremel	1,629	2020 prog, updated cost
I	Hollywd 4	Stremel - Highway 97	4,438	2020 prog, updated cost
I	Hollywd 5	Highway 97 - Cambrio	3,309	2020 prog, updated cost
I	Hollywd 6	Cambie - Sexsmith Rd	511	2020 prog, updated cost
I	Hollywd Bridge - Francis Cr.	Francis Creek - Crossing	35	2020 prog, updated cost
I	Hollywd Bridge - Mill Cr.	Mill Creek - Crossing	1,052	2020 prog, updated cost
I	Hwy 33 1	COMC - Enterprise	4,308	2020 prog, updated cost
I	Hwy Link - Gordon	Sutherland - Bernard	3,443	2020 prog, updated cost
I	Hwy Link - Pand 3	Sutherland - Lawrence	3,000	2020 prog, updated cost
I	Lkshore 3	Richter Street - Old Meadows Road	19,821	2020 prog, updated cost
I	Lkshore 4	Lanfranco Road - Richter Street	3,792	2020 prog, updated cost
I	Lkshore Bridge - Mission Cr.	Mission Creek - Crossing	5,662	2020 prog, updated cost
I	Lkshore Bridge - Wilson Cr.	Wilson Creek - Crossing	1,001	2020 prog, updated cost
I	McCurdy 1	Dilworth - COMC	1,265	2020 prog, updated cost
I	McCurdy 2	COMC - Highway 97 (& Dev Credit)	689	2020 Dvlpr Credit
I	Pandosy 1	Raymer - Rose	3,702	2020 prog, updated cost
I	Richter 1	Sutherland - KLO	7,100	New
I	Ridge	Cara Glen Way - Sexsmith Road	20,416	2020 prog, updated cost
I	Rio 1	Clifton Road - Highlands	1,286	2020 prog, updated cost
I	Rose	Pandosy - Gordon	8,072	New
I	Rutland 2	Cornish Road - Old Vernon Road	5,210	2020 prog, updated cost
I	Sexsmith 2	Snowsell - Glenmore Bypass	136	2020 prog, updated cost
I	Sexsmith 3	Glenmore Bypass - Valley Road	1,650	2020 prog, updated cost
I	Sexsmith 5	Longhill - Rutland Road	12,608	2020 prog, updated cost
		2030 Program - total roads	305,278	

TRANSITION FROM 2020 ROADS PROGRAM TO 2030 PROGRAM

*B	Lakshr 1 - AT	Dehart Rd - Vintage Terrace	416	New
*B	Lakshr 2 - AT	Old Meadows - DeHart	459	New
E	Airport - AT	Hollywood Road - Highway 97	175	New
E	E-W Connector 1 - AT	Glenmore Rd - Station 11+340	586	New
E	E-W Connector 2 - AT	Station 11+340 - Station 11+900	245	New
E	E-W Connector 3 - AT	Station 11+900 - Station 12+300	175	New
E	E-W Connector 4 - AT	Station 12+300 - Station 12+750	197	New
E	Hollywd 7 - AT	Sexsmith Road - Appaloosa	153	New
E	Hollywd 8 - AT	Lougheed - Quail Ridge	1,925	New
I	Abbott - AT		10,978	New
I	Casorso 3 -AT	Barrera - KLO	4,241	New
I	Casorso 4 - AT	KLO - Ethel	485	New
I	Ethel 1 - AT	Clement - Lawson	4,203	New
I	Ethel 2 - AT	Lawson - Springfield	3,097	New
I	Ethel 3 - AT	Springfield - Morrison	1,543	New
I	Ethel 4 - AT	Morrison - Raymer	3,004	New
I	Glenmore 3 - AT	Clement - High	5,743	New
I	Glenmore 4 - AT	High - Dallas	7,001	New
I	Glenmore 5 - AT	Scenic - EW Connector	4,036	New
I	Hollywd 10 - AT	Hwy 33 - McCurdy	1,468	New
I	Hollywd 11 - AT	Springfield - Mission Creek	68	New
I	Hollywd 3 - AT	McCurdy Road - Stremel	158	New
I	Hollywd 4 - AT	Stremel - Highway 97	363	New
I	Hollywd 5 - AT	Highway 97 - Railway Track	197	New
I	Hollywd 6 - AT	Railway Track - Sexsmith Road	98	New
I	Hollywd 9 - AT	Hollydell - Hwy 33	3,199	New
I	Houghton 1 - AT	Nickel - COMC 3	4,165	New
I	Houghton 2 - AT	Hillywd - Rutland	3,880	New
I	Houghton Overpass - AT	Overpass @ Hwy 97	3,000	New
I	KLO 1 - AT	Abbott - Pandosy	726	New
I	KLO 2 - AT	Pandosy - College	2,185	New
I	Lake 1 - AT	Pandosy - Abbott	1,290	New
I	Leckie 1 - AT	COMC 2 - Dilworth	380	New
I	Leckie 2 - AT	Dilworth - Enterprise	1,474	New
I	Leckie 3 - AT	Enterprise - Parkview Crescent	2,368	New
I	Lkshore 3 - AT	Richter Street - Old Meadows Road	1,190	New
I	Lkshore 4 - AT	Lanfranco Road - Richter Street	149	New
I	Rails w Trails - AT	COMC 4 - Hollywood	4,399	New
I	Rose - AT	Pandosy - Gordon	263	New
I	Sutherland 1 - AT	Hwy 97 - Gordon	6,573	New
I	Sutherland 2 - AT	Gordon - Lake	4,531	New
		2030 program - total AT	90,787	
		2030 Program Grand Total	396,065	

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November 22, 2010

School District #23 (Central Okanagan)
685 Dease Road
Kelowna, BC V1X 4A4

Attention: Mrs. Judy Shoemaker, Planning Manager, MBA, REFP

Dear Madam:

Re: School Site Acquisition Charge

With reference to the proposed School Site Acquisition Charge (SSAC), Urban Development Institute (UDI) does not support adding fees and charges to development, especially considering the current economic climate. However, we recognize that this initiative is a result of direction from the Ministry and is out of the control of School District #23 (School District). That being said, we have the following comments, suggestions and concerns:

1. We ask that the School District work with the local municipalities to combine school sites with parkland to achieve a more efficient use of the land. We feel that combining the public use of school sites and parkland will not only result in relieving unnecessary burdens on the development industry and economic growth in the valley, but also on taxpayers who currently support the maintenance of both school district fields and public parks.

2. Preliminary review of the budget for the school site acquisition does not appear to have taken into consideration the recent downturn in the real estate market and the downward pressure on land prices. We recommend that a review of these land prices be undertaken before the SSAC is adopted to ensure that developers are not over-charged for the acquisition of identified sites.

3. We ask that the School District support UDI's recommendation to municipalities to charge the SSAC at building permit stage, rather than at subdivision or development cost charge, in an effort to reduce the negative impact of the additional charge. When fees are charged far in advance of the development of housing, the developer must carry the burden through the entire process until the home is purchased by the end user. By charging the SSAC at building permit stage, the charge is not collected until the

housing unit is built, therefore partially reducing the carrying costs associated with the charge.

4. We ask that, in keeping with the SSAC Implementation Guide recommendations, the School District fully account for and publish annually the money collected and spent from the SSAC account, the financial information on projects involving new school sites, and enrolment levels and projected demand so that we can report to our membership that the charge is indeed being used to benefit those that are paying.

5. Our members have concerns that they will be paying charges towards acquiring land for which they will never see the benefit. What happens to fees collected that are not used to acquire lands that were identified at the time of the collection? Or, similarly, what happens when land is acquired, but then not used to build schools? Will the funds somehow be paid back?

UDI appreciates the opportunity to comment on the proposed SSAC. We welcome further discussion on the subject and look forward to your response.

Yours truly,

URBAN DEVELOPMENT INSTITUTE

Per: 

Matt Cameron
Chair, DCC Review Committee

SH/jr

cc: Randy Cleveland, City of Kelowna
cc: UDI Okanagan Chapter – Board of Directors

File

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November 22, 2010

City of Kelowna
1435 Water Street
Kelowna, BC V1Y 1J4

Attention: Randy Cleveland, MAIBC, Director, Infrastructure Planning

Dear Sir:

Re: **2030 – 20 Year Servicing Plan and Financing Strategy - Parks Policies (SR 181502 and SR181504)**

With reference to your Memo to the City Manager of October 27, 2010, a copy of which was provided to Urban Development Institute (UDI), we would like to thank you for making this document available to us. We have the following comments and/or concerns:

1. UDI supports the continuation of the 2.2ha/1000 population growth active parkland acquisition rate. Unlike many of the other municipalities used for comparison in your memo, the City of Kelowna (the City) is fortunate to have large areas of natural open space available for public use in and around it. These areas are not included in the 2.2ha/1000 population growth figures but do represent a significant park benefit. In addition, is the School District's land currently included in the City's parkland/population calculation? While these areas will not significantly impact the overall ratio of parkland to the population, it will add to the amount of developed parkland/population.

2. UDI supports the City moving away from waterfront acquisition into land which is more reasonably priced.

3. UDI does not support shifting the cost burden for neighbourhood parks construction into the DCC program. This represents a major change in policy and UDI feels it is inappropriate and ill-timed given current market conditions. UDI is concerned that a burden has been taken off the existing taxpayer and once again, put onto the development industry.

4. UDI does not support the proposal to charge commercial development a Parks DCC and views this as "double-dipping".

5. UDI is concerned with the City's estimate of a 12% increase in land acquisition costs since the last DCC rate review (2009) and questions how, in the biggest downturn in the last ten years, land values could have gone up by 12%. This is certainly not what the development industry has experienced, where there has been a significant decrease in land values.

UDI members span all sectors of the development industry, representing residential, commercial, industrial, recreational and institutional projects which contribute more than (currently) $25 Billion and 150,000 jobs to the provincial economy. The development industry is no different from any other industry in today's economy. Continued increases to development costs will negatively impact the development industry and in turn, the health of the local economy and are not sustainable at this time. The development industry has weathered large increases in DCC rates over the last 6 years, justified largely by increasing land and construction costs. In keeping with these same principals, UDI requests that the City apply the cost savings realized from reduced land values and acquisition of non-waterfront lands to reduce the Parks DCCs.

Yours truly,

URBAN DEVELOPMENT INSTITUTE

Per: 

Matt Cameron
Chair, DCC Review Committee

MC/jr

cc: Jim Paterson, General Manager, Community Sustainability
S. Bagh, Director, Policy & Planning
Keith Grayston, Director, Financial Services

cc: UDI Okanagan Chapter - Board of Directors

City of Kelowna

October 6, 2010

Randy Shier
President
Urban Development Institute
620-1632 Dickson Avenue
Kelowna, BC v1Y 7T2
rshier@missiongroup.ca

Matt Cameron
UDI-DCC Committee Chair
#205 - 1726 Dolphin Ave.
Kelowna, BC V1Y 9R9
MCameron@ctqconsultants.ca

Dear Randy and Matt:

Re: 2030 DCC Unit Rates: Water, Wastewater Trunks, Wastewater Treatment
Revised Construction Unit Prices for Water

Further to our correspondence of June 14, June 24, and July 1, find attached the following excerpts from the draft 2030 20-Year Servicing Plan and Financing Strategy in support of the draft 2030 Official Community Plan (OCP):

- Water: projects map, projects narrative and detailed DCC cost worksheet
- Wastewater Trunks: projects map, projects narrative and detailed DCC cost worksheet
- Wastewater Treatment: detailed DCC cost worksheet

Note that there is a boundary extension in North Glenmore for all three services reflecting anticipated development. A summary analysis of the calculated impact on the current Residential 1 DCC rates on two representative sectors follows, and further details on cost sharing are in the detailed DCC cost worksheets:

Residential 1 DCC Unit Rate Changes for 2 representative sectors of draft 2030 20-year Servicing Plan & Financing Strategy

System	Current City Centre	Unit Rate Change City Centre	% Change City Centre	Current SW Mission	Unit Rate Change SW Mission	% Change SW Mission
Water	$1,757	-$834	-47.5%	$1,289	-$610	-47.3%
Trunks	$1,562	-$265	-17.0%	$1,979	-$111	-5.6%
Treatment	$3,044	+$718	+23.6%	$3,044	+$718	+23.6%
Subtotal	$6,363	-$381	-6.0%	$6,312	-$3	0%
Note	Parks & Roads TBD					

A significant challenge in the development of this plan has been the slowing growth rate. The reduced need for infrastructure and project cost reductions resulting from declining construction unit prices has been largely offset by the impact of some fixed costs (wastewater treatment plant financing) spread out over fewer development units and the increasing cost of bio-solid treatment technologies acceptable to the authorities having jurisdiction. Therefore, the reductions shown for water distribution and wastewater trunks have been largely offset by the increases in Wastewater Treatment.

Further information on costs for the park land acquisition and the road network will be forthcoming shortly. We wanted to give you a head start on the review of this work to be able to shorten the time between now and OCP adoption.

We are also proposing a change in the methodology for water construction unit prices. Construction unit prices for water projects have posed a challenge because of the lack of depth in available tenders that are both local and comparable in scope to the large transmission main installations through urbanized areas that are proposed in the 2030 20-year servicing plan. Unfortunately the previously submitted unit rate tables are based

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on combined sewer and road improvement projects, which did not include water projects. The extrapolation of these figures for major water projects through urbanized areas is not as accurate as the new proposed calculation method.

Although the construction unit prices now proposed represents a different methodology for estimating water projects, they originate from an unbiased, credible third party. They were first developed by Associated Engineering for project estimates recently developed for the City-Wide Integrated Water Plan. These were based on a review of AE's internal cost data, City of Kelowna criteria for DCCs as well as the personal experience of the project leader for the City-Wide Integrated Water Plan and the 2030 20-year Water Servicing Plan, Bill Harvey.

The challenge with merging these unit prices into our previously proposed unit price table follows. The proposed costs per meter are set to include the reconstruction of backfill material as well as the cost of valves and valve chambers required for larger diameter pipes as an integrated cost. Breaking out these items to align with the previously proposed methodology for utility and road projects would require a separate exercise to account for valve chambers, as was done in the 2020 20-year servicing plan. For these reasons we submit that the attached revised unit rate table for water projects has advantages for estimating projects and is appropriate for this level of detail. The proposed unit price sheet is also attached.

Once we have submitted the DCC unit rate table for park land acquisition and roads, we will meet to discuss your input at a mutually agreeable time. We are expecting a series of public open houses on all aspects of the 2030 OCP and 20-year servicing plan and financing strategy before the end of November.

Thank you;

Randy Cleveland, MAIBC, Director, Infrastructure Planning

Attachments

cc. Jim Paterson, General Manager, Community Sustainability
Keith Grayston, Director, Financial Services
Bill Berry, Director, Design & Construction
Jim Wunderlich, Financial Analyst, Infrastructure Planning

P:\Infrastructure Planning\0100 ADMINISTRATION\0155 PLANS AND PROGRAMS\0155-65 INFRASTRUCTURE PLANS - 20 YEAR SERVICING\DCC Unit rates 2010Water to UDI,10.10.05,jo-rlc.docx

CITY OF KELOWNA

2030 WATER SERVICING PLAN & FINANCING STRATEGY (2010)

COST SHARING MODEL

EXHIBIT "B" - WATER

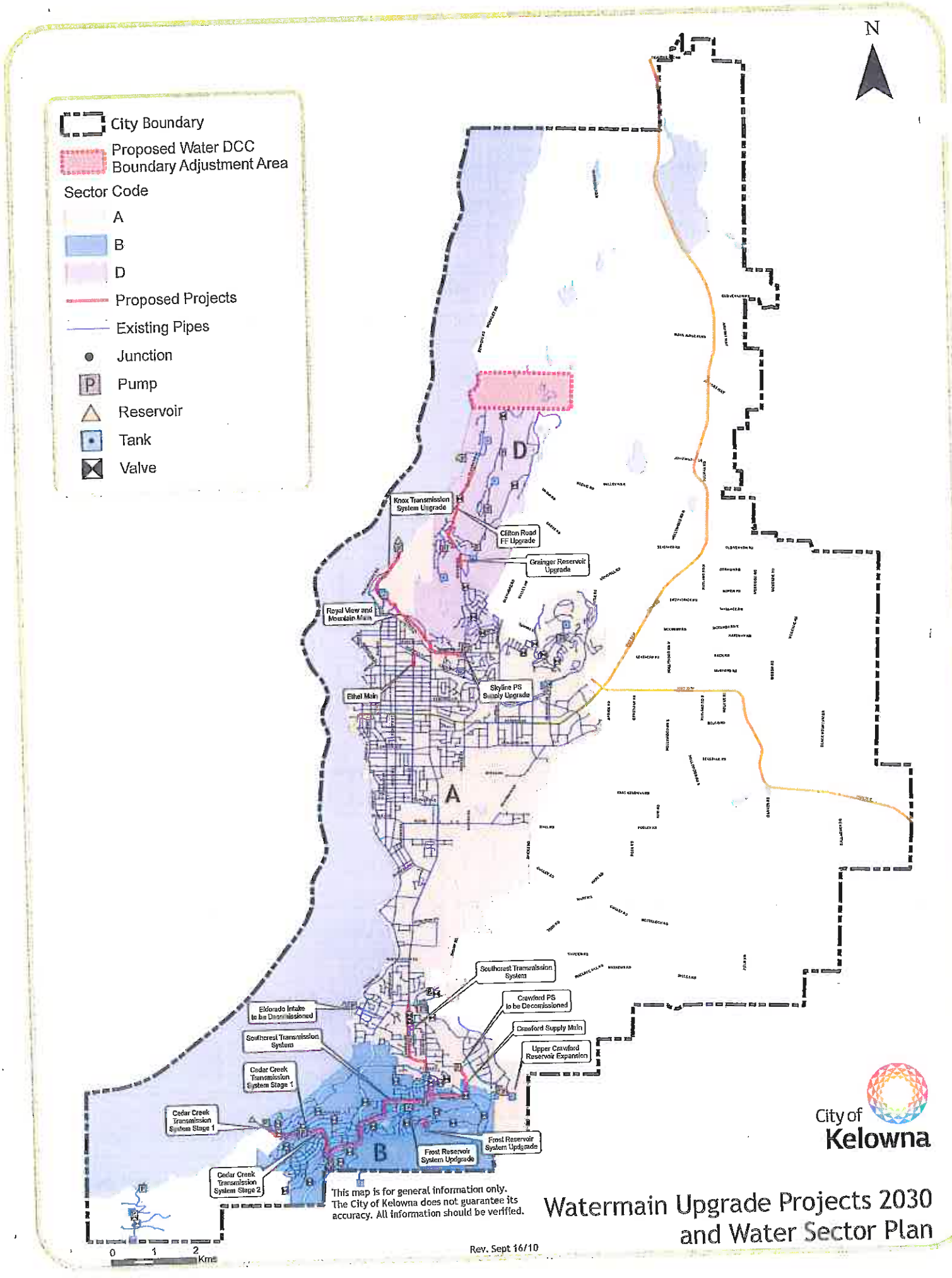
Sect	Target Year	PROJECT	DESCRIPTION	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES: By Developer	Benefit Existing	Oversize	Net Remaining Cap Costs	Secondary Suites	Infill	NET FOR DCC CALC'S	DCC SECTOR ALLOCATIONS: A Central	B South Mission	D Clifton
			Total Growth Units:					5,845	134	200	8,512	4,585	2,127	1,820
		DEVELOPER CREDIT		245.0				245.0	0.6		244.4			244.4
A	2010	CAPOZZI FIRE FLOW	Commercial fire flow N&S of Truswo	264.0	264.0									
A	2030	CRWFRD RES	Upper Crawford Reservoir Expansio	1,050.0	1,050.0									
A/D	2011	RYL & MNTN MAIN	Knox Reservoir - Skyline PS	5,475.0				6,475.0	17.2	202.1	6,255.8	4,754.4		1,501.4
A	2025	PZ STRG UPGRADE	PZ 419 Storage Upgrade	5,586.0				5,586.0	14.8	229.4	5,341.8	5,341.8		
A	2015	ETHEL MAIN	Ethel St. (Wescott Pl - Clement)	551.0				551.0	1.5	22.6	526.9	526.9		
A/D	2020	KNOX MOUNTAIN TRANS	Popular Pt PS - Knox Reservoir	3,538.0				3,538.0	9.4	110.4	3,418.2	2,597.8		820.4
D	2010	GRAINGER RESEVOIR	Grainger Reservoir Expansion	1,424.0	1,424.0									
D	2010	CARAGLEN FIRE FLOW	Caraglen prv to Alamosa Ct	651.0				651.0	8.1		642.9			642.9
D	2010	CLIFTON MAIN UPGR.	Clifton Main Upgrade	1,542.0		724.7		817.3	10.2		807.1			807.1
B	2020	SOUTHCREST TO WESTPOINT TRANS	Adams Res-Sthcrst Res-Wstpnt Res	4,496.0		4,496.0								
B	2013	ADAMS TO SOUTHCREST	Adams to Southcrest	5,814.0		4,244.2		1,569.8	1.2		1,568.6		1,568.6	
B	2015	FROST PUMPSTATION	Frost Pump Station and Res Upgrad	2,698.0	2,698.0									
B	2020	CEDAR CRK TRANS - STAGE 2	Cedar Ck PS, Stellar PS	11,335.0			11,335.0							
B	2020	ADAMS RESERVOIRS - STAGE 2	Late comer as ESA	1,200.0			1,200.0							
B	2011	CEDAR CRK TRANS STAGE 1	Adams Res - Quienapa & McCarrun	899.0		786.4		112.6	0.1		112.5		112.5	
B	2011	ADAMS UV DISINFECTION	Stage 1 UV	6,199.0		6,199.0								
B	2011	CEDAR CRK TRANS - Stage 1	Cedar Pump Upgrade (Stellar Impro	1,893.7		927.9		965.8	0.7		965.0		965.0	
B	2025	SKYLINE SUPPLY MAIN	Skyline Supply Main Upgrade	1,542.0		524.3		1,017.7	12.7		1,005.0			1,005.0
D	2011	SKYLINE PS	High Rd & Clifton Rd	323.0				323.0	4.0		319.0			319.0
A	Annl	ANNL OS	Annual Oversizing Component	1,200.0				1,200.0	3.2	49.3	1,147.5	1,147.5		
		SUBTOTAL A		58,925.7	5,436.0	17,902.6	12,535.0	23,052.1	83.7	613.7	22,354.7	14,368.5	2,646.1	5,340.1
		Less: Land Use Credits									(10,303.8)	(10,154.2)	(1,202.0)	1,052.4
		SUBTOTAL B		58,925.7	5,436.0	17,902.6	12,535.0	23,052.1		613.7	12,050.9	4,214	1,444.1	6,392.5
		Carry Over(2009-12-31 Reserve Balances)									120.5	42.1	14.4	63.9
		SUBTOTAL C		58,925.7	5,436.0	17,902.6	12,535.0	23,052.1		613.7	12,171.4	4,256.5	1,458.5	6,456.4
		120.5 Engineering/Administration					1.00%				(121.7)	(42.6)	(14.6)	(64.6)
		59,046.2 Subtotal D									12,049.7	4,213.9	1,443.9	6,391.8
		Less Assist	@	1.00%										
		Total for C												

NET UNIT DCC FOR:			
Residential 1:	923	679	3,512
Residential 2:	618	455	2,353
Residential 3:	443	326	1,686
Residential 4:	314	231	1,194
Residential 5:	258	190	983
Commercial - Per Sq. Mtr.:	3.81	2.81	14.51
Industrial - Per Hectare:	6,387	4,698	24,302
Institutional - Per Sq. Mtr.:	3.81	2.81	14.51

1757 1289 3054

-47% -47% 15%

10/f


N
City Boundary
Proposed Water DCC Boundary Adjustment Area
Sector Code
A
B
D
Proposed Projects
Existing Pipes
Junction
Pump
Reservoir
Tank
Valve
Knox Transmission System Upgrade
Clifton Road PF Upgrade
Grainger Reservoir Upgrade
Royal View and Mountain Main
Ethel Main
Skyline PS Supply Upgrade
Southcrest Transmission System
Eldorado Intake to be Decommissioned
Crawford PS to be Decommissioned
Crawford Supply Main
Upper Crawford Reservoir Expansion
Cedar Creek Transmission System Stage 1
Cedar Creek Transmission System Stage 1
Frost Reservoir System Upgrade
Frost Reservoir System Upgrade
Cedar Creek Transmission System Stage 2
D
A
B
0 1 2 Kms
This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.
Rev. Sept 16/10
City of Kelowna
Watermain Upgrade Projects 2030 and Water Sector Plan

Water Distribution System Upgrades

Major Completed Projects from 2020 20-year Servicing Plan and Financing Strategy:

- Poplar Point Pumphouse Upgrades, including power supply
- Skyline Suction Trunk, Skyline Trunk 1
- Cedar Creek Pump Station Upgrade
- Crawford 3,4 and 5

Projects no Longer Required:

Due to conservation initiatives, improvements to the hydraulic model, project consolidation and alternate transmission main routes, as well as, changes to the proposed future land use, a number of projects previously identified in the 2020 20-year Servicing Plan and Financing Strategy can now be excluded from the 2030 20-year Servicing Plan and Financing Strategy. These projects include:

- Broadway Trunk Main 1, Broadway Trunk Main 2, Trench Trunk, and Weddell Trunk are replaced by Royal View Transmission Main.
- Lakeshore Trunk Main is replaced by Adams to Southcrest to Westpoint projects.
- Ellis and Broadway Trunk Mains would be necessary only if the Utility is mandated to install filtration for Poplar Point source.
- Clement and Richter Trunks deferred.
- Cambridge, Broadway, Weddell Valve Chambers.

