



City of Richmond

Report to Committee

To: General Purposes Committee
From: Jim Bruce, General Manager,
Finance and Corporate Services

To General Purposes - Feb 18/02
Date: February 12, 2002

File: 0970-02-01

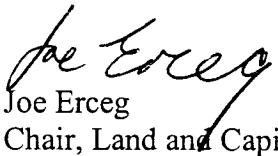
Joe Erceg
Chair, Land and Capital Team

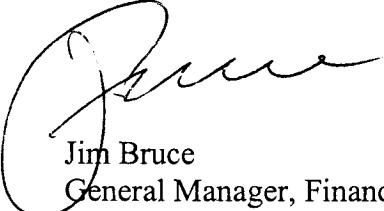
Re: Five Year Capital Plan – 2002 to 2006

Staff Recommendation

It is recommended that:

1. The attached 2002 to 2006 Capital Plan be adopted for inclusion in the 2002 Five Year Financial Plan (2002 to 2006) Bylaw; and
2. That staff be authorized to commence construction of the 2002 projects.


Joe Erceg
Chair, Land and Capital Team


Jim Bruce
General Manager, Finance and Corporate Services

JE:blg
Att.9

Staff Report**Origin**

The Local Government Act requires the City to adopt a Five Year Financial Plan Bylaw (which includes operating, utility and capital expenditures) before May 15th of each year. The bylaw is required to identify all expenditures for the current year and provide estimates for the remainder of the five year program. The 2002 Five Year Financial Plan Bylaw provides the City with the authority to proceed with spending to the limits outlined in the bylaw. The purpose of this report is to present the proposed 2002 to 2006 Capital Plan and to obtain Council's approval to commence construction of the projects in year 2002 of the Capital Plan.

The 2002 to 2006 Capital Plan is attached as follows:

- Year 2002 – Appendix A
- Year 2003 – Appendix B
- Year 2004 – Appendix C
- Year 2005 – Appendix D
- Year 2006 – Appendix E

Each Appendix contains the following material:

- A summary of Capital Budget Funding Sources by program.
- Capital projects "Recommended" by the Team.
- Capital projects "Not Recommended" by the Team.

Analysis

At the February 4, 2002 General Purposes Committee Meeting, the draft Five Year Capital Plan 2002 to 2006 was referred to staff to provide details on the following matters:

1. **When long-running programs were implemented and the time remaining on those programs;**
2. **The proposed Minoru Park Fieldhouse and Caretaker Suite and Minoru Arena renovations;**
3. **The proposed renovations to the Britannia Heritage site – Seine Net Loft and Cannery Office; and**
4. **The status of the "Steveston Tram restoration project" and funding feasibility report.**

Each of the above items is addressed separately below:

1. When long-running programs were implemented and the time remaining on those programs.

Appendix F contains the 2002 Capital Plan in a report format that identifies all long-term projects that have a finite completion date. The Project Duration ("Proj Dur") column shows the total length of the project, and the Project Year ("Proj Year") column shows the degree of completion of the project in 2002. Some well-known examples of long-term projects include:

- The No. 2 Road Bridge debt financing which is a 20 year project that is in its ninth year.
- No. 3 Road undergrounding which is a 10 year project that is in its fourth year.

In addition to such projects, there are several ongoing programs (often related to maintenance of existing infrastructure) that appear in each year of the Capital Plan. These programs are truly ongoing and therefore do not have a completion date. Some examples include:

- Minor Capital Waterworks Program;
- Public Works Minor Capital; and
- Physical Plant Sustaining Capital.

2. The proposed Minoru Park Fieldhouse and Caretaker Suite and Minoru Arena renovations.

The original Capital Project Submission sheets and supplementary material from the stakeholders are attached as Appendix G. In discussion with staff from the Parks Recreation and Cultural Services Division it was felt that the following course of action was appropriate:

- I. Remove the Minoru Park Fieldhouse and Caretaker Suite from the 2002 "Recommended" list and add it to the "Not Recommended" list. The need for this project can be reviewed following preparation of a Master Plan for the Minoru facility.
- II. Add a project titled "Minoru Park Plaza Facility Review" to the 2002 "Recommended" list; this would permit the preparation of a Master Plan for the Minoru facility.
- III. Retain the Minoru Arena Renovation on the 2002 "Recommended" list, as staff believe that these works are required regardless of the outcome of the Master Plan.

The above changes have been incorporated into the draft 2002 Capital Plan that is attached to this report for consideration.

3. The proposed renovations to the Britannia Heritage site – Siene Net Loft and Cannery Office.

The original Capital Project Submission sheet for this project is attached as Appendix H. In addition, the following input has been provided by the stakeholder, Jane Fernyough, Manager, Cultural Services:

The two projects identified in the 2002 Capital Plan were identified in the Britannia Business Plan as being the next priorities after the shipyard and front dock.

Priority #4 is phase 1 of the Cannery Office. In this phase, the building, which is deteriorating rapidly, will be stabilized and the roof fixed. Phase 2, interior restoration including installation of displays for viewing from the windows was identified as priority #7 at Britannia.

Priority #5 is the Seine Net Loft. The recommendation, as per the Business Plan, is for it to retain its industrial designation which will allow for some public access (similar to the shipyard). The recommended use is for museum and display space, display preparation, small boat collection and open storage with the upper level for work and storage space. The development required is for the building to be brought up to building code for industrial use, repair of the building fabric, and storage and display space built. Discussion during the preparation of the Business Plan determined that, to bring the building to "public assembly" designation would be prohibitively expensive.

This project has been retained on the draft 2002 Capital Plan "Recommended" list that is attached to this report.

4. The status of the "Steveston Tram restoration project" and funding feasibility.

In response to the referral, the following material has been provided by the stakeholder, Jane Fernyhough, Manager, Cultural Services:

Discussions have taken place with the Steveston Interurban Restoration Society (SIRS) and the City Solicitor regarding an agreement between the City and the Society. Once the agreement has been agreed to, the feasibility study will proceed. The agreement with the Society will ensure the Tram remains in Richmond at least until the feasibility study is complete and if Council decides at that time to pursue the project, the City will become a partner in the ownership of the Tram. It appears the pending lease to the Fraser Valley Rail Society in Surrey is off the table. A report is being prepared for the Parks, Recreation and Cultural Services Committee, February 26, 2002.

The \$75,000 that was set aside for the Tram and was recommended by Council at the meeting on September 10, 2001 to be utilized for the feasibility study is in an operating reserve account.

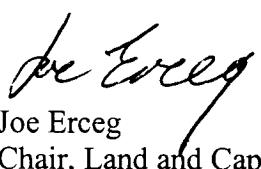
A project titled "Interurban Tram #1220 Feasibility Study" (refer to Appendix I) has been added to the 2002 draft Capital Plan "Recommended" list for consideration.

Financial Impact

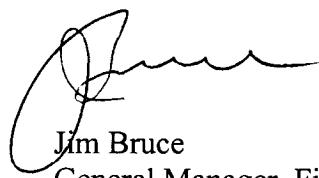
The Land and Capital Team worked closely with Finance and Corporate Services to develop a budget within specific financial parameters. Amendments to the draft Capital Plan have also been made as outlined above, in response to the referral at the February 4, 2002 General Purposes Committee Meeting. It is noted that funding from the Operating Budget for 2002 has been reduced to \$1.0 M.

Conclusion

The 2002 to 2006 Capital Plan was strategically developed to represent the interests of all stakeholders while meeting our corporate vision. The Plan utilizes our existing funding in an effective manner while ensuring that our strong financial position is not impacted.



Joe Erceg
Chair, Land and Capital Team



Jim Bruce
General Manager, Finance and Corporate Services

JE:blg

APPENDIX A

PROPOSED 2002 CAPITAL PLAN

- SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2002 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2001 PROGRAM	2002 PROGRAM	OPERATING BUDGET 541/13/15/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301 - 7399	PAW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7197/7539	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM													
ROADS	\$7,407,000	\$6,268,500											\$1,262,500
DRAINAGE/STORM SEWER	\$3,692,500	\$4,008,250	\$50,000										
WATER	\$2,590,000	\$3,166,500											
SANITARY SEWER	\$4,191,000	\$2,652,000											
MINOR PUBLIC WORKS	\$654,500	\$500,000	\$100,000										
LOCAL IMPROVEMENTS	\$750,000	\$750,000											
NIC	\$240,000	\$0											
SUB-TOTAL	\$19,525,000	\$17,345,250											
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,175,000	\$1,448,499											
MAJOR BUILDINGS	\$1,372,700	\$843,000	\$0										
PROVINCIAL COURT FACILITY	\$4,750,000	\$0											
SUB-TOTAL	\$7,247,700	\$2,291,499											
LAND PROGRAM													
LAND ACQUISITION	\$1,134,000	\$2,634,000											
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$2,000,000											
SUB-TOTAL	\$2,134,000	\$4,634,000											
PARKS PROGRAM													
PARKLAND ACQUISITION	\$2,449,000	\$1,224,490											
MAJOR PARKS	\$1,850,000	\$2,568,000	\$275,000										
MINOR PARKS	\$350,000	\$325,000	\$250,000										
CHILD CARE PROGRAM	\$0	\$50,000											
SUB-TOTAL	\$4,649,000	\$4,167,490											
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,632,000	\$2,229,579											
FIRE DEPT. VEHICLES	\$633,700	\$900,000											
COMPUTER CAPITAL/SOFTWARE	\$335,000	\$0											
TECHNOLOGICAL INNOVATIONS	\$675,000	\$375,000											
COMMUNICATION EQUIPMENT	\$75,000	\$130,000											
SUB-TOTAL	\$4,400,700	\$3,634,579											
TOTAL REQUIRED	\$37,956,400	\$32,072,818	\$1,000,000		\$0	\$4,576,656	\$2,634,000	\$8,702,663	\$2,000,000	\$900,000	\$0	\$2,512,000	\$3,166,500
													\$6,580,999

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$200,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.	\$263,000
Garden City Road Extension - Continuation of Phase 1	The infill of the ditch on the north side of Williams Road west of No. 1 Road in August 2001 provides an opportunity to extend westward the existing Williams Road bicycle lanes, which currently end at No. 1 Road. The cost related to providing wider paved shoulders with marked bicycle lanes would be submitted to the BC TFA Cycling Network Program for 50/50% cost-sharing and to the TransLink Bicycle Infrastructure Program for additional funding. This project will not proceed without funding commitments from BC TFA and/or TransLink. The total estimated cost of \$263,000 is expected to be funded by the City (\$132,000) and external agencies (\$132,000).	\$250,000
Intersection Improvements - Garden City Road/Cambie Road	Construction of a new five-lane arterial road connection. This is the first phase of a three-phase project, which will extend the existing Garden City Road from Sea Island Way to Bridgeport Road. Road work including the construction of curb/gutter, sidewalks and boulevard on both sides, the relocation of an existing gas main and other utilities, etc.	\$41,000
Intersection Improvements - Kwantlen Street/Alderbridge Way	This project involves modification of the existing centre median on Garden City Road at Cambie Road, extension of the existing northbound left-turn bay, street light relocation and signal modification (installation of turning arrows). No land acquisition will be required for this project.	\$200,000
Minoru Boulevard Traffic Safety Improvements	This project is eligible for potential ICBC funding as part of their Traffic Safety Improvement Program.	
Neighbourhood Traffic Safety Enhancement Program	This project will proceed only if the land required for this work can be obtained through the City's Strategic Land Acquisition Program. Therefore, no land acquisition cost is included in this project.	
	This project is eligible for TransLink funding contribution. If TransLink funding for Capital Project is not available in 2002, this project could potentially be deferred to a later year.	
	This project involves road widening of the north leg of the intersection on Kwantlen Street to five-lane crossing (similar standards with the south leg), storm sewer upgrade as well as the related traffic signal enhancements.	
	This project involves the installation of advance warning flashers to indicate the presence of loading vehicles in the northbound curb lane in front of Horizon Towers. Flashers will be triggered by loop detectors embedded in the pavement where loading is expected to occur.	
	Hardware for the project includes poles, bases, junction boxes, underground/communication conduits, controller, related wiring, pavement markings, etc.	
	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.	
	The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
No. 2 Road Bridge	Debt financing	\$2,030,000
No. 3 Road Undergrounding - Hydro, Telus & Shaw	Approximately 1/3 funding from BC Hydro. Undergrounding and removing poles and obtaining right-of-ways for Hydro kiosks. This project includes the removal of all BC Hydro, Telus and Shaw overhead wiring/cables/poles and installing the underground duct/cable systems to accommodate the existing and future Private Utility services.	\$1,296,000
River Road / Hollybridge Way Pedestrian Signal	This project involves the installation of a new pedestrian signal complete with advance warning flashers (westbound only), overhead illuminated signs and pedestrian-actuated push buttons on River Road at Hollybridge Way. This project is eligible for potential ICBC funding as part of their Traffic Safety Improvement Program.	\$40,000
Sidewalk Program	Hardware for the project includes poles, bases, junction boxes, underground/communication conduits, controller, related wiring, pavement markings, push buttons, etc.	\$45,000
Traffic Signal Installation Program	The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	\$250,000
Transit Plan Infrastructure Improvements	The scope of this project includes infrastructure improvements that are required to support the introduction of various transit service improvements identified in the Richmond Five-Year Area Transit Plan as well as on-going enhancements to existing transit infrastructure. The general scope of improvements is expected to include the installation of new bus stop pads, minor road geometric improvements (e.g. intersection corner improvements), minor sidewalk construction, wheelchair ramps, and other supplementary pedestrian amenity improvements required to facilitate pedestrian traffic generated by transit passengers. This project also involves upgrading of existing bus stops to accessible standards.	\$50,000
Undergrounding - Hydro & Telus	Undergrounding - ten year program. This project is the continuation of the removal of poles, overhead cables/ wires and the placement of kiosks in rights-of-way. This year would include Granville Ave. from Minoru Blvd. To Gilbert Rd. and Westminster Hwy. from 100m west of No. 3 Rd. to Minoru Blvd..	\$1,350,000
Westminster Highway Crosswalk Installation	1/3 funding is from BC Hydro.	\$62,000
Drainage	This project involves the installation of a new enhanced pedestrian crosswalk complete with overhead illuminated signs with flashers and pedestrian-actuated push buttons on Westminster Highway between No. 3 Road and Minoru Boulevard. The project will also include the closure of the existing median gap by removing the existing mid-block left-turn bay for eastbound traffic on Westminster Highway and restore the area with minor landscaping. Hardware for the project includes poles, bases, junction boxes, underground / communication conduits, controller, related wiring, pavement markings, push buttons, etc.	\$50,000
Broadmoor Blvd Lane Drainage	This project is eligible for ICBC funding (up to \$50,000) as part of their Traffic Safety Improvement Program.	
	Add drainage to the lane behind Broadmoor Blvd from 7760-7900 Herbert to Deagle.	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Drainage Assessment Program	This is the proposed Phase 1 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
Drainage Pump Station Rehabilitation	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	
Drainage System - Blundell Road	Replace the drainage pump station at Number 1 Road South . The pump station is under-sized, and needs upgrading and reconstruction.	\$500,000
Drainage System - F.A. Thompson School	Fill in the section of ditch on the 11,000 block of Blundell Road. (south side of Blundell Road, Shell Road to No. 5 Rd)	\$480,000
Drainage System - Granville Avenue	Ditch infill Fill in 140 meters of ditch on the north side of Odlin Road adjacent to F.A. Thompson School.	\$125,000
Drainage System - Sexsmith Road	Ditch infill for road safety Fill in the ditch on the north side of Granville Ave from Garden City Ave to Bridge Street.	\$375,000
Drainage System - Steveston Highway	Ditch infill for road safety Fill in ditch on west side of Sexsmith Way, immediately south of Sea Island Way.	\$180,000
Drainage System - Westminster Hwy	Fill in ditch on south side of Steveston Hwy from No 1 Read to 7th Ave.	\$300,000
Emergency Response Equipment	Fill in, south side of Westminster Highway, from #7 Road to #8 Road, in conjunction with watermain replacement ,and construction of bike lane	\$1,200,000
	Purchase of Generators for drainage pump stations	\$500,000
Water Main Replacement		
Asbestos Cement Watermain Replacement	Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project.	\$251,000
	Bakerview Dr.- Saunders Rd to Saunders Rd Ash St. – Bakerview Dr to Saunders Road	760 m 150 m
Total		910m @ \$275 m = \$251,000
Minor Capital Waterworks Program		
2002g Water Model Calibration		\$62,000 - REDMS 494868
2002a Asbestos Cement Watermai Testing -		\$83,000 - REDMS 498289
2002b Intersection Renewal		\$130,000 - REDMS 494846
2002c Number 8 Road Watermain Extentions		\$50,000 - REDMS 494848
2002d Mobile Computing Pilot ART		\$50,000 - REDMS 494859
2002e PRV Chamber Nelson Road		\$100,000 - REDMS 494862
2002f Development Driven Watermain Replace		\$25,000 - REDMS 494866
2002h Watermain West Road		\$74,000 - REDMS 503012

