



City of Richmond

Report to Committee

To: Finance Committee
From: Andrew Nazareth
General Manager, Business and Financial Services

to Finance - Oct 19, 2006
Date: October 17, 2006

File: 03-0970-01/2007

Jeff Day, P. Eng., General Manager,
Engineering & Public Works

Re: 2007 Utility Budgets

Staff Recommendation

1. That the 2007 Utility Expenditure Budgets outlined in Option 3 on the staff report dated September 30, 2006, from the Managers of Revenue, Water, Sewerage & Drainage, and Fleet & Environmental Programs, be approved as the basis for establishing the 2007 Utility Rates.
2. That staff be directed to report directly to Council with the necessary amendment bylaws to bring into effect the proposed Sewer Connection Charges, amendments to the Waterworks and Water Rates Bylaw and the 2007 Utility Rates option recommended by Committee.

Andrew Nazareth
General Manager, Business and
Financial Services
(4365)

Jeff Day, P. Eng.
General Manager, Engineering
& Public Works
(4019)

FOR ORIGINATING DIVISION USE ONLY					
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO	YES	NO
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Staff Report

Origin

This report presents the recommended 2007 utility budgets and rate bylaws for Water, Sewer, Drainage and Solid Waste & Recycling. The utility rates must be established by December 31, 2006 to enable billing in 2007.

Analysis

Key factors contributing to the utility budget increases in 2007 include:

- GVRD regional water rates have increased 23.4% or \$2.77 million in 2007.
- GVRD regional sewer rates have increased 9.8%, or approximately \$0.9 million.
- Strong economic conditions have impacted labour and materials costs in the construction sector, thereby resulting in above average increases for construction materials and services.
- The cost for treating and disposing of saturated soils has increased considerably due to a reduction in available landfill space for these materials.

Long-term infrastructure planning to replace ageing/deteriorating infrastructure will continue to drive budget and rate increases until such time as a sustainable replacement fund is reached. Council has adopted a staged program to increase water and sewer reserves to support infrastructure replacement. The 2007 budget figures presented represent options for increases in the sewer reserves for infrastructure replacement. No increase is proposed for the water reserves in 2007 due to the considerable increase in regional water purchase costs.

Recognizing these competing challenges, staff have presented various budget and rate options for 2007, including discretionary and non-discretionary increases. These options are presented for each of the utility areas in the following sections.

Water

2007 Water Budget - Options				
<i>Key Budget Areas</i>	<i>2006 Base Level Budget</i>	<i>Option 1 Non-Discretionary Increases</i>	<i>Option 2 Non-Discretionary Plus Discretionary Increases with Partial Residential Metering Reserve Increase</i>	<i>Option 3 Non-Discretionary Plus Discretionary Increases with Recommended Metering Reserve Increase</i>
Operating Expenditures	\$6,471,500			
• Equipment/Fuel Increase		\$91,100	\$91,100	\$91,100
• Material/Supply Increase		\$124,600	\$124,600	\$124,600
• Wage Increase		\$197,600	\$197,600	\$197,600
• Power		\$800	\$800	\$800
• Contracts Security			\$12,600	\$12,600
Rate Stabilization Contribution	\$894,800	(\$894,800)	(\$894,800)	(\$894,800)
GVRD Water Purchases	\$11,833,000	\$2,767,000	\$2,767,000	\$2,767,000
Capital Program	\$5,500,000			
Residential Water Metering Program	\$1,491,200		\$254,400	\$508,800
Other Fiscal	\$1,000,000			
Total Incremental Increase	\$27,190,500	\$2,286,300	\$2,553,300	\$2,807,700
<i>Revenues:</i>				
<i>Apply Rate Levelling Fund¹</i>	<i>(\$683,000)</i>	<i>(\$561,800)</i>	<i>(\$561,800)</i>	<i>(\$561,800)</i>
<i>Investment Income</i>	<i>(\$650,000)</i>			
Net Budget	\$25,857,500			
Net Difference over 2006 Base Level Budget		\$1,724,500	\$1,991,500	\$2,245,900

¹By applying the City's rate levelling fund, the increase in water purchases is mitigated.