Additional explanation provided by Associated Engineering for deferral of these projects is attached.

2010 - 2030 DCC Water Distribution Projects List

ROYAL VIEW AND MOUNTAIN MAIN UPGRADE

This project will install 300m of 1350mm pipe along Knox Mountain access road and 2270m of 900mm along Royal View Dr. to Mountain Ave.

- Increases conveyance to Dilworth Reservoir.
- Improves supply to Skyline Pump Station.

SKYLINE PUMP STATION

Install a third pump at Skyline Pump Station.

- Existing pumps are both required to meet current max day demand.
- Additional pump is needed to meet the redundancy requirement and demand increases due to projected growth Clifton North and Glenmore Highland areas.

CEDAR CREEK TRANSMISSION SYSTEM STAGE 1: Project 3(a)

Dedication of a raw water transmission main from Stellar Pump Station to Adams Reservoir, treated water conveyance to distribution, and fire flow improvements.

- This project is a required component of Cedar Creek UV Treatment.
- Fractional growth portion as shown in cost sharing model.
- Project is complete in 2010.

CEDAR CREEK TRANSMISSION SYSTEM STAGE 1: Project 3(b)

This final component of Stage 1 focuses on upgrades to Stellar Pump Station.

- This project is to increase capacity due to growth as well as to match the intake Pumphouse capacity.
- Includes backup power for fire flow and domestic supply.
- Cost share is 49% existing benefit.
- Project is a Priority 1 in the 2011 Capital Budget request.

KNOX MOUNTAIN TRNASMISSION SYSTEM UPGRADES

This project replaces existing 500mm main from Poplar Point Pumphouse to Knox Reservoir with 900mm.

- Previously identified in the 2020 servicing plan,
- Triggered by growth in sectors A and D

ETHEL MAIN INSTALLATION

This project will install 320m of 600mm main on Ethel St from Weddell Pl to Clement Ave.

- Previously identified in the 2020 Servicing Plan

CLIFTON MAIN UPGRADE

This project will replace existing 150mm and 200mm watermain from Rio Dr to Bopart Ct with new 300mm.

- Previously identified in the 2020 Servicing plan as SKY Trunk 2.
- Required to provide sufficient fire flow and supply to future development Clifton North area.

CEDAR CREEK TRANSMISSION SYSTEM STAGE 2

This project will increase capacity at Cedar Pump Station, conveyance to Stellar and storage at Adams.

- It is anticipated that portions of this project will be triggered by growth beyond the 2030 Servicing Plan.
- IHA treatment requirements could trigger this project sooner than 2020.
- DCC cost share to upsize for future will be included in the next DCC program revision.

SOUTHCREST TRANSMISSION SYSTEM: Project #9 (a)

A 750mm transmission main from Adams Reservoir to Southcrest reservoir is anticipated to be triggered by growth in the first quarter of the 2030 Plan.

- Significant conveyance is also required by the Utility to replace Eldorado capacity.
- DCC program cost share is 27%.

SOUTHCREST TRANSMISSION SYSTEM: Project #9 (b)

Transmission main installations will be required from Southcrest reservoir down to Steele, Westpoint and McClure facilities to replace Eldorado supply capacity.

- These works are Utility funded as part of Eldorado Pumphouse decommissioning and could be triggered by sooner than 2020 by IHA filtration requirement.

FROST PUMP STATION AND RESERVOIR

Future development in this area requires additional conveyance and storage capacity.

- These works will be funded by development as an Extended Service Area.

PZ 419 STORAGE UPGRADE

Projected Infill growth will require additional storage capacity in Sector A.

GRAINGER RESERVOIR EXPENASION

Approved development units require additional storage capacity at Grainger Reservoir.

- These works will be funded by development as an Extended Service Area.

UPPER CRAWFORD RESERVOIR EXPENASION

Additional storage capacity will be required if /when ICI or MF development is constructed in Crawford area designated zoning.

CARAGLEN SUPPLY MAIN FIRE FLOW UPGRADE

The existing main supplied by Caraglen PRV can not meet fire flow requirements future MF development west of Clifton Road.

- An alternate watermain upgrade on Clifton related to an existing application may replace the need for this project.

CAPOZZI FIRE FLOW UPGRADE

Existing watermains can not meet Fire Flow requirements for future development in the North Mission Village area.

4.2 Deferred Projects

Several of the projects listed in the 2009 DMWP can be deferred, given the reduction in demand growth outlined in Technical Memorandum No. 1. The demand growth is significantly reduced from the 2009 DMWP because we have not included the 22% safety factor that was applied to future demands for existing development, and have also reduced all demands after 2015 by 15% to reflect the City's demand side management initiative. We should note, however, that the projections are still somewhat conservative in that projected demands for future development are based on criteria that are 15% to 160% higher than existing per capita demands.

Broadway / Ellis Trunks
These projects are only required before 2030 if filtration is mandated and a filtration plant is constructed in the vicinity of Knox Mountain. These transmission mains would then convey treated water to the Downtown area.

Richter / Clement Trunks
The existing Richter and Clement trunks have maximum velocities of less than 1.5 m/s at 2030 MDD peak hour demands. There is also adequate fire flow available to supply a commercial fire requirement.

Dilworth Supply and Twinning
Due to minimal growth projected in the Dilworth Mountain area over the next 20 years, the existing pump capacity at Daon pump station is able to supply the 2030 MDD, through the existing infrastructure.

Cedar Creek Transmission System Stage 3
This project can be delayed until after year 2030.

Summit Reservoir
Due to minimal growth projected in the Dilworth Mountain area over the next 20 years, the existing reservoir capacity is sufficient to year 2030.

Lower Crawford Reservoir Expansion
Due to minimal growth projected in the Lower Crawford service envelope, the existing reservoir can supply the required balancing volume and a single family residential fire flow.

Steel Reservoir Expansion
When the Southwest Transmission main is constructed it will be gravity supplied by Adams Reservoir and will be able to supply PZ 452 with adequate fire flow.

CITY OF KELOWNA

2030 WASTEWATER TRUNKS PLAN & FINANCIAL STRATEGY (2010)

COST SHARING MODEL

EXHIBIT "C"

(2010 Dollars x 1000)

Target Year	PROJECT	FROM - TO	TOTAL CAPITAL COST	NON DCC REVENUE SOURCES							NET FOR DCC CALC'S	ALLOCATIONS	
				By Dev't	Prov'l Assist	Benefit Existing	Oversize By Utility	Net Remaining Cap Costs	Secondary Suites	Infill Credit		NOT South Mission	South Mission
								16,013	362	200	15,451	13,311	2,140
			Total Growth Units:								19.4		19.4
	O/S MS1 LKSHR	Outstanding Developer Credit	19.4					19.4	0.0		1,393.4	1,393.4	
	Byrns Baron Trunk	Long Term Financing	1,433.2					1,433.2	21.8	17.9	517.0	517.0	
	CROSS RD 6B	Glenmore - Valley	891.7	360.0				531.7	8.1	6.6	571.7	571.7	
2010	KLO	KLO - Swordy	588.0					588.0	9.0	7.3	1,528.8	305.8	1,223.1
2012	GYRO FM	Gyro LS - KPCC	1,552.0					1,552.0	3.8	19.4	620.3	620.3	
2012	RAYMER LS	@ Curtis	638.0					638.0	9.7	8.0	5,980.9	1,196.2	4,784.8
2012	LAKESHORE TRUNK	Old Meadows to KPCC	10,881.0			4,809.4		6,071.6	14.8	75.8	1,227.0	1,227.0	
2012	AIRPORT GRAVITY	Bulman - Airport	3,970.0			2,708.0		1,262.0	19.2	15.8	1,004.6	1,004.6	
2015	GYRO LS	Lakeshore - Swordy	1,274.0			240.8		1,033.2	15.7	12.9	7,573.3	7,573.3	
2015	BYRNS/BARON - Ph 2	Byrns to WWTF	7,789.3					7,789.3	118.7	97.3	452.1	452.1	
2020	WATER ST. FM	Pandosy to Ethel	465.0					465.0	7.1	5.8	36.0	36.0	
2020	GUY LS	Guy@Bay	836.0			799.0		37.0	0.6	0.5	1,177.4	1,177.4	
2025	RUTLAND TRUNK	Ziprick to Houghton	1,211.0					1,211.0	18.5	15.1			
2030	KINNICKINNICK	Shayler - Scenic	1,980.7	1,780.7		200.0							
2025	GLENMORE CONNECTION	Cross - 200 m. North of Scenic	1,792.0	1,592.0		200.0							
2025	ROSE AVE LS	Rose Ave @ Hospital	1,200.0	1,200.0									
2020	OVERSIZE	Oversize Component - $60,000/yr	1,200.0					1,200.0	18.3	15.0	1,166.7	1,166.7	
2010-203		SUBTOTAL A	37,721.3	4,932.7		8,957.2		23,831.4	265.4	297.4	23,268.6	17,241.4	6,027.2
		Less: Land Use Credits									(2,005.9)	23.4	(2,029.3)
		SUBTOTAL B	37,721.3	4,932.7		8,957.2		23,831.4	265.4	297.4	21,262.7	17,264.8	3,997.9
		Carry Over(2009-12-31 Reserve Balances)											
		SUBTOTAL C	37,721.3	4,932.7		8,957.2		23,831.4	265.4	297.4	21,475.3	17,437.4	4,037.9
		37,933.9 Subtotal D											
		Less Assist @									1.00% (214.8)	(174.4)	(40.4)
		Total for DCC									21,260.6	17,263.1	3,997.5

NET UNIT DCC FOR:		
Residential 1:	1,297	1,868
Residential 2:	1,076	1,550
Residential 3:	726	1,046
Residential 4:	700	1,009
Residential 5:	571	822
Commercial - Per Sq. Mtr.:	5.36	7.72
Industrial - Per Hectare:	8,974	12,926
Institutional - Per Sq. Mtr.:	5.36	7.72

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-17 -6

2030 20-year Servicing Plan and Financing Strategy
Wastewater Trunk Mains/Lift Stations

Completed Projects:

- Lane North of Harvey - Ellis - Richter - Leon
- SpringBlack - on Springfield from Belgo to Monterey
- SpringZip - on Springfield from Monterey - Ziprick - Baron
- ByrnsBaron Phase 1 & MillsBar - on Byrns/Baron, Mills - Ziprick-Burtch-Hwy97-Baron
- Water Street Force Main - Pandosy - Water St Lift Station to Cadder
- Hall - Fisher Road - KLO to Benoulin
- Birch Lift Station - Birch - @Richter

Projects no Longer Required:

Due to changes in development servicing routing and upgrades to other trunk mains, as well as, changes to the proposed future land use, a number of projects previously identified in the 2020 20-year Servicing Plan and Financing Strategy can now be excluded from the 2030 20-year Servicing Plan and Financing Strategy. These projects include:

- Glenmore 7C
- Gordon ELS
- Ethel 3

A pre-design for the "South Gordon Sanitary Sewer Trunk - Conceptual Routing" by Urban Systems recommended two alignment options for further consideration. One of the alignments is proposed on Gordon Drive and the other on Lakeshore Road. The City of Kelowna authorized AECOM to investigate the financial "Net Present Value Analysis" of those two options. From a financial perspective the Lakeshore Road option proved to be less onerous and therefore the preferred alignment. Other factors that influence the decision relate to scheduling with other capital improvements for construction savings (i.e., transportation improvements to Lakeshore Road). We propose that the project identifier in the 2030 20-year Servicing Plan and Financing Strategy be changed from Gordon Trunk to Lakeshore Trunk.

Some of the more significant works included are as follows:

- Extension of a major sewer trunk main, Lakeshore, to service new growth units (previously referred as *South Gordon*).
- Completion of the extension of a major sewer trunk main, Byrns-Baron Phase 2, from the wastewater treatment plant to the north and east area of the City to handle additional flows that cannot be accommodated in the North East Trunk main which runs from the intersection of Highway 33 & Highway 97.
- Extension of a sewer trunk main, Airport Gravity, to service new growth in the North End of the City.
- Completion of sewer trunk main, Glenmore, to service new growth in the North Glenmore area.

2010 - 2030 DCC Sanitary Trunk Projects List

BYRNS/BARON - PHASE 2

Extents of project are defined as 1050mm pipe from Burtch Road (at Byrns Road) to Wastewater Treatment Plant.

- Portions already completed include twin 1200mm pipes from Gordon to headworks of treatment plant.
- Portions included in 2011 Capital Plan include crossing of Gordon Drive and upgrade to Raymer Lift Station.
- Trunk flows are monitored and remainder of work to be completed as flow demands. We anticipate completion of works within second quarter (10 years).

CROSS ROAD 6B

- This project is complete in 2010.

KLO

Extents of project are defined as the twinning of the gravity main on Casorso and Swordy Roads between KLO Road and the Gyro Lift Station. Quantities are approximately 80m of 375mm and 360m of 525mm pipe.

- We propose to replace this main in conjunction with the replacement of the force main between the Gyro Lift Station and the Wastewater Treatment Plant.

GUY LS

This project is described as an upgrade to the Guy Street Lift Station.

- Due to the upgrade to the Trade Waste Treatment Plant Lift Station, the need for this project is delayed and will be triggered by downtown growth likely in fourth quarter.

GYRO FM

Extents of project are defined as a replacement of the Force Main from Gyro Lift Station to the Wastewater Treatment Plant.

- Anticipate work to be completed in conjunction with upgrade to Lakeshore Road.

RAYMER LS

This project is described as an upgrade to the Raymer Street Lift Station.

- This project is currently in the 2011 Capital Plan.

WATER ST FM - PHASE 2

Extents of project are defined as replacement of the Force Main on Cadder Ave., from Pandosy to Ethel. Quantities are approx. 606m of 400mm pipe.

- Phase 1 of this project on Pandosy Street, from Water Street Lift Station to Cadder Ave. is complete.
- Anticipate this project to be completed in second quarter (10 years).

RUTLAND TRUNK

Extents of project is described as the replacement of the gravity main with approx. 740m of 525mm pipe on Hwy 33 and Nickel Road, from Ziprick Road to Houghton Road.

- Trunks flows will be periodically monitored and we anticipate growth will trigger project in fourth quarter.

LAKESHORE TRUNK

This project was previously referred to as GORDON TRUNK in the 2020 DCC program. Extents of project are now defined as the twinning of the gravity main with approx. 2600m of 900mm pipe along Lakeshore Drive, from Old Meadows to the Gyro Lift Station.

- Anticipate work to be phased, with works starting in conjunction with upgrades to Lakeshore Road.

AIRPORT GRAVITY

This project is defined as approx. 2030m of 525mm gravity main from (MH 111479) near Bulman Road, paralleling the west side of the railroad ROW, to Airport (Convair Place - MH 152199). Approximately 56.8% of the serviced area is existing.

- A 6.5m wide ROW acquisition along is necessary and estimate is included in the project cost.

GYRO LS

Upgrades to the Lift Station will be triggered when trunk flows exceed LS capacity (>230 L/sec). Timing for this is dependent on future development. We anticipate this will be needed before the third quarter (10-15 years).

KINNICKINNICK

This project will be funded through the Development Application process.

GLENMORE CONNECTION

This project will be funded through the Development Application process.

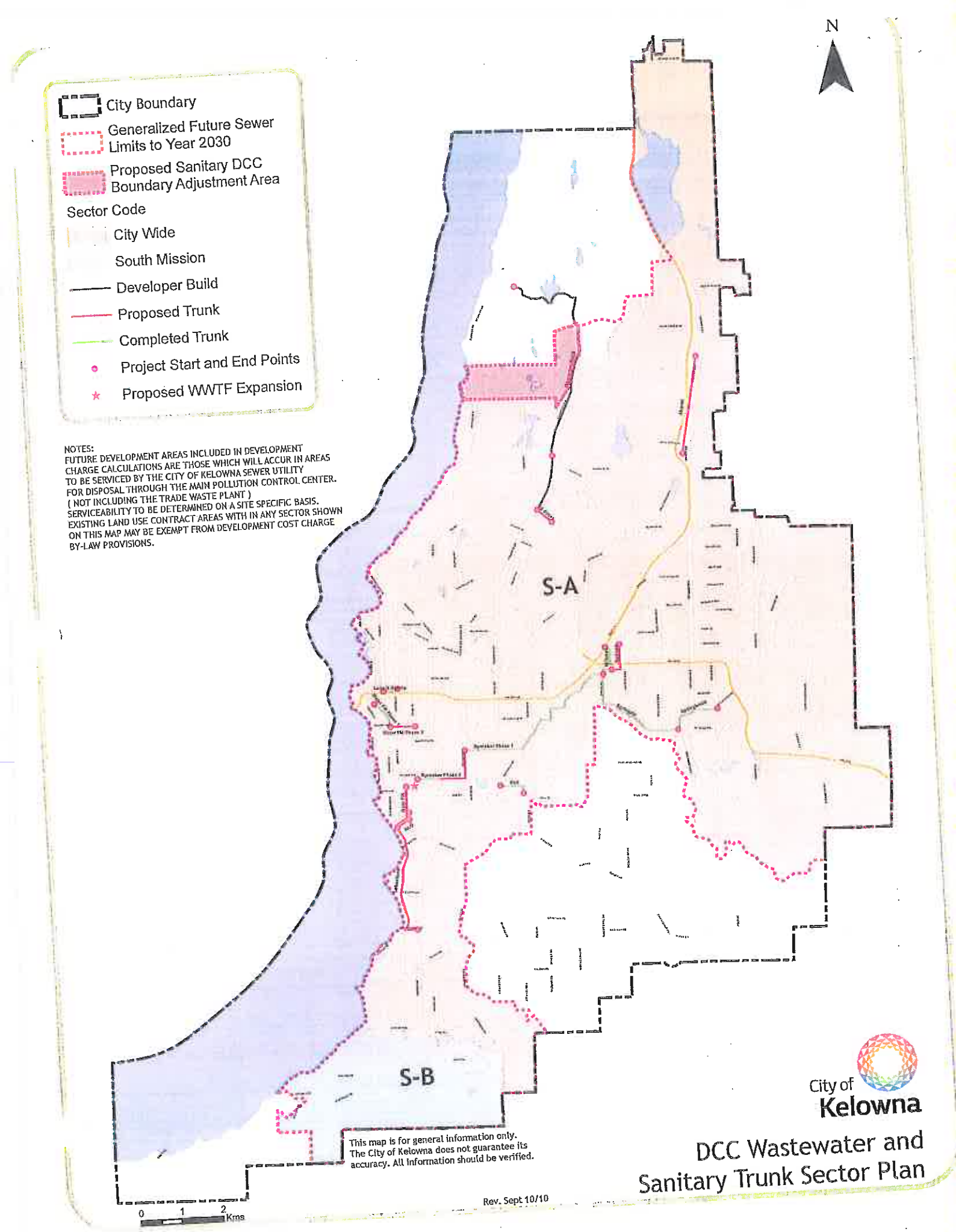
ROSE LS

The majority of growth in the neighbourhood serviced by the Rose Lift Station is projected to be generated by hospital expansion. The existing LS is located in what has been described as an "ugly location." We anticipate the need to relocate and replace the LS when flows exceed capacity. A new force main will also need to be factored into this analysis.