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Mond's Subdivision	Watermain renewal - replace approx. 1,560m of existing 150mm diameter AC watermain and replace with 150mm diameter C-900 PVC watermain. This is the 3rd year of a 4 year replacement program.	\$429,000
	The scope of work is as follows: Kirkmond Cr. - Lamond Ave to Lamond Ave 300m Elkmond Rd - Williams Rd. to Lamond 90m Lamond Rd. - Gormond to Diamond. 260m Gormond Rd. - Lamond Ave to Raymond Ave 450m Wellmond - Oakmond to Oakmond 460m Total 1,560m @ \$275/m = \$429,000	
More Subdivision	Watermain renewal - replace approx. 1,895m of existing 150mm diameter AC watermain and replace with 150mm diameter C-900 PVC watermain. This is the 2nd year of a 5 year replacement program.	\$521,000
	The scope of work is as follows: Kelmore Rd - Tinmore Pl to Francis Rd. 405m Vinnmore Ave - Elsmore to Kelmore 300m Ullsmore Ave Elsmore to Kelmore 300m Elsmore Rd - Vinnmore to Pacemore 500m Wardmore Francis to Seafair 390m Total 1895 @ 275 per/m = \$521,000	
Seismic Upgrades of Waterwork Network	Pressure reducing valve (PRV) stations - install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.	\$50,000
Southdale Sub-Division	The proposed locations are Blundell Road & Shell Road and Williams Road & Shell Road.	
	Project Scope (Detailed Description of Project) Replace 1030 m of 150mm Asbestos cement watermain with C-900. Inclusive of intersection renewals , Replacement of all Water Services, Rebuilding of the road shoulders and elimination of non-complying paved boulevards.	
	Southgate North PL at the rear of 9891 Berry Road to Steveston Hwy 210 M Southgate Pl. 70 M Berry Road Southridge Road to Mortfield Road 350 M South Ridge Steveston to Mortfield 400 M TOTAL 1030M	\$281,000
Westminster Highway	Replacement approx. 600m of existing 300mm diameter AC watermain with 300mm diameter C-900 PVC watermain to serve Richmond General and WCB. Replace approximately 600 meters of existing 300mm diameter AC watermain with 300mm diameter C-900 PVC watermain complete with services, tie ins and restraint joints.	\$400,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Westminster Hwy	Replace approximately 600 meters of 300mm diameter steel lead jointed watermain with 300mm diameter C-900 PVC watermain complete with joint restrainers. This project is located in the 16,000 and 17,000 blocks of Westminster Highway from approximately 24 meters east of No. 7 Road to and including the intersection of No. 8 Road.	\$520,000
Sanitary Sewer		
Aspen, More, Monds, Broadmoor and Shellmont Sanitary Sewers	Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, Mores, Broadmoor and Shellmont areas.	\$500,000
Sanitary Pump Station Rehabilitation	Replace pumps, discharge bends, pipe work, valves and controls in Montieith and Steveston pump stations.	\$500,000
Sanitary Pump Stations	Funding for three local sanitary pump stations and foremains required for new developments in the Fraser Port area.	\$750,000
Sanitary Sewer Control Upgrades	Upgrade 142 sanitary sewer pump stations by installing ultra-sonic (sonar fluid level indicators.	\$426,000
Sanitary sewer Extension	Sanitary Sewer Extension to service properties at 7551, 7531, 7511 Garden City Road and 8760 General Currie Road	\$30,000
Sanitary sewer extension	Sanitary sewer extension to service properties from 7580/7620 No. 3 Rd. and 8051 Jones Rd.	\$110,000
Sanitary sewer extension	Abandon existing pump station and extend sewer from Shell Rd along Freeway Exit and Odium Rd to Hall Ave.	\$170,000
Sanitary sewer extension	Sanitary sewer extension to service properties from Woodhead Road to properties at corner of No. 5 Rd. and Cambie Rd.	\$90,000
Minor Public Works	Various improvements to roads, traffic, sanitary and sewer systems as required. The scope of this program includes the following works:	\$500,000
LIP/NIC	A. Road Improvement program: Walkway improvements.	
LIP	B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems.	
Infrastructure Advanced Design & Land	C. Traffic Improvements: Including Crosswalks, Bus Stop improvements, Wheel chair program and Signage/Safety improvements.	
Infrastructure Advanced Design	D. Traffic Signal/Communications Network: Infrastructure renewal, Physical plant upgrading, Ongoing Infrastructure Development Testing and Communications network conduit/cable.	
	E. Minor Utility Projects: Pre-Ducting for utility works; Advance Pole relocations and Data storage to CD Rom format.	
	Ditch infills, curb, gutter and sidewalk projects requested under the LIP program This funding is for ditch infills, curb gutter and sidewalk projects requested under the LIP program.	\$750,000
	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$324,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	The Building Improvement Minor Capital program is designed to renovate, retrofit or add small additions to existing facilities that are under \$100,000.00 Eligible projects are submitted by the client/user and are evaluated and ranked by priority.	\$500,000
Facility Lighting Retrofits	The following is a list of lighting retrofit projects: Library Cultural Centre Minoru Place Seniors Centre West Richmond Community Centre South Arm Community Centre Steveston Community Centre	\$359,499
Physical Plant Sustaining Capital		
	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical ,Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 8% of \$1,000,000 = \$80,000 Unplanned repairs/ Contingency = \$100,000 Project Manager (F/T temp) = \$70,000 Recommended Projects = \$750,000	\$589,000
Major Building		
Britannia Heritage Site: Seine Net Loft & Cannery Office	Britannia Heritage Shipyard - cannery office stabilization and seine net loft. The cannery office needs structural stabilization, foundations replaced and the roof fixed. The seine net loft must be brought up to building code for industrial use, the building fabric repaired, powder post beetle damage repaired and controlled and storage and displays built.	\$173,000
	Cost split as follows for the two buildings: seine net loft \$150,000, cannery office \$23,000.	
RENOs of the Loft:	Seine Loft \$110,000 \$ 40,000	Cannery Office \$17,000 \$ 6,000
Totals:	\$150,000	\$23,000
5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.		
Civic Building Infrastructure Advanced Design		
Minoru Arena		\$140,000
Building Upgrades / Retrofit Programs		
-Sound System		\$180,000
-Hallway and dressing room flooring, replacement of asbestos laden asphalt tiles		
-interior aesthetic treatment update colour scheme, murals etc.		
-update concession area -35 year old counters, shelves, etc.		
-security system (does not currently exist)		

City of Richmond: One Year Capital Program - Summary by Program 2002

(Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Minoru Park Plaza Facility Review	<p>Major review of Minoru Park Plaza Recreation and Cultural Facilities:</p> <p>Minoru Park Plaza, in the heart of Richmond's City Centre, includes a variety of Recreation and Cultural facilities, including Minoru Aquatic Centre, Minoru Arenas, Seniors' Centre, Cultural Centre (Museum, Art Gallery, Arts Centre and Library) and Fitness Pavilion. These facilities range in age from one to several decades old and require a variety of building upgrades to provide the community with a level of services and amenities which it has come to expect from similar, newer facilities, both within and outside the City.</p> <p>Funding was approved in 2001 for Parks, Recreation and Culture to undertake a comprehensive Community Needs Assessment. This survey study (2002 completion) outlines the community's priorities related to Parks, Recreation and Cultural Services.</p> <p>The project request of \$150,000 would provide the funding for an architectural review of the overall condition of the existing facilities, review of the priorities (identified by the Needs Assessment) of residents, patrons, user groups and staff re new and updated building features, and the preparation of facility retrofit design options and capital construction cost estimates for a renewal upgrade of the popular Minoru Park Plaza.</p>	\$150,000
Satellite Works Yard	<p>The site will include the following long term functions:</p> <ul style="list-style-type: none"> * Parking for staff and fleet vehicles and equipment * Storage for materials * Continue to function as a soils reclamation / Composting * Fire rescue training area * Security fencing * Dump Station Facility and Truck washdown * Septic Field <p>The 1999 budget allocation of \$100,000 precluded the above site objectives being met in a single phase project. The additional funds proposed will enable a reduced scope project to be developed and priorities established in order to utilise this location as a operational facility.</p> <p>The objective for Phase 1 to be now accomplished in 2002 is to :</p> <ul style="list-style-type: none"> * Relocate the existing trailer (40' x 20') to main entrance, reconnect Power, telephone and washrooms, install sanitary tank and/or septic field * Provide Asphalt paved surface for staff parking for 10 vehicles * Locate parking and storage areas for City owned equipment (30m x 9m) with paved surface * Install 2.5m high chain link fence with gates to secure perimeter of site. * Install 150mm water service connection plus hydrant * Construct gravel surface (4000sq.m) and access road for Fire rescue training 	\$200,000

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C. Land And Parks Program

Land Acquisition

Affordable Housing Project

Request to Spend:
City has an Affordable Housing Statutory Reserve Fund with a balance of \$4,418,842 as of December 31, 2001.

- In 2001, no projects were approved.
1. This request is to use the dollars for buying land and for other housing capital items:
 - to implement the findings of the seniors housing study, and / or
 - for another affordable housing project.
 2. In 2002, two \$1Million dollar housing projects are contemplated, for example, one for seniors and the other for affordable housing projects..

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Infrastructure Program - Land Acquisition	To purchase lands required for a variety of DCC funded projects, as identified on the City's DCC project list, in advance of the project commencement. "In advance" is defined as prior to the project being planned, designed, implemented and approved and could occur up to ten years before the specific funding, planning and design is in place. "In advance" in this instance does not refer to a planned and approved project that will occur within a one year or two year time-frame and is already included in the Capital Projects Budget. This is year 2 of 4.	\$634,000
Land Acquisition (Strategic)	Funds are required for land acquisitions that are not within the scope of an approved parks or public works (ie: DCC funded) project. Such purchases are strategic in nature, in that they are opportunistic dependant upon availability, price and future utility.	\$2,000,000
Parkland acquisition	Funds for this purpose are available in the Industrial Land Reserve (totalling \$4 million) and inclusion of \$2 million within the 2002 capital budget program provides the opportunity to access the monies if the need arises, and subject to Council approval, without submission of a special by-law. Acquisition of park land	\$1,224,490
Minor Parks		
Child Care Program	In 2002, it is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment.	\$50,000
General Development	Ongoing improvements, repairs and replacements of benches, pathways, lighting, picnic tables, etc. Fund for misc. items initiated by Council/public. This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$150,000
Interurban Tram #1220 Feasibility Study	Transportation/Tourism/Engineering feasibility study of interurban tram car #1220, as requested by the Parks, Recreation and Cultural Services Committee on Tuesday, August 28, 2001 "that staff undertake a transportation/tourism/engineering study, utilizing \$75,000 contained in the provisional account as outlined in Phase One of the report (dated August 13, 2001 from Park Planner, Yvonne Stich)." ... This tram is a particularly valuable heritage asset given that it was the "Sockeye Special" and was the tram that originally ran from Steveston to Vancouver, doing the last run in 1958.	\$75,000
Playground Upgrade Program	The Steveston Interurban Restoration Society has ownership of the tram and has nearly completed the restoration of the interior and exterior and has begun an analysis and preliminary restoration of the mechanical and electrical components of the tram. A feasibility study would undertake the investigation of the total cost of tram restoration, possible routes, schedules and cost of operation, cost of laying track, cost of a car barn and stations, cost of an office/display space and workshop and a market feasibility study. Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$100,000
Major Parks/Streetscapes		
	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Artificial Turf Sports Field	Minoru Park -Field Artificial Turf Field Construction	\$800,000
	A Sport Statutory Reserve Fund was approved by Council in March, 2000 for the purposes of funding Richmond's first artificial turf field. The Sports Council and staff are recommending the upgrade of an existing field in Minoru Park. There are enormous savings realized by using the existing sand base, and the fact that there are support facilities such as washroom/changerooms, spotlights, security, and parking in place.	
	Total cost of \$800,000 is comprised of:	
	\$150,000 from 2002 Capital Plan	
	\$400,000 from 2001 Capital Plan	
	\$250,000 from 2000 Capital Plan	\$243,000
Britannia Shipyard Dredging and Front Dock Increased Upgrade	Dredging of the moorage area for Britannia Heritage Shipyards (\$200,000), geotechnical studies (\$43,000), and increased pile length of shipyard dock upgrade.	
City Centre Legacy Program	As part of the Corporate Plan, the City Centre Legacy Program is a key initiative aimed at proactively influencing the development and character of key areas in the downtown and the waterfront in order to establish the desired standard for the City Centre for years to come.	\$75,000
	The deliverables of this program include:	
	- improved urban environment at significant landmark locations in the downtown which will set the standard and desired character for future developments in the City Centre as a whole.	
	- a co-ordinated business approach, with an emphasis on partnerships, for developing the City Centre and its waterfront.	
	- clear directions for the development of strategic locations in the City Centre.	
	- implementation of key policies of the City Centre Plan.	
	- long term provision of open space for future generations.	
McLennan North Community Park - Botanical Garden Phase II	This will be continued design work on the Council approved concept plan for McLennan North Community Park. This amount of money together with the budget in 2001 will allow the City to continue with the design detailing of this important City Centre Park. As the intent is to build a unique pilot project with sustainability as a key concept, developing the appropriate design and construction detailing is critical especially when applying for Infrastructure Grants that focus on environmental and technical innovation.	\$55,000
Special Sports Statutory Reserve Fund	The scope of work for the total park is enormous: from 4 to 7 million dollars. This phase would allow for ongoing construction of the Botanical Garden that has been partnered through the Federal Millennium Partnership Program and ongoing construction detailing of some of the unique features proposed for the park. Other work may include temporary pathways into the park land to allow for limited public access.	
	Transfer of funds from DCC Parks to the Special Sports Statutory Reserve Fund. Continuation of funding provided in years 2000 and 2001.	\$150,000