The increase in contracts under Options 2 and 3 represents the relative proportion of Water Services costs for Works yard security charges.

The budget presented above for all options reflects no monies being collected for rate stabilization in 2007. To offset the impact of the significant regional rate increase for water purchases, the 2007 budget includes a considerable increase in contribution from the water stabilization fund. This revenue transfer offsets the increase in water purchases by 45%. This is a strong reflection of Council's foresight in creating this important rate stabilization strategy.

Regional Issues

Regional District increases represent the major cost driver under all the options. The majority of these costs are for the drinking water treatment program. A new water filtration plant at the Seymour reservoir, scheduled for completion in 2007, is required to meet the new water quality treatment guidelines, introduced in 2001. Another significant driver to the GVRD rates is the ultra-violet disinfection plant at

the Coquitlam reservoir. Future annual increases from the GVRD are projected to be significantly reduced (10%) as the capital construction costs for the drinking water treatment plant are completed.

Impact on Water Rates

The impact of these various budget options on the water rates by customer class is as follows. The amount of the increase for each option is shown bracketed beneath the rate in italics.

<i>2007 Water Rates Options</i>				
<i>Customer Class</i>	<i>2006 Rates</i>	<i>2007 Option 1 Rate</i>	<i>2007 Option 2 Rate</i>	<i>2007 Option 3 Rate</i>
Single Occupant	\$309.40	Eliminated in 2007.		
Single Family Dwelling	\$372.37	\$418.92 <i>(\$46.55)</i>	\$422.64 <i>(\$50.27)</i>	\$426.36 <i>(\$53.99)</i>
Townhouse	\$304.83	\$342.93 <i>(\$38.10)</i>	\$345.98 <i>(\$41.15)</i>	\$349.03 <i>(\$44.20)</i>
Apartment	\$196.43	\$220.98 <i>(\$24.55)</i>	\$222.95 <i>(\$26.52)</i>	\$224.91 <i>(\$28.48)</i>
Metered Rate (\$/m ³)	\$0.7006	\$0.7391 <i>(\$0.0385)</i>	\$0.7461 <i>(\$0.0455)</i>	\$0.7531 <i>(\$0.0525)</i>

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimal increase necessary to sustain operations.
- Does not meet our long-term residential water metering program goal for Multi-Family units.

Option 2

- This option has a lesser impact on the budget and rates than Option 3.
- Provides for a partial increase in the residential water metering program of \$254,400.

Option 3

- Has a higher impact on the budget and rates charged to owners.
- Recommended option because it meets all objectives for the Multi-Family portion of the residential water metering program increasing the program by \$508,800.

Water Amending Bylaws

In addition to the proposed rate amendments as outlined above, other changes to the Waterworks and Water Rates Bylaw are proposed. Included is a proposed amendment to clarify responsibility between YVR and the City of Richmond for watermains situated under the Canada Line tracks. These responsibilities are outlined in a proposed agreement dated July 4, 2006, outlined in Attachment 1. Key among these is agreement for YVR to maintain a large section of watermain for a period of 5 years, after which the costs will be shared equally between YVR and the City. Barring any concerns regarding this arrangement, a recommendation to authorize execution of the agreement will be included in the amending bylaws presented to Council.

Other amendments are primarily administrative in nature to clarify definitions, fine-tune processes, i.e. require application for plumbing permit in relation to a water connection; modify the value of works where a new meter must be installed, minor increases in fees to reflect actual costs and other clarifying language.