Submitted by:
Fred Schaad, Utilities Technologist

Unit Rate Table

Pipe Diameter	Pipe Unit Cost ($/m)	Fittings and Valve Allocation ($/m)	Total ($/m)	Remarks
150 mm	$280	$55	$335	Includes installation, restraint and backfill
200 mm	$310	$80	$390	Fittings include valves, bends, conflicts
250 mm	$350	$90	$440	
300 mm	$385	$116	$501	
350 mm	$416	$125	$541	
400 mm	$473	$142	$615	
450 mm	$536	$161	$697	
500 mm	$628	$188	$816	
600 mm	$671	$201	$872	
750 mm	$809	$243	$1,052	
900 mm	$1,074	$322	$1,396	
1050 mm	$1,326	$398	$1,724	
1200 mm	$1,600	$480	$2,080	
1350 mm	$1,900	$570	$2,470	
Hydrant	**Spacing (m)**	**Cost ($)**	**Total ($/m)**	**Remarks**
SF Residential	200	$5,000	$25	Includes tee, valve, lead, restoration
MF, Comm, Ind	100	$5,000	$50	
Tie Ins			**Total ($/Tie-In)**	**Remarks**
300 mm			$6,100	Includes tee, couplers, exploration
350 mm			$7,300	
400 mm			$8,500	
450 mm			$9,700	
500 mm			$10,900	
600 mm			$14,600	
750 mm			$18,200	
900 mm			$21,800	
1050 mm			$25,500	
1200 mm			$29,100	
1350 mm			$32,700	
Asphalt R&R	**Width (m)**	**Cost ($/m2)**	**Total ($/m)**	**Remarks**
150mm to 500 mm Dia	4	$40	$160	Includes removal, gravel, asphalt
Dia > 500 mm	5	$40	$200	
Pump Stations				**Remarks**
Pump System Costs	per Ml/d	Ml/d	Total ($)	Includes pumps (3 Operating and 1 Spare) piping, elect. & instr.
	60000	2.5	$150,000	
	50000	5	$250,000	
	40000	10	$400,000	
	40000	15	$600,000	
	40000	20	$800,000	
	40000	25	$1,000,000	
	40000			
		Ml/d	Total ($)	Includes single pump assembly, elect. & instr. (no piping)
Individual Pump Costs	per Ml/d	2.5	$50,000	
		5	$80,000	
		10	$130,000	
		15	$200,000	
		20	$270,000	
		25	$330,000	
		Ml/d	Total ($ / Ml/d)	Standard utility building, cost per Ml/d operating capacity
Pump Building Costs		0-2	$15,000	
No Wetwell		3-5	$12,000	
		6-10	$11,000	
		11-30	$10,000	
With Wetwell		0-2	$30,000	
		3-5	$24,000	
		6-10	$22,000	
		11-30	$20,000	
			Total ($/m3)	**Remarks**
Reservoirs			$400	Includes site grading, piping, valves etc.
			Total ($)	**Remarks**
Concrete			$200,000	Includes elect., instr., chamber
PRV's			$250,000	
200 mm			$300,000	
300 mm			$350,000	
400 mm			$400,000	
500 mm				
600 mm				


N
City Boundary
Generalized Future Sewer Limits to Year 2030
Proposed Sanitary DCC Boundary Adjustment Area
Sector Code
City Wide
South Mission
Developer Build
Proposed Trunk
Completed Trunk
Project Start and End Points
Proposed WWTF Expansion
NOTES:
FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT CHARGE CALCULATIONS ARE THOSE WHICH WILL ACCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT)
SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS.
EXISTING LAND USE CONTRACT AREAS WITH IN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.
S-A
S-B
This map is for general information only.
The City of Kelowna does not guarantee its accuracy. All information should be verified.
0 1 2 Kms
Rev. Sept 10/10
City of Kelowna
DCC Wastewater and Sanitary Trunk Sector Plan

CITY OF KELOWNA
2030 WASTEWATER TREATMENT PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

EXHIBIT "D" - WASTEWATER TREATMENT

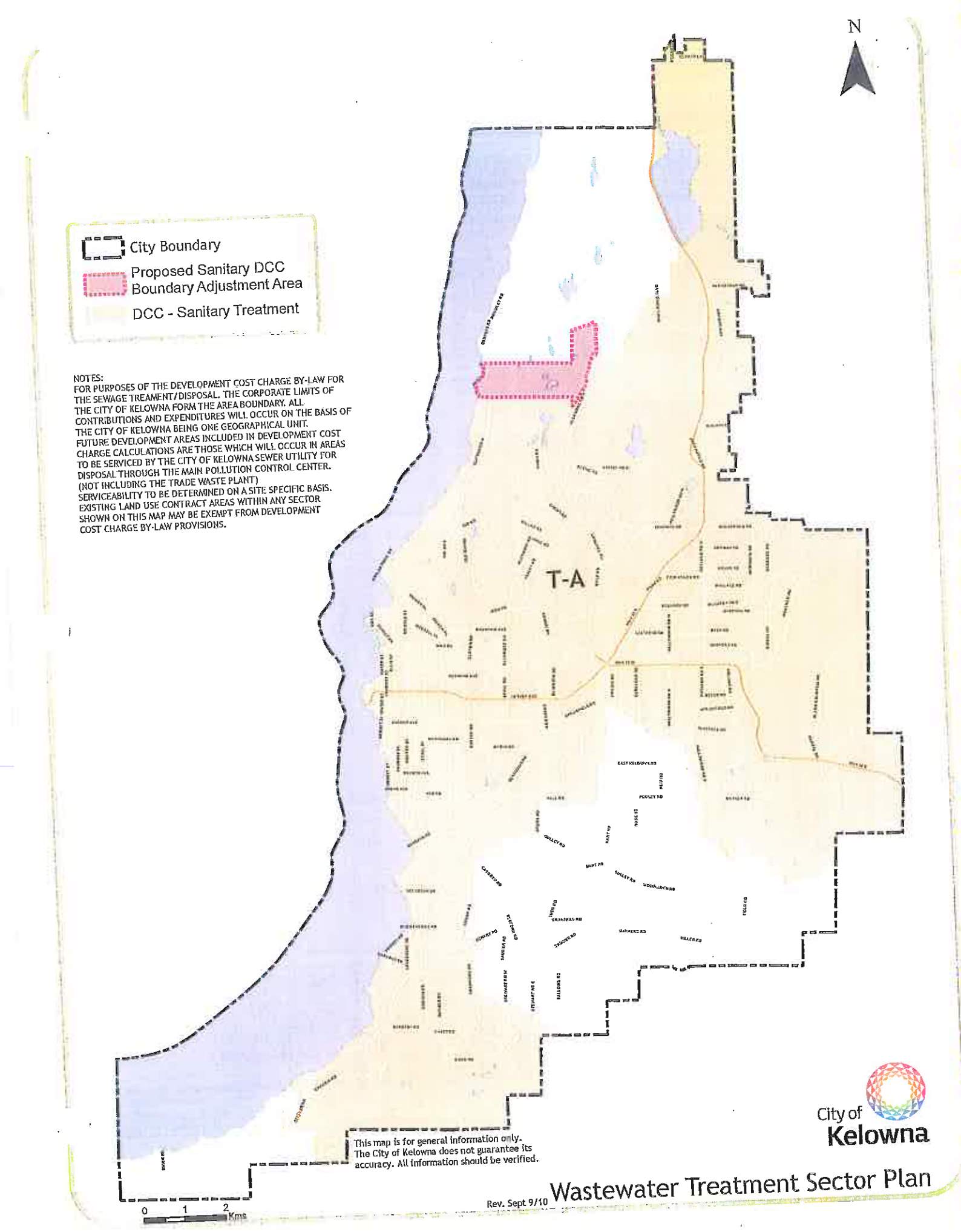
YEAR	PROJECT	TOTAL PROJECT COST	(2010 Dollars x 1000) PROVINCIAL ASSIST	BENEFIT EXISTING	OVERSIZE (2030+)	NET REMAINING	SECONDARY SUITES	INFILL Credit	NET FOR DCC CALC'S
	Total Growth Units:					16,013	403	200	15,410
						1,666.7	20.8		1,645.9
	KPCC Existing Debt Commitment	1,666.7				43,860.5	546.3		43,314.1
	WWTF - Phase 2 Plant Extension	52,192.8		8,332		11,216.8	139.7		11,077.0
	WWTF - Long Term Financing	11,216.8				3,137.6	39.1	39.2	3,059.4
2010	Existing Compost Plant Expansion	6,600.0		3,462.4		363.0	4.5	4.5	353.9
2016	Secondary Aeration Expansion	1,000.0		637.0		6,000.0	74.7	74.9	5,850.3
2022	Primary/Sec Aeration Expansion	6,000.0				1,218.0	15.2	15.8	1,187.0
2018	Land Acquisition - Compost Site	1,218.0			5,600.0				
	WWTF Land Acquisition	5,600.0							
	SUBTOTAL A	85,494.2		12,431.7	5,600.0	67,462.5	840.3	134.5	66,487.7
	Less: Land Use Credits							134.5	66,487.7
	SUBTOTAL B	85,494.2		12,431.7	5,600.0	67,462.5			(8,516.0)
	Carry Over(2009-12-31 Reserve Balances)							134.5	57,971.7
	SUBTOTAL C	85,494.2		12,431.7	5,600.0	67,462.5			579.7
	579.7 **Engineering/Administration**					1.00%			58,551.4
	86,073.9 **Subtotal D**								(585.5)
	Less Assist				@	1.00%			57,965.9
	Total for DCC								

NET UNIT DCC FOR:	
Residential 1:	3,762
Residential 2:	3,122
Residential 3:	2,107
Residential 4:	2,031
Residential 5:	1,655
Commercial - Per Sq. Mtr.:	15.54
Industrial - Per Hectare:	26,031
Institutional - Per Sq. Mtr.:	15.54

23.6

This schedule is conceptual and is subject to revision to meet future needs and conditions.

10/[illegible]10


N
City Boundary
Proposed Sanitary DCC Boundary Adjustment Area
DCC - Sanitary Treatment
NOTES:
FOR PURPOSES OF THE DEVELOPMENT COST CHARGE BY-LAW FOR THE SEWAGE TREAMENT/DISPOSAL. THE CORPORATE LIMITS OF THE CITY OF KELOWNA FORM THE AREA BOUNDARY. ALL CONTRIBUTIONS AND EXPENDITURES WILL OCCUR ON THE BASIS OF THE CITY OF KELOWNA BEING ONE GEOGRAPHICAL UNIT. FUTURE DEVELOPMENT AREAS INCLUDED IN DEVELOPMENT COST CHARGE CALCULATIONS ARE THOSE WHICH WILL OCCUR IN AREAS TO BE SERVICED BY THE CITY OF KELOWNA SEWER UTILITY FOR DISPOSAL THROUGH THE MAIN POLLUTION CONTROL CENTER. (NOT INCLUDING THE TRADE WASTE PLANT)
SERVICEABILITY TO BE DETERMINED ON A SITE SPECIFIC BASIS. EXISTING LAND USE CONTRACT AREAS WITHIN ANY SECTOR SHOWN ON THIS MAP MAY BE EXEMPT FROM DEVELOPMENT COST CHARGE BY-LAW PROVISIONS.
T-A
This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.
0 1 2 Kms
Rev. Sept 9/10
City of Kelowna
Wastewater Treatment Sector Plan

City of Kelowna

July 1, 2010

Matt Cameron
UDI-DCC Committee Chair
Urban Development Institute
#300 - 1708 Dolphin Ave.
Kelowna, BC V1Y 9S4
MCameron@ctqconsultants.ca

Dear Matt:

Re: 2010 Development Cost Charges

Thank you for your letter of response dated June 28, 2010. To facilitate discussion at our upcoming July 5th meeting, we are providing advance responses to your comments in the order you raised them:

- Unit costs: we are open to discussion with the usual proviso that specific tender details will remain confidential
- Anticipatory 5% cost reduction: Decreasing costs will be welcomed by the City and accurately reflected in future unit rate calculations based on the evidence-based methodology.
- Current DCC rates: A review was completed in 2009 that resulted in no change to the current DCC bylaw. The identified changes were deemed too small to prompt a revision to the bylaw this spring given that the revised 2030 OCP, together with associated bylaws, are scheduled for adoption around the end of 2010.
- New DCC rates: We will be pleased to discuss the process and methodology for determining future DCC rates at our next meeting. In brief,
  - The new 20-year plan will eliminate work from the 2020 plan that has already been completed;
  - All relevant infrastructure systems will be analyzed for the impact of anticipated population growth and development to 2030, with capacity increases determined relative to Council approved levels of service;
  - Identified projects will be costed using the proposed 2010 unit rates and those costs apportioned by sector and development type;
  - We do however anticipate some changes to the balance of projects to reflect emerging issues such as climate change and GHG emission reductions, asset management strategies and the natural tendency in maturing cities to seek compact, livable urbanization. We will be happy to discuss these policy issues.

We look forward to meeting with UDI next week.

Thank you;

Randy L. Cleveland
Director, Infrastructure Planning

cc. Jim Paterson, General Manager, Community Sustainability
Keith Grayston, Director, Financial Services
Bill Berry, Director, Design & Construction
Jim Wunderlich, Financial Analyst, Infrastructure Planning
Randy Shier, President, UDI, rshier@missiongroup.ca

P:\Infrastructure Planning\0100 ADMINISTRATION\0155 PLANS AND PROGRAMS\0155-65 INFRASTRUCTURE PLANS - 20 YEAR SERVICING\DCC 2010-to UDI 2010 06 28 ltr.docx

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June 28, 2010

City of Kelowna
1435 Water Street
Kelowna, BC V1Y 1J4

Attention: Mr. Randy Cleveland, Director of Infrastructure Planning

Dear Sir:

Re: Development Cost Charges

Thank you for your letter dated June 14, 2010 and follow-up email of June 24th. First and foremost, we would like to thank you for the information put forward in your June 14th letter. We appreciate the transparency provided in the letter and look forward to meeting on July 5, 2010 to discuss further. In order to achieve the most in the next meeting, we have a few items that we would like you to consider in advance:

- With regard to the findings of your study, in general we support the average cost decrease of 9% subject to clarification on a few points that we can discuss at our July 5th meeting.

- We expect a further reduction in costs of at least 5% as the industry moves forward in this downward trending market.

- During the next meeting we would like to confirm the status of the current DCC rates. Your letter indicates that the DCC review took place in 2009 and that the rates were not updated. Based on our last meeting, we understood that the City anticipated the 2009 DCC bylaw, albeit late, would come forward in July 2010. We would like to know the findings of the 2009 review and whether or not the DCC bylaw has or will be, changed.

- In the next meeting, we would like to confirm the process and methodology used to determine the DCC rates going forward, especially in light of the revised DCC project list and costs that will stem from the new OCP and 20 years servicing plan. While we believe that we agree on the correct approach, we would like to confirm that we have a consensus.

Yours truly,

URBAN DEVELOPMENT INSTITUTE

Per: for Matt Cameron
Chair, DCC Review Committee

979-1221

MC/jr
cc: Keith Grayston, Director, Financial Services
Bill Berry, Director, Design & Construction
Jim Wunderlich, Financial Analyst, Infrastructure Planning
Jim Paterson, General Manager, Community Sustainability

cc: UDI Okanagan Chapter - Board of Directors

Randy Cleveland

From: Randy Cleveland
Sent: June 24, 2010 12:01 PM
To: 'MCameron@ctqconsultants.ca'; 'rshier@missiongroup.ca'
Cc: Jim Paterson; Jim Wunderlich; Keith Grayston; Jerry Behl; Bill Berry
Subject: FW: Refinement of Unit Prices
Attachments: 2010 Roads Unit Prices Master Sheet Rev1.pdf; Refinement of 2010 Roads DCC Unit Prices.pdf

Matt, Randy:

Further to my letter of June 14, find attached a refinement to the DCC Roads Unit prices with an explicit methodology. This allows greater precision in our estimating and has no implications on the bottom line.

Further to your e-mail of June 22 regarding a postponement of the proposed meeting date to the week of July 5, Jim Wunderlich will contact you to accommodate your request. Given holiday schedules, it will be inevitable that some people will not be able to attend. We'll do the best we can.

Thanks,

Randy L Cleveland, Director
Infrastructure Planning

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City of Kelowna 1435 Water Street, Kelowna, BC V1Y 1J4 kelowna.ca

Refinement of 2010 Roads DCC Unit Prices

Below is a summary of refinements to the proposed 2010 DCC Unit Prices. Most of the changes result from line items that have been added to accommodate active transportation projects. These new items do not appear in any projects in the current program but are anticipated to be included in future projects.

A) New Items:

1) Item 2512.4 – Asphalt for multi-use paths, 50mm

   Price set at $19.16/sq.m. based on average low bid on four recent City tenders.

   The segregation of 50mm asphalt into two items (for sidestreets and multi-use pathways) has led to a reduction in unit price on item 2512.3 (asphalt for sidestreets) from $16.81/sq. m. to $14.60/sq. m.

2) Item 2523.5 – Concrete pathway edging

   Price set at $70.68/lin. m. based on average low bid on three recent City tenders.

3) Item 2523.6 – Stamped Concrete

   Price set at $95.00/sq. m. based on low bid on one recent City tender.

4) Item 2831.2 - Supply and install chain link fence (>1.2m)

   Price set at $58.50 based on low bid on one recent City tender.

   The segregation of fencing into two heights (1.2m and >1.2m) has led to a reduction in unit price on item 2831.1 (1.2m high chain link fencing) from $53.90/lin. m. to $50.80/lin. m.

5) Item 2950.4 - Cast iron tree grate, including concrete support

   Price set at $2,500 each based on recent tender experience of Urban Systems Ltd.

6) Item 3001.1 – Standard Bollards

   Price set at $887 each based on low bid on one recent City tender.

7) Item 3001.2 – Decorative Bollards

   Price set at $1,209 based on average low bid on two recent City tenders.

8) Item 3400.2 – Benches

Price set at $1,800 each based on recommendation of Urban Systems Ltd.

9) Item 3400.3 – Garbage Receptacles

Price set at $1,388 based on low bid on one recent City tender. Note that Urban Systems recommended price for this item was $1,400.

B) Other Refinements:

1) Item 2515.1 – Unit pavers c/w granular base and edging

Price updated ($110.33/sq. m.) to reflect average of low bids on two recent City tenders.

2) Item 2950.2 Shrubs and other ground cover plantings

Unit pricing now based on each unit rather than per square meter to reflect normal tender pricing. Price set at $18.19 based on average low bid on two recent City tenders.

2010 DCC UPDATE - UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-9.5% *Inflation Rate*

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
Section 01050 - Field Surveys							
1050.1	Surveys for layout and as-constructed records	%		1.0%	1.0%	6	0.0%
Section 01535 - Temporary Facilities							
1535.1	Temporary utilities and construction facilities	%		1.0%	1.0%	3	0.0%
Section 01570 - Traffic Regulation							
1570.1	Traffic regulation	%		3.0%	3.0%	7	0.0%
Section 02070 - Sitework Demolition and Removal							
2070.1	Miscellaneous removals	L.S.				0	
2070.2	Remove and disposal of pipe culvert	lin. m		$40.99	$47.00	3	-12.8%
2070.3	Fence removal and/or relocation	lin. m		$19.00	$21.00	0	-9.5%
Section 02104 - Shrubs and Tree Preservation							
2104.1	Preservation of existing trees and shrubs	L.S.		-	-	1	
Section 02111 - Clearing and Grubbing							
2111.1	Close-cut clearing (1ha=10,000m2)	ha		$18,091.78	$20,000.00	0	-9.5%
2111.2	General clearing and grubbing	ha		$4,714.24	$65,000.00	3	-92.7%
Section 02113 - Removal of Existing Asphalt Pavement							
2113.1	Removal and disposal of asphalt, regardless of depth	sq. m		$4.28	$4.87	1	-12.1%
Section 02221 - Rock Removal							
2221.1	Trench rock removal	cu.m		$51.30	$56.71	0	-9.5%
2221.2	Mass rock removal	cu.m		$15.39	$17.01	0	-9.5%
2221.3	Off-site disposal of excess rock quantity	cu.m		$7.34	$8.11	0	-9.5%
Section 02223 - Excavating, Trenching and Backfilling							
2223.1	Imported trench backfill material	cu. m		$24.89	$25.50	4	-2.4%
2223.3	Dewater trench (250 to 450)	lin.m.		$25.65	$28.36	0	-9.5%
2223.4	Dewater trench (525 to 900)	lin.m.		$35.91	$39.70	0	-9.5%
Section 02224 - Roadway Excavation, Embankment and Compaction							
2224.1	Topsoil stripping and stockpile on-site	cu. m		$5.60	$5.54	2	1.0%
2224.2	Organic stripping, shrub removal off-site	ha		$2,051.97	$2,268.40	0	-9.5%
2224.3	Common excavation, on-site re-use	cu. m		$7.86	$8.30	3	-5.3%
2224.4	Common excavation, off-site disposal	cu. m		$11.01	$14.01	6	-21.4%
2224.5	Common excavation, replace unsuitable subgrade	cu. m		$37.99	$42.00	0	-9.5%
2224.6	Imported granular fill, 75mm minus pitrun	cu.m		$21.90	$26.07	1	-16.0%
2224.7	Miscellaneous Removal	L.S.		-	-	0	
2224.8	Subgrade finishing and compaction	sq. m		$1.09	$0.95	5	14.5%
Section 02233 - Granular Base							
2233.1	Granular base, 25 mm minus crushed gravel	cu. m		$46.30	$56.67	8	-18.3%
2233.2	Shoulder gravel, 19 mm minus (100 mm depth)	cu.m		$56.09	$49.00	2	14.5%
Section 02234 - Granular Subbase							
2234.1	Granular subbase, 75mm minus crushed gravel	cu. m		$33.91	$44.14	4	-23.2%
2234.2	Select granular subbase salvaged from excavation and full depth reclamation	cu. m		$11.20	$19.44	1	-42.4%
Section 02235 - Unsuitable Trench Material							
2235.1	Remove & replace unsuitable material (50%)	lin.m.		$29.00	$32.06	0	-9.5%
Section 02271 - Riprap							
2271.1	Machine placed riprap	cu. m		$54.41	$94.77	3	-42.6%
Section 02512 - Hot Mix Asphalt Concrete Paving							
2512.1	Asphalt lower course, 60 mm	sq.m		$14.75	$11.90	7	23.9%
2512.2	Asphalt surface course, 40 mm	sq.m		$10.88	$8.17	7	33.2%
2512.3	Asphalt surface course for sidestreets, 50 mm	sq.m		$14.60	$16.74	1	-12.8%
2512.4	Asphalt for multi-use paths, 50mm	sq. m		$19.16		4	#DIV/0!
2512.5	Asphalt curb - 150mm high	lin. m		$16.80	$22.39	1	-25.0%

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
2512.6	Asphalt - stamped and colored, including base & prep	sq. m		$24.42	$27.00	0	-9.5%
Section 02515 - Unit Paving							
2515.1	Unit pavers c/w granular base and edging	sq.m		$110.33	$99.40	2	11.0%
Section 02523 - Concrete Walks, Curbs and Gutters							
2523.1	Concrete curb and gutter, c/w granular base	lin. m		$68.04	$68.77	6	-1.1%
2523.2	Sidewalks, c/w granular base	sq. m		$53.08	$61.05	6	-13.1%
2523.3	Concrete median curb per MMCD C6	lin. m		$38.61	$41.23	5	-6.4%
2523.4	Median Treatment - c/w asphalt/concrete/landscaping	sq. m		$80.61	$73.13	4	10.2%
2523.5	Concrete pathway edging	lin. m		$70.68		3	#DIV/0!
2523.6	Stamped Concrete	sq. m		$95.00		1	#DIV/0!
Section 02547 - Asphalt Tack Coat							
2547.1	Asphalt tack coat	sq. m		$0.57	$0.44	7	29.9%
Section 02574 - Cold Milling							
2574.1	Mill existing asphalt pavement and stockpile at yards	sq. m		$3.23	$2.36	7	36.7%
Section 02575 - Full Depth Reclaimation							
2575.1	Full depth reclamation of asphalt to 300mm depth	sq.m		$4.52	$5.00	0	-9.5%
Section 02580 - Painted Pavement Markings							
2580.1	Painted Pavement Markings	lin. m		$1.02	$1.13	0	-9.5%
Section 02581 - Pavement Surface Cleaning and removal of Pavement Markings							
2581.1	Removal of pavement markings	L.S.		-	-	0	
Section 02721 - Storm Sewer (based on 2m depth)							
2721.10	Catchbasin leads, non-perforated PVC Ultra Rib - 200 mm diameter	lin. m		$82.84	$145.00	6	-42.9%
2721.20	Drainage ditching	lin. m		$24.00	$9.29	1	158.3%
2721.30	250mm PVC	lin.m.		$112.92	$253.00	2	-55.4%
2721.40	300mm PVC	lin.m.		$164.17	$215.00	4	-23.6%
2721.50	375mm PVC	lin.m.		$190.08	$252.00	2	-24.6%
2721.60	450mm PVC	lin.m.		$228.53	$349.00	2	-34.5%
2721.70	525mm PVC	lin.m.		$275.00	$221.17	1	24.3%
2721.80	600mm PVC	lin.m.		$335.00	$308.16	1	8.7%
2721.90	675mm PVC	lin.m.		$402.89	$406.60	1	-0.9%
2721.10	750mm CONC	lin.m.		$408.00	$395.90	1	3.1%
2721.11	900mm CONC	lin.m.		$489.60	$385.63	1	27.0%
2721.12	1050mm CONC	lin.m.		$571.20	$856.00	1	-33.3%
2721.13	1200mm CONC	lin.m.		$652.80	$465.02	1	40.4%
2721.14	1350mm CONC	lin.m.		$734.40	$521.73	1	40.8%
2721.15	1500mm CONC	lin.m.		$816.00	$595.46	1	37.0%
2721.16	250mm PERF PVC	lin.m.		$120.00	$153.12	0	-21.6%
2721.17	300mm PERF PVC	lin.m.		$129.35	$303.00	1	-57.3%
2721.18	375mm PERF PVC	lin.m.		$145.62	$157.29	2	-7.4%
2721.19	450mm PERF PVC	lin.m.		$174.60	$232.51	2	-24.9%
2721.20	525mm PERF PVC	lin.m.		$241.11	$266.54	0	-9.5%
2721.21	600mm PERF PVC	lin.m.		$282.15	$311.91	0	-9.5%
2721.22	675mm PERF PVC	lin.m.		$338.58	$374.29	0	-9.5%
Section 02723 - Pipe Culverts							
2723.1	Pipe culvert, galvanized CMP						
	- 450 mm diameter	lin. m		$160.00	$153.12	1	4.5%
	- 600 mm diameter	lin. m		$183.25	$153.50	4	19.4%
	- 900 mm diameter	lin. m		$236.85	$270.00	1	-12.3%
2723.2	Pre-cast concrete headwall, complete with safety grill						
	- 450 mm diameter	each		$1,596.50	$10,700.00	1	-85.1%
	- 600 mm diameter	each		$2,256.50	$10,700.00	1	-78.9%
	- 900 mm diameter	each		$6,500.00	$10,700.00	0	-39.3%
2723.3	Sandbag endwalls for culverts, all diameters	each		$775.00	$515.50	1	50.3%
Section 02725 - Manholes and Catchbasins (based on average 2m depth)							
2725.1	Catchbasin, side inlet	each		$1,478.57	$1,531.11	7	-3.4%
2725.2	Catchbasin, top inlet	each		$1,410.00	$1,716.67	2	-17.9%
2725.3	Adjust existing storm manholes	each		$1,193.50	$1,040.00	5	14.8%