City of Richmond: One Year Capital Program - Summary by Program 2002

(Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Trails	As part of the ongoing expansion and enhancement of Richmond's Trail and Greenway System, a number of design and construction projects are proposed.	\$225,000
	The original list of projects includes two substitutions. The proposed construction of a trail on the Shell Road r.o.w. to link to Dyke Road is being delayed as this r.o.w. is being actively farmed and the issue of recreational corridors through agricultural land needs further discussion and resolution. The cost of building the Hamilton Trail adjacent to River Road is greater than the budget will allow for.	
	The incredible popularity of the Richmond's trails system has increased the use and at times conflicts being experienced on the trails between the different users. The recent requests by residents and subsequent concerns from farmers of expanding the trails system adjacent to farmlands, the ongoing request for a trails program when applying for infrastructure grants has resulted in the urgent need to develop an updated Trails Strategy and Implementation Plan. The last Trails Plan was done in 1979.	
	The projects proposed for 2002 include:	
	1. South Dyke - East Trails - completion of the waterfront trail along Dyke Road between No. 5 Road and Horseshoe Slough. This is building upon work done in the area by the Public Works Department. 2. Trails Strategy and Implementation Plan. 3. No. 7 Road /South Dyke - completion of the first staging area in this area South Arm .	
Waterfront Improvement Program	Waterfront amenities projects to be determined.	
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Apparatus and Equipment replacement	\$900,000
	1. Replace Unit #463 (pumper) \$750,000 including taxes and associated equipment Unit #463 is 20 years old, well past the life expectancy of fire apparatus in a full time fire department such as Richmond. In fact, the National Fire Protection Association recommends that pumpers should not exceed 15 years of service. Additionally because of its age, it is difficult to secure parts to properly maintain it, and as such, it's in a state of decay and disrepair. It is also technologically obsolete and does not meet the current (or future) needs of the department. Unit 463 is a single-function type of apparatus and not well suited to meet the daily demands of the department. It is intended to replace this unit with a "multi-functional rescue-pumper" type apparatus which is well-suited to respond to the wide variety of calls for service received by the department (fire, medical, automobile rescue, water rescue, etc.)	
	2. Equipment for new apparatus scheduled to be delivered in 2002 \$150,000 including applicable taxes.	
	In both 2000 and 2001, funds were approved from the vehicle reserve fund to replace two pumpers. However, the amount requested in each of these years was not sufficient to replace both the units and their associated equipment. The current cost to replace a pumper and its associated equipment is approximately \$750,000 (inclusive of applicable taxes) The \$150,000 requested is to provide for new equipment for the two units scheduled to arrive in 2002.	
Vehicle Reserve Purchases (PW)	Vehicle replacement program. 4 - Cars, 1- Soil Shredder, 1- Front end loader, 1 - 2 Step vans, 3 - Pickup trucks, 3 - Full size vans, 2 - Mini vans, 1 - Mower tractor, 1 - Rotary mower (impliment), 1 - Roto tiller (impliment), 1 - Large excavator, 2 - 21 passenger buses, 2 - Dump trucks, 1 - Backhoe loader, 1 - Crew cab dump truck, 1 - Ride-on roller.	\$2,000,000
Vehicle Reserve Purchases - Phantom Fleet/Auxiliary Technology	To buy out 4 vehicles currently being leased as part of Phase 2 to dissolve the Auxiliary/Phantom Fleet	\$229,579

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Facility Lifecycle Planning Model	Year 2 of Lifecycle Planning Program for City Buildings and Facilities refer to Project FPC 02 submitted for 2001	\$125,000
	Project is required to continue that "thorough" evaluation for all city bldgs and determine value and scope of: deferred maintenance, life cycle renewal, code compliance and functional deficiencies. Funding is 100% allocated towards the process of on site inspections to determine deficiencies, enter that data into our data base. Project has already been tendered in 2000 and awarded to VFA. Target: 112 bldgs, 1.2 msf (900 contract 300 city) TO DATE: 38 bldgs, 621 ksf total cost \$200K. Also committed to \$30K/annum operating budget to maintain the database.	
Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from CityHall to remote sites for 1 time capital cost and eliminate these lease costs.	\$50,000
Property System Enhancements	The Amanda system requires a list of enhancements: interface to the Geographic Information System; direct payment update; remote inspections; ability to handle inspections, permits, payments and property information via Interactive Voice Response and the Web (E-Commerce); completion of trust account module; ability to scan in images; attach correspondence online; purchase and integrate a third-party report-writing tool. Consulting costs will be incurred for each of the enhancements.	\$200,000
Computer Capital	The scope of this work is to: A: upgrade the existing internal GIS Intranet Inquiry application to ESRI's new ArcIMS technology. This will enable the city to: -enhance the navigation tools -add an aerial backdrop -hyperlink images to existing GIS features eg. Heritage Buildings to the existing GIS foot prints, and asbuilt drawings to water, storm, sanitary lines and street lighting B: Create a FREE DRIVEN internet application that will enable our customer to purchase digital GIS data in various formats and related static data 24 hours a day 7 days a week. C: Create a FREE internet application that will enable the public to search City, Tourism and Chamber of Commerce information 24 hours a day 7 days a week. D: Create an interface application that will enable mobile city staff to download GIS infrastructure data at their desktops and view and query this critical information in the field such as water, storm, sanitary lines and street lighting.	\$130,000
	Summary for 'Project Year' = 2002 (74 detail records)	\$32,072,818
	Grand Total	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Minor Public Works		
Birchwood Estates Street Light Replacement	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision.	\$30,000
Replacement of Service Panels on BC Hydro	To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of service entrances will take approx. 3 years to complete.	\$25,000
B. Building Program		
Major Building		
Brighouse Library Renovation	<p>Since opening ten years ago the Brighouse Library Branch has seen exceptionally heavy public use (over one million people use Brighouse Library every year) and has deteriorated in appearance through wear and tear. In addition, library use is growing far faster than the growth in population. For example, the number of items checked out annually is increasing an average of 10% year over year. Renovations are essential in order to meet rapid growth in library use, return Brighouse's appearance to being an appealing and attractive facility, add new high demand public services, and further improve staff productivity.</p> <p>In order to keep costs down the renovations will take place within the existing walls and care has been taken to ensure a conceptual design that provides maximum flexibility in the spaces. A key strategy is to take full advantage of new technologies and automation in order to convert staff spaces into space for library customers. The project costs include a major upgrade to the lighting at a cost of some \$550,000 in order to achieve energy management cost savings over the long term. It does not include furniture and equipment costs at approximately \$500,000.</p> <p>These renovations will provide the customer service improvements requested by library users while providing much needed more space to meet the growth in library use. Included will be:</p> <ul style="list-style-type: none"> · 3,055 sq. ft. of additional public space · Enclosed Silent Study Room with seating for 36 (new service) · 2 Group Study Rooms especially important for teens (new service) · 50 additional study carrels · 2 reading lounges with 25 additional seats (expanded service) · Computer Centre for Teaching and Training (improved service) · Larger, more appealing area for Chinese language book collection · Improved display and merchandizing of books, videos and audios throughout the library · 2 additional Express Checkout machines to meet increased circulation · Improved book stack space to accommodate growing collections · The adoption of a "Front of House" approach to staffing on the second floor in order to create an improved customer service centre · Reduced and combined staff spaces to increase efficiency and productivity 	\$3,500,000
Comprehensive documentation and analysis has been done to support this project. Architectural conceptual drawings have been created and sent out to a quantity surveyor in order to get accurate cost estimates and the project has been divided into discrete sections so that phasing options are available. A complete set of documentation is available for review.		
Minor Park Fieldhouse & Caretaker Suite Replacement	Replace existing caretaker house and parks washroom facilities based on the London/Palmer models.	\$565,000
C. Land And Parks Program		
Minor Parks		
Sports Field Drainage Program	Construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields. This ongoing program entails construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields.	\$90,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Tennis Court Resurfacing Program	This is a program to resurface the tennis courts in the City's major park sites. Minoru Park is considered the priority for this program.	\$100,000
Tram Restoration	The Tram, car 1220, is being restored in Steveston. Remaining work requires that the engines and trucks be repaired and retooled at a professional shop and some interior work remains that requires professional workmen and cannot be done by volunteers.	\$260,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and restock the City Nursery.	\$100,000
Major Parks/Streetscapes		
Neighbourhood Beautification Initiative	The purpose of this project is to initiate capital improvements on City owned frontages and park lands in partnership with a variety of neighborhoods.	\$90,000
Summary for 'Project Year' = 2002 (9 detail records)		
Grand Total		\$4,760,000

APPENDIX B

PROPOSED 2003 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2003 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2002 PROGRAM	2003 PROGRAM	OPERATING BUDGET 541/13/15/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301 - 7959	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7919/7959	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM													
ROADS	\$6,268,500	\$4,506,577	\$0										
\$82,413	\$4,008,250	\$1,698,251	\$50,000										
WATER	\$3,166,500	\$2,808,000	\$0										
SANITARY SEWER	\$2,657,000	\$1,625,000											
MINOR PUBLIC WORKS	\$500,000	\$700,000	\$700,000										
LOCAL IMPROVEMENTS	\$750,000	\$750,000											
SUB-TOTAL	\$17,345,250	\$12,087,828											
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,448,499	\$1,550,000	\$600,000										
MAJOR BUILDINGS	\$833,000	\$4,575,000											
SUB-TOTAL	\$2,291,499	\$6,125,000											
LAND PROGRAM													
LAND ACQUISITION	\$2,634,000	\$634,000											
AFFORDABLE HOUSING PROJECT	\$2,000,000	\$1,000,000											
SUB-TOTAL	\$4,634,000	\$1,634,000											
PARKS PROGRAM													
PARKLAND ACQUISITION	\$1,224,490	\$3,400,000											
MAJOR PARKS	\$2,568,000	\$1,566,000											
MINOR PARKS	\$375,000	\$300,000	\$300,000										
CHILD CARE PROGRAM	\$50,000	\$0	\$0										
SUB-TOTAL	\$4,167,490	\$5,266,000											
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,229,579	\$2,229,579											
FIRE DEPT. VEHICLES	\$900,000	\$84,200											
COMPUTER CAPITAL/SOFTWARE	\$0	\$0											
TECHNOLOGICAL INNOVATIONS	\$375,000	\$85,000											
COMMUNICATION EQUIPMENT	\$130,000	\$0											
SUB-TOTAL	\$3,634,579	\$2,398,779											
TOTAL REQUIRED	\$32,072,818	\$27,511,607	\$1,650,000	\$0	\$3,458,887	\$634,000	\$8,786,443	\$2,000,000	\$84,200	\$0	\$1,625,000	\$2,808,000	\$6,465,077

City of Richmond: One Year Capital Program - Summary by Program 2003

(Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$200,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.	\$456,000
Blundell Road Rebuild of Road Base	This project involves pavement widening to provide 2.5 m asphalt bike lanes for cyclists on both sides of Shell Road from Williams Road to Steveston Highway.	\$332,077
Sideway to # 6 Rd		
Browngate Road Extension (Road Construction)	Mulching existing asphalt , removal of overburden grade and repave existing Road 2.0 m Bike Lane @ 75mm dp asphalt to South Side Approx \$79,000 (not including Storm Works)	\$645,000
Intersection Improvements (Westminster Highway and Jacombs Road)	The proposed Browngate Road Extension is consistent with the recommendations contained in the City Centre Transportation Plan in addressing the need for better local circulation in the Aberdeen area. This road connection is required to support the proposed Aberdeen Centre Expansion with no cost to the City.	\$200,000
Intersection Improvements - Westminster Highway / No. 6 Road	This project involves road widening to enable the construction of left-turn bays on both No. 6 Road approaches (northbound and southbound), dual left turn lanes on Westminster Highway (eastbound) and associated traffic signal modifications.	\$220,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Neighbourhood Traffic Safety Enhancement Program	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.	\$200,000
No. 2 Road Bridge	The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$2,030,000
Traffic Signal Installation Program	The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required.	\$200,000
Transit Plan Infrastructure Improvements	The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	
Drainage	The scope of this project includes infrastructure improvements that are required to support the introduction of various transit service improvements identified in the Richmond Five-Year Area Transit Plan as well as on-going enhancements to existing transit infrastructure. The general scope of improvements is expected to include the installation of new bus stop pads, minor road geometric improvements (e.g. intersection corner improvements), minor sidewalk construction, wheelchair ramps, and other supplementary pedestrian amenity improvements required to facilitate pedestrian traffic generated by transit passengers. This project also involves upgrading of existing bus stops to accessible standards.	\$100,000
Broadmoor Boulevard Lane Drainage	Install drainage in the lane behind the north side of Broadmoor Blvd, at 7331 Deagle Road.	\$50,000
Drainage Assessment Program	This is the proposed Phase 2 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
Drainage Pump Station Rehabilitation	The program will include storm sewer video assessment, flow monitoring and data collection, required for the development of the City's Drainage master plan.	
Drainage System - Granville Avenue	Reconstruct drainage pump station. Replace pumps, electrical switch gear, floodbox and discharge pipes. Replace wooden shack with concrete block house. Public washroom and viewing platform (Parks)	\$500,000
Drainage System - Tait School	Fill in the ditch on the south side of Granville Avenue from 4 Rd to Shell Road. Rehabilitate boulevard and edge of road.	\$342,500
Drainage System - Granville Avenue	Fill in ditch on north side of Granville Ave from 4 Road to Shell.	\$342,500
Drainage System - Westminster Highway	100 meters of ditch to be filled in, fronting on Tait School, on Gilmore Crescent.	\$50,000
Water Main Replacement	Fill in ditch between 20351 and 20471 Westminster Hwy.	\$110,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Bakerview	Project # 2003-02 Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project.	\$345,000
Saunders Rd – Garden City to Ash St. Heather Pl. Pinewell Cres - Ash St to Saunders Road Ash St. – Williams Road to Saunders Rd	406 m 75 m 510 m 160m	
Total	1251 m @ \$275/m = \$345,000	
Blundell Road	Replace 800m of 150mm steel watermain with 300mm C-900	\$300,000
Gilbert Road	Replace approx. 800m of existing 300mm diameter watermain with 300mm diameter C-900 PVC watermain complete with services, tie ins and restraint joints.	
Monds Subdivision	Watermain renewal - replace approx. 1,500m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,500 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4th year of a 4 year replacement program.	\$500,000
	The scope of work is as follows: Lamond – Gormond to Florimond Stilmond – Lamond to Williams Florimond Rd – Lamond Ave to Jesmond Ave Sedgemond Jesmond Florimond Rd, to Gormond Ave Piermond – Jesmond to Lamond Chapmond Cres	
	320 m 90 m 270 m 100 m 320 m 270 m 460 m	
	Total 1830m @ \$275/m = \$504,000	
More Subdivision	Watermain renewal - replace approx. 1,900m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,900 meters of existing 150mm diameter AC watermain and services with 150mm diameter C-900 PVC watermain. This is the 3rd year of a 5 year replacement program.	\$483,000
	The scope of work is as follows: Seafair Dr. Blundell Rd. to Fairbrook Cres Newmore Ave – Seafair Dr. to Pacemore Ave Fairbrook Cres – Pacemore Ave to Fairdell Cres Fairbrook Pl Fairdell Cres Fairdell PL	
	Total 1756 @ 275 per/m = \$483,000	
No. 4 Road	Watermain AC replacement-Remove Existing 250mm Steel watermain with 8m of 300 mm C-900 Plastic complete with service renewals LOCATION Number 4 Road Steveston Hwy to Montieh ROW	\$260,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Westminster Highway	Replace 600m of 300mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w joint restraints.	\$500,000
Aspen, More, Monds, Broadmoor and Shellmont Sanitary Sewers	Gravity Sewer replacement, reconstruction and rehabilitation Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, Mores, Broadmoor and Shellmont areas.	\$500,000
Sanitary Pump Station Rehabilitation	Replace pumps discharge bends, headers, pipe work, switchgear and controls in the Boyd pump stations.	\$250,000
Sanitary Pump Station Rehabilitation	Replace pumps discharge bends, headers, pipe work, switchgear and controls in the Ivy pump stations	\$250,000
Sanitary Sewer Pump Stations	New Sewer Pump Stations as required	\$500,000
Minor Public Works	Various improvements to roads, traffic, sanitary and sewer systems as required. The scope of this program includes the following works:	
Public Works Minor Capital	A. Road Improvement program: Walkway improvements. B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems. C. Traffic Improvements: Including Crosswalks, Bus Stop improvements, Wheel chair program and Signage/Safety improvements. D. Traffic Signal/Communications Network: Infrastructure renewal, Physical plant upgrading, Ongoing Infrastructure Development Testing and Communications network conduit/cable. E. Minor Utility Projects: Pre-Ducting for utility works; Advance Pole relocations and Data storage to CD Rom format.	
Wheel Chair Ramp upgrade program	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivisions by installing wheel chair ramps.	\$50,000
LIP/NIC	Ditch infill, sidewalk, curb and gutter where requested and required	\$750,000
Infrastructure Advanced Design & Land	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	
Infrastructure Advanced Design		
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000
Parks Washrooms - Trails	Parks and trail washrooms	\$200,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the LifeCycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical ,Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$ 100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 11% of \$700,000 = \$77,000 Unplanned repairs/ Contingency = \$68,000 Project Manager (F/T temp) = \$55,000 Recommended Projects = \$500,000	\$850,000
Major Building	Chinese Bunkhouse: bring the building up to current building code and interpret as the living quarters of Chinese labourers in the early part of the 1900's. 5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$155,000 \$255,000
Briannia Heritage Shipyard		
Civic Building Infrastructure Advanced Design	Replacement of Existing Fire hall No 5 located on Westminster Hwy. In Hamilton, East Richmond . The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size and would also accommodate a 1000sf Community Policing component. The new facility will be constructed to "Post Disaster" standards and include substantial "green" initiatives.	\$3,000,000
Community Safety Building Replacement	Ref REDMS # 336064, #128596 Prepare one rink for public skating and major upgrade of material finishes.	\$400,000
Parks Facility	Modified to reflect planning process, project delayed by one year from 2002 to 2003. vj New facility including caretaker suite	\$565,000
Ice Rinks		
Satellite Works Yard	Refer to year 2002 for detailed scope . Phase 2 anticipates laying Blacktop roadway to rear of property for Fire truck access and providing Blacktop cover to the 4000 sq.m. training area.	\$200,000
C. Land And Parks Program		
Land Acquisition		
Affordable Housing Project	Request to Spend: City has an Affordable Housing Statutory Reserve Fund.	\$1,000,000
	This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project.	
Infrastructure Program - Land Acquisition	To purchase land required for DCC programs and per Council resolution Sept. 2000 this is year 3 of 4.	\$634,000
Parkland acquisition	Acquisition of park land	\$3,400,000
Minor Parks		