Sewer

2007 Sewer Budget - Options				
<i>Key Budget Areas</i>	<i>2006 Base Level Budget</i>	<i>Option 1 Non-Discretionary Increases</i>	<i>Option 2 Non-Discretionary Plus Discretionary Increases with Partial Reserve Increase</i>	<i>Option 3 Non-Discretionary Plus Discretionary Increases with Reserve Increase as per Long-Term Plan</i>
Operating Expenditures	\$3,818,900			
• Equipment/Fuel Increase		\$59,500	\$59,500	\$59,500
• Material/Supply Increase		\$57,500	\$57,500	\$57,500
• Wage Increase		\$64,700	\$64,700	\$64,700
• Power Cost Increase		\$11,100	\$11,100	\$11,100
• Contracts Security			\$8,400	\$8,400
GVS&DD O&M	\$9,159,000	\$901,468	\$901,468	\$901,468
GVS&DD DD Debt	\$3,479,800	(\$118,827)	(\$118,827)	(\$118,827)
GVS&DD Sewer DCC's		\$4,000,000	\$4,000,000	\$4,000,000
GVS&DD BOD/TSS Charges	\$710,550	\$141,450	\$141,450	\$141,450
Rate Stabilization Contribution	\$1,516,800			
Capital Program	\$2,506,400		\$250,000	\$500,000
Other Fiscal/	\$135,465	(\$78,465)	(\$78,465)	(\$78,465)
Total Incremental Increase	\$21,326,915	\$5,038,426	\$5,296,826	\$5,546,826
<i>Revenues:</i>				
<i>Debt Funding</i>		(\$57,000)	(\$57,000)	(\$57,000)
<i>Investment Income</i>	(\$150,000)			
<i>Property Tax Levy for DD Debt</i>	(\$4,190,350)	\$829,377	\$829,377	\$829,377
<i>GVS&DD Sewer DCC Levy to Developers</i>		(\$4,000,000)	(\$4,000,000)	(\$4,000,000)
<i>Direct Levy for BOD/ TSS</i>		(\$852,000)	(\$852,000)	(\$852,000)
Net Budget	16,986,565			
Net Difference Over 2006 Base Level Budget		\$958,803	\$1,217,203	\$1,467,203

The increase in contracts under Options 2 and 3 represents the relative proportion of Sewer Services costs for Works Yard security charges.

As per earlier Council direction (April 24, 2006 and May 8, 2006) the BOD/TSS and GVS&DD DCC sewer levy charges shown will be charged directly to developers (in the case of DCC's) and to commercial sewer waste generators (in the case of BOD/TSS) to reduce the impact to the utility rates and property taxes. These charges are identified separately with corresponding offsetting revenues, therefore, these charges do not impact the utility rates and the BOD/TSS charges will no longer be collected through property taxes.

Regional Issues

GVRD operating increases are due principally to upgrades and expansion of the Lulu Island Sewage Treatment Plant to accommodate future growth, an inspection/cleaning program on the GVRD Gilbert Road trunk main and a projected increase in biosolids production and recycling. GVS&DD debt is based on estimates provided by the GVRD.

Impact on Sewer Rates

The impact of these various budget options on the sewer rates by customer class is provided in the table which follows. The amount of the increase for each option is shown bracketed beneath the rate in italics.

<i>2007 Sewer Rates Options</i>				
<i>Customer Class</i>	<i>2006 Rates</i>	<i>2007 Option 1 Rate</i>	<i>2007 Option 2 Rate</i>	<i>2007 Option 3 Rate</i>
Single Occupant	\$190.26	Eliminated in 2007.		
Single Family Dwelling	\$231.24	\$256.68 <i>(\$25.44)</i>	\$260.15 <i>(\$28.91)</i>	\$263.61 <i>(\$32.37)</i>
Townhouse	\$211.58	\$234.85 <i>(\$23.27)</i>	\$238.03 <i>(\$26.45)</i>	\$241.20 <i>(\$29.62)</i>
Apartment	\$176.21	\$195.59 <i>(\$19.38)</i>	\$198.24 <i>(\$22.03)</i>	\$200.88 <i>(\$24.67)</i>
Metered Rate (\$/m ³)	\$0.5588	\$0.5812 <i>(\$0.0224)</i>	\$0.5895 <i>(\$0.0307)</i>	\$0.5979 <i>(\$0.0391)</i>