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
2725.4	1050 mm dia. (450 and less)	ea.		$2,140.75	$1,847.47	6	15.9%
2725.5	1200 mm dia. (525 and 600)	ea.		$2,583.33	$2,658.75	3	-2.8%
2725.6	1350 mm dia. (675 and 750)	ea.		$4,145.00	$2,620.00	2	58.2%
2725.7	1500 mm dia. (900)	ea.		$4,400.00	$3,266.67	2	34.7%
2725.8	1800 mm dia. (1050 and 1200)	ea.		$4,630.00	$6,420.00	1	-27.9%
2725.9	Drywells	ea.		$2,955.50	$3,174.25	2	-6.9%
Section 02831 - Chain Link Fence and Gates							
2831.1	Supply and install chain link fence (1.2m)	lin. m		$50.80	$72.00	5	-29.4%
2831.2	Supply and install chain link fence (>1.2m)	lin. m		$58.50		1	#DIV/0!
Section 02921 - Topsoil and Finish Grading							
2921.1	Import topsoil - 150 mm depth for hydraulic seeding and sod in boulevard or other disturbed areas	sq. m		$6.91	$8.89	4	-22.3%
2921.2	Finish grading in embankment or cut areas at back of curb or sidewalk	sq. m		$2.05	$2.27	0	-9.5%
Section 02934 - Hydraulic Seeding							
2934.1	Hydro-seeding disturbed areas	sq. m		$1.07	$1.75	2	-39.1%
Section 02938 - Sodding							
2938.1	Supply and placement of nursery sod	sq. m		$6.99	$13.90	2	-49.7%
Section 02950 - Planting of Trees, Shrubs and Ground Covers							
2950.1	Boulevard trees	each		$718.00	$493.83	1	45.4%
2950.2	Shrubs and other ground cover plantings	each		$18.19		2	#DIV/0!
2950.3	Irrigation - includes connection and curb stops	lin.m.		$167.77	$185.46	0	-9.5%
2950.4	Cast iron tree grate, including concrete support	each		$2,500.00			
Section 03001 - Protective Structures							
3001.1	Standard Bollards	each		$887.00		1	#DIV/0!
3001.2	Decorative Bollards	each		$1,209.00		2	#DIV/0!
3001.3	Cast in place retaining walls	v.sq.m		$381.74	$422.00	0	-9.5%
Section 03400 - Pre-Cast Concrete							
3400.1	Supply and install geogrid reinforced modular concrete block retaining wall	v.sq. m		$257.85	$250.00	3	3.1%
3400.2	Benches	each		$1,800.00		0	#DIV/0!
3400.3	Garbage Receptacles	each		$1,388.00		1	#DIV/0!
3400.4	Noise attenuation - walls and berms	lin. m		$102.60	$113.42	0	-9.5%
Section 16650 - Shallow Utilities and Electrical Work							
16650.1	Trenching and ducts for street lights	lin. m.		$25.97	$32.75	2	-20.7%
16650.2	Supply and install pre-cast concrete street light bases	each		$878.45	$1,096.67	2	-19.9%
16650.3	Erect street light poles, davits and luminaires	each		$1,704.00	$1,980.67	2	-14.0%
16650.4	Street light wiring	lin.m.		$9.40	$7.94	2	18.4%
16650.5	traffic signal installation complete with wiring	each		$130,727.25	$144,450.00	0	-9.5%
16650.6	Relocate existing utility poles	each		$3,489.93	$3,856.28	0	-9.5%
16650.7	Miscellaneous adjustments	%			-		

June 14, 2010

Randy Shier
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Urban Development Institute
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Matt Cameron
UDI-DCC Committee Chair
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Dear Randy and Matt:

Re: 2010 DCC Unit Costs:

The City has now embarked on the preparation of the new 20-Year Servicing Plan and Financing Strategy (DCC Bylaw) in response to the revised DRAFT 2030 Official Community Plan. Both documents will be reviewed by Council for adoption at the end of 2010. We are pursuing an ambitious schedule for completion of the OCP and DCC Bylaw to clarify the vision and direction for the next 20-years of Kelowna's urban development.

The recent reorganization has resulted in a change of responsibilities among the new departments. This is a departure from the past when Financial Services had the primary role for DCC coordination. The new structure places the responsibility for technical planning of growth-driven infrastructure, as well as the financial planning for this work, within the capital infrastructure design and construction departments:

- *Infrastructure Planning* is an amalgamation of professional planners representing all infrastructure disciplines. This department is responsible for planning the new infrastructure required to address the growth anticipated in the OCP, for coordinating the development of the 20-year servicing plan and financing strategy and for acting as the prime contact with external stakeholders, such as UDI.
- *Design and Construction* is an integrated unit of interdisciplinary project managers responsible for the construction documentation and contract administration of construction projects. This department is responsible for developing unit costs for all infrastructure types, having direct access and an in-depth understanding of current contract pricing.
- *Financial Services* is responsible for ensuring that there are strong fiscal controls in the collection and expenditure of DCC funds so that the implementation of the DCC bylaw is achieved within available funds. They are also providing process continuity for the new organizational structure.

The City is working towards a full discussion with UDI on the proposed 2030 Servicing Plan and DCC unit rate structure in mid-August. We expect to provide information to UDI in advance of our meetings as it becomes available, to allow for sequential decision-making and a higher value for our discussions.

Find attached:

- The methodology used for the development of unit costs. The underlying principle is that the City is applying common sense to the analysis of the lowest acceptable bids to ensure that it is collecting the right amount of money to pay the costs of infrastructure development.
- The unit cost calculations for roads, water and sewer services.

We are suggesting a meeting with UDI at 9:30 am on Tuesday, June 29, 2010, Layer Cake Mountain Room, 4th Floor City Hall, to discuss these attachments. This should provide sufficient time for you to review the material. We are requesting your final input by July 9, 2010 for our review and use in project costing on the 2030 DCC plan. The mid-August meeting, which will be preceded by another information package for your review, will

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kelowna.ca

look at:

- Network changes to accommodate projected growth
- Policy changes regarding levels of service and the items included in the DCC rates
- DCC project costs
- DCC rates

You will notice that the unit rates are showing reductions across the board. AS you are well aware, these rates need to be applied to existing and proposed new projects before a DCC rate can be determined. It would be premature to speculate on the change in the DCC rates at this time.

We look forward to continuing our close working relationship with UDI in this regard.

Thank you;

Randy L. Cleveland
Director, Infrastructure Planning

Attachment: Unit Cost Methodology
Unit Cost Analysis: Roads, Water, sewer

cc. Keith Grayston, Director, Financial Services
Bill Berry, Director, Design & Construction
Jim Wunderlich, Financial Analyst, Infrastructure Planning
Jim Paterson, General Manager, Community Sustainability

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2010 Roads DCC Unit Price Review Methodology

1. Background

The City of Kelowna DCC Roads Projects are reviewed annually to ensure that the cost estimates reasonably represent the projected cost of construction. The review process normally involves:

- For those roads that have been completed or that are under construction, the estimated costs are replaced with actual or tendered cost of construction.
- For those roads with advanced design complete, the preliminary cost estimates are replaced with detailed estimates (with lower contingencies) prepared by the design engineer.
- For those roads which have no new information available, the cost estimates are updated on the basis of revised unit prices. The revised unit prices are developed using recent City of Kelowna tender information, consultant advice and economic trend information.

During the time that the 2008 annual review was underway, the economy was showing signs of a downturn. While the downturn was not yet being reflected in lower pricing in City roads projects, the development community was predicting that lower prices were inevitable. Analysis of the available data as outlined above resulted in a recommendation of a 7% average increase in unit prices for 2008. After consultation with the development community, it was decided to update only those cost estimates for which better information was available (projects which had been designed, tendered and/or constructed). The cost estimates for all other roads were unchanged and unit prices were not updated from the previous (2007) rates.

A similar review took place in 2009 but again the rates were not updated. As such, the unit rates in the current DCC cost estimates are from 2007 based upon tenders received late in 2006 and early in 2007.

2. 2010 Unit Price Review Process

The process that has been followed in 2010 to arrive at the proposed new unit prices (attached) is outlined in this section.

1. The DCC unit price spreadsheet was updated using the low bidder pricing on recent City tendered projects.

For the current (2010) update, the following tenders were included:

- Glenmore Bypass
- Clifton/Highland Dr (Water & Storm Main and Retaining wall)
- Gordon Dr.
- BC Trade Waste Treatment Plant Lift Station and Force Main
- Highway 97 Widening
- Moyer Rd. Storm Sewer
- Abbott St. Recreation Corridor
- Gordon Dr. Bridge
- Highway 33 Upgrading

2. Items showing a very large percentage change in unit costs were analyzed. For these either:
    - The average of all (rather than low only) bid prices was used, or
    - Outlier bids were dropped (only where a minimum of two other tender prices are available) and the average of the low tender prices on the remaining projects were used.
3. For pricing of items with incremental sizes (e.g. – pipe and manholes) a further test was applied. If unit prices did not steadily increase as the size increases, a cost curve was developed and the individual unit prices smoothed to fit the curve. This helped to remove bidding anomalies from the analysis.
4. Line items which together comprise 80% of the total program costs were identified and the average percentage change in costs of these items was calculated. The average cost decrease for these items based on recent tender data is 9.5%.
5. Items for which no recent City tender data is available were deflated by this same 9.5%.
6. The new unit price model was tested by using it to update the costs of three (3) representative DCC Roads Estimates. The revised unit prices resulted in an average cost decrease on these three projects (exclusive of land) of 8.95%.

CONSTRUCTION COST ESTIMATE

-9.5% *Inflation Rate*

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
Section 01050 - Field Surveys							
1050.1	Surveys for layout and as-constructed records	%		1.0%	1.0%	6	0.0%
Section 01535 - Temporary Facilities							
1535.1	Temporary utilities and construction facilities	%		$1.00	$1.00	3	0.0%
Section 01570 - Traffic Regulation							
1570.1	Traffic regulation	%		$3.00	$3.00	7	0.0%
Section 02070 - Sitework Demolition and Removal							
2070.1	Miscellaneous removals	L.S.				0	
2070.2	Remove and disposal of pipe culvert	lin. m		$40.99	$47.00	3	-12.8%
2070.3	Fence removal and/or relocation	lin. m		$19.00	$21.00	0	-9.5%
Section 02104 - Shrubs and Tree Preservation							
2104.1	Preservation of existing trees and shrubs	L.S.		-	-	1	
Section 02111 - Clearing and Grubbing							
2111.1	Close-cut clearing (1ha=10,000m2)	ha		$18,091.97	$20,000.00	0	-9.5%
2111.2	General clearing and grubbing	ha		$4,714.24	$65,000.00	3	-92.7%
Section 02113 - Removal of Existing Asphalt Pavement							
2113.1	Removal and disposal of asphalt, regardless of depth	sq. m		$4.28	$4.87	1	-12.1%
Section 02221 - Rock Removal							
2221.1	Trench rock removal	cu.m		$51.30	$56.71	0	-9.5%
2221.2	Mass rock removal	cu.m		$15.39	$17.01	0	-9.5%
2221.3	Off-site disposal of excess rock quantity	cu.m		$7.34	$8.11	0	-9.5%
Section 02223 - Excavating, Trenching and Backfilling							
2223.1	Imported trench backfill material	cu. m		$24.89	$25.50	4	-2.4%
2223.2	Concrete encasement of utilities	lin. m		$169.39	$187.25	0	-9.5%
2223.3	Dewater trench (250 to 450)	lin.m.		$25.65	$28.36	0	-9.5%
2223.4	Dewater trench (525 to 900)	lin.m.		$35.91	$39.70	0	-9.5%
2223.5	Dewater trench (1050 and up)	lin.m.		$46.17	$51.04	0	-9.5%
Section 02224 - Roadway Excavation, Embankment and Compaction							
2224.1	Topsoil stripping and stockpile on-site	cu. m		$5.60	$5.54	2	1.0%
2224.2	Organic stripping, shrub removal off-site	ha		$2,051.99	$2,268.40	0	-9.5%
2224.3	Common excavation, on-site re-use	cu. m		$7.86	$8.30	3	-5.3%
2224.4	Common excavation, off-site disposal	cu. m		$11.01	$14.01	6	-21.4%
2224.5	Common excavation, replace unsuitable subgrade	cu. m		$37.99	$42.00	0	-9.5%
2224.6	Imported granular fill, 75mm minus pitrun	cu.m		$21.90	$26.07	1	-16.0%
2224.7	Miscellaneous Removal	L.S.		-	-	0	
2224.8	Subgrade finishing and compaction	sq. m		$1.09	$0.95	5	14.5%
Section 02233 - Granular Base							
2233.1	Granular base, 25 mm minus crushed gravel	cu. m		$46.30	$56.67	8	-18.3%
2233.2	Shoulder gravel, 19 mm minus (100 mm depth)	cu.m		$56.09	$49.00	2	14.5%
Section 02234 - Granular Subbase							
2234.1	Granular subbase, 75mm minus crushed gravel	cu. m		$33.91	$44.14	4	-23.2%
2234.2	Select granular subbase salvaged from excavation and full depth reclamation	cu. m		$11.20	$19.44	1	-42.4%
Section 02235 - Unsuitable Trench Material							
2235.1	Remove & replace unsuitable material (50%)	lin.m.		$29.00	$32.06	0	-9.5%
Section 02271 - Riprap							
2271.1	Machine placed riprap	cu. m		$54.41	$94.77	3	-42.6%
Section 02512 - Hot Mix Asphalt Concrete Paving							
2512.1	Asphalt lower course, 60 mm	sq.m		$14.75	$11.90	7	23.9%
2512.2	Asphalt surface course, 40 mm	sq.m		$10.88	$8.17	7	33.2%
2512.3	Asphalt surface course for sidestreets, 50 mm	sq.m		$16.81	$16.74	4	0.4%
2512.4	Asphalt - hand placed	sq. m		$18.00	$29.43	1	-38.8%
2512.5	Asphalt curb - 150mm high	lin. m		$16.80	$22.39	1	-25.0%

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
2512.6	Asphalt - stamped and colored, including base & prep	sq. m		$24.42	$27.00	0	-9.5%
Section 02515 - Unit Paving							
2515.1	Unit pavers c/w granular base and edging	sq.m		$89.92	$99.40	0	-9.5%
Section 02523 - Concrete Walks, Curbs and Gutters							
2523.1	Concrete curb and gutter, c/w granular base	lin. m		$68.04	$68.77	6	-1.1%
2523.2	Sidewalks, c/w granular base	sq. m		$53.08	$61.05	6	-13.1%
2523.3	Concrete median curb per MMCD C6	lin. m		$38.61	$41.23	5	-6.4%
2523.4	Median Treatment - c/w asphalt/concrete/landscaping	sq. m		$80.61	$73.13	4	10.2%
Section 02547 - Asphalt Tack Coat							
2547.1	Asphalt tack coat	sq. m		$0.57	$0.44	7	29.9%
Section 02574 - Cold Milling							
2574.1	Mill existing asphalt pavement and stockpile at yards	sq. m		$3.23	$2.36	7	36.7%
Section 02575 - Full Depth Reclaimation							
2575.1	Full depth reclamation of asphalt to 300mm depth	sq.m		$4.52	$5.00	0	-9.5%
Section 02580 - Painted Pavement Markings							
2580.1	Painted Pavement Markings	lin. m		$1.02	$1.13	0	-9.5%
Section 02581 - Pavement Surface Cleaning and removal of Pavement Markings							
2581.1	Removal of pavement markings	L.S.		-	-	0	
Section 02721 - Storm Sewer							
2721.10	Catchbasin leads, non-perforated PVC Ultra Rib	lin. m		$82.84	$145.00	6	-42.9%
	- 200 mm diameter	lin. m		$24.00	$9.29	1	158.3%
2721.20	Drainage ditching	lin.m.		$112.92	$253.00	2	-55.4%
2721.30	250mm PVC	lin.m.		$164.17	$215.00	4	-23.6%
2721.40	300mm PVC	lin.m.		$190.08	$252.00	2	-24.6%
2721.50	375mm PVC	lin.m.		$228.53	$349.00	2	-34.5%
2721.60	450mm PVC	lin.m.		$275.00	$221.17	1	24.3%
2721.70	525mm PVC	lin.m.		$335.00	$308.16	1	8.7%
2721.80	600mm PVC	lin.m.		$402.89	$406.60	1	-0.9%
2721.90	675mm PVC	lin.m.		$408.00	$395.90	1	3.1%
2721.10	750mm CONC	lin.m.		$489.60	$385.63	1	27.0%
2721.11	900mm CONC	lin.m.		$571.20	$856.00	1	-33.3%
2721.12	1050mm CONC	lin.m.		$652.80	$465.02	1	40.4%
2721.13	1200mm CONC	lin.m.		$734.40	$521.73	1	40.8%
2721.14	1350mm CONC	lin.m.		$816.00	$595.46	1	37.0%
2721.15	1500mm CONC	lin.m.		$120.00	$153.12	0	-21.6%
2721.16	250mm PERF PVC	lin.m.		$129.35	$303.00	1	-57.3%
2721.17	300mm PERF PVC	lin.m.		$145.62	$157.29	2	-7.4%
2721.18	375mm PERF PVC	lin.m.		$174.60	$232.51	2	-24.9%
2721.19	450mm PERF PVC	lin.m.		$241.11	$266.54	0	-9.5%
2721.20	525mm PERF PVC	lin.m.		$282.15	$311.91	0	-9.5%
2721.21	600mm PERF PVC	lin.m.		$338.58	$374.29	0	-9.5%
2721.22	675mm PERF PVC						
Section 02723 - Pipe Culverts							
2723.1	Pipe culvert, galvanized CMP	lin. m		$160.00	$153.12	1	4.5%
	- 450 mm diameter	lin. m		$183.25	$153.50	4	19.4%
	- 600 mm diameter	lin. m		$236.85	$270.00	1	-12.3%
	- 900 mm diameter						
2723.2	Pre-cast concrete headwall, complete with safety grill	each		$1,596.50	$10,700.00	1	-85.1%
	- 450 mm diameter	each		$2,256.50	$10,700.00	1	-78.9%
	- 600 mm diameter	each		$6,500.00	$10,700.00	0	-39.3%
	- 900 mm diameter	each		$775.00	$515.50	1	50.3%
2723.3	Sandbag endwalls for culverts, all diameters						
Section 02725 - Manholes and Catchbasins							
2725.1	Catchbasin, side inlet	each		$1,478.57	$1,531.11	7	-3.4%
2725.2	Catchbasin, top inlet	each		$1,410.00	$1,716.67	2	-17.9%
2725.3	Adjust existing storm manholes	each		$1,193.50	$1,040.00	5	14.8%
2725.4	1050 mm dia. (450 and less)	ea.		$2,140.75	$1,847.47	6	15.9%

ITEM	DESCRIPTION	UNIT		2010 DCC Unit Price	2009 UNIT PRICE	Count	Change
2725.5	1200 mm dia. (525 and 600)	ea.		$2,583.33	$2,658.75	3	-2.8%
2725.6	1350 mm dia. (675 and 750)	ea.		$4,145.00	$2,620.00	2	58.2%
2725.7	1500 mm dia. (900)	ea.		$4,400.00	$3,266.67	2	34.7%
2725.8	1800 mm dia. (1050 and 1200)	ea.		$4,630.00	$6,420.00	1	-27.9%
2725.9	Drywells	ea.		$2,955.50	$3,174.25	2	-6.9%
Section 02831 - Chain Link Fence and Gates							
2831.1	Supply and install chain link fence	lin. m		$53.90	$72.00	5	-25.1%
2831.2	Supply and install 1.07 m high 38 mm diameter galvanized railing	lin. m		$64.13	$70.89	0	-9.5%
Section 02921 - Topsoil and Finish Grading							
2921.1	Import topsoil - 150 mm depth for hydraulic seeding and sod in boulevard or other disturbed areas	sq. m		$6.91	$8.89	4	-22.3%
2921.2	Finish grading in embankment or cut areas at back of curb or sidewalk	sq. m		$2.05	$2.27	0	-9.5%
Section 02934 - Hydraulic Seeding							
2934.1	Hydro-seeding disturbed areas	sq. m		$1.07	$1.75	2	-39.1%
Section 02938 - Sodding							
2938.1	Supply and placement of nursery sod	sq. m		$6.99	$13.90	2	-49.7%
Section 02950 - Planting of Trees, Shrubs and Ground Covers							
2950.1	Boulevard trees	each		$718.00	$493.83	1	45.4%
2950.2	Shrubs and other ground cover plantings	sq.m		$1.54	$1.70	0	-9.5%
2950.3	Irrigation - includes connection and curb stops	lin.m.		$167.77	$185.46	0	-9.5%
Section 03300 - Cast-in-Place Concrete							
3300.1	Miscellaneous unformed 25 Mpa concrete	cu. m		$307.80	$340.26	0	-9.5%
3300.2	Miscellaneous formed 25 Mpa concrete	cu. m		$615.60	$680.52	0	-9.5%
3300.3	Retaining walls	v.sq.m		$381.74	$422.00	0	-9.5%
Section 03400 - Pre-Cast Concrete							
3400.1	Supply and install geogrid reinforced modular concrete block retaining wall	v.sq. m		$257.85	$250.00	3	3.1%
3400.2	Supply and install 690 mm high concrete roadside barrier c/w bullnose	lin. m		$241.98	$267.50	0	-9.5%
3400.3	Supply and install bollards	each		$153.90	$170.13	0	-9.5%
3400.4	Noise attenuation - walls and berms	lin. m		$102.60	$113.42	0	-9.5%
Section 16650 - Shallow Utilities and Electrical Work							
16650.1	Trenching and ducts for street lights	lin. m.		$25.97	$32.75	2	-20.7%
16650.2	Supply and install pre-cast concrete street light bases	each		$878.45	$1,096.67	2	-19.9%
16650.3	Erect street light poles, davits and luminaires	each		$1,704.00	$1,980.67	2	-14.0%
16650.4	Street light wiring	lin.m.		$9.40	$7.94	2	18.4%
16650.5	traffic signal installation complete with wiring	each		$130,727.25	$144,450.00	0	-9.5%
16650.6	Relocate existing utility poles	each		$3,489.93	$3,856.28	0	-9.5%
16650.7	Miscellaneous adjustments	%			-		

2010 Utility DCC Unit Price Review Methodology

1. Background

The City of Kelowna DCC Utility Projects are reviewed annually to ensure that the cost estimates reasonably represent the projected cost of construction. The review process normally involves:

- For those utility projects that have been completed or that are under construction, the estimated costs are replaced with actual or tendered cost of construction.
- For those utility projects with advanced design complete, the preliminary cost estimates are replaced with detailed estimates (with lower contingencies) prepared by the design engineer.
- For those utility projects which have no new information available, the cost estimates are updated on the basis of revised unit prices. The revised unit prices are developed using recent City of Kelowna tender information, consultant advice and economic trend information.