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City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
General Development	This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen situations.	\$200,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$100,000
Major Parks/Streetscapes	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.	
McLennan North Community Park	Capital construction work. Basic site preparation will be a major part of this first phase, including site work demolition, clearing, grading, preloading for hard surfaces and vegetation/landscape protection.	\$250,000
Park Design/Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000
Parks Upgrade Program - Characterization	Implementation of design solutions intended to strengthen the overall function and character of existing park sites This project involves the implementation of design solutions intended to strengthen the overall function and character of existing sites within the City's park system. This site has been chosen for its size and community visibility due to its location to a major well travelled road, Francis Road.	\$100,000
Richmond Nature Park	Freestanding washroom building (not attached to existing buildings) with water and electricity. As part of this building a visitor and interpretation kiosk with a small room.	\$150,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$166,000
Steveston Tram	Relocation of the Tram and all ancillary buildings from Steveston Park to a location to be determined by the transportation and feasibility study to be started in 2001.	\$100,000
Trails	The upgrade of existing trails and construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, Needs Assessment, and the Environmental Management Strategy are conducted.	\$250,000
Waterfront Improvement Reserve Fund	Proposed trail projects for this year may include: A combination of design and construction projects: <ol style="list-style-type: none"> 1. Railway Avenue - trail construction and signage to connect Middle Arm to Steveston. 2. Boardwalk/lookouts at Terra Nova/West Dyke staging areas. 3. No.2 Road/ Dover Gateway Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Apparatus and Equipment Replacement. A. Miscellaneous Equipment Replacement - \$ 84,200.00.	\$84,200
	The majority of this request is for replacement of extraction equipment that was purchased in 1992.	
Vehicle Reserve Purchases (PW)	Vehicle replacement program.	\$2,000,000
Vehicle Reserve Purchases - Phantom Fleet/Auxiliary	To buy out 4 vehicles currently being leased as part of Phase3 to dissolve the Auxiliary/Phantom Fleet	\$229,579
Technology		
Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.	\$85,000
Summary for 'Project Year' = 2003 (58 detail records)		
Grand Total		\$27,511,606

City of Richmond: One Year Capital Program - Summary by Program 2003 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Intersection Improvements - Blundell Road/Garden City Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$923,000
Intersection Improvements - Cambie Road/No. 5 Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$1,086,000
No. 6 Road widening	This project involves the widening of the existing single northbound lane of No. 6 Road to two lanes from north of the No. 7 Fire Hall to International Place.	\$329,000
Sidewalk Program	This project involves the construction of a 2.0m wide concrete sidewalk and tree boulevard along Firbridge Way between No. 3 Road and Minoru Blvd. (north side only) where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$68,000
Sidewalk Program	This project involves the construction of a 2.0 m wide concrete sidewalk and a 1.5 m wide tree boulevard along Minoru Boulevard between Elmbridge Way and Alderbridge Way where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$194,000
Water Main Replacement		
Minor Capital Waterworks Program	Water Model Development \$70,000	\$400,000
Minoru pool complex watermain	Install 120 m of 150mm watermain between the feed to the Minoru Pool and the watermain servicing the Senior Centre,	\$50,000
Seismic Upgrades of Waterwork Network	Pressure reducing valve (PRV) stations - install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This Budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.	\$50,000
	The proposed locations are Steveston Hwy & Shell Rd and Shell Rd & Montieth Rd	
Minor Public Works		
Birchwood Estates Street Light Replacement	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision.	\$30,000
Replacement of Service Panels on BC Hydro	To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of service entrances will take approximately 3 years to complete.	\$25,000
C. Land And Parks Program		
Land Acquisition		
North Loop Road - Phase I (Land Acquisition)	Land acquisition along the rear of No. 3 Road properties west side is required to secure the necessary road right-of-way for constructing a new two-lane interim road from Cambie Road to Leslie Road before the CPR right-of-way is acquired for an ultimate arterial road. This is the first phase of a two-phase project. The construction of this new road is the second phase of the project.	\$1,000,000
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Sports Field Drainage Program	This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$90,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide stock for the City Nursery.	\$100,000
Major Parks/Streetscapes		
Stevenson Tram - demonstration 1/2 kilometer	Construction of a half kilometer of tram line including track construction, provision of overhead power lines, a rectifier station and crossing and crossing protection. Temporary landing platforms also needed. The location of the route will be determined in a feasibility and engineering study being undertaken in 2001. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$385,000
Tennis Court Resurfacing Program	This is a program to resurface the tennis courts in the City's major park sites. Further work is to be done at South Arm Park.	\$100,000
Terra Nova Park	Design ,construction, and engineering detailing of the 60 acre site. The degree and amount of detailing will depend upon the final plan approved by Council. Some of this fund may go towards providing trails through the site.	\$250,000
Summary for 'Project Year' = 2003 (17 detail records)		
Grand Total		\$5,130,000

APPENDIX C

PROPOSED 2004 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

**CITY OF RICHMOND
2004 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM**

	2003 PROGRAM	2004 PROGRAM	OPERATING BUDGET 5411/13/15/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301 - 7059	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7019/7959	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM													
ROADS	\$4,506,577	\$4,112,500			\$926,175		\$2,527,325						\$659,000
DRAINAGE/STORM SEWER	\$6,698,251	\$954,750	\$50,000		\$45,237		\$839,513						
WATER	\$2,808,000	\$2,836,000											
SANITARY SEWER	\$1,625,000	\$2,152,500											
MINOR PUBLIC WORKS	\$700,000	\$625,000											
LOCAL IMPROVEMENTS	\$750,000	\$750,000											
SUB-TOTAL.	\$12,087,828	\$11,430,750											\$750,000
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,550,000	\$1,300,000			\$800,000		\$500,000						
MAJOR BUILDINGS	\$3,575,000	\$3,460,250					\$460,250						
SUB-TOTAL.	\$6,125,000	\$4,760,250											\$3,000,000
LAND PROGRAM													
LAND ACQUISITION	\$634,000	\$634,000					\$634,000						
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$1,000,000											
SUB-TOTAL.	\$1,634,000	\$1,634,000											\$1,000,000
PARKS PROGRAM													
PARKLAND ACQUISITION	\$3,400,000	\$3,400,000					\$68,000						
MAJOR PARKS	\$1,566,000	\$1,595,000					\$619,900						
MINOR PARKS	\$3,300,000	\$390,000			\$390,000								
SUB-TOTAL.	\$5,266,000	\$5,385,000											
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,229,579	\$2,569,679					\$229,579						
FIRE DEPT. VEHICLES	\$84,200	\$149,400											
COMPUTER CAPITAL/SOFTWARE	\$0	\$0											
TECHNOLOGICAL INNOVATIONS	\$85,000	\$115,000					\$115,000						
SUB-TOTAL.	\$2,398,779	\$2,834,079											
TOTAL REQUIRED	\$27,511,607	\$26,044,079	\$1,865,000		\$0	\$2,964,141	\$634,000	\$7,693,938	\$2,340,100	\$149,400	\$0	\$2,152,500	\$2,836,000
													\$5,409,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.	\$418,000
Neighbourhood Traffic Safety Program	This project involves the construction of a 3.0 m wide asphalt paved bicycle pathway on a linear greenway north of Bridgeport Road between Shell Road and Garden City Road. This bicycle pathway will connect the Shell Road bike route. This project assumes no land acquisition cost.	\$100,000
No. 2 Road Bridge	This project (\$418,000) is expected to be funded jointly by the City (\$209,000) and BCTFA/TransLink (\$209,000). This project will not proceed without a funding commitment from either BCTFA or TransLink.	\$2,030,000
Traffic Signal Installation Program	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.	\$100,000
Undergrounding - Hydro and Telus	The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$1,350,000
Drainage	As in previous years, 1/3 funding is from BC Hydro.	\$50,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Drainage Assessment Program	This is the proposed Phase 3 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
Drainage Pump Station Rehabilitation	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	
Drainage System - No. 6 Road	Reconstruction of pump station, renewal of pumps, floodbox, electrical switch gear, controls and pipework. Rebuilding of pump station house. Possible Public washrooms and viewing platform (Parks).	\$500,000
Drainage System - Walter Lee School	Reconstruction of the pump station, renewal of the pumps, floodbox, electrical switch gear, controls, and pipework. The building housing the pump station will also be rebuilt.	
Water Main Replacement	Ditch infill for road safety A short stretch of ditch on the east side of No 6 Road, to be filled in prior to road widening. Ditch infill Fill in the ditch fronting on Walter Lee School for a length of 250 meters.	\$80,000
AC Watermain Replacement	Replace approximately 1875 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 3 year replacement program	\$516,000
Bakerview/Saunders	Afton Dr – Gilbert Rd. to Broadmoor Blvd. Herbert Rd. – Afton to Broadmoor Blvd Broadmoor Blvd. Gilbert to No 3 road Belair Rd – Gilbert to Deagle	Total 1875m @ 275 = \$516,000
	Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project.	\$289,000
	Saunders Rd ~Ash St to No 4 Rd. Pinewell Pl. Pinewell Cres - Ash St to Saunders Road east	420 m 100 m 530 m
	Total 1050 m @ \$275 m = \$289,000	
Minor Capital Waterworks Program	Funding for emergency watermain replacements and infrastructure studies. The intent of the minor capital account is to fund unscheduled, high priority projects, large emergency watermain replacements and Engineering Planning costs to maintain infrastructure studies.	\$200,000
	Water modeling \$25,000	

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
More Subdivision	Watermain renewal - replace approx. 1,800m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,800 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4th year of a 5 year replacement program.	\$491,000
The Scope of work is as follows: The scope of work is as follows:		
Seafair Dr. Fairbrook Cres to Fairway Rd Fairlane Rd. – Seafair Dr. to Fairway Rd. Fairway Rd. – Seafair Drive to Ullsmore Ave Ullsmore Rd = Fairway Rd. to Elsmore Fairhurst Rd – Ullsmore to Fairbrook Cres Fairbrook Cres – Fairhurst Rd o Pacemore Ave	240m 270 m 31.5 m 250 m 300 m 410	
Total	1785 @ 275 per/m = \$491,000	
No. 7 Road	Replace approximately 800 meters of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain complete with service connections.	\$235,000
No. 7 Road	Replace approx. 800m of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w water service connections.	\$240,000
No. 7 Road	Replace approx. 750m of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w water service connections.	\$215,000
Pressure Reducing Valve Station Seismic Upgrade	Recommendation of consultant report	\$200,000
Seismic Upgrades of Waterwork Network	Rebuild the Pressure Reducing Station for earthquake proofing including replacement of the watermain between the PRV chamber and GVRD watermain	
Westminster Highway	Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.	\$50,000
Fraserlands Industrial Area	The proposed locations are Steveston Hwy & Shell Rd and Shell Rd & Montieth Rd	\$400,000
Sanitary Sewer	Replace approximately 800 meters of 300mm diameter steel lead jointed watermain with 300mm diameter C-900 PVC complete with joint restraints and service connections.	
Aspen, More, Monds, Broadmoor and Shellmont Sanitary Sewers	This project is located in the 9000 Block of Westminster Highway and includes the replacement of the watermain at both intersections.	
New Pump Stations	Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, More, Broadmoor and Shellmont areas.	\$1,000,000
Sanitary Pump Station Rehabilitation	Reconstruct two sanitary pump stations, replace pumps, electrical switch gear, controls, valves and pipework at Quilchena and Crestwood.	\$500,000
Minor Public Works		\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required. The scope of this program includes the following works: A. Road Improvement program: Walkway improvements. B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems. C. Traffic Improvements: Including Crosswalks, Bus Stop improvements, Wheel chair program and Signage/Safety improvements. D. Traffic Signal/Communications Network: Infrastructure renewal, Physical plant upgrading, Ongoing Infrastructure Development Testing and Communications network conduit/cable. E. Minor Utility Projects: Pre-Ducting for utility works; Advance Pole relocations and Data storage to CD Rom format. Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$575,000
Wheel Chair Ramp upgrade program	Ditch infill, sidewalk, curb and gutter where requested and required	\$50,000
LIP/NIC		\$750,000
Infrastructure Advanced Design & Land	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$204,500
15 2. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical ,Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 8% of \$1,000,000 = \$80,000 Unplanned repairs/ Contingency 10 % = \$100,000 Project Manager (F/T temp) = \$70,000 Recommended Projects = \$750,000	\$800,000
Major Building		
Britannia Heritage Shipyard	relocate Murchison Houses to permanent locations, refurbish the interiors to depict living conditions in the early 1900's.	\$100,000
Civic Building Infrastructure Advanced Design	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$360,250