Advantages/Disadvantages of Various Options

Option 1

- Represents the minimal increase necessary to sustain operations and results in the least impact to property owners.
- Does not allow us to maintain new sewer infrastructure and, therefore, results in a reduced level of service.
- Does not meet City's long-term infrastructure plan to increase the capital program for replacement of ageing infrastructure. Capital replacement remains fixed at \$2.5 million for 2007. The objective is to build the annual infrastructure replacement for sewer to \$4.3 million.

Option 2

- Higher impact on the budget and rates charged to property owners.
- Ensures sustained operations, maintenance of new sewer infrastructure, and provides for a partial increase in the capital infrastructure program, from \$2.5 to \$2.75 million. This option partially meets the City's objective for increasing the degree of replacement of aging sewer infrastructure.

Option 3

- Highest impact on the budget and rates charged to owners.
- Recommended option because it meets all objectives as noted in Option 2, and fully conforms with the planned, phased increases in the long-term replacement program objective for aging infrastructure, increasing the capital program from \$2.5 to \$3 million.

Sewer Connection Charges

It is proposed to change fees for sewer connection charges for residential and commercial properties. Substantive increases are required to offset actual costs based on the greater complexities of the work undertaken by City forces. Previously, the City would undertake both routine and complex connections where offsetting between higher and lower costs connections would occur. However, the development community is opting to undertake the lower cost work, resulting in the complex/higher cost work being undertaken by City forces. These proposed changes will be reflected in the amending bylaws presented to Council.

Drainage and Dyking

<i>2007 Drainage and Dyking Options</i>				
<i>Utility Area</i>	<i>2006 Rates</i>	<i>2007 Option 1 Rate¹</i>	<i>2007 Option 2 Rate¹</i>	<i>2007 Option 3 Rate¹</i>
Drainage	\$44.60	\$55.75	\$55.75	\$55.75
Dyking	\$11.11	\$11.11	\$11.11	\$11.11
Total Drainage & Dyking	\$55.71	\$66.86	\$66.86	\$66.86
<i>(Increase Over 2006)</i>		<i>(\$11.15)</i>	<i>(\$11.15)</i>	<i>(\$11.15)</i>

¹There is no variation in the rates proposed for Drainage and Dyking. The options are presented for consistency with presentation of the other utility areas.

Background

Drainage - In 2003, a drainage utility was created to begin developing a reserve fund for drainage infrastructure replacement costs. The objective is to build the fund to an anticipated annual expenditure of \$4.85 million, subject to ongoing review of the drainage infrastructure replacement requirements.

As adopted by Council in 2003, the rate started at \$11.15 and is increased an additional \$11.15 each year until such time as the \$4.85 million annual reserve requirement is reached -- expected to take approximately 8 years. The rate in 2006 was \$44.60. The options presented above represent the full increase of \$11.15 as per prior Council approvals.

Dyking - An annual budget amount of \$600,000 was established in 2006 to undertake structural upgrades at key locations along the dyke, which equated to an \$11.11 charge. Continued annual funding is required to facilitate continued studies and upgrades as identified through further seismic assessments of the dykes. No increase in the \$11.11 rate is proposed for 2007. This will result in revenues of \$629,000 in 2007, based on residential unit growth projections.