During the time that the 2008 annual review was underway, the economy was showing signs of a downturn. While the downturn was not yet being reflected in lower pricing in City roads projects, the development community was predicting that lower prices were inevitable. Analysis of the available data as outlined above resulted in a recommendation of a 7% average increase in unit prices for 2008. After consultation with the development community, it was decided to update only those cost estimates for which better information was available (projects which had been designed, tendered and/or constructed). The cost estimates for all other projects were unchanged and unit prices were not updated from the previous (2007) rates.

A similar review took place in 2009 but again the rates were not updated. As such, the unit rates in the current DCC cost estimates are from 2007 based upon tenders received late in 2006 and early in 2007.

2. 2010 Unit Price Review Process

The process that has been followed in 2010 to arrive at the proposed new unit prices (attached) is outlined in this section.

1. The DCC unit price spreadsheet was updated using the low bidder pricing on recent City tendered projects.

For the current (2010) update, the following tenders were included:

- Glenmore Bypass
- Clifton/Highland Dr (Water & Storm Main and Retaining wall)
- Gordon Dr.
- BC Trade Waste Treatment Plant Lift Station and Force Main
- Highway 97 Widening
- Highway 33 Upgrading

2. Items showing a very large percentage change in unit costs were analyzed. For these either:
    - The average of all (rather than low only) bid prices was used, or
    - Outlier bids were dropped (only where a minimum of two other tender prices are available) and the average of the low tender prices on the remaining projects were used.
3. For pricing of items with incremental sizes (e.g. – pipe and manholes) a further test was applied. If unit prices did not steadily increase as the size increases, a cost curve was developed and the individual unit prices smoothed to fit the curve. This helped to remove bidding anomalies from the analysis.
4. Line items which together comprise 80% of the total program costs were identified and the average percentage change in costs of these items was calculated. The average cost decrease for these items based on recent tender data is 14.8%.
5. Items for which no recent City tender data is available were deflated by this same 14.8%.
6. The new unit price model was tested by using it to update the costs of all the representative DCC Sewer Utility projects Estimates. The revised unit prices resulted in an average cost decrease on all current DCC Sewer Utility projects (exclusive of land) of 8.0%.

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
Sanitary Sewer - Average Annual Cost Inflation of Tendered Items						
02725	***Manholes***					
	Top Slab, Frame & Cover	ea.	$1,200.00	$1,385.00		
	Base & Top Slab	ea.	$1,040.00	$1,200.00		
	Frame & Cover	ea.	$570.00	$665.00		
	Adjustable Frame & Cover	ea.	$560.00		3	
	Base, Lid & Casting (1050 dia)	ea.	$1,770.00	$2,370.00	1	-25.3%
	Base, Lid & Casting (1200 dia)	ea.	$3,770.00		1	
	Base, Lid & Casting (1350 dia)	ea.	$4,240.00		1	
	Base, Lid & Casting (1500 dia)	ea.	$4,360.00			
	Base, Lid & Casting (1800 dia)	ea.	$4,610.00			
	Riser Sections, 1050mm dia	v.m	$430.00	$495.00	2	-13.1%
	Riser Sections, 1200mm dia	v.m	$630.00	$730.00		
	Riser Sections, 1350mm dia	v.m	$740.00	$775.00	1	-4.5%
	Riser Sections, 1500mm dia	v.m	$980.00	$1,140.00		
	Riser Sections, 1800mm dia	v.m	$1,210.00	$1,395.00		
	Overbuilt MH (1050 dia Base, Lid, & Casting)	ea.	$2,020.00		1	
	Manhole Outside Ramp Structure	v.m	$1,610.00	$1,860.00		
	Manhole Outside Drop - 200mm (Additional MH Cost)	ea.	$390.00		1	
	Manhole Inside Ramp Benching	ea.	$790.00	$810.00	1	-2.5%
	Manhole Inside Drop Structure (Additional MH Cost)	ea.	$570.00		1	
	Clean Out	ea.	$1,680.00	$1,940.00		-14.9%
	Remove & Dispose of Manholes	ea.	$720.00	$1,085.00	3	-33.6%
	Abandon Existing Manhole (fill w/CDF-crush & remove cover)	ea.	$570.00	$1,260.00	1	-54.8%
	Adjust Ex MH Lid	ea.	$800.00		2	
	Adjust Ex MH c/w New Frame & Cover	ea.	$870.00	$865.00	2	0.6%
02731	***Connections to Existing Sewer***					
	Connect to ex Stub (coupler)	ea.	$1,180.00	$1,365.00		-15.0%
	Tie to Ex MH & Re-Bench	ea.	$1,700.00	$1,570.00	2	8.3%
	Tie into ex main w/ new overbuilt MH	ea.	$2,960.00	$3,425.00		-14.7%
	Tie to existing pipe	ea.	$3,000.00	$1,275.00	1	135.3%
02731	***Sanitary Sewer Main (SDR 35)***					
	150mm in SRW, 0 - 3.0m depths	m	$100.00		1	
	200mm in SRW, 0 - 3.0m depths	m	$105.00			
	200mm in SRW, 3.0 - 4.0m depths	m	$115.00			
	200mm in SRW, 4.0 - 4.5m depths	m	$125.00			
	150mm, 0 - 3.0m depths	m	$135.00	$195.00		
	150mm, 3.0 - 3.5m depths	m	$145.00	$210.00		
	200mm, 0 - 3.0m depths	m	$165.00	$230.00	1	-28.3%
	200mm, 3.0 - 3.5m depths	m	$170.00	$245.00		
	200mm, 3.5 - 4.0m depths	m	$190.00	$275.00		
	200mm, 4.0 - 4.5m depths	m	$210.00	$305.00		
	200mm, 4.5 - 5.0m depths	m	$245.00	$355.00		

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
	250mm, 0 - 3.0m depths	m	$170.00	$280.00	3	-39.3%
	250mm, 3.0 - 3.5m depths	m	$200.00	$285.00		
	300mm, 0 - 3.0m depths	m	$205.00	$340.00	2	-39.7%
	300mm, 3.0 - 3.5m depths	m	$225.00	$325.00		
	375mm, 0 - 3.5m depths	m	$235.00	$385.00	2	-39.0%
	450mm, 0 - 3.5m depths	m	$320.00	$430.00	2	-25.6%
	525mm, 0 - 3.5m depths	m	$410.00	$505.00	2	-18.8%
	600mm, 0 - 3.5m depths	m	$480.00	$555.00	2	-13.5%
	675mm, 0 - 3.5m depths	m	$560.00	$640.00	2	-12.5%
	750mm, 0 - 3.5m depths	m	$640.00	$760.00	2	-15.8%
	900mm, 0 - 3.5m depths	m	$790.00	$1,025.00	2	-22.9%
	1050mm SDR 41, 0 - 3.0m depths	m	$950.00	$1,500.00	2	-36.7%
	1200mm SDR 41, 0 - 3.0 depths	m	$1,120.00	$2,235.00	2	-49.9%
	1200mm SDR 41, 3.0 - 4.0 depths	m	$1,350.00	$2,470.00	2	-45.3%
	Removal & Disposal of Ex. Mains, all diameter & depths	m	$41.00	$70.00	1	-41.4%
	Abandon existing sanitary main (fill with CDF)	m	$19.00	$27.00		
	Temporary Main Bypass	ea.	$6,100.00	$8,800.00		
	Pipe Anchors	ea.	$195.00		1	
02731	***Services & Fittings***					
	100mmø SDR 28, all depths	m	$90.00	$180.00	1	-50.0%
	100mmø SDR 28 (pipe in common trench with water service)	m	$60.00	$159.00		
	100mmø Inserta Tee on ex main	ea.	$180.00	$210.00		
	150mmø SDR 28, all depths	m	$100.00	$155.00		
	150mmø SDR 28 (pipe in common trench with water service)	m	$170.00	$198.00		
	IC (100 mm)	ea.	$740.00	$550.00	1	34.5%
	IC (150 mm)	ea.	$890.00	$710.00	1	25.4%
	Brooks Box	ea.	$160.00	$185.00		
	IC (100 mm) c/w Brooks Box	ea.	$630.00	$735.00		
	IC (150 mm) c/w Brooks Box	ea.	$1,250.00	$1,445.00		
	Wye (150øX100ø)	ea.	$120.00	$140.00		
	Wye (200øX100ø)	ea.	$135.00	$155.00		
	Wye (250øX100ø)	ea.	$145.00	$170.00		
	Wye (300øX100ø)	ea.	$205.00	$240.00		
	Wye (375øX100ø)	ea.	$295.00	$340.00		
	Wye (525øX100ø)	ea.	$335.00		1	
	Wye (200øX150ø)	ea.	$140.00	$160.00		
	Wye (250øX150ø)	ea.	$155.00	$180.00		
	Wye (300øX150ø)	ea.	$220.00	$255.00		
	Wye (525øX150ø)	ea.	$420.00		1	
	Wye (525øX200ø)	ea.	$530.00		1	
	150mm Grade Riser	ea.	$205.00	$240.00		
	100mm Grade Riser	ea.	$145.00	$170.00		
	100mm service conn (c/w IC, 10m SDR 28 pipe, Wye)	ea.	$1,250.00	$1,450.00		

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
	150mm service conn (c/w IC, 10m SDR 28 pipe, Wye)	ea.	$1,710.00	$1,980.00		
	cap ex service at main	ea.	$770.00	$890.00		
	Coupler - 250mm	ea.	$100.00	$115.00		
	Coupler - 300mm	ea.	$115.00	$135.00		
	Coupler - 1200mm	ea.	$1,620.00	$1,875.00		
	End Cap, 100mm	ea.	$22.00	$26.00		
	End Cap, 200mm	ea.	$175.00	$200.00		
	End Cap, 250mm	ea.	$240.00	$275.00		
	End Cap, 300mm	ea.	$285.00	$330.00		
	End Cap, 1200mm	ea.	$4,400.00	$5,100.00		
	Temporary Service Bypass	ea.	$480.00	$550.00		
	50mm Service Connection at Forcemain	ea.	$600.00	$695.00		
	50mm HDPE DR 17 (38mm ID) Municipal Tubing	m	$53.00		2	
02732	***Sanitary Forcemains***					
	200mmø PVC Forcemain, 0 - 3.00m depths	m	$160.00	$295.00	1	-45.8%
	350mmø PVC Forcemain, 0 - 3.00m depths	m	$215.00	$355.00	1	-39.4%
	400mmø PVC Forcemain, 0 - 3.00m depths	m	$245.00	$395.00	1	-38.0%
	450mmø PVC Forcemain, 0 - 3.00m depths	m	$275.00	$430.00	1	-36.0%
	Air Valve Chamber	ea.	$12,500.00		1	
	Check Valve Chamber	ea.	$7,700.00		1	
	Forcemain Cleanout	ea.	$3,310.00		1	
	200mm Plug Valve (c/w VB & Riser)	ea.	$2,290.00		1	
	200mmø bend	ea.	$460.00	$845.00	1	-45.6%
02746	***Lift Stations***					
	Site Works	L.S.	$6,500.00		1	
	Supply and Install Tank	L.S.	$170,000.00	$375,000.00	1	-54.7%
	Supply and Install Flow Meter Chamber	L.S.	$13,000.00	$20,000.00	1	-35.0%
	Electrical	L.S.	$70,000.00	$132,000.00	1	-47.0%
	Communications	L.S.	$13,000.00		1	
	Commissioning and Testing	L.S.	$5,770.00	$3,525.00	1	63.7%
	Gen Set	L.S.	$50,000.00	$60,000.00	1	-16.7%
	Transformer	L.S.	$6,000.00		1	
	Additional Depth & Capacity	L.S.	$40,000.00		1	
	Total Lift Station (Small)	L.S.	$393,000.00	$615,000.00	1	-36.1%
	Tie into existing well	L.S.	$14,500.00	$17,000.00		
	Removal & Disposal of ex Wetwell LS	L.S.	$5,900.00	$6,800.00		
02666 Waterworks - Average Annual Cost Inflation of Tendered Items						
	Watermain					
	100mm	m	$100.00		2	
	150mm	m	$125.00		2	
	200mm	m	$90.00		1	
	250mm	m	$105.00		1	
	300mm	m	$120.00		1	

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
	350mm	m	$140.00		1	
	400mm	m	$160.00		1	
	450mm	m	$180.00		1	
	500mm	m	$195.00		1	
	600mm	m	$310.00		1	
	750mm	m	$415.00		1	
	900mm	m	$510.00		1	
	1050mm	m	$630.00		1	
	1200mm	m	$750.00		1	
	1350mm	m	$890.00		1	
	Heat Shrink Wrap Joints	ea.	$49.00		1	
	Services					
	200mm x 19mm Saddle, Corp & Curb Stops, coupler	ea.	$270.00		1	
	19mm Service Pipe	m	$53.00		1	
	200mm x 38mm Saddle, Corp & Curb Stops, coupler	ea.	$1,000.00		1	
	38mm Service Pipe	m	$75.00		1	
	Fittings					
	Bend - 100mm	ea.	$275.00		1	
	Bend - 150mm	ea.	$315.00		1	
	Bend - 200mm	ea.	$450.00		2	
	Bend - 600mm	ea.	$2,060.00		1	
	Reducer - 200 x 100	ea.	$370.00		2	
	Reducer - 250 x 150	ea.	$425.00		2	
	Reducer - 250 x 200	ea.	$475.00		2	
	Flexible PVC Joint - 150mm	ea.	$980.00		1	
	Coupler - 100mm	ea.	$135.00		1	
	Coupler - 150mm	ea.	$250.00		1	
	Coupler - 200mm	ea.	$185.00		1	
	Coupler - 250mm	ea.	$250.00		1	
	Tee - 150 x 150 x 150	ea.	$490.00		1	
	Tee - 200 x 200 x 100	ea.	$580.00		1	
	Tee - 200 x 200 x 150	ea.	$540.00		2	
	Tee - 200 x 200 x 200	ea.	$590.00		2	
	Tee - 600 x 600 x 150	ea.	$2,790.00		1	
	Pipe / Fitting Joint Restraints - 100mm	ea.	$100.00		1	
	Pipe / Fitting Joint Restraints - 150mm	ea.	$145.00		2	
	Pipe / Fitting Joint Restraints - 200mm	ea.	$170.00		2	
	Pipe / Fitting Joint Restraints - 600mm	ea.	$810.00		1	
	End Cap c/w TB - 100mm	ea.	$195.00		1	
	End Cap c/w TB - 150mm	ea.	$260.00		1	
	End Cap c/w TB - 200mm	ea.	$305.00		1	
	Valves					
	Gate Valve - 100mm	ea.	$650.00		2	

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
	Gate Valve - 150mm	ea.	$910.00		3	
	Gate Valve - 200mm	ea.	$1,280.00		2	
	Gate Valve - 250mm	ea.	$2,070.00		2	
	Gate Valve - 300mm	ea.	$3,330.00		2	
	Gate Valve - 600mm	ea.	$8,700.00		2	
	Air Valve Chamber (25mm AV off 200mm main)	ea.	$3,500.00		1	
	Air Valve Chamber (100mm AV off 600mm main)	ea.	$19,500.00		1	
	Adjust Ex'g Valve Boxes to new grade	ea.	$100.00		2	
	Remove Abandoned Gate Valve and plug pipe ends	ea.	$305.00		1	
	Tie Ins					
	Tie in to Ex main - 200mm (no fittings)	ea.	$1,220.00		1	
	Tie in to Ex main - 600mm (no fittings)	ea.	$5,500.00		1	
	HOT TAP for Tee with 150mm Branch c/w 150mm Gate Valve	ea.	$3,500.00		2	
	Hydrants					
	Complete Hydrant Assembly	ea.	$3,780.00		2	
	Relocate Fire Hydrant	ea.	$1,880.00		2	
	Watermain Undercrossings					
	150mm Casing Pipe	m	$150.00	$175.00		
	200mm Casing Pipe	m	$210.00	$245.00		
	350mm Casing Pipe	m	$270.00	$315.00		
	100mm, Flex Joint	ea.	$970.00	$1,475.00	1	-34.2%
	150mm, Flex Joint	ea.	$1,190.00	$1,475.00	1	-19.3%
	200mm, Flex Joint	ea.	$1,460.00	$2,365.00	1	-38.3%
	250mm, Flex Joint	ea.	$1,700.00	$2,365.00	1	-28.1%
	300mm, Flex Joint	ea.	$2,050.00	$3,925.00	1	-47.8%
	100mm, U-Bend	ea.	$2,040.00	$2,365.00		
	150mm, U-Bend	ea.	$2,340.00	$2,705.00		
	200mm, U-Bend	ea.	$2,630.00	$3,045.00		
	250mm, U-Bend	ea.	$3,070.00	$3,555.00		
	300mm, U-Bend	ea.	$3,650.00	$4,230.00		
	100mm, Hand Dig	ea.	$255.00	$295.00		
	150mm, Hand Dig	ea.	$255.00	$295.00		
	200mm, Hand Dig	ea.	$285.00	$330.00		
	250mm, Hand Dig	ea.	$285.00	$330.00		
Additional Miscellaneous Items - Average Annual Cost Inflation of Tendered Items						
0150	Mobilization & Demobilization	%	8.2%		4	
0150	Bonding & Insurance	%	1.5%		1	
	Restoration (sod), based on property frontage	l.m	$90.00	$105.00		
	Land Acquisition - Major	L.S.	$30,000.00	$35,000.00		
	Land Acquisition - Minor	L.S.	$8,500.00	$10,000.00		
	Security	Day	$180.00	$210.00		
	Utility Exploration	Day	$1,200.00	$1,385.00		
	Construction Fencing	l.m	$12.00	$14.00		

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-13.6% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
01535	Field Office	week	$570.00	$660.00		
01570	Traffic Management (minor roads)	week	$1,990.00	$2,305.00		
01570	Traffic Management (major roads)	week	$10,500.00	$12,000.00		
02223	Re-use suitable site material in trench	cu. m	$10.00		2	
02223	Dewatering - Pumps	l.m	$31.31	$60.00	1	-47.8%
02223	Dewatering - Well Points	l.m	$70.00	$115.00	1	-39.1%
02233	Roadway base (25mm-), 150mm thickness	sq. m	$6.90	$8.00		
02233	Roadway base (25mm-), 100mm thickness	sq. m	$5.20	$6.00		
02233	Roadway base, 75mm thickness	sq. m	$6.00	$7.00		
02233	Shoulder Gravel & Gravel Driveways, 50mm thickness	sq. m	$5.20	$6.00		
02234	Granular subbase, 300 minus	cu. m	$31.00		1	
02234	Granular subbase, 150 minus	cu. m	$28.00		2	
02234	Granular subbase, 150mm minus, 200mm thickness	sq. m	$10.00	$11.00		
02234	Granular subbase, 150mm minus, 350mm thickness	sq. m	$13.00	$15.00		
02234	Granular subbase, 75mm minus, 200mm thickness	sq. m	$8.00	$9.00		
02235	Unsuitable Trench Material, Removal & Disposal	cu. m				
02235	Unsuitable Trench Material, Import 150mm minus Pit Run	cu. m				
02235	Unsuitable Trench Material, Supply & Place Drain Rock	cu. m	$26.00	$55.00		
02235	Unsuitable Trench Material, Supply & Place Drain Rock	l.m	$20.00		1	
02236	Controlled Density Fill	cu. m	$150.00	$225.00	1	-33.3%
02512	Asphalt lower course, 60 mm	sq. m	$14.00		2	
02512	Asphalt surface course, 40 mm	sq. m	$9.00		2	
02512	Asphalt surface course, 100 mm	sq. m	$19.00	$22.00		
02512	Asphalt Driveways, 50 mm	sq. m	$19.00	$20.00	1	-5.0%
02512	Asphalt Hwy Crossing - bottom lift (50mm)	sq. m	$15.00		1	
02512	Asphalt Hwy Crossing - top lift (50mm)	sq. m	$15.00		1	
02512	Asphalt Superpave Base Course (60mm)	sq. m	$16.00		1	
02512	Asphalt Superpave Surface Course (40mm)	sq. m	$11.00		1	
02512	Asphalt Superpave Surface Course (50mm)	sq. m	$15.00		1	
02512	Asphalt Leveling Course	tonne	$115.00		2	
02512	Asphalt Superpave (upper & lower course)	tonne	$105.00		1	
02512	Asphalt Pathway (50mm - including gravel)	sq. m	$21.00		2	
02512	Asphalt Sidewalk	sq. m	$30.00		1	
02512	Asphalt Sawcutting, < 100 mm depth	l.m	$5.40	$8.00	5	-32.5%
02512	Concrete Sawcutting	l.m	$2.00		1	
02523	Barrier Curb & Gutter, c/w driveway & wheelchair drops	l.m	$56.00	$65.00		
02523	Roll-Over Curb & Gutter	l.m	$105.00	$120.00		
02523	Removal of Concrete Walks & Driveways	sq. m	$9.00	$16.00	2	-43.8%
02523	Removal of Concrete Curb & Gutter	l.m	$12.00	$21.00	2	-42.9%
02523	Removal of Catch Basins	ea.	$275.00		1	
02523	Curb & Gutter - Hand Formed c/w base & sub-base	l.m	$85.00	$100.00		
02523	Concete Driveways, 150mm thick	sq. m	$100.00	$115.00	2	-13.0%
02523	Stamped Concrete In Medians	sq. m	$95.00		1	