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Community Safety Building Replacement	Replacement of Existing Fire hall No 4 located on Lancaster crescent, Burkeville, Sea Island . The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size. The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives.	\$3,000,000
Affordable Housing Project	Request to Spend: City has an Affordable Housing Statutory Reserve Fund.	\$1,000,000
Ref REDMS # 336064, #128596		
C. Land And Parks Program		
Land Acquisition		
Affordable Housing Project	This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project.	
Infrastructure Program - Land Acquisition	To purchase land required for DCC program and per Council resolution Sept. 2000 this is year 4 of 4.	\$634,000
Parkland acquisition	Acquisition of park land	\$3,400,000
Minor Parks		
General Development	This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$100,000
Sports Field Drainage Program	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards. Construction of perimeter drainage in parks/school park sites and retrofitting drainage around sports fields. This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$90,000
Major Parks/Streetscapes		
McLennan North Community Park Development	Capital construction work including basic site preparation, grading and drainage. Construction phasing will be determined after detailed design, construction and engineering plans are completed in 2001/2002.	\$250,000
Minor Park Upgrade	Restore lake banks, repair/replace drain lines, modify irrigation, relandscape overgrown beds Lakes - restore banks with rip-rap and wood and re turf. Repair or replace drain lines. Modify irrigation to meet the needs of the landscaping. Relandscape overgrown beds.	\$150,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Natural Areas	Construction of pathways, shelters, observation areas and/or interpretation signage in a variety of natural areas. Priorities will be established depending upon the outcome of the Trails Strategy and the Environmental Management Plan. Areas could include the Northeast Bog Forest, waterfront natural areas, the east side of the Nature Park, Lee Slough or new properties that may be acquired through the acquisition plan.	\$150,000
Park Advance Design/Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000
Parks Upgrade Program-Characterization	Implementation of design solutions intended to strengthen the overall function and character of existing park sites This project involves the implementation of design solutions intended to strengthen the overall function and character of existing sites within the City's park system.	\$100,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$95,000
Trails	An ongoing program of upgrading existing trails and the construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, and Environmental Management Strategy are conducted in the previous years.	\$200,000
Some proposed projects may include:		
	1. North Arm trails - upgrade of dyke surfaces and construction of staging areas at No. 4 Road. 2. Trail Development between No. 5 Road and No. 7 Road Pier - North Arm	
15	Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.
		\$600,000
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Apparatus and Equipment Replacement. A. Replace units # 800, 801, 821 and 822 - \$ 84,000.00. These Ford Ranger pickups in 2004 will be ten years old.	\$149,400
	B. Replace Unit # 809 - \$ 40,000.00 This GMC Jimmy in 2004 will be ten years old.	
	C. Miscellaneous Equipment Replacement - \$ 25,400.00. The majority of this request is to replace Honda generators that were purchased in 1988 and 1982.	
Vehicle Reserve Purchases (PW)	Vehicle replacement program.	\$2,340,100
Vehicle Reserve Purchases - Phantom Fleet/Auxiliary	To buy out 4 vehicles currently being leased as part of Phase 4 to dissolve the Auxiliary/Phantom Fleet	\$229,579
Technology	Fibre optic cabling to City Buildings	\$115,000
	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from City Hall to remote sites for 1 time capital cost and eliminate these lease costs.	

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City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Summary for 'Project Year' = 2004 (51 detail records)		
Grand Total		\$26,044,079

City of Richmond: One Year Capital Program - Summary by Program 2004 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Francis Road widening	This project involves the widening of the existing Francis Road to 4-lane paved urban arterial standards with concrete sidewalks and tree boulevard along Francis Road between St. Albans Road and Garden City Road where concrete sidewalk does not exist.	\$867,000
Intersection Improvements - Blundell Road/No. 3 Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$919,000
North Loop Road - Phase II (Construction)	This project involves the construction of two lane interim road/lanceway along the rear of No. 3 Rd properties on the west side before the CPR right-of-way is acquired for the completion of a an ultimate arterial road. The project scope includes the construction of a new 2-lane interim road along the rear of No. 3 Road properties on the west side between Cambie Road and Leslie Road. This is the second phase of a two-phase project.	\$1,460,000
Sidewalk Program	This project involves the construction of a 2.0 m wide concrete sidewalk and min. 1.5 m wide tree boulevard on the west side of No. 3 Road between Cambie Road and Sea Island Way where concrete sidewalk does not exist.	\$100,000
This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.		
Minor Public Works		
Birchwood Estates Street Light Replacement	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision.	\$30,000
Replacement of Service Panels on BC Hydro	To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of all service entrances will take approximately 3 years to complete.	\$25,000
Street Light Replacement Program	Significant # of old subdivisions need street lights	\$125,000
C. Land And Parks Program		
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide tree stock for the City Nursery.	\$100,000
Major Parks/Streetscapes		
Steveston Tram - second 1/2 kilometer	Construction of the second half kilometer of tram line including track construction, provision of overhead power lines, a rectifier station and crossing and crossing protection. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$385,000
Tennis Court/Hard Surfaces Resurfacing Program	This is a program to resurface the tennis courts in the City's major and minor park sites. Work is to be done at Hugh Boyd Park and Steveston Park.	\$100,000
Terra Nova Park	This is the first phase of construction of this major legacy project in Terra Nova. The scope of work will only be determined after the planning and public and Council approval processes in Year 2001 and 2002.	\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Summary for 'Project Year' = 2004 (12 detail records)		
Grand Total		\$4,661,000

APPENDIX D

PROPOSED 2005 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

**CITY OF RICHMOND
2005 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM**

	2004 PROGRAM	2005 PROGRAM	OPERATING BUDGET 541113/15/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ 7110	D.C.C. RESERVE 7301-7059	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7220	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)	
INFRASTRUCTURE PROGRAM														
ROADS	\$4,112,500	\$3,878,500			\$917,250			\$2,357,750					\$603,500	
DRAINAGE/STORM SEWER	\$954,750	\$61,0500			\$30,525			\$579,975						
WATER	\$2,836,000	\$2,830,000			\$0			\$0						
SANITARY SEWER	\$2,152,500	\$1,902,500												
MINOR PUBLIC WORKS	\$625,000	\$1,125,000												
LOCAL IMPROVEMENTS	\$750,000	\$750,000												
SUB-TOTAL	\$11,430,750	\$11,096,500											\$750,000	
BUILDING PROGRAM														
MINOR BUILDINGS	\$1,300,000	\$1,385,000												
MAJOR BUILDINGS	\$3,460,250	\$3,505,000												
SUB-TOTAL	\$4,760,250	\$4,890,000												
LAND PROGRAM														
LAND ACQUISITION														
AFFORDABLE HOUSING PROJECT														
SUB-TOTAL	\$1,634,000	\$1,225,000											\$1,000,000	
PARKS PROGRAM														
PARKLAND ACQUISITION														
MAJOR PARKS	\$3,400,000	\$5,900,000												
MINOR PARKS	\$1,595,000	\$2,190,000												
SUB-TOTAL	\$390,000	\$500,000			\$300,000									
EQUIPMENT PROGRAM														
ANNUAL FLEET REPLACEMENT	\$2,569,679	\$1,776,300												
FIRE DEPT. VEHICLES	\$149,400	\$650,000												
COMPUTER CAPITAL/SOFTWARE	\$0	\$0												
TECHNOLOGICAL INNOVATIONS	\$115,000	\$135,000												
SUB-TOTAL	\$2,834,079	\$2,561,300												
TOTAL REQUIRED	\$26,044,079	\$28,362,800	\$1,725,000		\$0	\$3,419,575	\$225,000	\$10,375,925	\$1,776,300	\$650,000	\$0	\$1,902,500	\$2,830,000	\$5,458,500

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.	\$307,000
Neighbourhood Traffic Safety Program	This project involves the in-filling of ditch and widening of pavement to provide bike lanes for cyclists on Shell Road from Highway 99 to Cambie Road as part of ditch in-filling project, timing TBD. Project subject to RCCC and BCTFA support.	
T1368/1369 - No. 2 Road Bridge	This project (\$308,000) is expected to be funded jointly by the City (\$154,000), and BCTFA/TransLink (\$154,000). This project will not proceed without a funding commitment from either BCTFA or TransLink.	
Traffic Signal Installation Program	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.	
Undergrounding - Hydro/Tel	The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	
Drainage		
Drainage Assessment Program	1/3 funding is from BC Hydro	
	This is the proposed Phase 4 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	

City of Richmond: One Year Capital Program - Summary by Program (Recommended by Capital Team)

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
More Subdivision	Replace approximately 1635 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 5th year of a 5-year replacement program.	\$450,000
The scope of work is as follows:		
Seafair Dr. - Fairway Rd to Francis Fairfax Cres Seafair Dr. to Fairfax Pl. Francis Rd. – east of Millmore Rd to No 1 Road	500m 435 m 700 m	
Total	1635 @ 275 per/m = \$450,000	
Seismic Upgrading of Watermains	Replace 500 meters of 300 mm Ac watermain with restrained 300 mm of C-900 plastic.	\$400,000
Watermain replacement	Replace existing watermain with C-900 in conjunction with a ditch in-fill project.	\$100,000
Full scope has not been determined at this time		
Sanitary Sewer		
Hamilton Pump Station	New Pump Stations and extension of sanitary sewers. To extend sanitary sewers in Hamilton area (details not yet known)	\$1,000,000
Sanitary Pump Station Rehabilitation	Sanitary pump Station Rehabilitation	\$750,000
Minor Public Works		
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required. The scope of this program includes the following works:	\$575,000
A. Road Improvement program: Walkway improvements.		
B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems.		
C. Traffic Improvements: Including Crosswalks, Bus Stop improvements, Wheel chair program and Signage/Safety improvements.		
D. Traffic Signal/Communications Network: Infrastructure renewal, Physical plant upgrading, Ongoing Infrastructure Development Testing and Communications network conduit/cable.		
E. Minor Utility Projects: Pre-Ducting for utility works; Advance Pole relocations and Data storage to CD Rom format.		
Upgrade to City Centre Lighting	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$500,000
Wheel Chair Ramp upgrade program		
LIP/NIC	Ditch Infill and possible full road upgrade	\$750,000
Infrastructure Advanced Design & Land		

City of Richmond: One Year Capital Program - Summary by Program (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$204,500
B. Building Program		
Minor Building		
Britannia Heritage Site	Code and structural work, building fabric repair. Use is undetermined at this point; further research is required to determine accurate past use. This is phase 2. Phase 1, foundation work, is occurring in 2001.	\$85,000
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as : Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical, Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 11% of \$700,000 = \$77,000 Unplanned repairs/ Contingency = \$68,000 Project Manager (FT temp) = \$55,000 Recommended Projects = \$500,000	\$800,000
Major Building		
Civic Building Infrastructure Advanced Design	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$310,000
Community Safety Building Replacement	Repositioning and replacement of Existing Fire hall No 1 on Gilbert @ Granville and by locating a smaller community Fire Hall The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size and would also accommodate a 1000sf Community Policing component. The new facility will be constructed to "Post Disaster" standards and include substantial "green" initiatives.	\$3,105,000
Public Washroom - Shell Rd Trail	Ref REDMS # 336064, #128596 Deferred to 2005 from 2002 as per Parks Planning (from David Naysmith)	\$90,000
	Construct a "Trails" type public washroom facility, along the existing Shell Road Trail. Request for funding to construct a "Trails" type public washroom facility along the existing Shell Road Trail, with a specific location to be determined. This would be a facility on the model of the washroom facilities constructed in 1998 – 1999.	
	Estimate: 'global' budget allowance	\$90,000
C. Land And Parks Program		
Land Acquisition		

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Affordable Housing Project	Request to Spend: The City has an Affordable Housing Statutory Reserve Fund.	\$1,000,000
Infrastructure Program - Land Acquisition	To purchase land required for DCC program	\$225,000
Parkland acquisition	Acquisition of park land	\$5,900,000
Minor Parks		
General Development	Ongoing improvements, repairs and replacements of benches, pathways, lighting, picnic tables, fencing, and backstops. These funds are also used for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
Park Drainage Retrofit Program	Construction of perimeter drainage in parks/school park sites and retrofitting drainage around individual sports fields. This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$200,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards as identified through the CSA inspection program. The City owns 54 playgrounds that are all impacted to varying degrees by the new standards introduced in 1999.	\$100,000
Major Parks/Streetscapes		
Characterization - Neighbourhood Parks	Implementation of design solutions to add character to existing park sites- pathways, trees and activity areas -with the intent of strengthening the overall function and character of existing sites within the City's park system.	\$200,000
City Centre Waterfront Open Space	This project would entail an upgrade/ beautification of the waterfront in the City Centre. The specific projects would be determined through the Beautification and City Centre Legacy teams. This amount of money could be used for a small pilot project or be used as seed money to elicit matching funds from infrastructure grants or the business community.	\$290,000
Hugh Boyd Park Development	Redevelopment of field no. 4 and landscaping of new fieldhouse	\$200,000
McLennan North Community Park	This project comprises two major components: 1) the redevelopment of field no. 4, in the southwest corner of the park. Work will include regrading and reseeding the site, and renewing the storm drainage system. A new backstop will also be installed. 2) landscaping of the new fieldhouse to be located just east of the 'oval'.	\$250,000
Natural Areas	Various sites. Program is used to protect and enhance natural areas, to construct limited public access observation decks, pathways, interpretation signage and/or shelters.	\$50,000
Stevenson Park Redevelopment - Phase III	Retrofit , development of park	\$500,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$700,000
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Fire Department - Apparatus and Equipment Replacement	\$650,000

City of Richmond: One Year Capital Program - Summary by Program 2005

(Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Vehicle Reserve Purchases (PW)	Vehicle replacement program	\$1,776,300
Technology		
Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.	\$135,000
Summary for 'Project Year' = 2005 (46 detail records)		
Grand Total		\$28,362,800

City of Richmond: One Year Capital Program - Summary by Program 2005 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads	Blundell Road widening (Phase I) This project involves in-filling of ditches and reconstructing the existing Blundell Road to 14m wide paved urban arterial standards. This is the first phase of a two-phase project includes the section of Blundell Road between No. 4 Road and Shell Road. Phase II of this project includes the section east of Shell Road to No. 5 Road.	\$2,734,000
Intersection Improvements - Cambie Road/No. 4 Road	Project scope includes: storm sewer, sanitary trunk sewer, sidewalk, curb and gutter, streetlights, treed boulevard on both sides; railway crossing and relocation of other utilities.	\$800,000
Sidewalk Program	This project includes road widening for the introduction of leftturn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$519,000
Steveston Highway Widening	This project involves construction of concrete sidewalk and tree boulevard on both sides along Garden City Road between Sea Island Way and Cambie Road where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$1,800,000
Drainage	This project involves the widening of Steveston Highway from Palmberg Road to the Steveston Highway Interchange to divided four-lane urban arterial road standard. Project scope includes: road widening to four lanes with curb and gutter, sidewalk, raised centre median, streetlights and tree boulevard. Project is contingent upon ditch infill and storm drainage already being completed.	
P39308 - Queens Canal	This project will not proceed without funding commitment from BC TFA, TransLink, ICBC River Port area businesses and future developments. The total estimated cost of \$1,800,000 is expected to be funded 1/3 by the City (\$600,000) and 2/3 by external agencies (\$1,200,000). This cost estimates do not allow for drainage work including ditch infill and box culvert extensions.	
Water Main Replacement		
Monteith Road	Drainage Pump Station Rehabilitation # 3 Rd/Steveston Highway pump station is in a dilapidated condition, the pumps and electrical switch gear are under-sized and nearing the end of their useful life. The pump station and floodbox structure will be completely reconstructed.	\$500,000
Seismic Upgrades of Waterwork Network	Rebuild cross-section of canal	\$500,000
Sanitary Sewer		
Aspen, More, Monds, Broadmoor and Shellmont	Sanitary sewer infrastructure replacement. This program will rehabilitate aging sanitary sewers before they completely break down.	\$1,000,000
Minor Public Works		
Street Light Replacement Program	Repair and replace Older Street Light Poles with newer Poles	\$125,000
C. Land And Parks Program		
Land Acquisition		

