



# Corporate Report

NO: R255

COUNCIL DATE: December 4, 2006

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## REGULAR COUNCIL

TO: **Mayor & Council** DATE: **November 29, 2006**

FROM: **General Manager, Engineering** FILE: **1855-20 (Canada/BC**  
**General Manager, Parks, Recreation & Infrastructure Program Grant)**  
**Culture** **0250-07**

SUBJECT: **New Canada-BC Municipal Rural Infrastructure Program (NRIF) and**  
**BC/UBCM Innovations Fund**

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## RECOMMENDATION

The Engineering and Parks, Recreation & Culture Departments recommend that Council support the priorities for grant applications for the MRIF Program and the Innovation Fund, as listed in this report and as described in Appendix 1.

## DISCUSSION

Recently, the Federal and Provincial Governments announced a new Canada-BC Municipal Rural Infrastructure Program. The program is primarily targeted at smaller rural municipalities with a minimum of 80% of the funding going to municipalities of less than 250,000 people. The program has two categories of projects, namely a "Green" category for water, sewer and energy projects and "Other" for all other municipal projects. The program allows a maximum of two applications in each category and the maximum Federal/Provincial contribution for "Other" category projects is \$2 million.

Additionally, the Province and the UBCM have announced the General Strategic Priorities Fund and the Innovations Fund, both of which are funded through the Agreement on the transfer of Federal gas tax revenues. Of these two programs, only the Innovations Fund, which has \$31.8 million to be distributed Province-wide, is potentially available for Surrey projects. The larger strategic Priorities Fund has \$307 million being directed to TransLink's Capital Transit and Roads Capital Projects.

It is recommended that the following projects be submitted under each of the cost sharing programs as listed below:

Potential Green Projects under the MRIF:

- Replacement of a section of the Vacuum Sewer System (can be phased into smaller components) \$6.0 million
- I&I Reduction Program \$0.5 million

Potential "Non-Green" Community Projects under the MRIF:

- Artificial Turf Field in Newton \$2.1 million
- Addition and renovation to Newton Recreation Centre \$3.0 million

Potential Projects under the Innovations Fund:

- Robson Park aquatic habitat enhancement \$2 million
- Robson Ravine sanitary sewer relocation \$3 million

Brief descriptions of the projects are provided in the attached Appendix "1".

Laurie Cavan  
General Manager  
Parks, Recreation & Culture

Paul Ham, P.Eng.  
General Manager, Engineering

PH/rdd/amr  
Attachments

## OUTLINE OF PROJECTS

### **Replacement of a Section of the Vacuum Sewer System**

**\$6 million**

Bridgeview Vacuum Sewer System, built in the late 70s, is at the end of its economical life. The system is about 20 times more expensive to operate and maintain than the rest of the City sewer system on a per connection basis. Some areas have high inflow and infiltration (I & I), causing some vacuum lines to be down during rain events.

The City retained Earth Tech to carry out a study on this system. The study recommends the system to be replaced with a Hybrid Low Pressure System (LPS)/Steep Grade Sewer system. LPS will service the industrial lots, while the steep grade sewer will service the residential lots. The cells for steep grade system are to be enlarged with horizontal directional drilling. Two steep grade sewer cells are proposed. The west cell was selected for phase one of the replacement program because of its high I&I in this area. The estimated cost for implementing the replacement sewer system in this west cell is \$6.0 million.

### **North Surrey Inflow and Infiltration Mitigation I & I Reduction Program**

**\$0.5 million**

The City of Surrey is seeking to initiate a comprehensive inflow and infiltration mitigation project within North Surrey to reduce the amount of rainfall dependent inflow and infiltration in to the sanitary sewer system. The introduction of inflow and infiltration in the sanitary sewer reduces the ability of the system to convey sanitary sewer flow, and has resulted in sanitary sewer overflows. To reduce the inflow and infiltration problem within the northern (older) part of the City, the City is seeking to complete a program that utilizes all current best management practices. These best management practices include:

- a pre-condition flow monitoring program to quantify the magnitude of the inflow and infiltration problem;
- a smoke testing program to identify inflow locations requiring disconnection;
- a video inspection program to identify pipe defects (such as root intrusions and structural defects) in the sewer main and service laterals;
- a grouting repair program to mitigate all service lateral, pipe and manhole defects; and
- a post-condition flow monitoring program to quantify the impacts of the mitigation works.

The estimated cost to complete this comprehensive program for a catchment area within North Surrey is \$500,000.

**Artificial Turf Field at Newton Athletic Park**

**\$2.1 million**

The development of a second lighted full-size artificial turf field in Newton Athletic Park would serve the needs of field sport users in Surrey where high demand for soccer fields are being experienced. Artificial turf fields provide the equivalent of seven natural fields allocated playing time. Artificial turf enables consistent scheduling of games and maximum utilization of practice time as the field turf performance is not compromised by inclement weather. A second artificial turf field in Newton Athletic Park will enhance the ability to host large tournaments at this location.

The City's one-third funding contribution (\$667,000) has been secured in the five-year financial plan.

**Addition to Newton Recreation Centre**

**\$3 million**

The existing Newton Recreation Centre consists of a number of campus style facilities, including the Wave Pool and weight room, community hall, and senior's centre. The addition of a multi-purpose gymnasium facility that can accommodate a variety of recreation activities for all ages would be very well utilized by the community and enable the other facilities and staffing on the same location to complement the new addition. The primary focus of the multi-purpose space would be to support physical activity with a focus on children and youth. Programming would engage the culturally diverse Newton population with activities that will engage youth and bring them into a safe environment.

The City's \$1 million dollar contribution has been identified in the City's five-year financial plan.

**Robson Park Aquatic Habitat Enhancement**

**\$2 million**

This project involves the redevelopment of an old neighbourhood park to enable the addition of fisheries enhancements in order to preserve and rejuvenate an aquatic system more to its past status. Works will include day lighting some previously piped sections of creek, providing detention in the form of wet ponds and marshes in the park area, and providing an enhanced fisheries channel including some spawning habitat within the Park. The existing park recreation facilities are to be re situated so as to maximize the environmental benefits available to the watershed area and the local community. The City has been working with the community including the local stream keepers groups on this project. In the end over 250m of channel will be reconstructed with 4 pond/marsh areas proposed, a riparian buffer of over 7500m<sup>2</sup> is to be established. Fisheries access will be provided through culvert modifications with the intention that all the new works would provide habitat and some spawning potential for salmonids. Project budget is \$2,000,000.

## **Robson Ravine Sanitary Sewer Relocation**

**\$3 million**

Robson Creek sewer within the Robson Ravine and located along the eastern slope creek from 100 Avenue to 103A Avenue, services an old subdivision built 50 years ago. Because of the age of the sewer and the fact that a large portion of this subdivision area does not have a storm sewer system, significant inflow and infiltration (I&I) occurs. As a result, sanitary sewer overflows (SSOs) occur during significant rainfall storm.

The City would like to embark on an I & I reduction program for this area (please see the project description for the I&I Reduction Program) and is monitoring the SSOs closely. However, the City is planning to divert the sewer from 100 Avenue to 103A Avenue away from the creek ravine. The estimated cost is \$3.0 million. In the meantime, manholes on Robson Creek sewer are tied down with venting and overflow pipes. These temporary features will mitigate the SSOs for lesser rainfall events.