UNIT PRICE MASTER SHEET
CONSTRUCTION COST ESTIMATE

-13.5% *Inflation Rate*

MMCD Ref	Item Description	Units	2010 DCC's (Ave Low)	2007 DCC's	COUNT	2010 Low vs. 2007 DCC's
02523	Stamped Concrete In Boulevards (c/w gravel base)	sq. m	$90.00		2	
02523	Exposed Aggregate Concete, 150mm thick	sq. m	$160.00	$115.00	1	39.1%
02574	Asphalt Removal, Following Milling	sq. m	$0.80	$0.90		
02574	Asphalt Removal, all depths	sq. m	$6.00	$4.20	1	42.9%
02574	For Stepped Joint, ex pavement depth > 75 mm	l.m	$42.00	$49.00		
02721	Break in & tie into ex drywell	ea.	$940.00	$1,085.00		
02721	250 mm dia Catch Basin Lead	m	$110.00	$130.00		
02723	Culvert - 400mm CMP	m	$115.00	$120.00	1	-4.2%
02723	Culvert - 500mm CMP	m	$130.00	$150.00		
02723	Culvert - 800mm CSP	m	$500.00		1	
02723	End Wall - 800mm Culvert	ea.	$1,100.00		1	
02723	Pre-cast concrete endwalls, all diameters	ea.	$1,290.00	$1,495.00		
02725	Catchbasin, double inlet	ea.	$1,680.00	$1,945.00		
02526	Trenchless Pipe Installations (500mm casing c/w 200mm PVC pipe, twin 50mm ducts, restrainers, spacers, dewatering, pits, Permit for Railway Crossing	l.m LS	$1,010.00	$1,675.00	1	-39.7%
02831	Wooden Fence	l.m	$110.00	$105.00	1	4.8%
03300	Concrete Driveway Restoration - removal, disposal, replace	sq. m	$110.00	$130.00		

City of Kelowna

20 YEAR SERVICING PLAN AND FINANCING STRATEGY – 2030 REVIEW

EXIBITS A-E

CITY OF KELOWNA
2030 TRANSPORTATION SERVICING PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

EXHIBIT "A" - TRANSPORTATION

(2010 Dollars X 1000)

Target Quarte	Sect	NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	Total Existing Benefit	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC'S	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
		Growth Units								450		16,907	45	2,117	881	1,957	2,146	10,007
Q3	A	McCulloch	Various	RAU2L	20-30	2,884.9				14.7	14.7	2,870.2	2,870.2					
						2,884.9				14.7	14.7	2,870.2	2,870.2					
Q1	B	Deficiencies	Frst 2/3,Brnby 1,Kldr,S.Per 2,Stw 2,Grd 1			2,366.5				13.3	13.3	2,353.1		2,353.1				
Q2	B	Frost 1	Killdeer - Chute Lake	UCU2L	20	1,686.7				9.5	9.5	1,677.2		1,677.2				
Q2	B	Gordon 1 - part 1	Frost - South Crest Dr	UAD2L	30	1,492.7				8.4	8.4	1,484.3		1,484.3				
Q2	B	Gordon 1 - part 2	South Crest Dr - S. Perimeter	UAD2L	30	2,524.6				14.2	14.2	2,510.3		2,510.3				
Q4	B	Lakshr 1A	Vintage Terrace Rd to Barnaby Rd	RAD2L	30	2,376.8				13.4	13.4	2,363.5		2,363.5				
Q4	B	S. Perimeter 1	Gordon Dr to Stewart 1	RAU2L	30	7,065.3				39.8	39.8	7,025.5		7,025.5				
						17,512.5				98.6	98.6	17,413.9		17,413.9				
Q4	*B	Casorso 1	Benvoulin - Swamp	RAU4L	30	1,886.8			248.5	9.2	257.7	1,629.0	488.7	1,140.3				
Q4	*B	Casorso Bridge - Mission Cr.	Widening bridge to 4 lane	RAD4L	30	2,743.7				15.4	15.4	2,728.3		2,728.3				
Q1	*B	Dehart 2	Lakeshore Road - Gordon Drive	UAU2L	26	1,719.4			76.9	9.2	86.1	1,633.3		1,633.3				
Q3	*B	Gordon Bridge - Bellevue Cr.	Crossing - Bellevue Creek	UAU2L	20	454.6				2.6	2.6	452.0		452.0				
Q3	*B	Lakshr 1	Dehart Rd - Vintage Terrace	UAU2L	30	4,998.4			766.7	23.8	790.6	4,207.8		4,207.8				
Q3	*B	Lakshr Bridge - Bellevue Cr.	Crossing - Bellevue Creek	UAD4L	30	1,428.3				8.0	8.0	1,420.2		1,420.2				
Q3	*B	Lakshr 2	Old Meadows - DeHart	UAU2L	30	5,038.6	602.9		1,751.6	20.7	1,772.3	3,653.5		3,653.5				
Q4	*B	Stewart 3	Swamp - Crawford Rd	RAU2L	30	6,443.3				36.3	36.3	6,406.9	2,915.2	3,491.8				
						26,703.0	602.9		2,843.7	125.3	2,969.0	23,131.1	3,403.9	19,727.2				
												5,496.9			5,496.9			
DC	C	McCurdy 4 (Dev Credit)	Craig Rd - Tower Ranch (Dvlpr Crdt)	RAU2L	25	2,866.1				11.6	11.6	2,866.1				2,866.1		
Q4	D	Lone Pine	Highway 33 - 500m east	UCU2L	20	1,224.1				4.9	4.9	1,224.1				1,224.1		
Q4	D	Gallagher 1	Lago Vista - Gallagher Rd	RCU2L	16-20	8,803.9	6,964.8				2,108.9	8,804.1				6,809.9		2,201.0
Compl	D	Highway 33 (Complete)	McKenzie - Gallagher			22,934.3		11,931.4	2,188.9		2,205.4	12,894.3				10,693.3		2,201.0
						33,935.6	6,964.8	11,931.4	2,188.9	16.5								
Q3	E	Airport	Hollywood Road - Highway 97	UAD2L	30	1,516.7	151.7			1.9	1.9	1,363.1					1,383.1	
Q1	E	John Hindle 1	Glenmore Rd - Station 11+340	UAU2L	30	2,922.7			2,145.3	1.1	2,146.4	776.4					776.4	
Q1	E	John Hindle 2	Station 11+340 - Station 11+900	RAU2L	30	1,304.2			957.3	0.5	957.8	346.4					346.4	
Q1	E	John Hindle 3	Station 11+900 - Station 12+300	RAU2L	30	3,161.9			2,320.9	1.2	2,322.0	839.9					839.9	
Q1	E	John Hindle 4	Station 12+300 - Station 12+750	RAU2L	30	2,747.7			2,016.8	1.0	2,017.8	729.9					729.9	
Q2	E	Hollywd 7	Sexsmith Road - Appaloosa	UAD2L	25	1,996.0	159.7		19.3	2.5	21.7	1,814.6					1,360.9	453.6
Q4	E	Hollywd 8	Appaloosa - Quail Ridge	UAD2L	25	10,839.8	6,383.7		242.2	4.3	246.5	4,009.3					3,007.0	1,002.3
						24,388.8	6,695.1		7,701.7	12.4	7,714.3	9,979.6					8,423.8	1,455.8
Q3	I	Begbie	Glenmore Highlands - Glenmore Rd.	RCU2L	20	2,247.2	2,247.2					8,111.2						8,111.2
Q4	I	Benvoulin 1	Casorso Road - KLO Road	RAD4L	30	9,242.6			1,010.2	120.8	1,130.8	8,111.2						4,641.2
Q2	I	Burtch 2	KLO Road - Byrns Road	RAU2L	25	4,830.2			120.0	69.0	189.0	4,641.2						455.9
Q3	I	Burtch 4	Sutherland - Harvey Ave	UAD2L	25	476.0			13.4	6.8	20.2	455.9						5,286.4
Q3	I	Clement 1	Ellis - Graham	UAD4L	30	5,778.4	949.0		464.4	78.6	543.0	5,286.4						4,404.2
Q1	I	Clifton	Clement - Mountain	UAD4L	30	4,635.8			166.1	65.5	231.6	4,404.2						22,617.1
Q4	I	Clement 2	Spall Road - Highway 33	RAD4L	35	46,131.3		11,862.4	11,305.4	336.4	11,641.8	22,617.1						1,381.7
Q4	I	Clement 3	Highway 33 - McCurdy Road	RAD4L	35	2,092.3			690.6	20.6	711.2	1,381.7						
Q4	I	Gordon 4	Old Meadows Rd - Lequime	UAD4L	30	795.9	793.9											1,294.5
Q2	I	Guisachan 2	Gordon - Nelson Rd	UAD4L	30	2,089.4			775.6	19.3	794.9	1,294.5						1,411.4
Q2	I	Guisachan 3	Ethel - Gordon	UAU2L	25	2,156.3			754.1	21.0	775.0	1,411.4						781.5
Q2	I	Hollywd 3	McCurdy Road - Stremel	UAU2L	25	1,737.2	434.3		509.7	11.6	521.4	781.5						2,139.7
Q2	I	Hollywd 4	Stremel - Highway 97	UAU2L	25	4,686.6	1,171.6		1,343.4	31.8	1,375.2	2,139.7						21.7
Q2	I	Hollywd Bridge - Francis Cr.	Francis Creek - Crossing	UAU2L	25	34.9			12.8	0.3	13.1	21.7						1,639.7
Q2	I	Hollywd 5	Highway 97 - Railway Track	UAU2L	25	3,443.7	860.9		918.7	24.4	943.1	1,639.7						

Target Quarte Sect		NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	By Devlp'r	Highways Assist	Total Existing Benefit	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC's	A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
										480		18,507	43	2,177	891	1,327	3,148	18,507
			Growth Units															
Q2	I	Hollywd Bridge - Mill Cr.	Mill Creek - Crossing	UAU2L	25	1,052.2			386.1	9.8	395.9	656.3						656.3
Q2	I	Hollywd 6	Railway Track - Sexsmith Rd	UAU2L	25	578.2			224.0	5.2	229.2	349.0						349.0
Q4	I	Highway 33(1)	Clement 2 - Enterprise	RAD4L	35	4,307.4		1,435.8	974.7	27.8	1,002.5	1,869.1						1,869.1
Q4	I	Hwy Link-Gordon	Sutherland - Bernard	UAD4L	30	3,442.7			40.9	49.9	90.8	3,351.9						3,351.9
Q1	I	Hwy Link-Pand 3	Sutherland - Lawrence	UAD4L		3,000.0						3,000.0						3,000.0
Q1	I	Lakshr 3	Richter Street - Old Meadows Road	UAU2L	30	20,637.2	619.1		895.6	280.3	1,175.9	18,842.2						18,842.2
Q1	I	Lakshr Bridge - Mission Cr.	Mission Creek - Crossing	UAD4L	30	5,661.7	396.3		1,737.6	51.7	1,789.3	3,476.1						3,476.1
Q1	I	Lakshr Bridge - Wilson Cr.	Wilson Creek - Crossing	UAD4L	30	1,001.1				14.7	14.7	986.4						986.4
Q2	I	Lakshr 4	Lanfranco Road - Richter Street	UAU2L	30	4,224.4	1,394.1		108.1	39.9	148.0	2,682.3						2,682.3
Q4	I	McCurdy 1	Dilworth - COMC	RAU2L	30	1,264.6				18.5	18.5	1,246.1						1,246.1
DC	I	McCurdy 2 (Dev Credit)	COMC - Highway 97	UAU2L	30	705.4						705.4						705.4
Q3	I	Pandosy 1	Raymer - Rose	UAU2L	20	3,701.6			1,303.3	35.1	1,338.5	2,363.1						2,363.1
Q3	I	Richter 1	Sutherland - KLO	UAU2L	20	7,173.1			441.8	98.7	540.4	6,632.7						6,632.7
Q4	I	Ridge	Cara Glen Way - Union Road	UAU2L	20	20,415.8	20,415.8											
Q3	I	Rio 1	Clifton Road - Clear Ponds Place	UCU2L	20	1,285.8	1,285.8											
Q2	I	Rose 1	Pandosy - Ethel	UAU2L	25	8,072.2	565.1		192.1	107.2	299.3	7,207.8						7,207.8
Q1	I	Rutland 2	Cornish Road - Old Vernon Road	UAD2L	30	4,369.4			278.7	60.0	338.7	4,030.7						4,030.7
Q1	I	Sexsmith 2	Snowsell - Glenmore Bypass	UAD2L	30	135.8			49.5	1.3	50.8	85.0						85.0
Q1	I	Sexsmith 3	Glenmore Bypass - Valley Road	UAD2L	25	1,649.8	659.9		480.2	7.5	487.7	502.2						502.2
Q1	I	Sexsmith 5	Longhill - Rutland Road	UAD4L	30	12,608.4	3,782.5		710.1	118.9	829.0	7,996.9						7,996.9
						196,682.7	35,373.6	13,256.2	25,907.3	1,732.3	27,639.6	120,169.3						120,169.3
		ACTIVE TRANSPORTATION																
Q3	*B	Lakshr 1 - AT	Dehart Rd - Vintage Terrace			415.6			305.1	1.6	306.7	108.9		108.9				
Q3	*B	Lakshr 2 - AT	Old Meadows - DeHart			459.4			337.2	1.8	339.0	120.4		120.4				
Q3	E	Airport - AT	Hollywood Road - Highway 97	UCD2L	30	175.0	17.5		115.6	0.6	116.2	41.3					41.3	
Q1	E	John Hindle 1 - AT	Glenmore Rd - Station 11+340			586.3			430.3	2.3	432.6	153.7					153.7	
Q1	E	John Hindle 2 - AT	Station 11+340 - Station 11+900			245.0			179.8	1.0	180.8	64.2					64.2	
Q1	E	John Hindle 3 - AT	Station 11+900 - Station 12+300			175.0			128.5	0.7	129.1	45.9					45.9	
Q1	E	John Hindle 4 - AT	Station 12+300 - Station 12+750			196.9			144.5	0.8	145.3	51.6					51.6	
Q2	E	Hollywd 7 - AT	Sexsmith Road - Appaloosa			153.1			112.4	0.6	113.0	40.1					30.1	10.0
Q4	E	Hollywd 8 - AT	Appaloosa - Quail Ridge			1,925.0			1,413.0	7.5	1,420.5	504.5					378.4	126.1
Q2	I	Abbott - AT	Rose - Lakeshore	UCU2L	20	10,978.1			8,057.9	42.8	8,100.7	2,877.4						2,877.4
Q3	I	Casorso 3 -AT	Barrera - KLO	UCU2L	20	4,241.4			3,113.2	16.5	3,129.8	1,111.7						1,111.7
Q3	I	Casorso 4 - AT	KLO - Raymer		6	485.4			356.3	1.9	358.2	127.2						127.2
Q1	I	Ethel 1 - AT	Clement - Lawson	UCU2L	20	3,003.7			2,204.7	11.7	2,216.4	787.3						787.3
Q1	I	Ethel 2 - AT	Lawson - Springfield	UCU2L	20	4,026.3			2,955.3	15.7	2,971.0	1,055.3						1,055.3
Q1	I	Ethel 3 - AT	Springfield - Morrison	UCU2L	20	2,966.5			2,177.4	11.6	2,189.0	777.5						777.5
Q1	I	Ethel 4 - AT	Morrison - Raymer	UCU2L	20	2,383.1			1,749.2	9.3	1,758.5	624.6						624.6
Q2	I	Glenmore 3 - AT	Clement - High	UAD4L	30	5,743.3			4,215.6	22.4	4,238.0	1,505.3						1,505.3
Q2	I	Glenmore 4 - AT	High - Dallas	UAD4L	30	7,001.0			5,138.7	27.3	5,166.0	1,835.0						1,835.0
Q2	I	Glenmore 5 - AT	Scenic - EW Connector	RAU2L	30	4,036.5			2,962.8	15.7	2,978.5	1,058.0						1,058.0
Q2	I	Hollywd 3 - AT	McCurdy Road - Stremel			157.5			115.6	0.6	116.2	41.3						41.3
Q2	I	Hollywd 4 - AT	Stremel - Highway 97			363.1			266.5	1.4	267.9	95.2						95.2
Q2	I	Hollywd 5 - AT	Highway 97 - Railway Track			196.9			144.5	0.8	145.3	51.6						51.6
Q2	I	Hollywd 6 - AT	Railway Track - Sexsmith Road			98.4			72.3	0.4	72.6	25.8						25.8
Q2	I	Hollywd 9 - AT	Hollydell - Hwy 33	UAU2L	25-30	3,199.1			2,348.1	12.5	2,360.6	838.5						838.5
Q2	I	Hollywd 10 - AT	Hwy 33 - McCurdy	UAU2L	24-25	1,716.4			1,259.8	6.7	1,266.5	449.9						449.9
Q2	I	Hollywd 11 - AT	Springfield - Mission Creek	UCU2L	20	67.6			49.6	0.3	49.9	17.7						17.7
Q2	I	Houghton 1 - AT	Nickel - Rails w Trails	UCU2L	20	4,164.8		1,374.4	2,048.2	10.9	2,059.1	731.4						731.4
Q2	I	Houghton Overpass - AT	Overpass @ Hwy 97			3,000.0			2,202.0	11.7	2,213.7	786.3						786.3
Q2	I	Houghton 2 - AT	Hllywd - Rutland	UCU2L	20	3,880.4	582.1		2,421.0	12.9	2,433.8	864.5						864.5
Q3	I	KLO 1 - AT	Abbott - Pandosy	UCU2L	20	726.4	508.5		160.0	0.8	160.8	57.1						57.1
Q3	I	KLO 2 - AT	Pandosy - Okanagan College	UCU2L	25-30	2,185.1			1,603.9	8.5	1,612.4	572.7						572.7
Q3	I	Lake 1 - AT	Pandosy - Abbott	UCU2L	10-20	1,289.9			946.8	5.0	951.8	338.1						338.1
Q4	I	Leckie 1 - AT	Rails w Trails - Dilworth		10	379.7			278.8	1.5	280.2	99.5						99.5
Q4	I	Leckie 2 - AT	Dilworth - Enterprise	UCU2L	25	1,473.8			1,081.8	5.7	1,087.5	386.3						386.3
Q4	I	Leckie 3 - AT	Enterprise - Springfield Rd.	UCU2L	24	2,367.9			1,738.1	9.2	1,747.3	620.6						620.6

(2010 Dollars X 1000)

04/12/2011

(2010 Dollars X 1000)

Target Quarte Sect		NAME	LOCATION	Cross Sctn	RoW (M)	TOTAL CAPITAL COSTS	NON DCC REVENUE SOURCES: By Devlp'r	Highways Assist	Total Existing Benefit	Secondary Suites (Taxation)	Grand Total Paid By Taxation	NET FOR DCC BASED CALC's	DCC SECTOR ALLOCATIONS: A S.E. Kelowna	B South Mission	C NE of Inner City	D Hwy 33	E North of Inner City	I COMMON
			Growth Units:							428		16,307	42	2,117	891	1,857	2,146	16,307
Q1	I	Lakshr 3 - AT	Cook - Old Meadows Road	UAU2L		1,190.0			873.5	4.6	878.1	311.9						311.9
Q2	I	Lakshr 4 - AT	Lanfranco Road - Richter Street	UAU2L		148.8			109.2	0.6	109.8	39.0						39.0
Q1	I	Rails w Trails - AT	Spall - Houghton 1		10	4,398.7			3,228.7	17.1	3,245.8	1,152.9						1,152.9
Q2	I	Rose 1 - AT	Pandosy - Ethel			262.5			192.7	1.0	193.7	68.8						68.8
Q2	I	Sutherland 1 - AT	Hwy 97 - Gordon	UCU2L	20	6,405.5			4,701.6	25.0	4,726.6	1,678.9						1,678.9
Q2	I	Sutherland 2 - AT	Gordon - Lake	UCU2L	20	5,056.0			3,711.1	19.7	3,730.8	1,325.2						1,325.2
		TOTAL ACTIVE TRANSPORTATION				91,935.3	1,108.1	1,374.4	65,651.6	348.7	65,999.7	23,443.1		239.3			765.1	22,440.8
		Annual MOTH										(1,000.0)						(3,000.0)
		Subtotal A				398,481.8	50,946.2	26,604.0	104,292.7	2,348.5	106,641.2	214,290.4	6,274.1	36,370.5	5,488.9	10,693.3	9,188.7	146,274.9
		Carry Over (2009-12-31 Reserve Balance):										(14,816.4)	(6,255.8)	(1,821.8)	(46.5)	(3,856.6)	(1,350.8)	(1,485.0)
		Subtotal B				398,481.8	50,946.2	26,604.0	104,292.7	2,348.5	106,641.2	199,474.0	16.3	34,548.7	5,442.4	6,836.7	7,837.9	144,789.9
		Subtotal C				398,481.8	50,946.2	26,604.0	104,292.7	2,348.5	106,641.2	199,474.0	16.3	34,548.7	5,442.4	6,836.7	7,837.9	144,789.9
						1,994.7	Engineering/Administration					1,994.7	0.2	345.5	54.4	68.4	78.4	1,447.9
						400,476.5	Subtotal D					201,468.8	18.4	34,894.2	5,496.8	6,905.1	7,916.3	146,237.8
							Less Assist					(30,220.4)	(2.7)	(5,224.1)	(824.5)	(1,035.8)	(1,187.4)	(21,935.7)
							Total for DCC					171,248.4	15.7	29,670.1	4,672.3	5,869.3	6,728.9	124,302.2

		A	B	C	D	E
Residential 1:	Sector	347	14,009	6,762	3,542	3,136
	Common	7,530	7,530	7,530	7,530	7,530
	Total Roads	7,878	21,540	14,292	11,072	10,666
Residential 2:	Sector	327	13,169	6,356	3,329	2,948
	Common	7,079	7,079	7,079	7,079	7,079
	Total Roads	7,405	20,247	13,435	10,408	10,026
Residential 3:	Sector	233	9,388	4,530	2,373	2,101
	Common	5,045	5,045	5,045	5,045	5,045
	Total Roads	5,278	14,432	9,576	7,419	7,147
Residential 4:	Sector	219	8,826	4,260	2,231	1,976
	Common	4,744	4,744	4,744	4,744	4,744
	Total Roads	4,963	13,570	9,004	6,976	6,720
Residential 5 - per Sq Mtr: (56 sq mtrs or less):	Sector	3	123	59	31	28
	Common	66	66	66	66	66
	Sector	69	189	126	97	94
Commercial - per Sq Mtr:	Sector	1	46	22	12	10
	Common	25	25	25	25	25
	Total Roads	26	71	47	37	35
Industrial - per Hectare:	Sector	858	34,603	16,701	8,749	7,746
	Common	18,600	18,600	18,600	18,600	18,600
	Total Roads	19,458	53,203	35,301	27,349	26,346
Institutional - per Sq Mtr:	Sector	1	46	22	12	10
	Common	25	25	25	25	25
	Total Roads	26	71	47	37	35

CITY OF KELOWNA
2030 WATER SERVICING PLAN & FINANCING STRATEGY (2010)
COST SHARING MODEL

EXHIBIT "B" - WATER

(2010 Dollars x 1000)