City of Richmond: One Year Capital Program - Summary by Program 2005 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Stevenson Tram - car barn/station/museum display	Construction of a permanent car barn, station and museum display.	\$450,000
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites.	\$100,000
Major Parks/Streetscapes		
City Centre Streetscape Upgrades	Greenways, entrances to City, medians etc.	\$200,000
Park Advance Design / Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$250,000
Trails	Upgrade of existing trails and construction of new trails. The locations will be determined after the Trail Study to be conducted in 2000/2001.	\$250,000
Summary for 'Project Year' = 2005 (17 detail records)		
Grand Total		\$9,628,000

APPENDIX E

PROPOSED 2006 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2006 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2005 PROGRAM	2006 PROGRAM	OPERATING BUDGET 54111121517	OPERATING SURPLUS 2430	CAP RSV REVOLVE 710	CAP RSV LAND ACQ 7301-7959	D.C.C. RESERVE 7205	PW EQUIP RESERVE 7220	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER UTILITY 7210	WATER RESERVE/ UTILITY 7919/7939	OTHER FUNDING (VARIOUS)		
INFRASTRUCTURE PROGRAM															
ROADS	\$3,878,500	\$4,044,500											\$675,000		
DRAINAGE/STORM SEWER	\$610,500	\$1,699,750													
WATER	\$2,830,000	\$2,963,500													
SANITARY SEWER	\$1,902,500	\$2,052,500													
MINOR PUBLIC WORKS	\$1,125,000	\$725,000													
LOCAL IMPROVEMENTS	\$750,000	\$750,000													
SUB-TOTAL	\$11,096,500	\$12,235,250											\$750,000		
BUILDING PROGRAM															
MINOR BUILDINGS	\$1,385,000	\$1,900,000													
MAJOR BUILDINGS	\$3,505,000	\$1,695,000													
PUBLIC SAFETY BUILDING	\$0	\$27,000,000													
COMMUNITY SAFETY BUILDING REPL.	\$0	\$11,500,000													
SUB-TOTAL	\$4,890,000	\$42,095,000													
LAND PROGRAM															
LAND ACQUISITION	\$225,000	\$0													
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$1,000,000													
SUB-TOTAL	\$1,225,000	\$1,000,000											\$1,000,000		
PARKS PROGRAM															
PARKLAND ACQUISITION	\$5,900,000	\$6,400,000													
MAJOR PARKS	\$2,190,000	\$2,500,000													
MINOR PARKS	\$350,000	\$200,000													
SUB-TOTAL	\$8,590,000	\$2,250,000													
EQUIPMENT PROGRAM															
ANNUAL FLEET REPLACEMENT	\$1,776,300	\$1,590,000													
FIRE DEPT. VEHICLES	\$650,000	\$650,000													
COMPUTER CAPITAL/SOFTWARE	\$0	\$0													
TECHNOLOGICAL INNOVATIONS	\$135,000	\$0													
SUB-TOTAL	\$2,561,300	\$2,240,000													
TOTAL REQUIRED	\$28,362,800	\$66,820,250	\$1,825,000		\$0	\$3,846,962		\$0	\$12,147,288	\$1,590,000	\$650,000	\$0	\$2,052,500	\$2,963,500	\$41,745,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads to overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware for these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.	\$450,000
Neighbourhood Traffic Safety Program	In-filling of ditch and widening of pavement to provide bike lanes for cyclists on Shell Road from Cambie Road to River Road as part of ditch infilling project, timing TBD. Project subject to RCCC and BCTFA support. This project assumes no land acquisition cost.	
	This project (\$450,000) is expected to be funded jointly by the City (\$250,000) and BCTFA/TransLink (\$200,000). This project will not proceed without a funding commitment from either BCTFA or TransLink.	
	This project is critical to the bicycle network and should be implemented.	
T1368/1369 - No. 2 Road Bridge	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.	\$100,000
Drainage	The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	
No. 3 Road South Pump Station	Debt financing costs	\$2,030,000
Water Main Replacement	Undergrounding - Hydro/Tel (10 year program)	\$1,350,000
Drainage Assessment Program	This is the proposed Phase 5 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	
	The project involves moving existing control systems and constructing a new structure west of the current location.	
	A detailed scope of this project will be available by the next budget cycle.	

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
AC Replacement Program	Replace approximately 2700 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 2 year replacement program	\$743,000
	Maddock – Aintree Cres to Swinton Cres Dennis Cres – complete look to new areas Dennis Pl Wilkinson Rd – No 4 Road to Swinton Crew Swinton Crew - complete look to new areas Aquilla Rd – Williams Rd. to Swinton Cres.	259 m 1075 m 156 m 190 m 780 m 240m
	Total	2700 m @ 275 = \$743,000
AC Replacement Program	Replace 1729 m of undersized or passes life cycle Asbestos Cement Watermain.	\$459,000
	Comstock 553m Udy 467m Donald 297m Bassett Rd 366m Bassett Ol 46m TOTAL 1729 @ \$265 = \$459,000	
AC Watermain Replacement	Watermain Replacement Replace 1115 meters of existing 100mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 2 year replacement program	\$307,000
	Bowcock Road St Albans 425 m Scotbrook Rd – Bowcock to Robinson Rd 220 m Wheeler Rd = Bowcock to Robinson Rd 220 m Robinson Road Gay road to St Albans 200 m Robinson Pl 50 m	
	Total	1115 m @ 275 = \$307,000
Broadmoor Sub-division Watermain Replacement Phase 3 of 3	Replace approximately 950 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4nd year of a 4 year replacement program	\$262,000
	Bates Rd – Greenlees to end 453 m Gihurst Gate – Gilbert to Gihurst Cr 107 m Gihurst Cr - Gihurst Gate to Gilbert Rd 384m	
Minor Capital Waterworks Program	Water Main Development 25,000	\$265,000
River Rd 18 inch steel	Replace 18 inch steel watermain from PRV C chamber to 300 mm AC Pipe	\$280,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Seismic Upgrading of Watermains	Replace 800 meters of 300 mm Ac watermain with restrained 300 mm of C-900 plastic.	\$400,000
Sanitary Sewer		\$1,400,000
Aspen, More, Monds, Broadmoor and Shellmont	Sanitary sewer infrastructure replacement	
Sanitary Pump Station Rehabilitation	Sanitary pump Station Rehabilitation	\$500,000
Minor Public Works		\$675,000
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required. The scope of this program includes the following works:	
	A. Road Improvement program: Walkway improvements.	
	B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems.	
	C. Traffic Improvements: Including Crosswalks, Bus Stop improvements, Wheel chair program and Signage/Safety improvements.	
	D. Traffic Signal/Communications Network: Infrastructure renewal, Physical pole upgrading, Ongoing Infrastructure Development Testing and Communications network conduit/cable.	
	E. Minor Utility Projects: Pre-Ducting for utility works; Advance Pole relocations and Data storage to CD Rom format.	
1	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$50,000
2	Wheel Chair Ramp upgrade program	
LIP/NIC	Ditch Infill and possible full road upgrade	\$750,000
Infrastructure Advanced Design & Land		\$352,000
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$1,000,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment								
Physical Plant Sustaining Capital	<p>The purpose of this project is to provide a funding source for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical, Electrical, Conveying and life Safety Systems.</p> <p>Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital</p> <p>At this time the project budget is distributed as :</p> <table> <tr> <td>City Overhead charge @ 11% of \$700,000</td> <td>= \$77,000</td> </tr> <tr> <td>Unplanned repairs/ Contingency</td> <td>= \$68,000</td> </tr> <tr> <td>Project Manager (F/T temp)</td> <td>= \$55,000</td> </tr> <tr> <td>Recommended Projects</td> <td>= \$500,000</td> </tr> </table>	City Overhead charge @ 11% of \$700,000	= \$77,000	Unplanned repairs/ Contingency	= \$68,000	Project Manager (F/T temp)	= \$55,000	Recommended Projects	= \$500,000	\$900,000
City Overhead charge @ 11% of \$700,000	= \$77,000									
Unplanned repairs/ Contingency	= \$68,000									
Project Manager (F/T temp)	= \$55,000									
Recommended Projects	= \$500,000									
Major Building Civic Building Infrastructure Advanced Design	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$310,000								
Community Safety Building - Seismic Upgrade	<p>The Work entails removal and replacement of the existing Floor slab and roof to install a structurally reinforced floor slab and roof diaphragm, and provide structural cross bracing to the building. In addition, fixtures and equipment will be strengthened and lifecycle maintenance deficiencies corrected</p>	\$820,000								
Community Safety Building Replacement	<p>ref REDMS # 336064, 446000</p> <p>Repositioning and replacement of Existing Fire hall No 3 at Bridgeport to a new location on garden City @ Alderbridge and constructing a new Fire rescue headquarters facility</p> <p>The proposed new post disaster fire rescue facility is estimated to be approximately 15 -20,000 sf in size</p> <p>Initial Planning is also evaluating the opportunities to co -locate the RCMP in a joint service Public Safety building along with a new Emergency Operations Centre</p> <p>The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives.</p>	\$11,500,000								
Manoh Steves Park Fieldhouse & Caretaker Suite	Deferred to 2006 from 2002 as per Parks Planning (from David Naysmith)	\$565,000								
RCMP - Public Safety Building Affordable Housing Project	<p>New washroom and caretaker facility</p> <p>Construction of a new "Post Disaster" and "Green" Public safety building to accommodate the RCMP by the year 2008</p> <p>The estimated size of the facility is 85,000 sf with an additional 5,000sf allocation for an Emergency Operations Centre.</p> <p>Current Community Safety Buildings Master Plan prepared by Fac. Mgmt proposes a number of site options including the City precinct and the potential to co -locate with the new Fire Rescue headquarters at garden City @ Alderbridge</p>	\$27,000,000								
C. Land And Parks Program Land Acquisition Affordable Housing Project	Reference REDMS # 336064, 446000	\$1,000,000								

City of Richmond: One Year Capital Program - Summary by Program 2006

(Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Parkland acquisition	Acquisition of park land	\$6,400,000
Minor Parks		
Hugh Boyd Park Sports Lights	Construction of Phase 2 sports lights on Field One as per the Council approved Hugh Boyd Park Master Plan.	\$150,000
Parks Minor Capital-General Development	This program covers the ongoing improvements to the park facilities such as benches, pathways, lighting, picnic tables, fencing and is used as a fund for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
Major Parks/Streetscapes		
McLennan North Park	Capital park construction work. Total cost of project is estimated at \$4 million to \$7 million dollars. Detailed phasing of the construction will only be determined upon completion of the design/construction details in 2002.	\$250,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$50,000
Terra Nova NWQ Park	Development of a potential 60 acre open space site.	\$500,000
	This is the third phase of construction of this major legacy project in Terra Nova. The exact scope of work will only be determined after the planning and public and Council approval processes in Year 2001 and 2002.	
Trails	Upgrade of existing trails and construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, Needs Assessment, and the Environmental Management Strategy are conducted in the previous years.	\$300,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$800,000
Waferfront Park Development	This project would entail an upgrade/beautification of the waterfront in the City Centre or along the South Dyke - Legacy Lands by Riverport. The priority and the specific projects would be determined as the opportunities arise. It may be a project within the City Centre determined through the Beautification and City Centre Legacy teams or a project along the South Dyke-Riverport area determined through the Trails Strategy and Needs Assessment.	\$350,000
Youth Park - BMX or equivalent	This amount of money could be used for a specific construction project or be used as seed money to elicit matching funds from infrastructure grants or the business community.	\$250,000
	To construct a park or a section of an existing park programmed with a recreational activity specifically for youth/teens. It may be another skateboard park, frisbee golf, BMX or an equivalent sport of choice for teens.	
D. Equipment Program		
Vehicle Equipment	Fire Department - Apparatus and Equipment Replacement.	\$650,000
Vehicle Reserve Purchases (Fire)		
Vehicle Reserve Purchases (PW)	Vehicle Replacement program.	\$1,590,000
Summary for 'Project Year' = 2006 (40 detail records)		
Grand Total		\$66,820,250

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City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Blundell Interchange (Phase I)	This is a 2-3 year project. This phase involves implementation of a partial Blundell interchange at Highway 99 and Blundell Road and will be implemented in partnership with the Province/Ministry of Transportation (MoT), TransLink and potentially with ICBC. The project scope includes: construction of a northbound off-ramp and southbound on-ramp to form a partial interchange at Highway 99 and Blundell Road. This project also involves widening of Blundell Road between No. 5 Road and No. 6 Road to 4 lanes. The detailed scope of work will be determined after the completion of the Richmond Sub-Area Transportation Study in early 2002. Land acquisition may be required.	\$7,200,000
Blundell Road widening (Phase II)	This project will not proceed without funding commitment from external agencies including the Province/MoT, TransLink (subject to inclusion of Blundell Road in the MRN) and ICBC. Staff also anticipate that this project will be funded by a three-party funding agreement (including the City as one of the parties). The total project cost is estimated at \$21,900,000, and the anticipated share from the City is \$7,300,000 (\$2,400,000 in 2006, \$2,400,000 in 2007 and \$2,500,000 in 2008). Potentially, ICBC may contribute to this project to enhance traffic safety along the Highway 99 system and Blundell Road corridor, as part of their Traffic Safety Improvement Program.	\$2,607,000
Intersection Improvements - Blundell Road at Gilbert Road	This project involves infilling of ditches and reconstructing the existing Blundell Road to 14 m wide paved urban arterial standards. This is the second phase of a two-phase project which includes the section of Blundell Road between Shell Road and No. 5 Road.	\$1,000,000
Lynas Lane Extension	The project scope includes: storm sewer, sanitary trunk sewer, sidewalk, curb and gutter, streetlights, treed boulevard on both sides, railway crossing, and relocation of other utilities.	\$900,000
Sidewalk Program	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$394,000
Steveston Highway Interchange Upgrade (Ph I)	This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$4,500,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Traffic Signal Installation Program	The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required.	\$100,000
	The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	
Minor Public Works		
Street Light Replacement Program	Significant # of old subdivisions need street lights	\$125,000
Upgrade to City Centre Lighting	Change existing street light poles with ornamental theme poles	\$500,000
B. Building Program		
Major Building		
Britannia Heritage Shipyard Cannery Office	Interior work on cannery office, completed to look as it was when it was the office. Work includes interior restoration including installation of displays for viewing from window. No public access. Further research is required about past historical configuration.	\$50,000
C. Land And Parks Program		
Land Acquisition		
Infrastructure Program - Land Acquisition	To purchase land required for DCC program	\$500,000
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Field Drainage Upgrade Program	Construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields.	\$150,000
	This ongoing program entails construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields. The cost of one sports field to be properly drained averages \$150,000.	
Playground Upgrade Program	This will be the 6 th year of a phased program to deal with the CSA requirements.	\$100,000
	This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	
Tree Planting	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.	\$100,000
Major Parks/Streetscapes		
	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide stock for the City Nursery.	