Solid Waste & Recycling

<i>2007 Solid Waste & Recycling Budget - Options</i>				
<i>Key Budget Areas</i>	<i>2006 Base Level Budget</i>	<i>Option Non-Discretionary Increases</i>	<i>Option 2 Non-Discretionary Plus Discretionary Increases</i>	<i>Option 3 Non-Discretionary Plus Discretionary Increases</i>
Operating Expenditures	\$429,400			
• Wage Increase		\$3,700	\$3,700	\$3,700
• Equipment/Fuel Increase		\$16,100	\$16,100	\$16,100
• Operating Cost Increase		\$3,400	\$3,400	\$3,400
Collection Contracts	\$3,004,300	\$126,500	\$126,500	\$126,500
Contracts – Security			\$10,000	\$10,000
Disposal Costs	\$2,066,300	\$33,000	\$33,000	\$33,000
Program Costs	\$1,092,300			
• Equipment/Fuel Increase		\$28,900	\$28,900	\$28,900
• Material Increase		\$10,400	\$10,400	\$10,400
• Wage Increase		\$11,600	\$11,600	\$11,600
• Efficiencies		(\$1,600)	(\$1,600)	(\$1,600)
Environmental Programs	\$577,400			
• Wage Increase		\$11,300	\$11,300	\$11,300
• Equipment/Agreements		\$4,700	\$4,700	\$4,700
Rate Stabilization	\$702,900			\$14,900
Total	\$7,872,600			
Net Difference Over 2006 Base Level Budget		\$248,000	\$258,000	\$272,900

Collection contract increases in Options 1, 2 and 3 are as per Council approved contracts/agreements with service providers. The additional \$10,000 under Options 2 and 3 is for Environmental Programs relative share of costs associated with Works Yard security charges. A minimal increase in the rate stabilization contribution is suggested to provide adequate reserve funding in the event of regional increases in the disposal rate associated with additional landfill capacity challenges.

Impact on Rates

The impact of these various budget options is provided in the table which follows. The amount of the increase for each option is shown bracketed beneath the rate in italics.

<i>2006/2007 Solid Waste & Recycling Rates Options</i>				
<i>Customer Class</i>	<i>2006 Rates</i>	<i>2007 Option 1 Rate</i>	<i>2007 Option 2 Rate</i>	<i>2007 Option 3 Rate</i>
Single Occupant	\$208.18	\$208.97 <i>(\$.79)</i>	\$209.32 <i>(\$1.14)</i>	\$209.89 <i>(\$1.71)</i>
Single Family Dwelling	\$208.18	\$208.97 <i>(\$.79)</i>	\$209.32 <i>(\$1.14)</i>	\$209.89 <i>(\$1.71)</i>
Townhouse	\$167.04	\$168.26 <i>(\$1.22)</i>	\$168.61 <i>(\$1.57)</i>	\$168.61 <i>(\$1.57)</i>
Apartment	\$44.19	\$45.39 <i>(\$1.20)</i>	\$45.39 <i>(\$1.20)</i>	\$45.39 <i>(\$1.20)</i>
Metered Rate (\$/m ³)	\$24.00	\$24.25 <i>(\$.25)</i>	\$24.25 <i>(\$.25)</i>	\$24.25 <i>(\$.25)</i>

Staff recommend Option 3.

Total 2007 Utility Rate Options

The total 2007 utility billing, including the four major utility areas, is detailed in the following table, which shows the total utility rate options by customer class for 2007. A comparison to 2006 rates is also provided. The increases over 2006 rates for each option are shown in bracketed italics beneath the rate amount.