Sect	Target Year	PROJECT	DESCRIPTION	TOTAL CAPITAL COST	NON-DCC REVENUE SOURCES				NET FOR DCC CALC'S	DCC SECTOR ALLOCATIONS		
					By Devlp'r	Benefit Existing	Oversize	Secondary Suites		A Central	B South Mission	D Clifton
			Total Growth Units:					144	8,702	4,788	2,102	1,812
		DEVELOPER CREDIT		245.0				0.8	244.3			244.3
A	2010	CAPOZZI FIRE FLOW	Commercial fire flow N&S of Truswell	264.0	264.0							
A	2030	CRWFRD RES	Upper Crawford Reservoir Expansion	1,050.0	1,050.0							
A/D	2011	RYL & MNTN MAIN	Knox Resevoir - Skyline PS	6,476.0				20.8	6,454.2	4,905.2		1,549.0
A	2025	PZ STRG UPGRADE	PZ 419 Storage Upgrade	5,586.0				17.9	5,568.1	5,568.1		
A	2016	ETHEL MAIN	Ethel St. (Weddell Pl - Clement)	551.0				1.8	549.2	549.2		
A/D	2020	KNOX MOUNTAIN TRANS	Popular Pt PS - Knox Reservoir	3,538.0				11.3	3,526.7	2,680.3		846.4
D	2010	GRAINGER RESEVOIR	Grainger Reservoir Expansion	1,424.0	1,424.0							
D	2010	CARAGLEN FIRE FLOW	Caraglen prv to Alameda Ct	651.0				8.3	642.7			642.7
D	2010	CLIFTON MAIN UPGR.	Clifton Main Upgrade	1,542.0		724.7		10.5	806.8			806.8
D	2010	SOUTHCREST TO WESTPOINT TRANS	Adams Res-Sthcrst Res-Wstpnt Res	4,496.0		4,496.0						
B	2020	ADAMS TO SOUTHCREST	Adams to Southcrest	5,814.0		4,244.2		1.2	1,568.6		1,568.6	
B	2013	FROST PUMPSTATION	Frost Pump Station and Res Upgrade	2,698.0	2,698.0							
B	2015	CEDAR CRK TRANS - STAGE 2	Cedar Ck PS, Stellar PS	11,336.0			11,335.0					
B	2020	ADAMS RESERVOIRS - STAGE 2	Late comer as ESA	1,200.0			1,200.0					
B	2011	CEDAR CRK TRANS STAGE 1	Adams Res - Quichena & McCarren	899.0		786.4		0.1	112.5		112.5	
B	2011	ADAMS UV DISINFECTION	Stage 1 UV	6,199.0		6,199.0						
B	2011	CEDAR CRK TRANS - Stage 1	Cedar Pump Upgrade (Stellar Improv.)	1,893.7		927.9		0.8	965.0		965.0	
D	2025	SKYLINE SUPPLY MAIN	Skyline Supply Main Upgrade	1,542.0		524.3		13.0	1,004.7			1,004.7
D	2011	SKYLINE PS	High Rd & Clifton Rd	323.0				4.1	318.9			318.9
A	Annl	ANNL OS	Annual Oversizing Component	1,200.0				3.8	1,196.2	1,196.2		
			SUBTOTAL A	58,925.7	5,436.0	17,902.6	12,535.0	94.5	22,957.7	14,899.0	2,646.1	5,412.7
			Carry Over(2010-01-01 Reserve Balances)						(10,303.8)	(10,154.2)	(1,202.0)	1,052.4
			SUBTOTAL B	58,925.7	5,436.0	17,902.6	12,535.0	94.5	12,653.9	4,744.8	1,444.1	6,465.1
			Engineering/Administration @ 1%						126.5	47.4	14.4	64.7
				58,925.7					12,780.4	4,792.2	1,458.5	6,529.7
			Less Assist @ 1%						(127.8)	(47.9)	(14.6)	(65.3)
			Total for						12,652.6	4,744.3	1,443.9	6,464.4

NET UNIT DCC FOR:			
Residential 1:	998	679	3,552
Residential 2:	668	455	2,380
Residential 3:	479	326	1,705
Residential 4:	339	231	1,208
Residential 5 - per sq m (56 sq m or less):	5.01	3.41	17.85
Commercial - Per Sq. Mtr.:	4.12	2.81	14.68
Industrial - Per Hectare:	6,904	4,698	24,578
Institutional - Per Sq. Mtr.:	4.12	2.81	14.68

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CITY OF KELOWNA

2030 WASTEWATER TRUNKS PLAN & FINANCIAL STRATEGY (2010)

COST SHARING MODEL

EXHIBIT "C" WASTEWATER TRUNKS

(2010 Dollars x 1000)

Target Quarter	PROJECT	FROM - TO	TOTAL CAPITAL COST	NON DCC REVENUE SOURCES			NET FOR DCC CALC'S	ALLOCATIONS	
				By Devlp'r	Benefit Existing	Secondary Suites		NOT South Mission	South Mission
		Total Growth Units:				365	15,648	13,508	2,140
	O/S MS1 LKSHR	Outstanding Developer Credit	19.4			0.0	19.4		19.4
	Byrns Baron Trunk	Long Term Financing	1,433.2			22.6	1,410.6	1,410.6	
cmplt	CROSS RD 6B	Glenmore - Valley	891.7	360.0		8.4	523.3	523.3	
2	KLO	KLO - Swordy	588.0			9.3	578.7	578.7	
1	GYRO FM	Gyro LS - KPCC	1,552.0			3.9	1,548.1	309.6	1,238.5
1	RAYMER LS	@ Curtis	638.0			10.0	628.0	628.0	
1	LAKESHORE TRUNK	Old Meadows to KPCC	10,881.0		4,809.4	15.3	6,056.3	1,211.3	4,845.0
2	AIRPORT GRAVITY	Bulman - Airport	3,970.0		2,708.0	19.9	1,242.1	1,242.1	
4	GYRO LS	Lakeshore - Swordy	1,274.0		240.8	16.3	1,017.0	1,017.0	
3	BYRNS/BARON - Ph 2	Byrns to WWTF	7,789.3			122.6	7,666.7	7,666.7	
3	WATER ST. FM	Pandosy to Ethel	465.0			7.3	457.7	457.7	
2	GUY LS	Guy@Bay	836.0		799.0	0.6	36.4	36.4	
4	RUTLAND TRUNK	Ziprick to Houghton	1,211.0			19.1	1,191.9	1,191.9	
3	KINNICKINNICK	Shayler - 1220 m North of Scenic	1,980.7	1,780.7	200.0				
4	GLENMORE CONNECTI	Cross - 200 m. North of Scenic	1,792.0	1,592.0	200.0				
3	ROSE AVE LS	Rose Ave @ Hospital	1,200.0	1,200.0					
	OVERSIZE	Oversize Component - $60,000/y	1,200.0			18.9	1,181.1	1,181.1	
		SUBTOTAL A	37,721.3	4,932.7	8,957.2	274.0	23,557.4	17,454.5	6,102.9
		Carry Over(2010-01-01 Reserve Balances)					(2,005.9)	23.4	(2,029.3)
		SUBTOTAL B	37,721.3	4,932.7	8,957.2	274.0	21,551.5	17,477.9	4,073.6
	215.5	Engineering/Admin				1.00%	215.5	174.8	40.7
	37,936.8						21,767.0	17,652.7	4,114.3
	Less Assist	@				1.00%	(217.7)	(176.5)	(41.1)
	Total for DCC						21,549.3	17,476.2	4,073.2

NET UNIT DCC FOR:

Residential 1:	1,294	1,903
Residential 2:	1,074	1,580
Residential 3:	724	1,066
Residential 4:	699	1,028
Residential 5 - per sq m (56 sq m or less):	10.2	15.0
Commercial - Per Sq. Mtr.:	5.35	7.87
Industrial - Per Hectare:	8,953	13,171
Institutional - Per Sq. Mtr.:	5.35	7.87

CITY OF KELOWNA

2030 WASTEWATER TREATMENT PLAN & FINANCING STRATEGY (2010)

COST SHARING MODEL

EXHIBIT "D" - WASTEWATER TREATMENT

Target Year	PROJECT	TOTAL PROJECT COST	(2010 Dollars x 1000) BENEFIT EXISTING	OVERSIZE (2030+)	SECONDARY SUITES	NET FOR DCC CALC'S
	Total Growth Units:				402	15,611
	KPCC Existing Debt Commitment	1,666.7			20.5	1,646.2
	WWTF - Phase 2 Plant Extension	52,192.8	8,332		539.3	43,321.2
	WWTF - Long Term Financing	11,216.8			137.9	11,078.8
2010	Existing Compost Plant Expansion	6,600.0	3,462.4		38.6	3,099.1
2016	Secondary Aeration Expansion	1,000.0	637.0		4.5	358.5
2022	Primary/Sec Aeration Expansion	6,000.0			73.8	5,926.2
2018	Land Acquisition - Compost Site	1,218.0			15.0	1,203.0
	WWTF Land Acquisition	5,600.0		5,600.0		
	SUBTOTAL A	85,494.2	12,431.7	5,600.0	829.5	66,633.0
	Carry Over(2010-01-01 Reserve Balances)					(8,516.0)
	SUBTOTAL B	85,494.2	12,431.7	5,600.0	829.5	58,117.0
	581.2 Engineering/Administration @ 1%					581.2
	86,075.3					58,698.2
	Less Assist @ 1%					(587.0)
	Total for DCC					58,111.2

NET UNIT DCC FOR:	
Residential 1:	3,723
Residential 2:	3,090
Residential 3:	2,085
Residential 4:	2,010
Residential 5 - per sq m (56 sq m or less):	29.40
Commercial - Per Sq. Mtr.:	15.38
Industrial - Per Hectare:	25,760
Institutional - Per Sq. Mtr.:	15.38

This schedule is conceptual and is subject to revision to meet future needs and conditions.

CITY OF KELOWNA

2030 PARKS ACQUISITION PLAN & FINANCING STRATEGY (2010)

COST SHARING MODEL

EXHIBIT "E" - PARKS

(2010 Dollars x 1000)

TYPE	ACQUISITIONS	TOTAL CAPITAL COST	GOV'T ASSIST	TAXABLE BENEFIT	SECONDARY SUITES	NET FOR DCC CALCULATIONS
Total Growth Units:					793	19,159
City	12 Hectares	51,547.5	5,400.0		1,624.1	44,523.3
Community	20 Hectares	27,226.7			958.2	26,268.5
Neighbourhood	23 Hectares	31,508.2			1,108.9	30,399.3
Recreation	40 Hectares	14,105.8			496.4	13,609.4
SUBTOTAL A	95 hectares	124,388.2	5,400.0		4,187.7	114,800.5
Carry Over (10-01-01 Reserve Balance - Committments)						(5,520.1)
SUBTOTAL B						109,280.4
1,092.8	Plus Administration/Engineering @				1.00%	1,092.8
1,092.8						110,373.3
Less Assist @					8.00%	(8,829.9)
Total for DCC						101,543.4

NET UNIT DCC FOR:	
Residential 1:	5,300
Residential 2:	5,300
Residential 3:	5,300
Residential 4:	5,300
Residential 5 - per sq m (56 sq m or less)	95.13

City of Kelowna

20 YEAR SERVICING PLAN AND FINANCING STRATEGY – 2030 REVIEW

SCHEDULES 1-5

Residential 1 - Single Family, Duplex - density to 15 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate						
	Roads	Water	Sewer Trunks	Treatment	Parks	Total	(+)(-)
City Centre (2011)	I 7,530	A 998	A 1,294	A 3,723	5,300	**18,844**	-8.6%
Current	I 9,176	A 1,757	A 1,562	A 3,044	5,069	**20,608**	
Clifton/Glen. Hghld (2011)	I 7,530	D 3,552	A 1,294	A 3,723	5,300	**21,398**	-2.3%
Current	I 9,176	D 3,054	A 1,562	A 3,044	5,069	**21,905**	
Glenmore Valley (2011)	I 7,530	GEID	A 1,294	A 3,723	5,300	**17,847**	-5.3%
Current	I 9,176	GEID	A 1,562	A 3,044	5,069	**18,851**	
Rutland (2011)	I 7,530	RWW	A 1,294	A 3,723	5,300	**17,847**	-5.3%
Current	I 9,176	RWW	A 1,562	A 3,044	5,069	**18,851**	
Hall Road (2011)	I 7,530	SEKID	A 1,294	A 3,723	5,300	**17,847**	-5.3%
Current	I 9,176	SEKID	A 1,562	A 3,044	5,069	**18,851**	
North East Rutland (2011)	C 14,292	BMID	A 1,294	A 3,723	5,300	**24,608**	1.8%
Current	C 14,505	BMID	A 1,562	A 3,044	5,069	**24,180**	
Hwy 33 - (2011)	D 11,072	BMID	A 1,294	A 3,723	5,300	**21,389**	-19.6%
Current	D 16,932	BMID	A 1,562	A 3,044	5,069	**26,607**	
University / Airport (2011)	E 10,666	GEID	A 1,294	A 3,723	5,300	**20,983**	-12.1%
Current	E 14,203	GEID	A 1,562	A 3,044	5,069	**23,878**	
McKinley (2011)	E 10,666	GEID	N/A	N/A	5,300	**15,966**	-17.2%
Current	E 14,203	GEID	N/A	N/A	5,069	**19,272**	
Southeast Kelowna (2011)	A 7,878	SEKID	N/A	N/A	5,300	**13,178**	-56.9%
Current	A 25,529	SEKID	N/A	N/A	5,069	**30,598**	
S.W. Mission (2011)	B 21,540	B 679	B 1,903	A 3,723	5,300	**33,145**	-5.6%
Current	B 23,743	B 1,289	B 1,979	A 3,044	5,069	**35,124**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 2 - Small Lot Single Family, Row Housing - density >15-35 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate						
	Roads	Water	Sewer Trunks	Treatment	Parks	Total	(+)(-)
City Centre (2011)	I 7,079	A 668	A 1,074	A 3,090	5,300	**17,210**	-1.2%
Current	I 7,341	A 1,178	A 1,297	A 2,526	5,069	**17,411**	
Clifton/Glen. Hghld (2011)	I 7,079	D 2,380	A 1,074	A 3,090	5,300	**18,922**	3.5%
Current	I 7,341	D 2,046	A 1,297	A 2,526	5,069	**18,279**	
Glenmore Valley (2011)	I 7,079	GEID	A 1,074	A 3,090	5,300	**16,542**	1.9%
Current	I 7,341	GEID	A 1,297	A 2,526	5,069	**16,233**	
Rutland (2011)	I 7,079	RWW	A 1,074	A 3,090	5,300	**16,542**	1.9%
Current	I 7,341	RWW	A 1,297	A 2,526	5,069	**16,233**	
Hall Road (2011)	I 7,079	SEKID	A 1,074	A 3,090	5,300	**16,542**	1.9%
Current	I 7,341	SEKID	A 1,297	A 2,526	5,069	**16,233**	
North East Rutland (2011)	C 13,435	BMID	A 1,074	A 3,090	5,300	**22,898**	11.7%
Current	C 11,604	BMID	A 1,297	A 2,526	5,069	**20,496**	
Hwy 33 - (2011)	D 10,408	BMID	A 1,074	A 3,090	5,300	**19,871**	-11.4%
Current	D 13,546	BMID	A 1,297	A 2,526	5,069	**22,438**	
University / Airport (2011)	E 10,026	GEID	A 1,074	A 3,090	5,300	**19,490**	-3.8%
Current	E 11,362	GEID	A 1,297	A 2,526	5,069	**20,254**	
McKinley (2011)	E 10,026	GEID	N/A	N/A	5,300	**15,326**	-6.7%
Current	E 11,362	GEID	N/A	N/A	5,069	**16,431**	
Southeast Kelowna (2011)	A 7,405	SEKID	N/A	N/A	5,300	**12,705**	-50.2%
Current	A 20,423	SEKID	N/A	N/A	5,069	**25,492**	
S.W. Mission (2011)	B 20,247	B 455	B 1,580	A 3,090	5,300	**30,672**	5.4%
Current	B 18,995	B 864	B 1,642	A 2,526	5,069	**29,096**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 3 - Row Housing & Up to 4 Story Apartments - density >35-85 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate						
	Roads	Water	Sewer Trunks	Treatment	Parks	Total	(+)(-)
City Centre (2011)	I 5,045	A 479	A 724	A 2,085	5,300	**13,633**	0.7%
Current	I 5,047	A 844	A 875	A 1,704	5,069	**13,539**	
Clifton/Glen. Hghld (2011)	I 5,045	D 1,705	A 724	A 2,085	5,300	**14,859**	4.9%
Current	I 5,047	D 1,466	A 875	A 1,704	5,069	**14,161**	
Glenmore Valley (2011)	I 5,045	GEID	A 724	A 2,085	5,300	**13,154**	3.6%
Current	I 5,047	GEID	A 875	A 1,704	5,069	**12,695**	
Rutland (2011)	I 5,045	RWW	A 724	A 2,085	5,300	**13,154**	3.6%
Current	I 5,047	RWW	A 875	A 1,704	5,069	**12,695**	
Hall Road (2011)	I 5,045	SEKID	A 724	A 2,085	5,300	**13,154**	3.6%
Current	I 5,047	SEKID	A 875	A 1,704	5,069	**12,695**	
North East Rutland (2011)	C 9,576	BMID	A 724	A 2,085	5,300	**17,685**	13.2%
Current	C 7,978	BMID	A 875	A 1,704	5,069	**15,626**	
Hwy 33 - (2011)	D 7,419	BMID	A 724	A 2,085	5,300	**15,528**	-8.5%
Current	D 9,313	BMID	A 875	A 1,704	5,069	**16,961**	
University / Airport (2011)	E 7,147	GEID	A 724	A 2,085	5,300	**15,256**	-1.3%
Current	E 7,811	GEID	A 875	A 1,704	5,069	**15,459**	
McKinley (2011)	E 7,147	GEID	N/A	N/A	5,300	**12,446**	-3.4%
Current	E 7,811	GEID	N/A	N/A	5,069	**12,880**	
Southeast Kelowna (2011)	A 5,278	SEKID	N/A	N/A	5,300	**10,578**	-44.6%
Current	A 14,041	SEKID	N/A	N/A	5,069	**19,110**	
S.W. Mission (2011)	B 14,432	B 326	B 1,066	A 2,085	5,300	**23,208**	7.6%
Current	B 13,059	B 619	B 1,108	A 1,704	5,069	**21,559**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Residential 4 - Apartments Greater Than 4 Storys - greater than 85 units per hectare - rate per unit

Comparison to current rates

GROWTH AREA	Sector / Rate						
	Roads	Water	Sewer Trunks	Treatment	Parks	Total	(+)(-)
City Centre (2011)	I 4,744	A 339	A 699	A 2,010	5,300	**13,092**	1.3%
Current	I 4,771	A 598	A 844	A 1,644	5,069	**12,926**	
Clifton/Glen. Hghld (2011)	I 4,744	D 1,208	A 699	A 2,010	5,300	**13,960**	4.4%
Current	I 4,771	D 1,038	A 844	A 1,644	5,069	**13,366**	
Glenmore Valley (2011)	I 4,744	GEID	A 699	A 2,010	5,300	**12,753**	3.4%
Current	I 4,771	GEID	A 844	A 1,644	5,069	**12,328**	
Rutland (2011)	I 4,744	RWW	A 699	A 2,010	5,300	**12,753**	3.4%
Current	I 4,771	RWW	A 844	A 1,644	5,069	**12,328**	
Hall Road (2011)	I 4,744	SEKID	A 699	A 2,010	5,300	**12,753**	3.4%
Current	I 4,771	SEKID	A 844	A 1,644	5,069	**12,328**	
North East Rutland (2011)	C 9,004	BMID	A 699	A 2,010	5,300	**17,013**	12.7%
Current	C 7,543	BMID	A 844	A 1,644	5,069	**15,100**	
Hwy 33 - (2011)	D 6,976	BMID	A 699	A 2,010	5,300	**14,984**	-8.4%
Current	D 8,805	BMID	A 844	A 1,644	5,069	**16,362**	
University / Airport (2011)	E 6,720	GEID	A 699	A 2,010	5,300	**14,729**	-1.4%
Current	E 7,385	GEID	A 844	A 1,644	5,069	**14,942**	
McKinley (2011)	E 6,720	GEID	N/A	N/A	5,300	**12,020**	-3.5%
Current	E 7,385	GEID	N/A	N/A	5,069	**12,454**	
Southeast Kelowna (2011)	A 4,963	SEKID	N/A	N/A	5,300	**10,263**	-44.1%
Current	A 13,275	SEKID	N/A	N/A	5,069	**18,344**	
S.W. Mission (2011)	B 13,570	B 231	B 1,028	A 2,010	5,300	**22,139**	7.6%
Current	B 12,346	B 438	B 1,069	A 1,644	5,069	**20,566**	

BMID Serviced by Black Mountain Irrigation District
SEKID Serviced by South East Kelowna Irrigation District
RWW Serviced by Rutland Water Works
GEID Serviced by Glenmore Ellison Irrigation District
N/A Not Applicable as Sewer will not be in that area within the 20 Year period

Updated Development Cost Charge Rates

ARTERIAL ROADS

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A SE Kelowna	Sector B South Mission	Sector C NE of Inner City	Sector D Hwy 33	Sector E N of Inner City	Sector I Inner City
Residential 1	7,878	21,540	14,292	11,072	10,666	7,530
Residential 2	7,405	20,247	13,435	10,408	10,026	7,079
Residential 3	5,278	14,432	9,576	7,419	7,147	5,045
Residential 4	4,963	13,570	9,004	6,976	6,720	4,744
Residential 5 - Per Sq. Mtr.	69	189	126	97	94	66
Commercial - Per Sq. Mtr.	26	72	47	36	35	25
Institutional A - Per Sq. Mtr.	26	72	47	36	35	25
Institutional B - Per Sq. Mtr.	0	0	0	0	0	0
Industrial - Per Hctr	19,458	53,203	35,301	27,349	26,346	18,600
Current Residential 1 Rate	25,529	23,743	14,505	16,932	14,203	9,176

WATER

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A Inner City	Sector B South Mission	Sector D Glenmore/ Clifton
Residential 1	998	679	3,552
Residential 2	668	455	2,380
Residential 3	479	326	1,705
Residential 4	339	231	1,208
Residential 5 - Per Sq. Mtr.	5.0	3.4	17.9
Commercial - Per Sq. Mtr.	4.1	2.8	14.7
Institutional A - Per Sq. Mtr.	4.1	4.1	4.1
Institutional B - Per Sq. Mtr.	4.1	2.8	14.7
Industrial - Per Hctr	6,904	4,698	24,578
Current Residential 1 Rate	1,646	1,292	2,943

Updated Development Cost Charge Rates

WASTEWATER TRUNK MAINS

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A Inner City	Sector B South Mission
Residential 1	1,294	1,903
Residential 2	1,074	1,580
Residential 3	724	1,066
Residential 4	699	1,028
Residential 5 - Per Sq. Mtr.	10.2	15.0
Commercial - Per Sq. Mtr.	5.3	7.9
Institutional A - Per Sq. Mtr.	5.3	7.9
Institutional B - Per Sq. Mtr.	5.3	7.9
Industrial - Per Hctr	8,953	13,171
Current Residential 1 Rate	1,562	1,979

WASTEWATER TREATMENT

Development Cost Charges Applicable to Development Within the Municipality

Development Type	Sector A All City
Residential 1	3,723
Residential 2	3,090
Residential 3	2,085
Residential 4	2,010
Residential 5 - Per Sq. Mtr.	29.4
Commercial - Per Sq. Mtr.	15.4
Institutional A - Per Sq. Mtr.	15.4
Institutional B - Per Sq. Mtr.	15.4
Industrial - Per Hctr	25,760
Current Residential 1 Rate	3,044

City of Kelowna

20 YEAR SERVICING PLAN AND FINANCING STRATEGY – 2030 REVIEW

ANNEX 2

ANNEX 2

OCP Feedback Form (#6) Summary
March 23, 2011

This tabulation reflects responses received from feedback forms distributed at OCP Open Houses held on February 17, 19, 21, and 23, 2011 as well as responses received on-line between February 17 and March 18, 2011. In total, 628 people completed the feedback form.

