Agenda - Council - April 26, 2006

Report - Standing Policy Committee on Infrastructure Renewal and Public Works - April 11, 2006

Item No. 4 New Capital Project for the supply and installation of automatic chlorine shut off valves
File WS-7

STANDING COMMITTEE RECOMMENDATION:

On April 19, 2006, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submits the following to Council:

1. That the supply and installation of automatic chlorine shut off valves be approved as a new capital project outside of the Capital Budget process.

2. That surplus cash flow forecasted funds in the amount of $375,000.00 from the Lagimodiere Boulevard Feedermain Extension capital project (Account Distribution No. 443 181000 200751 2004000505) be transferred to this new project.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report - Standing Policy Committee on Infrastructure Renewal and Public Works - April 11, 2006

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On April 19, 2006, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On April 11, 2006, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the administrative recommendation and submitted the matter to the Executive Policy Committee and Council.

RE: NEW CAPITAL PROJECT FOR THE SUPPLY AND INSTALLATION OF AUTOMATIC CHLORINE SHUT OFF VALVES

FOR SUBMISSION TO: THE STANDING POLICY COMMITTEE ON INFRASTRUCTURE RENEWAL AND PUBLIC WORKS

ORIGINAL REPORT SIGNED BY: Barry D. MacBride, P. Eng

REPORT DATE: March 17, 2006

RECOMMENDATION(S):

1. That the supply and installation of automatic chlorine shut off valves be approved as a new capital project outside of the Capital Budget process and,
2. That surplus cash flow forecasted funds in the amount of $375,000.00 from the Lagimodiere Boulevard Feedermain Extension capital project (Account Distribution No. 443 181000 200751 2004000505) be transferred to this new project.

REPORT SUMMARY

KEY ISSUES: New Capital projects must be approved by Council

IMPLICATIONS OF THE RECOMMENDATION(S):

General Implications

X	None
	For the organization overall and/or for other departments
	For the community and/or organizations external to the City of Winnipeg
	Involves a multi-year contract

Comment(s):

Policy Implications

X	No
	Yes – Comment(s):

Environmental Implications

X	None
	Yes – Comment(s):

Human Resources Implications

X	No
	Yes – Comment(s):

Financial Implications

X	Within approved current and/or capital budget
	Current and/or capital budget adjustment required

Comment(s): Funds for this project are available in the Lagimodiere Boulevard Feedermain Extension capital project.

REPORT

REASON FOR THE REPORT:

New Capital projects must be approved by Council.

HISTORY:

Funds in the amount of $1,350,000 are included in the 2005 Capital Budget for the Lagimodiere Boulevard Feedermain Extension project, Account Distribution No. 443 181000 200751 2004000505.

DISCUSSION:

A chlorine residual is required in the water distribution system for public health protection. Chlorine is currently added to the City of Winnipeg's drinking water system at five locations, three Regional Water Pumping Stations (McPhillips, MacLean and Hurst), at the Deacon Booster Pumping Station and at the Shoal Lake Intake.

In December of 2005 an uncontrolled release of chlorine gas, from a one tonne storage cylinder at the Hurst Pumping Station, resulted in the deployment of the City of Winnipeg Fire Paramedic Service Hazardous Materials Control Team. The chlorine leak was detected by the Water Distribution Supervisory Control and Data Acquisition (SCADA) system which monitors chlorine gas levels within the Pumping Station Chlorine Room. The SCADA system initiated an alarm which was acknowledged by the Control Centre operator. The chlorine leak occurred as a result of a failed chlorine vacuum regulator onsite at the Station. Manual control valves at the Station were utilized by the Control Team to control the chlorine leak.

At sufficient concentrations the consequences of chlorine exposure when it is released to the atmosphere are mild to severe burns when in contact with skin, burning and discomfort of the eyes and respiratory effects. The Water and Waste Department's Emergency Response Plan for a chlorine release requires a report on the incident to Manitoba Conservation and other agencies such as Transport Canada.

In response to this event the Water and Waste Department is proposing to implement the use of automatic shut off valves, in addition to manual valves, on chlorine one tonne cylinders and rail cars at its facilities. The advantage of the new shut off valves is the automatic suspension, in response to a chlorine alarm, of the flow of chlorine from its container in the event of a vacuum regulator or other component failure. The automatic shut off valves will be controlled and monitored by the SCADA system.

To be able to proceed with these remedial improvements as quickly as possible, it is recommended that the supply and installation of the automatic chlorine shut off valves be approved as a new Capital project and that surplus cash flow forecasted funds in the amount of

$375,000.00 be transferred to this project from the 2005 Capital Project – Lagimodiere Boulevard Feedermain Extension project, Account Distribution No. 443 181000 200751 2004000505. This amount of funding will allow for the supply and installation of automatic chlorine shut off valves on one tonne chlorine storage cylinders at the Regional Water Pumping Stations and on onsite chlorine storage rail cars at the Deacon Booster Pumping Station and the Shoal Lake Intake.

The Lagimodiere Boulevard Feedermain Extension project is substantially complete and funds are not required.

The financial status of the Lagimodiere Boulevard Feedermain Extension project is as follows:

Authorized Capital		$1,350,000.00
Amount of Previous Awards or Expenditures	$ 652,076.00	
Amount of this Recommendation	$ 375,000.00	
Total Estimated Cost	$1,027,076.00	$1,027,076.00
Estimated Surplus		$ 322,924.00

The surplus funds were included in the Capital Expenditures Report and Forecast that was put forward for the period ending September 30, 2005.

FINANCIAL IMPACT:

The following financial impact statement for this project has been prepared in accordance with the recommendation adopted by Council on December 13, 2000.

Financial Impact Statement

Date: March 15, 2006

Project Name: **First Year of Program** **2006**

AUTOMATIC CHLORINE SHUT OFF VALVES

	2006	2007	2008	2009	2010
Capital					
Capital Expenditures Required	$ 375,000	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	375,000	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 9,029	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	9,029	-	-	-	-
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Funds for this project are included in the approved Capital Budget and are financed by retained earnings

gkp

Moira L. Geer C.A.
Manager of Finance & Administration

IN PREPARING THIS REPORT THERE WAS CONSULTATION WITH AND CONCURRENCE BY: N/A

THIS REPORT SUBMITTED BY:

Water and Waste Department
Engineering Division
Prepared by: Geoffrey Patton, P. Eng
File No. W-614