2007 Total Annual Utility – Rate Options				
<i>Customer Class</i>	<i>2006 Rates</i>	<i>Total Option 1 Rate Non- Discretionary Increases</i>	<i>Total Option 2 Rate Non-Discretionary Plus Discretionary Increases with Partial Reserve Increase</i>	<i>Total Option 3 Rate Non-Discretionary Plus Discretionary Increases with Reserve Increase Per Long-Term Plan</i>
Single-Occupant (Single-Family Dwelling)	\$763.55	<i>Eliminated in 2007.</i>		
Single-Family Dwelling	\$867.50	\$951.43 <i>(\$83.93)</i>	\$958.97 <i>(\$91.47)</i>	\$966.72 <i>(\$99.22)</i>
Single-Occupant Townhouse (on City garbage service)	\$722.41	<i>Eliminated in 2007.</i>		
Townhouse (on City garbage service)	\$739.16	\$812.90 <i>(\$73.74)</i>	\$819.48 <i>(\$0.32)</i>	\$825.70 <i>(\$86.54)</i>
Single-Occupant Townhouse (not on City garbage service)	\$623.11	<i>Eliminated in 2007.</i>		
Townhouse (not on City garbage service)	\$639.86	\$712.48 <i>(\$72.62)</i>	\$718.71 <i>(\$78.85)</i>	\$724.93 <i>(\$85.07)</i>
Apartment	\$472.54	\$528.82 <i>(\$56.28)</i>	\$533.44 <i>(\$60.90)</i>	\$538.04 <i>(\$65.50)</i>
Metered Water (\$/m ³)	\$0.7006	\$0.7391 <i>(\$0.0385)</i>	\$0.7461 <i>(\$0.0455)</i>	\$0.7531 <i>(\$0.0525)</i>
Metered Sewer (\$/m ³)	\$0.5588	\$0.5812 <i>(\$0.0224)</i>	\$0.5895 <i>(\$0.0307)</i>	\$0.5979 <i>(\$0.0391)</i>
Business: Garbage	\$24.00	\$24.25 <i>(\$0.25)</i>	\$24.25 <i>(\$0.25)</i>	\$24.25 <i>(\$0.25)</i>
Business: Drainage & Dyking	\$55.71	\$66.86 <i>(\$11.15)</i>	\$66.86 <i>(\$11.15)</i>	\$66.86 <i>(\$11.15)</i>

The Option 3 rate is recommended to ensure best management practices concerning infrastructure maintenance are maintained and that the adopted strategy for long-term infrastructure replacement is continued.

Financial Impact

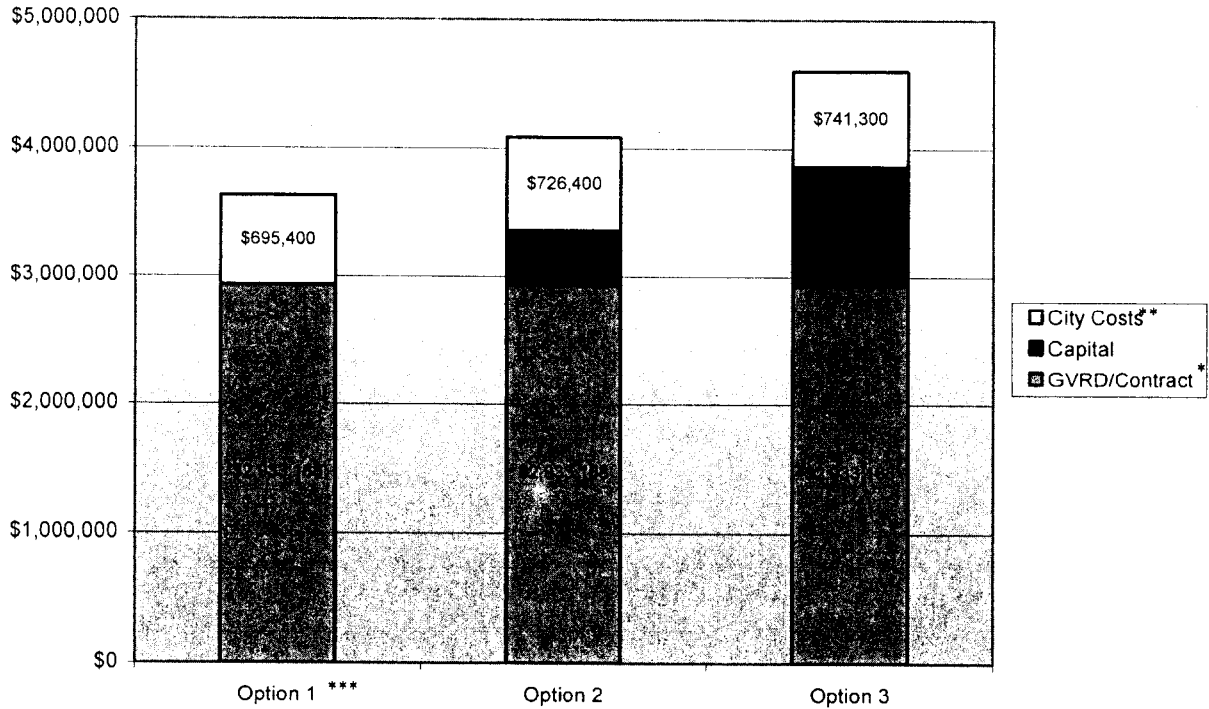
The budgetary and rate impacts associated with each option are outlined in detail in this report. In all options, the budgets and rates represent full cost recovery for each respective area. The Option 3 rates maintain the existing practices of reserve funding for capital replacement programs.