Q28. Parkland Acquisitions

	# Responses	% of Responses
Total	259	54%
Strongly Agree	152	32%
Somewhat Agree	37	8%
No Opinion	19	4%
Somewhat Disagree	12	3%
Strongly Disagree		
Total Responses	479	100%

Q29. Water priorities

	# Responses	% of Responses
Total	223	47%
Strongly Agree	158	33%
Somewhat Agree	69	15%
No Opinion	14	3%
Somewhat Disagree	9	2%
Strongly Disagree		
Total Responses	473	100%

Q30. Sewer Priorities

	# Responses	% of Responses
Total	204	43%
Strongly Agree	170	36%
Somewhat Agree	78	17%
No Opinion	13	3%
Somewhat Disagree	5	1%
Strongly Disagree		
Total Responses	470	100%

Q31. Transportation Networks

	# Responses	% of Responses
Total	193	42%
Strongly Agree	191	41%
Somewhat Agree	43	9%
No Opinion	23	5%
Somewhat Disagree	15	3%
Strongly Disagree		
Total Responses	465	100%

Written comments (open ended questions):

The following summary contains responses from feedback forms submitted at OCP Open Houses and on-line during the period between February 17 and March 18, 2011.

Notes: Typos/spelling/grammatical errors are as submitted by those completing the forms. Respondents were asked to provide details if they indicated disagreement with the proposed policies. In a few cases, respondents also provided details when they agreed with the proposed policies. All responses to the open-ended questions are included below.

Q28 Reasons cited for disagreeing with proposed policy for parkland acquisitions:

- I think requirements are on high side. Most small parks seem to get little except in urban areas.
- Parkland is not sustainable, and is not being maintained as it is.
- I support park acquistion, including use of taxation dollars. Also would like to ensure Devt charges are actually put toward park acquisition.
- 40
- Additional lakeshore lands should be obtained as they come available. Under no circumstances should lakeshore properties such as those proposed for the South Pandosy area be used for other than park with only limited commercial necessary to service park users.
- City should not see waterfront land. Consider developing an urban wildlife park with the Cedar Ave property on MOST of the land.
- Could be more.
- Developers should pay a higher proportion of costs for parks.
- Developing parks is important, but the construction should not pay for 92% of it. The new construction will not place this level of demand for new parks, and the assist level should be about 25%, not 5%.
- Dog parks? Would like to see more on lakefront, accessibility for all
- Don't know enough to answer intelligently sorry!
- Don't understand financial model but agree with other aspects.
- Emphasis on wilderness parks that are acceptable, not tiny cultivated urban parks.
- Enough already. Cedar Road should be a development with the linear park only.
- I see no need for the acquisition of more parkland at this time.
- I would rather see one really well designed, formal park in this city than 200+ mediocre parks.
- Increase to more than 2.2/1000

- Increased acquisition beyond that which is proposed is recommended.
- It is very important that as we add parks, we improve accessibility for all members of the family: including pets and kids.
- Just because a park is larger....does not make it automatically better. We need to think creatively about our small parks. They can be gems....and present opportunities to be used differently than larger parks.
- Linear parks do not encourage families with children. Once land is purchased they should NOT be sold to developers to finance development = ex. Cedar Park Ave! Larger parks not just linear. Even though it is difficult - more park should be purchased in the core area (than planned) considering designation in this area and if you want to encourage more people to live in this area.
- Make sure you have the science and input from impacted parties before taking any steps
- More dog parks on the water please!
- MUST support more "total access" to the lake...this is our greatest asset and access must be maintained
- Need more and more water front access
- need more dog parks downtown
- not necessary to increase size except by lakeshore
- Or more as some areas already behind
- Parkland is extremely expensive. Not reasonable that every person should have a park next door. If you want a park, look for a dwelling near a park??
- Parkland priorities do not match population growth projections.
- Parkland: Do not run lakeside parkland into pub sites.
- Parks are important, however, consideration must be given to more than just linear parks. Neighborhood parks for families, dog parks, and parks that are accessible to people with disabilities should have as much consideration and merit.
- Parks area always a positive for a community.
- parks cost money to buy and maintain, who is going to pay for more parks, we don't need any more in the City
- Partnerships.
- Somewhat deals with other comments I have made. I do think that the amount of parkland is too low. Some of the parks that you have shown on the map and surrounded by a 'service area' are pretty much useless as a meaningful recreational site.
- The designated amount of parkland per 1000 population seems low. Who determines this or is that what we happen to have now--- if so is it enough?
- Too late
- Use what we have acquired.
- Want more parks
- We could always use more cultivated wetlands, desert not 1/2 acre of land with a swing set.
- What a crock of ... City Hall has used tax dollars to buy land under the guise of using it for parkland only to turn it over to developers. Cedar Ave is a prime example of the fraud perpetrated by City Hall. If land is purchased a park land then it must be made into park land only
- Why is there a plan to acquire more parks when we have land at Cedar that could be used for park and is planned to be sold for development?
- consider obtaining more parkland downtown and in South Pandosy area

- "Service area" for existing parks only accounts for distance from the park not accessability. Looks good on a map but it doesn't reflect if a child can actually get to their neighbourhood park safely. I would love to see the city parks program input to the new Okanagan4kids.com website as they are going to catagorize all parks and give families an opportunity to comment on the play structures. This would be a fantastic opportunity for the City to comment and hear comments on what families think about their neihbourhood parks and how they get to them.
- Bike and path conectivity should be a high priority.
- Continually raising DCC's just drives the cost of housing upward. Developers will just pass the cost increases on to the consumer.
- core area seems like it may be optimistic to get 8 ha of land for parks!
- I hope that the City places lakefront properties as their top priority. Although very expensive, the lake is what makes the City an incredible place to live. And please start setting money aside for when the Mill in Sutherland Bay eventually goes.
- If you can't maintain it don't buy it.
- Keep a balance. Don't get too aggressive, be smart and sensitive to cost of the land acquired.
- Maintaining and expanding parks is vital and must be continued in developing areas (e.g. Kettle Valley).
- Must not trade, sell or lease any existing park land (i.e. Cedar Ave property) for any purpose but enjoyment of residents.
- Not when it involves peoples property
- Now that Glenmore is all houses want to develop 31ha of parkland the hosre is already out!!
- panels didn't open
- Parkland DCC's should not solely be funded from residential activity, but should be generated from multi-use, commercial, industrial and/or institutional development as well. There are uses (especially those that are institutional) that heavily rely on parkland space for their programming and compliment their uses. The same argument applies to commercial properties that benefit from attracting and retaining employees that have easy and relevant access to open space provisions (ie. downtown waterfront being a major attractor for business groups).
- Perhaps I'm reading the map wrong, but I believe the city should increase Parkland both along the waterfront and inside the core area.
- The lack of parkland adjacent to the lake is woefully inadequate and it seems like little attention is being paid to this long term need.
- The waterfront should be accessible to all, so I would give that priority. All overhead wiring should be put under ground along Lakeshore Road and the road itself should be more parklike aka the City's work along Abbott Road which is like a walk in a park.
- This is just another money grabbing area. I disagree with expanding the parks to "maximize the park experience" this is a lie, it really means "lets make parks appealing to all the rich tourists coming through Kelowna so that maybe the will purchase land"
- We must ensure that everyone pay proportionately. New development plays a large role in this. To place all the burden on new is not proportionate. Expansion or acqisition of lakefront and existing parks in existing neighbourhoods must be paid by taxation
- why should a parks DCC for a bachelor suite or one bedroom be the same as a large single family house?
- Yes please, more green/natural space!

Q29 Reasons cited for disagreeing with proposed policy for water priorities:

- Include provisions for dual distributions so that we are not treating the water that is used for outdoor use and agriculture. Consider bringing together all KJWC to help this.
- only for core area's
- 42 - what about ALR high usage
- Again, I believe that a water conservation system needs to be implemented as well.
- Agriculture does not lose any and you leave current irrigation in place.

- All expansion costs should be paid by developments, as taxpayers will have ongoing costs forever.
- All water districts within the City of Kelowna should be acquired by the City to enable a coordinated water development program.
- Allow Rutland water works to operate as a separate entity
- City-Wide Water Supply and Treatment for potable water! Separate out the irrigation from potable water supply.
- Could dual systems for agriculture/developed areas and grey water recycling systems be explored? We really should not need to irrigate lawns etc, with the same water we are treating to drink.
- DCC's must pay for ALL additions to the current system
- disagree with our dollars spent on pumping of water to new hig end residential s/u housing areas that are inaccessible to others
- High priority need for water/sewer development/management.
- I agree with the priorities but I wonder that there is really enough water.
- I don't understand this one.
- I support lower water rates for agriculture.
- It should accompany with water conservation policy, auditing, education. Installing agricultural use line separate from treated drinking water line.
- Make new developments pay.
- More emphasis on water use reduction needed especially on lawns. High users should pay for additional capacity while those willing to conserve and reduce the need for new infrastructure should benefit.
- Need to be considered in everything!
- Need tougher laws governing residential and commercial water use.
- New development should bear the majority of cost of new infrastructure development. Only replacement of existing infrastructure should be considered for funding from general revenue.
- Not enough information to comment.
- Per capita, we use well below the Canadian average (Kelowna's water use is well above the Canadian average). Perhaps continue working on rewarding those who conserve the most (water, yard, garbage, etc)
- The City has had a number of 5 year plans that never last beyond one year. The continued decrease in the water parcel tax lets undeveloped land & seasonal condos benefit from infrastructure costs that only the current consumers bear. Inequalities in the water fees are absurd.
- The DCC's should not be paying all the costs - the City collects taxes for projects too.
- The indicated priorities do not agree with the rest of the plans for development. Improving water supplies for outlying suburbs doesn't fit with focusing more growth into urban centers.
- the people who live higher up should contribute more to these upgrades
- There needs to be consideration for grey water usage, reduced water consumption in the form of xeriscaping and low-water usage toilets and home appliances.
- Very easy for the City to label and charge infrastructure costs to new development. Remember, not all new development is new residents, many new development areas are local residents who have been paying taxes for years and should be targeted because they want to build a new house
- Water must be preserved
- Why u/g Clifton? 0 new housing there.

- You need to try for more than 2.2hectares/1000. If Kelowna takes more water then it will be neither balanced nor equitable for the irrigation district.
- circumstances may dictate that the City has to pay for additional capacity if we wish an area to be developed and recover later from developers/property owners
- Focus should be highest on highest consumers. To enforce new water consumption policies on an already efficient market segment seems backwards.
- How does this water use plan mesh with the overall availability of water to all users in the valley. When do we cap new construction , without an offsetting reduction in per capita consumption.
- I think stricter penalties for excessive water use, limiting/alternating days for lawn watering, and more incentives for property owners to xeriscape should be implemented.
- Is there any thought to introducing a grey water system for landscape irrigation?
- Meeting Canadian drinking water standards is not even MENTIONED!!
- More burden should be placed on existing users based on the benefits of the upgraded and replaced infrastructure. Higher DCC's rates mean higher housing costs - this is not the answer.
- MUCH MORE PRESSURE NEEDS TO BE APPLIED AGAINST NON ESSENTIAL WATER USE! Penalties. Golf courses?!
- panels didn't open
- plan does not go far enough
- The city should be looking to take over the other water utilities to provide better service for all citizens
- There should be more planning closer to Lake Country as they are developing that area.
- While I think it is important to maintain water quality I think we should avoid increasing use. Like automobile traffic: if it's easy to use it gets used more. Increasing capacity increases volume.
- your other panels say you're building in the core but more of these projects are in the south

Q30 Reasons cited for disagreeing with proposed policy for sewer priorities:

- There is not sufficient consideration made to innovative decentralized solutions for areas that are not easily serviced.
- Go septic for all future SFR to limit growth and encourage sustainable waste water management, low flow devices.
- All expansion costs should be paid by developments, as taxpayers will have ongoing costs forever.
- as above
- As sewer becomes available all lakeshore properties should be required to connect to the sewer system.
- Cambie Rd area should be Priority #1 for sewer service
- Central Rutland #1 priority
- Central Rutland is long overdue area
- Consideration to reducing the load on sewer system by encouraging grey water use.
- DCC's must pay for ALL additions to the current system
- Has privatization of a new or portions of new requirements been considered? Like a toll road -- user pays
- How will this be paid for?
- I don't understand some of the terminology.
- It should be the same city wide.
- It would take some effort for anyone to have a decent opinion on this kind of thing, so I hope you don't take the largely uninformed opinions of survey-takers too seriously.

- Make sewer available to "smaller properties" where septic use is restricted or limited P.G.B areas.
- Manage growth to avoid
- Meetings - more small groups for concerns...
- Need to be considered in everything!
- New developers should pay for sewer and water extension (not our taxes)
- note - actual needs need to be confirmed and not just rely on design criteria as water usage is decreasing and promotion of using grey water should be addressed
- Please try to fix the waste management plant by KSS because kids have to run on that field and I have heard that poop comes up through the ground and onto the field.
- same points as with water
- Sewer should not be extended to those areas which are not intended for future development.
- Sexsmith Rd area is of concern.
- Should the new development areas pay more because the planning was poorly done?
- the people who live higher up should contribute more to these upgrades
- Waste water reclamation to reduce fresh water demands. Glenmore sports fields and Mission sports fields, ALR lands, etc.
- Why is Okaview prioritized before Rutland?
- You have to talk to those impacted and pre-inform them of grant proposal options. They may band together and agree to pay more for other upgrades while their street is ripped up i.e.: maybe not sidewalks, but 1/4 round curbs, etc.
- More burden should be placed on existing users based on the benefits of the upgraded and replaced infrastructure. Higher DCC's rates mean higher housing costs - this is not the answer.
- New development should be self funding. Old systems should be upgraded to lesson environmental impact and carbon footprint.
- panels didn't open
- There should be more planning further toward Lake Country so development can start from that end as well.
- We cannot afford to go on sewer. Septic tanks are better for the environment than sewers.

Q31 Reasons cited for disagreeing with proposed policy for transportation networks:

- Plan for the South Perimeter Ring Road to be extended through the Thomson Flats area to help relieve South Mission traffic being funnelled down onto Lakeshore Road
- More non-vehicular improvements....
- COMC 2 is needed now. Major congestion at Enterprise, Hwy 97 due to Clemment dead ending at Spall.
- I love your emphasis on my sustainable transportation, but . . . it needs to be more aggressive. Can you please implement a reginaol parking supply/pricing strategy - with the sea of free parking you will NEVER gets folks to get out of their car EVER! Or some sort of mileage tax based on their insurance - something to help them drive less!!! Panel 51 - Replace Glenmore to UBCO Link (grades, length are a BIG problem) with a Scenic Rd, Valley Rd N, Curtis Lake Rd route - shorter, existing route, best grades for peds/bikes, and away from traffic! And I do NOT agree with "balanced" funding for transportation - it should be about moving people first, not all about cars, or nothing will change. Be proactive and start providing better funding for transit, bikes, peds, and combined with parking/VKT tax you will see a shift start.
- This is a vague policy in light of the previous questions we answered. I thought there are already policies were in support of increasing infrastructure priorities with active and public transportation at the top. This panel gives me the impression that there will be a balance of priorites between all modes of transportation including cars. Why the conflict?

- Don't agree with use of Sutherland Ave as an active transportation corridor.
- Active and alternate transportation networks. Establish long term multi-corridors. Including north south connections, i.e. Benvoulin and Lakeshore
- Active transportation plan looks great, roads look ok.
- Agree in principle but will have to check DCC to see details.
- As long as there is still room to expand the road to more lanes, and the transportation networks don't get in the way of the added lane, I am in favor of transportation networks.

- Bike paths are great
- Casorso Rd/Bedford/Dehart intersection is very poor. Needs to be redesigned. Lots of accidents here.
- COMC - I do not support another 4 lane rd adjacent to highway. It will only encourage more trips by car
- Corner of Rutland Rd S at Springfield needs re-engineering - no one stops at the stop sign when turning right.
- DCC's must pay for ALL additions to the current system. Lake Ave is part of the Heritage Conservation area. The street is very narrow and only suited to foot traffic. It only services a single family area which is fully developed. There is no need to upgrade it and no room to do so. City Hall wanted to put in a sidewalk there last year but when someone finally left the Ivory Tower and measured the roadway it was found that a sidewalk was not possible between Abbott and Water. Doesn't City Hall read its own engineers reports???????
- Don't need to four-lane Clifton for local use. Most traffic can use Glenmore/Clement that is already four-lane and leave Clifton so that High and Mountain remain as local roads
- Ensure that COMPETENT DESIGNERS AND PLANNERS are employed to set guidelines. Remember the transit bus curb heights on Hwy 97 and double deck bus power line issues. We never utilized the 2 deck capacity
- Hwy 33 prov. influences most of our areas.
- I can't really see which areas the different roads run through.
- I think that the plan to provide alternative routes to ease congestion is at odds with your earlier stated plan to use congestion as a means of encouraging transit and active transportation, and limiting the expansion of transportation infrastructure for single occupant vehicles. Why is there a center turning lane envisioned for the western part of the east-west connector? Some of your active transportation corridors seem to have little connection to the origins and destinations neither of those who use this mode, nor to the geographical issues (like hills) that tend to discourage use of active modes.
- I want to know why so much attention is being given to the trans corridor and active corridor to the Tower Ranch. Other than the Ranch subdivision, there's nothing there.
- Lawrence bike lane
- Lots of traffic and trucks use Rutland Rd. It has to be upgraded.
- More commuter (bike) routes. Rails and trails aren't commuter (bike) friendly
- More of the same UNSAFE bike routes will be a waste of tax dollars, and will undermine all relevant goals.
- New development is unfairly been charged for transportation upgrades that benefit most residents. The unreasonable approach to DCC is a major factor in the high cost of lots in Kelowna. Developers only pass on the DCC in the price of the lots and residents end up paying more and the City is using this political vehicle as cash grab.

- No faith again... sidewalks that go nowhere, bike lanes along roads are not used... they crowd the sidewalk. Speed bumps on Byrnes and inconsistent speed limits on Benvoulin. What is the plan to complete what we have?
- non vehicle transportation - need to review options of having a "trail / pathway system separated from the road - as far as a total different alignment or route
- Rail to airport and UBCO
- Reduce thru traffic on Lakeshore!
- See #8
- Seems to be insufficient consideration to transportation implications when new developments are permitted. More separate bicycle paths sooner!
- Sexsmith 4-lane, recommend 2 land w/ centre
- Some of it is good. But there needs to be a proper bike route to the university - not just a lane on the side of a road.
- South Perimeter needs to connect to Chute Lake Road to get heavy logging truck traffic off Lakeshore and ease existing Lakeshore congestion.
- Spend on education. People don't understand how easy public transportation is.
- Strong need for increased public transport
- Strongly support 2 lanes and centre lane on Lakeshore Rd.
- The east-west connector needs to be routed closer to the University, and needs to join Harvey Ave. close to the Airport
- The planned bus routes are fine. Fix traffic rid of sync lights before adding options people won't or can't use (i.e.: b/c the city doesn't plow the sidewalk!)
- Too many road improvements.
- Way, way, way more left turn lights along Hwy 97/Harvey
- Why is there no provision for transit on McKenzie Rd
- Would like to see more frequent buses and upgrades to bus stops that permit identification of timing of next arriving bus, rather than wider network of infrequent buses.
- Would like to see MORE transit stops on Gordon to service the senior's facilities in the area of Gordon/Casorso.
- Yes, we should have increased active transportation corridors. But we can't JUST have sidewalks on main corridors like Richter (which doesn't have sidewalks now) but also all the side streets. We need safe walkways for our kids to cross these major thoroughfares.
- Your policy says 1) active 2) transit 3) goods etc. but your plan says SOV SOV SOV - more $ on sidewalks, bike lanes, off street paths, signal priority, HOV - less road expansion.
- suggest widening Ethel St. - main access to KGH should be via Springfield to Richter to Royal (push the street through)
- also need to look at bypass around Kelowna for flow thru traffice
- As a rule, the more roads the more cars and congestion. Even though I agree with the proposed plan, I would lead with a stronger vision. I suggest a "train Line" as stated earlier. Also, and this is very important, all overhead wiring along major transportation routes should be put under ground - Kelowna is a beautiful place but it is visually polluted.
- Burtch Road should be extrended to KLO.
- Designatin of "2 lane" doesn't contain enough information. Will there be large sidewalks with trees and a green verge? Will there be traffic calming measures? Will there be narrowed intersections to allow pedestrians to cross the road easily? I'm using Burtch road as an example, we don't need another wide but not pedestrian friendly road.
- Further focus on shifting budget to active transportation methods, and creating a culture where single-occupant vehicle congestion/delay is acceptable in favour of other forms of transportation, and encouraging densification of core areas.

- Futrure transportation will go further than your boundaries.
- Hwy97 has to many conflicting uses, goods and services, commuter, shopping districts, business districts, commercial retail, pedestrians. Much like a dogs breakfast. It is the sine of the netowrk, how do you effectively plan a road improvement plan without addressing the real problem? The active transportation plan is a good idea, but you can't afford it because it is not well planned out, the value of land makes this initiative cost prohibitive.
- Lakeshore Road needs four lanes
- Living in a dream world where transit and walking is the solution
- More burden should be placed on existing users based on the benefits of the upgraded and replaced infrastructure. Higher DCC's rates mean higher housing costs - this is not the answer.
- Need to re-define "core area". Urban centers? What radius beyond defined urban centers? Corridors for community/tourist access - eg. wineries, beaches, parks, golf - that is outside of urban centers. Transportation to these high vulume areas would e applauded.
- panels didn't open
- Recognize true cost financially and to the environment and carbon footprint of all systems developed and supported. This must be examined / considered beyond the 20 year window. Develop a per capita measure and keep a running total impact measurement. Looking to improve. Kelowna should strive to be a model semi arid climate low impact city. Efficiencies discussed above to lower impact of transportation.
- Should be less of a focus on active transportation
- The 4 laneing of Benvoulin is going to create serious traffic volume past the Catholic Church. At the present time this spot is an extremely dangerous exit-entry. Please create a safe means of getting out of the Church yard for those trying to travel south. Also a safe means of getting into the Church Yard for those traveling South. The future for this Church will likely include an Old Folks Home as well as the present development of the main offices for the Nelson Diocese. I am also concerned with the plans to 4 lane the extension on COMC Clement etc. flowing North. The extreme cost to finance a second bridge and that intrusion through residential property is a legacy that I do not like put on my grandchildren. The COMC will increasingly get opposition from those who want to protect the swamp lands. For a tenth or less cost, a raising of Highway 97 on Harvey Ave. to Gordon Drive would very efficiently look after the truck traffic now that we have the 6 + laning of Highway 97. It is interesting to see the joining of Highway 33 to COMC to allow trucks to go to the commercial area of North Kelowna.
- the EWC looks like a waste of agricultural land and adds substantially to cycling time from the downtown core (where students live). A bicycle path does not have to depend on the presence of a road. In Holland many, small-eco-footprint cycle paths (not asphalt or concrete) go through agricultural land. Don't build huge wide cycle paths like small roads. Too expensive and environmentally unsustainable.
- The Mission area needs to have improved service as well.
- There should be at least 1 full additonal four lane roads running east - west and at least 1 full additonal four lane roads running south and north. Current plan shows pockets of 4 lanes. Left turning lanes should be put to use as much as possible along with left turning lights. Active transport routes should include Bernard, Pandosy (downtown through to south) Water and Sunset.
- THIS TRANSPORTATION PLAN MUST INCLUDE LIGHT RAIL!
- Use the dcc for what they were inteneed for
- We need more emphasis on active transportation networks.
- You've got to have a city by-pass for through traffic. Somehow that has to be accomplished - - 2nd bridge at least and a partial by-pass