City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Automatic Lighting and Irrigation Control	Installation of electronic/computer control of irrigation and lighting systems at parks	\$250,000
Minoru Park Pathway	To construct a lit pathway system in the park.	\$250,000
Steveston Tram - second kilometer	Construction of one kilometer of tram line including track construction, provision of overhead power lines, rectifier station, crossing and crossing protection. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$770,000
Summary for 'Project Year' = 2006 (18 detail records)		
Grand Total		\$19,546,000

APPENDIX F

**IDENTIFICATION OF 2002
LONG TERM PROJECTS**

City of Richmond: One Year Capital Program - Details (Recommended By Capital Team)

2002												Operating/ Maint. Funding					
Rqd	Land Division Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	DCC Year Area	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total
No	Urban Development	Affordable Housing Project	7481-7489	City	Request to Spend: City has an Affordable			\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$2,000,000	
No	Engineering Operations - Public Works	Soudahke Sub-Division	123456	Southgate Rd. Berry Road, Southgate Road	Project Scope (Detailed)			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$281,000
No	Engineering Roads & Public Works	No. 2 Road Bridge	13168/1369	Middle Arm Crossing	Debt financing	20 Years	Lulu Island	\$2,030,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,030,000
No	Engineering, Engineering & Public Planning Works	Drainage Assessment Program	d2002f	Various locations, Lulu Island	This is the proposed Phase 1 of a 7 year	7 Years	Lulu Island	\$0	\$154,138	\$0	\$0	\$0	\$0	\$0	\$8,113	\$0	\$162,250
No	Engineering Operations - Public Sewer & Drainage Works	Emergency Response Equipment			Purchase of Generators for drainage pump			\$0	\$475,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$500,000
No	Engineering Operations - Public Works	Mond's Subdivision		Elmond Rd, Germund Rd, Kirkwood Cr.,	Wateman renewal - replace approx. 1.56km of	4 Years		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$429,000
No	Engineering Operations - Public Works	More Subdivision		Kelmore Rd, Ulisnore Rd, Littlemore Pl.	Wateman renewal - replace approx. 1.895m of	5 Years		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$521,000
No	Engineering Operations - Public Works	Westminster Highway	P49901	No 7 Road to No 8 Road	No 2 Road to Gilbert Replacement Road	5 Years		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000
No	Engineering Operations - Public Works	Westminster Hwy	P49901	Various sites in the City	Replace existing 300mm meters of 300mm	5 Years		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$520,000
Yes	Finance and Corporate	Land	Parkland acquisition		Acquisition of park land		Lulu Island	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,24,490
179	Engineering Operations - Public Works	Asbestos Cement Watermain Replacement	2002-02	Bakerview Sub-division	Replace undersized 100 mm and 150 mm Asbestos	3 Years		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$251,000
No	Urban Development	Minon Boulevard Traffic Safety Improvements		Minon Boulevard (between Granville and Westminster)	This project involves the installation of			\$19,000	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0
No	Urban Transportation Development	Bicycle Lane Program	T-2002-02	Williams Road (west dyke to No. 1 Road)	The infill of the ditch on the north side of Williams			\$125,400	\$0	\$0	\$0	\$0	\$0	\$131,000	\$6,600	\$0	\$263,000
No	Urban Development	Westminster Highway Crosswalk Installation		Westminster Highway between Minon, Blvd & No. 3 Road	This project involves the installation of a			\$58,900	\$0	\$0	\$0	\$0	\$0	\$3,100	\$0	\$0	\$62,000

City of Richmond: One Year Capital Program - Details (Recommended By Capital Team)

2002

Land Rqd	Division Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	Proj Year Area	DCC	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total	Operating/ Maint. Funding
No	Engineering Operations - & Public Works	Sanitary Pump Station Rehabilitation	T-2002-05	Mount and Steer pump stations TBA	Replace pumps, discharge bonds, pipe work, valves	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$5,000
No	Engineering Operations - & Public Works	Minor Capital Waterworks Program	TBA	2002's Water Model Calibration	5% of funds to be allocated towards the advanced project	1	Lulu Island	\$13,775	\$88,150	\$0	\$0	\$76,000	\$140,500	\$0	\$0	\$3,375	\$324,000	\$0	
Engineering Infrastructure Advanced Design & Public Works	Urban Development	Arterial Road Crosswalk Improvement	T-2002-01	Various locations	This project involves the upgrading of Projects contained in this program are aimed at applying	5 Years	Lulu Island	\$190,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$0	
Urban Transportation Development	Urban Transportation Development	Transit Plan Infrastructure Improvements	T-2002-04	Various Locations TBA	The scope of this project includes infrastructure.	2 Years	Lulu Island	\$47,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$50,000	\$0
Engineering Operations - & Public Works	Urban Transportation Development	Sanitary sewer extension	S2002	Freeway Exit 4 Shell Rd. to Hall Ave.	Abandon existing pump station and extend sewer from River Read at Hollybridge Way	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170,000	\$0	
Engineering Operations - & Public Works	Urban Transportation Development	Pedestrian Signal	S2002	River Road / Hollybridge Way	This project involves the installation of a Sanitary sewer extension to Albans St.	\$38,000	Lulu Island	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$40,000	\$0
Engineering Operations - & Public Works	Engineering Operations - & Public Works	Sanitary sewer Extension	S2002	Jones Rd. Fr. No.3 Rd to 125m East	Sanitary sewer extension to service properties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000	\$0	
Engineering Operations - & Public Works	Engineering Operations - & Public Works	Sanitary sewer extension	S2002	No. 5 Rd. From Woodhead to Cambie Road	Sanitary sewer extension to service properties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	
Engineering Operations - & Public Works	Parks, Recreation and Urban Development	Sanitary sewer Extension	S2002	General Currie and Garden City Road	Sanitary Sewer Extension to service properties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	
No	Engineering Operations - & Public Works	Scenic Upgrades of Waterworks Network	P2007	Bundell Road at Shell Road and Williams Road at	Pressure reducing valve (PRV) stations - install	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Parks, Recreation and Urban Development	Parks Services	McLeman North Community Park - Botanical Garden	2	McLeman North Community Park	This will be continued design work on the	10 Years	Lulu Island	\$53,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100	\$55,000	\$0
No	Urban Development	Traffic Signal Installation Program	TBA	The scope of this project involves the installation of	Various Locations	Lulu Island	\$237,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,500	\$250,000	\$7,000	

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City of Richmond: One Year Capital Program - Details (Recommended By Capital Team)

2002										Operating/ Maint. Funding								
Rqd	Land Division	Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	DCC Year	Parks DCC	Water DCC	Storm DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total	
Yes	Urban Development	Transportation	Intersection Improvements - Garden City	2002	Garden City Road at Cable Road	This project involves modification of the approximately 1/3 funding from BC	10	4 Years	\$0	\$0	\$0	\$0	\$0	\$431,500	\$864,500	\$1,296,000	\$0	
No	Corporate and Public Works	Engineering Roads & Public Works	Undergrounding - Hydro, Telus & Hydro		Cable Road to Sea Island Way	Construction of a new five-lane arterial road	2	2 Years	\$0	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	\$0	
Yes	Finance and Land	Engineering Roads & Public Works	Extension - Continuation of Land Acquisition (Strategic)		Garden City Road	Sea Island Way to Bridgeport Road	Funds are required for land		\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$2,000,000	\$0
No	Community Fire Safety	Corporate and Public Works	Vehicle Reserve Purchases (Fire)		Fire Department	Acquisitions that Apparatus and Equipment replacement			\$0	\$0	\$0	\$0	\$0	\$0	\$900,000	\$0	\$900,000	\$0
No	Engineering Operations - & Public Works	Vehicle Reserve Purchases (PW)	Vehicle Reserve	1	PW Fleet Operations	Vehicle replacement program.			\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$0	\$2,000,000	\$0
No	Engineering Operations - & Public Works	Vehicle Reserve Purchases - Phantom Fleet/Auxiliary	Vehicle Reserve	1	PW Fleet Operations	To buy out 4 vehicles currently being leased as undergrounding	4	2 Years	\$0	\$0	\$0	\$0	\$0	\$0	\$229,579	\$229,579	\$229,579	\$0
No	Engineering Roads & Public Works	Engineering Facility & Public Management Works	Undergrounding - Hydro & Telus	2002	City Centre - Granville Ave. and Westminster Hwy	Undergrounding - ten year program.	10	4 Years	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$900,000	\$1,350,000	\$0
No	Parks, Recreation and	Finance and Land	Physical Plant Sustaining Capital	FM-02-0	Various	The purpose of this project is to provide a funding ongoing expansion and enhancement.			\$0	\$0	\$0	\$0	\$0	\$0	\$125,000	\$264,000	\$389,000	\$0
181			Park Services	Trails	East Richmond Area	As part of the Lulu Island			\$0	\$0	\$0	\$0	\$0	\$0	\$4,500	\$225,000	\$10,000	
No	Corporate and Information Services	Finance and Land	Infrastructure Program - Land Acquisition		Various	To purchase lands required for a variety of DCC			\$0	\$0	\$0	\$0	\$0	\$0	\$634,000		\$634,000	\$0
			Property System Enhancements		All divisions	The Amanda system requires a funding for three local sanitary pump stations and			\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000	\$200,000	\$0
No	Engineering Operations - & Public Works	Sanitary Pump Stations	New Developments			In 2002, it is proposed to spend \$50,000 to assist			\$0	\$0	\$0	\$0	\$0	\$0	\$750,000	\$750,000	\$750,000	\$10,000
Urban Development	Policy Planning	Child Care Program	7719		City				\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000	\$0

City of Richmond: One Year Capital Program - Details (Recommended By Capital Team) 2002

		Operating/ Maint. Funding																
Land Rqd	Division Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	Proj Year	DCC	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total
No	Engineering Operations - & Public Works	Broadmoor Blvd Lane Drainage		Broadmoor Blvd	Add drainage to south side from 7760-7900 Herbert to Broadmoor Blvd.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	
No	Engineering Operations - & Public Works	Aspen, More, Monks, Broadmoor and Shellmont	45569	Aspen, More, Monks, Broadmoor and Shellmont	Gravity Sewer replacement, reconnection, and reconstruction, and work is to:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	
No	Finance and Services	Corporate															\$5,000	
No	Engineering, Planning & Public Works	Waterfront Improvement Program		Richmond	Waterfront amenities projects to be determined.	7	1		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,020,000	
No	Parks, Recreation and	Park Services		Minon Park	Transfer of funds from DCC Parks to the Special Sports Fund			Lulu Island	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
No	Parks, Recreation and	Park Services		Minon Park	Vinona Park Field Artificial Turf Field Construction				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800,000	
No	Engineering Operations - & Public Works	L.P		TBA	Ditch infills, curb, gutter and sidewalk projects requested.				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750,000	
No	No Parks, Recreation and	Culture and Heritage		Minoru Arena	Minoru Arena				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	
1	No Parks, Recreation and	Culture and Heritage		Britannia Site: Seine Net Loft & Camery Office	Britannia				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$180,000	
2	Yes Urban Development	Transportation Improvements - Kwantlen	FPC 02	Facility Lifecycle Planning Model	Kwantlen Street at Alderbridge Way	\$149,150	\$40,850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	
	Engineering Facility & Public Works				This project will proceed only if the land required for													
	No Engineering Operations - & Public Works	Sewer & Drainage		Facilities Planning Dept.	Year 2 of Lifecycle Planning Program for City Buildings	2	2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$125,000	
	No Engineering Operations - & Public Works	Drainage System - Steveston Highway			Between No 1 Road and 7th Avenue.	\$0	\$285,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	
	No Engineering Operations - & Public Works	Drainage System - Sessmith Road			Steveston Hwy	Lulu Island	\$0	\$171,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	No Engineering Operations - & Public Works	Drainage System - Granville Avenue			South of Sea Island Way	Lulu Island	\$0	\$336,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,750	
	No Engineering Operations - & Public Works	Drainage			North side between Garden City Rd and Bridge St.	Lulu Island											\$375,000	

City of Richmond: One Year Capital Program - Details (Recommended By Capital Team)

2002

Land Rqd No	Division Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	Proj Year Area	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total	Operating/ Maint. \$	Funding \$1,000
1	Engineering & Public Works	Drainage System - F.A. Thompson School	d2003a	140m on north side of Odlin Road adjacent to F.A. Thompson School	Fill in 140 meters of ditch on the various locations	50	\$118,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,250	\$125,000	\$1,000
2	Engineering Facility & Public Management Works	Civic Building Infrastructure Advanced Design																	
3	Engineering Operations - Public Sewer & Drainage	Drainage System - Blundell Road	d2003b	Blundell Road - 11,000 block	Fill in the section of ditch on the 11,000 block of ditch on the Britannia Shipyard	50	\$456,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,000	\$480,000	\$0
4	Parks, Culture and Recreation Heritage and	Britannia Shipyard 1			Dredging of the mooring area for Britannia Heritage Dock Increased	50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,000	\$243,000	\$0
5	Engineering Operations - Public Sewer & Drainage	Dredging and Front Dock Increased			From No. 7 Rd to No. 8 Rd	50	\$1,140,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,000	\$1,200,000	\$0
6	Engineering Operations - Public Sewer & Drainage	Drainage System - Westminster Hwy	d2003c	Number 1 Road South	Replace the drainage pump station at Number 1 Road South	50	\$475,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$500,000	\$0
7	Parks, Park Services and Recreation	Drainage Pump Station Rehabilitation.		City Centre Legacy Program	As part of the Corporate Plan, the City Centre Legacy	50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000	\$75,000	\$0
8	Urban Development	Buiding Improvements Minor Capital Program		Various	The Building Improvement Minor Capital	10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$0
9	Engineering Facility & Public Works	Park Services Program	T-2003-05	Various locations TBA	Inspect City playgrounds and rectify potential	3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
10	Parks, Recreation and	Public Works Minor Capital		Various Sites	Various improvements to roads, traffic,		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$0
11	No Parks, Recreation and	General Development		Various locations	Ongoing improvements, repairs and		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$0
12	Urban Transportation Development	Sidewalk Program	Alderbridge Way (Hazebridge Way to Garden City)		This project involves the construction of a	2	\$42,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,250	\$45,000	\$0
13	Engineering Facility & Public Works	Satellite Works Yard FM199-9004	Stoway Rd		The site will include the	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000	\$0
14	Finance and Corporate	Information Services	Fibre optic cabling to City Buildings	Library and Works Yard	Put in place a fibre cable network from City Hall to remote	5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000	-\$25,800	

City of Richmond: One Year Capital Program - Details (Recommended By Capital Team)

2002

Land Rqd	Division Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	Proj Year	DCC Area	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total	Operating/ Maint. Funding
Yes	Engineering Operations - Public Works	Sanitary Sewer Control Upgrades		Intersection Improvements	Upgrade 142 sanitary sewer pump stations by Stevensen	142	2002	Lulu Island	\$0	\$0	\$0	\$426,000	\$0	\$0	\$0	\$0	\$0	\$426,000	\$0
	Parks, Recreation and Culture	Interurban Tram #1230 Feasibility Study			Transportation/Tourism Engineering feasibility study of various locations				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0
	Engineering Facility & Public Works	Facility Lighting Retrofit			The following is a list of lighting retrofit projects:				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$359,499	\$0
	Parks, Recreation and Culture	Minoru Park Plaza Facility Review	TBA	Minoru Park Plaza	Major review of Minoru Park Plaza Recreation and				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0
Summary for "Year" = 2002 (74 detail records)									\$3,180,975	\$3,760,338	\$0	\$1,621,400	\$2,512,000	\$3,166,200	\$1,000,000	\$12,254,999	\$4,576,656	\$32,072,818	\$15,200
Total																			