Conclusion

The utility rate strategy represents a comprehensive approach to addressing current increases in regional charges for water purchases, water filtration and sewer treatment. The approach in 2007 represents a considerable contribution from the rate stabilization fund (\$1.2 million) to help offset the significant increase in GVRD water purchase costs in 2007.

The following graph demonstrates the key factors driving cost increases for each option in 2007 in the areas of regional charges, capital infrastructure replacement programs and City costs.

2007 Utility Budget Increase - Impact Areas



* The GVRD/Contract amount contains the reduction to Rate Stabilization of \$894,800 in Options 1,2 and 3.

** A increase to Rate Stabilization of \$14,900 is included in the City Costs for Option 3

*** Option 1 does not contain an increase to Capital as there was an overall reduction in the amount of \$78,465 relating to debt.

As demonstrated in these charts, regional increases continue to be a significant cause of increases in utility rates. This trend will continue for the foreseeable future as the challenges associated with addressing growth and new demands for water treatment are managed. City cost increases are minimized to the degree possible, with the principal drivers being growth and issues outside of our direct control, such as inflation. As the City continues to grow, sound financial management is required to ensure we keep pace with the challenges associated with replacement and maintenance of ageing critical infrastructure and ensuring the stability of the dyking system given our proximity within an active seismic region.

Summary - Option 1

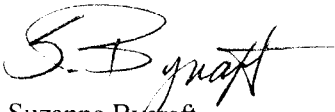
Represents the minimal increase necessary to meet basic demands, but represents a reduction in service levels in that it does not provide for maintenance of new infrastructure acquired through growth. This option is not recommended.

Summary - Option 2

Provides for existing service levels to be maintained and provides for additional capital to partially meet the demands associated with replacement of ageing infrastructure. This option is not recommended because it does not meet long-term infrastructure replacement demands.

Summary - Option 3

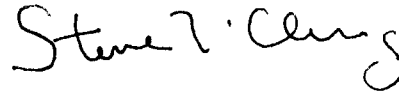
Maintains existing service levels and meets the requirements that have been previously identified and endorsed by Council for long-term infrastructure replacement. For these reasons, Option 3 is recommended.



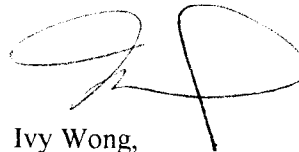
Suzanne Bycraft
Manager, Environmental Programs
(3338)



Tom Stewart, AScT.
Manager, Sewerage & Drainage
(3301)



Steve McClurg
Manager, Water Services
(1209)



Ivy Wong,
Manager - Revenue
(4046)

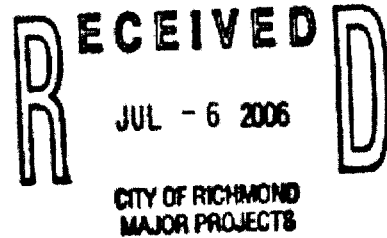
Attachment 1



Vancouver International Airport Authority
Administration de l'aéroport international de Vancouver
P.O. Box 23760
Airport Postal Centre
Richmond, B.C. Canada V7B 1Y7
Website: www.yvr.ca