184

City of Richmond: One Year Capital Program - Details (Not Recommended By Capital Team) 2002

Land Rqd	Division	Department	Project Name	Project Number	Project Location	Scope of Work	Proj Dur	Proj Year	DCC Area	Roads DCC	Storm DCC	Water DCC	Parks DCC	Utilities Sanitary	Utilities Water	General Revenue	Other Funding	Capital Reserve	Total	Operating/ Maint. Funding
Parks, Recreation and	Park Services	Neighbourhood Beautification Initiative	Various neighbourhood locations	1	The purpose of this project is to initiate capital projects to initiate		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Parks, Recreation and	Park Services	Minoru Park Fieldhouse & Caretaker Suite	Minoru Park		Replace existing caretaker house and parks		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
No	Parks, Recreation and	Sports Field Drainage Program			Construction of perimeter drainage in older park sites		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Engineering Operations - Roads & Public Works & Field Works	Parks, Library Recreation and	Birchwood Estates Street Light Replacement	Birchwood Estates		To replace existing Lamp Standard Years with new Z pole in north of Garry Street and west of Railway	3	1			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Parks, Recreation and	Park Services	Brighthouse Library Renovation	Brighthouse Library		Since opening ten years ago the		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Parks, Recreation and	Park Services	Tree Planting Program			Brighthouse library		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Parks, Recreation and	Park Services	Tennis Court Resurfacing Program	Minoru Park		This is an ongoing program to plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Parks, Recreation and	Culture and Heritage	Trans Restoration	Steveston		This is a program to resurface the tennis courts in the		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
120	Engineering Operations - Roads & Public Works & Field Works	Replacement of Service Panels on BC Hydro	Richmond		The Trans, car 120, is being restored in		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
51					To renew 25 pole mounted Service Panels. The	3	1			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Summary for "Year" = 2002 (9 detail records)																				
Total																				

APPENDIX G

- ***MINORU PARK FIELDHOUSE AND CARETAKER SUITE REPLACEMENT***
- ***MINORU ARENA UPGRADE***
- ***MINORU PLAZA FACILITY REVIEW***



City of Richmond Capital Project Submission

Date: **October 11, 2001** Project Year: **2002**

Submitted by: **Mike Redpath**

Project Name Minoru Park Fieldhouse & Caretaker Suite Replacement

Project Location Minoru Park

Estimated cost \$565,000.00

Project Scope (Should be a detailed description of project)

Replace existing caretaker house and parks washroom facilities based on the London/Palmer models.

Stakeholder Justification (including alternate funding sources)

The existing Minoru park facilities were constructed in 1972 as two separate facilities. The caretaker suite is approximately 1431 sq ft and the fieldhouse is 950 sq ft.

Both are in average condition with the public facilities well utilized and generating many complaints regarding smells and condition through constant use and abuse.

The proposed replacements would replicate similar standard facilities now situated at London Park Steveston and Palmer Park Garden City which have been well received by the committees at Council.

The Minoru facility would differ through the inclusion of shower and changing room facilities rather than a concession area.

The program supports the strategic initiatives for providing well managed, vibrant infrastructure.

Cost breakdown

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$0.00
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$565,000.00

Impact of Capital Project on Operating Budget \$0.00**Division Priority** (check one) 1 2 3 NR**Comments****Consequences of not proceeding with the project:**

The current facilities would continue to generate complaints and ongoing maintenance costs would increase.

Minoru Park Fieldhouse and Caretaker Suite

The existing Minoru Park Fieldhouse building and caretaker suite buildings are located at the North end of Minoru Oval at the park site. The existing facilities were constructed in 1972 as separate facilities. Currently the caretaker suite is approximately 1431 square feet and the Fieldhouse is 950 square feet.

Fieldhouse

The existing fieldhouse is well utilized by the public and organized sport groups. The existing facility has in the past few years seen increased usage due to the loss by arson of a park washroom facility which was located near Caring Place and the Gateway Theatre there are no plans to replace the lost facility at this time.

At present the fieldhouse is the only public washroom facility located in the heart of Minoru park. It houses a small kitchen, shower and change facilities, as well as public washrooms. The existing facility is also used as storage space for the organized sport groups, and the centralised location for the park irrigation system controllers.

In addition to general park visitor usage, the facility is used as a washroom/shower facility for major special events in the park including: track and field, walkers, cricket, soccer, baseball, both league and tournament play. The site is also heavily used during special events in the park including the Halloween fireworks, City Centre Celebration and other special events.

Limitations of Existing Fieldhouse

Current operating challenges with the existing fieldhouse include an odour emanating from the washrooms that staff have been unable to control, and a general state of deterioration of the facility over the 30 years of annual facility usage.

A complicating factor at the site is the continual request from sports organizations for storage space in the general vicinity of the fieldhouse from track and field, baseball, and the cricket groups in particular. Temporary sheds, outdoor storage and the caretaker suite garage are presently being used due to a current lack of storage space. At present the available storage space in the facility is at a maximum, and the aesthetics of the fieldhouse continue to deteriorate on an annual basis. Ultimately the fieldhouse will have to be closed unless replaced.

Caretaker Suite

The present caretaker suite is in better condition than the adjacent fieldhouse building, it is possible to extend the life span of this facility. There is a need for a caretaker in Minoru Park, current duties of the caretaker include: park security, general washroom maintenance, special event duties, site inspections for damage and vandalism, graffiti removal in the park, operating park and track lighting systems, and addressing or answering public concerns.

Existing Services to the Fieldhouse and Caretaker Suite

In consultation with the facilities department, the 2002 capital request for the replacement of these facilities is inclusive of all potential site servicing, and estimates were based on two previous installations of similar facilities at London/Steveston and Palmer/Garden City Parks. The existing services on site may have to be upgraded due to changes in the building code since 1979, and possible improvements in services for special events.

Subject to Council approval of this capital request, the proposed replacement of the fieldhouse/caretaker suite at Minoru Park would exceed \$250,000. Prior to any work being undertaken on the Minoru Park Fieldhouse and caretaker suite, staff will bring forward a detailed report on the proposed scope of work and cost estimates along with community and user group public process for consideration by Council.



City of Richmond

Capital Project Submission

Date: **October 3, 2001** Project Year: **2002**

Submitted by: **Vern Jacques**

Project Name Minoru Arena

Project Location Minoru Arena

Estimated cost \$180,000.00

Project Scope (Should be a detailed description of project)

Building Upgrades / Retrofit Programs

-Sound System

-Hallway and dressing room flooring, replacement of asbestos laden ashalt tiles

-interior asthetic treatment update colour scheme, murals etc.

-update concession area -35 year old counters, shelves, etc.

-security system (does not currently exist)

Stakeholder Justification (including alternate funding sources)

The facility is 35 years old and is in basically good condition. It needs significant updating in recognition of the appealing aspect of our vision. The sound system is substandard making the p.a. system unintelligible and unusable for special events. Staff safety and building security are compromised because of lack of a security system. Presence of asbestos in flooring that is in need of repair makes replacement a much bigger task and at much greater expense than is usually covered under maintenance.

Cost breakdown

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$0.00
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$180,000.00

Impact of Capital Project on Operating Budget \$0.00**Division Priority** (check one) 1 2 3 NR**Comments****Consequences of not proceeding with the project:**

Stakeholder: Vern Jacques
Date: February 7, 2002

Re: Minoru Arena Renovation – Response to Referral

The proposed renovation at Richmond arenas has been put forward at this time as a second phase of renovation, the first was done in 1999 which replaced many components of the refrigeration system and the rotted rink boards. The portion that didn't receive funding at that time included a number of items that were deemed important but not absolutely urgent. These were/are: replacement of the public address system, required for music, announcements and effective emergency evacuation; replacement of some portions of asbestos laden flooring (these two are the largest portions); and some counter replacements to modernize 35 year old counters (small portion).

This work is renovation work to deal with some specific deficiencies. It is acknowledged that there is no long-term plan for the Minoru Park facilities however, with Minoru Arena being the only spectator rink in Richmond, any long-term changes to the use of the Minoru facilities are not expected to change the function. Therefore, improvements would be of benefit over a very long period of time.



City of Richmond Capital Project Submission

Date: September 11, 2001 Project Year: 2002

Submitted by: Dave McBride

Project Name Minoru Park Plaza Facility Review
Project Location Minoru Park Plaza
Estimated cost \$150,000.00

Project Scope (Should be a detailed description of project)

Major review of Minoru Park Plaza Recreation and Cultural Facilities:

Minoru Park Plaza, in the heart of Richmond's City Centre, includes a variety of Recreation and Cultural facilities, including Minoru Aquatic Centre, Minoru Arenas, Seniors' Centre, Cultural Centre (Museum, Art Gallery, Arts Centre and Library) and Fitness Pavilion. These facilities range in age from one to several decades old and require a variety of building upgrades to provide the community with a level of services and amenities which it has come to expect from similar, newer facilities, both within and outside the City.

Funding was approved in 2001 for Parks, Recreation and Culture to undertake a comprehensive Community Needs Assessment. This survey study (2002 completion) outlines the community's priorities related to Parks, Recreation and Cultural Services.

The project request of \$150,000 would provide the funding for an architectural review of the overall condition of the existing facilities, review of the priorities (identified by the Needs Assessment) of residents, patrons, user groups and staff re new and updated building features, and the preparation of facility retrofit design options and capital construction cost estimates for a renewal upgrade of the popular Minoru Park Plaza.

Stakeholder Justification (including alternate funding sources)

Over the years, the City has demonstrated that it is committed to providing Recreation and Cultural facilities and services to enhance the quality of life of its residents. The variety of facilities at the Minoru Park Plaza site clearly contributes to the City's strategic initiatives related to community vibrancy, wellness and livability. This is especially true in light of the ever increasing densification of the City's central core area.

Facilities Management recently conducted audits of the City's major facilities. The audits confirm that the condition of the facilities at Minoru Park Plaza is such that significant increases in maintenance expenditures will be required in order to address the aging facility infrastructure.

In anticipation of these growing facility life-cycle replacement costs, it is prudent to consider retrofit upgrades which will encompass improved facility features and amenities to extend the life of the buildings and better address the community's needs.

A natural outcome of the retrofits would be community facilities that are more appealing and well attended. Additional program opportunities would enhance the livability of the City's core area. Since Recreation and Cultural facilities are able to generate significant revenues through program and rental fees, greater attendance will result in higher operating budget recovery rates and therefore more efficiently managed operations.

Cost breakdown

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$0.00
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$150,000.00

Impact of Capital Project on Operating Budget \$0.00Division Priority (check one) 1 2 3 NR**Comments****Consequences of not proceeding with the project:**

If a co-ordinated review of the Minoru Park Plaza Recreation and Cultural facilities does not occur, the aging buildings will become less able to meet the community's changing needs. At the same time, the facilities will continue to require increased maintenance budget expenditures to address the decades of wear and tear on both facility structure and physical plant. It is likely that the operating budget recovery rates will decline with time.

APPENDIX H

- ***BRITANNIA HERITAGE SITE: SEINE NET LOFT
AND CANNERY OFFICE***



City of Richmond Capital Project Submission

Date: September 11, 2001 Project Year: 2002

Submitted by: Jane Fernyhough

Project Name Britannia Heritage Site: Seine Net Loft & Cannery Office

Project Location Britannia

Estimated cost \$173,000.00

Project Scope (Should be a detailed description of project)

Britannia Heritage Shipyard - cannery office stabilization and seine net loft. The cannery office needs structural stabilization, foundations replaced and the roof fixed. The seine net loft must be brought up to building code for industrial use, the building fabric repaired, powder post beetle damage repaired and controlled and storage and displays built.

Cost split as follows for the two buildings: seine net loft \$150,000, cannery office \$23,000.

RENOS of the Loft:	Seine Loft	Cannery Office
	\$110,000	\$17,000
	\$ 40,000	\$ 6,000
Totals:	\$150,000	\$23,000

Stakeholder Justification (including alternate funding sources)

Cannery Office: one of the buildings on site with unique building construction that needs to be preserved. The building is deteriorating at a rapid rate and to ensure that it is not lost it must be stabilized. This is phase one. The second phase - interior restoration - is a later phase in the Britannia project.

The seine net loft is a part of the overall preservation of the Britannia site that preserves an important part of the history of the development of Richmond and the industries of the waterfront.

Cost breakdown

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$0.00
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$173,000.00

Impact of Capital Project on Operating Budget \$0.00**Division Priority** (check one) 1 2 3 NR**Comments**

The Council adopted Britannia Business Plan has laid out the priorities for capital development. Should the Capital Team not recommend one of the years the priority for that year must be pushed to the next year and not deleted altogether.

Consequences of not proceeding with the project:

The cannery office may collapse due to deterioration. The seine net loft is an important building on this site. Delay in completion of the site delays the opportunities for promotion as a visitor and tourist destination.

APPENDIX I

- ***INTERURBAN TRAM #1220 FEASIBILITY STUDY***



City of Richmond Capital Project Submission

Date: February 12, 2002 **Project Year:** 2002
Submitted by: J. Fernyhough & C. Baxter

Project Name Interurban Tram #1220 Feasibility Study
Project Location Steveston
Estimated cost \$75,000.00

Project Scope (Should be a detailed description of project)

Transportation/Tourism/Engineering feasibility study of interurban tram car #1220, as requested by the Parks, Recreation and Cultural Services Committee on Tuesday, August 28, 2001 "that staff undertake a transportation/tourism/engineering study, utilizing \$75,000 contained in the provisional account as outlined in Phase One of the report (dated August 13, 2001 from Park Planner, Yvonne Stich)."...

This tram is a particularly valuable heritage asset given that it was the "Sockeye Special" and was the tram that originally ran from Steveston to Vancouver, doing the last run in 1958.

The Steveston Interurban Restoration Society has ownership of the tram and has nearly completed the restoration of the interior and exterior and has begun an analysis and preliminary restoration of the mechanical and electrical components of the tram.

A feasibility study would undertake the investigation of the total cost of tram restoration, possible routes, schedules and cost of operation, cost of laying track, cost of a car barn and stations, cost of an office/display space and workshop and a market feasibility study.

Stakeholder Justification (including alternate funding sources)

Council has determined that the Tram is an important community heritage asset. The tram adds to the tourist destination potential of the community and in particular Steveston and at the same time preserves a part of the heritage of the community. Council has given direction to phase in the project to get the tram operational and with operating tracks within a five year period.

Cost breakdown

Roads	\$0.00
Storm Sewer	\$0.00
Waterworks	\$0.00
Sanitary Sewer	\$0.00
Building Construction	\$0.00
Land Acquisition	\$0.00
Park Development	\$0.00
Vehicle Purchases	\$0.00
Local Improvements/Nics	\$0.00
Computer cost	\$0.00
TOTAL	\$75,000.00

Impact of Capital Project on Operating Budget \$0.00**Division Priority (check one)** 1 2 3 NR**Comments**

Project to be funded from tram operating reserve, per J. Bruce (Feb 12/02). (HE)

Consequences of not proceeding with the project:

onsequences of not proceeding with the project:

The redevelopment of Steveston Park dictates that the current location of the tram is no longer appropriate and the tram must be moved. If the feasibility study is not completed the cost of relocating the tram to another temporary location could end up costing the City more in the long term. Determining the feasibility of such a sizable undertaking as restoration and operation of the tram is not possible without a detailed study.