July 4th, 2006

Joyce Chang
Project Manager, Major Projects
Chief Administrative Office
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1



RE: Canada Line Tracks Crossing of Watermains on Sea Island

Dear Joyce,

Further to our meeting of April 27th and our subsequent e-mail of May 4th, the following will summarize the Agreement reached between the City of Richmond (COR) and Vancouver International Airport Authority (Authority) regarding the issues related to the crossing of the Canada Line tracks over the watermains on Sea Island. Portions of the following 3 watermains situated under the Canada Line tracks are at issue: 42 inch watermain, 24 inch watermain, and 30 inch watermain.

42 inch watermain

1. The Authority will direct the Canada Line contractor, RSL, to install a parallel concrete sleeve pipe (60 inch or larger) adjacent to the existing 42 inch watermain for the purposes of future replacement when required.
2. COR will not be obligated to pay for the cost of the installation of the above referenced concrete sleeve pipe. The cost of installation including water tie-ins will be the sole responsibility of the Authority. The water tie-ins must be performed by COR staff.
3. The Authority will be responsible for 100% of maintenance costs for the subject section of the 42 inch watermain (or the 60 inch or larger concrete sleeve pipe, as the case may be) for a period of 5 years from completion of construction of the Canada Line. Following this 5 year period, the Authority and COR will share, on a 50/50 basis, any future maintenance costs for this section of the 42 inch watermain (or the 60 inch or larger concrete sleeve, as the case may be) as per

Bylaw No.5637, as amended by Bylaw No.7646 relating to Schedule G, Rates for Vancouver International Airport Authority.

24 inch watermain

4. The Authority will direct RSL to replace the 24 inch watermain (lying perpendicular to the Canada Line tracks) with HDPE pipe. The HDPE pipe will be situated under the Canada Line tracks and extend 10 metres on each side of the Canada Line tracks.
5. The cost of installation including watermain tie-ins will be the responsibility of the Authority. The water tie-ins must be performed by COR staff.
6. The Authority will be responsible for 100% of the maintenance costs for the 24 inch watermain.

30 inch watermain

7. The Authority will direct RSL to install a parallel concrete sleeve (42 inch or larger) adjacent to the section of the 30 inch watermain situated under the Canada Line tracks for the purposes of future replacement when required.
8. The cost of any future installation including watermain tie-ins will be the responsibility of the Authority. The water tie-ins must be performed by COR staff.
9. The Authority will be responsible for 100% of the maintenance costs for the 30 inch watermain and 42 inch or larger concrete sleeve and any new watermain installations, as the case may be.
10. Light fill will be used over the section of the Canada Line tracks crossing over the subject watermains that are not replaced with HDPE pipe.

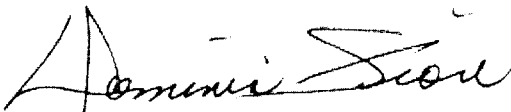
COR will amend Schedule G to Bylaw No. 5637, as amended, to reflect this Agreement.

COR will not be liable for any damages to the Canada Line tracks resulting from water leaks, breaks, or water erosion related repairs of the above referenced portions of the subject watermains unless such damage and required repairs are due to the negligence of COR for work performed by COR.

I believe the foregoing reflects our agreement on the watermain issues. Will you kindly sign in the space below signifying your acceptance on the above and returning a copy to my attention.

Thank you for your co-operation regarding this issue.

Sincerely,



Dominic Fiore
Director, Capital Facilities Development

DF/ers

AGREED AND ACCEPTED BY:

Name: _____

Title: _____

Date: _____

Cc: Carlos Rocha – Design Technologist – Major Projects
Vern Shaver – RSL
Verne Janzen – SNC-Lavalin
John Lenahan – YVRAA (ENG)
Sergio C. Custodio – YVRAA (LCS)

Joyce Chang
City of Richmond
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