Request for Decision City Council



Meeting Date June 16			Туре	of Decision				
Decision Requested	T	T	T	Report Date	Ma	y 27, 2005		
idaddied	X	Yes	No	Priority	x	High	Low	1
) Uii	ection Only		Type of Meeting	x	Open	Closed	1

Report Title

Sudbury Arena Family Washroom

Policy Implication + Budget Impact

X

This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.

The project will be funded from the 2005 P.W.D. Building Capital Envelope Contingency Account and the 2005 Sudbury Arena Operational Budget.

Background Attached

Recommendation

THAT the tender for Contract IS05-25, construction of a new Family Washroom at the Sudbury Arena, be awarded to 939604 Ontario Inc. o/a Quality Contracting in the amount of \$35,096 [G.S.T. included], being the lowest tender meeting all requirements; and

That the cost for this project be funded as follows: \$16,400 from the 2005 P.W.D. Building Capital Envelope Contingency Account and \$16,400 from the 2005 Sudbury Arena Operational Budget. The funded amounts are net of the G.S.T. rebate.

Recommendation Continued

Recommended by the General Manager

C matterion

Catherine Matheson General Manager of Community Development

Recommended by the C.A.O.

Mark Mieto C.A.O.

6

Title: Sudbury Arena Family Restroom

Date: May 27, 2005

Report Prepared By

Ray Mensour

Manager of Sudbúry Community Arena

Division Review

Page:

1

Réal Carré

Director of Leisure Services

BACKGROUND

The Sudbury Community Arena was built in 1951 and as a result, does not have all the current amenities which are provided in newer facilities. One complaint that is continually expressed from patrons who attend events at the Sudbury Arena, is the lack of washrooms, in particular, a Family Washroom. Family Washrooms are larger and more private washroom facilities that simplify life and make public space more accessible for people with disabilities, health concerns or young children. The proposed Sudbury Arena Family Washroom is 11' x 18' (203 square feet) and would include: a diaper change station, private nursing area, barrier-free stall, family stall which includes 2 toilets, one of which is a toddler toilet, and two sinks, one of which is a toddler sink. The location for the Family Washroom was determined to be the Old Media Room (located on the lower level of the west end of the Sudbury Arena) as it represented the most cost-effective and having minimal impact on existing facility operations.

Contract IES05-25, tenders for the construction of a Family Washroom at the Sudbury Community Arena were received on May 19, 2005 from the following bidders:

BIDDERS	TOTAL TENDERED AMOUNT
SRS Contracting	\$43,216.23
LaRo Construction	\$45,651.00
Nu-Style Construction Co. [1988] Limited	\$79,982.50
939604 Ontario Inc. o/a Quality Contracting	\$35,096.00

The lower tender for Contract IES05-25, meeting all contract specifications, was submitted by 939604 Ontario Inc. o/a Quality Contracting in the amount of \$35,096 and is recommended for approval. The project will be funded equally from the 2005 P.W.D. Building Capital Envelope Contingency Account and the 2005 Sudbury Arena Operational Budget. The Building Capital Envelope has sufficient funding for this project in contingencies, while the Sudbury Arena revenues for 2005 will surpass the budgeted amount.

Request for Decision City Council



Meeting Date	luno 16	0005		Туре	of Decision				
Decision Requested ✓ Yes				T 1	Report Date	May 11, 2005			
		Direction Only		No	Priority	1	High	Low	
			Total Offing		Type of Meeting		Open	Closed	

Report Title

Operation of Municipal Arenas Concession Booths

Policy Implication + Budget Impact

This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.

Recommendation

As per the results of the RFP, it is recommended that Option 2 be selected for the operation of the Municipal Arenas Concession Booths; and

THAT the following private operators be approved to operate the following concessions for a period of five [5] years, with an option to renew for an additional five [5]

Coniston Community Centre/Arena

Operator: Debbie Owen

Bid: \$19,175

Raymond Plourde Arena

Operator: Diane Gauthier

[Time Out Catering]

Bid: \$29,062

Centennial Community Centre/Arena

Operator: Diane Gauthier

[Time Out Catering]

Bid: \$27,125

I.J. Coady Memorial Arena

Operator: KVW Services

Bid: \$ 9,100

Recommendation Continued

Background Attached

X

Recommended by the Department Head

C. Matheson

Catherine Matheson General Manager of Community Development Recommended by the C.A.O.

Mark Mieto

Chief Administrative Officer

Title: Operation of Municipal Arenas Concession Booths

Date: May 11, 2005

Report Prepared By

Richard Ahola

Manager of Municipal Arenas and Community Centres

Division Review

Page: 1

Réal Carré

Director of Leisure Services

Executive Summary

The CGS extended lease agreements from 2001-2005 [which had expired on March 31, 2005], to three [3] private concession operators at the Centennial, Raymond Plourde, I.J. Coady Memorial and Coniston Arenas. An 'Expression of Interest' was issued on April 15, 2005, followed by an RFP which was issued on April 21, 2005 to operate the concessions at the Municipal Arenas. There were three [3] bidders: Debbie Owen, KVW Services and

Background

On April 21, 2005 the CGS issued an RFP for the operation of Municipal Arena Concessions. The concessions were operated both municipally and privately from 2001-2005. The following is a summary of facilities and operating

City of Greater Sudbury

Cambrian Arena

Garson Community Centre/Arena

Capreol Community Centre/Arena

Carmichael Arena

Chelmsford Community Centre/Arena

Countryside Sports Complex

Dr. Edgar Leclair Community Centre/Arena

McClelland Community Centre/Arena

T.M. Davies Community Centre/Arena

Private Operators

Coniston Community Centre/Arena - Debbie Owen

Centennial Community Centre/Arena - Diane Gauthier [Time Out Catering1

Raymond Plourde Arena - Diane Gauthier [Time Out Catering]

I.J. Coady Memorial Arena - Wanda Wilson

Prior to issuing the RFP for concession operations, the private operators were not responsible for any capital cost associated with the operation of the concession. The successful bidders, under the terms of the RFP, will be responsible for equipment purchases and repairs during the term of the agreement, resulting in capital expenditure avoidance to the CGS. The private operators, under the expired agreement, also received 100% commission on soft drink vending machines. Coca-Cola Bottling Company was approved as the supplier of soft drinks at the Sudbury Arena and Municipal Arenas. As part of the proposal, Coca-Cola has agreed to provide 25% commission on soft drink vending machines to the CGS which is estimated at \$12,807 per year. The private operators will no longer receive vending commission. The revenue generated by the private operators on vending machines was estimated

As a result of issuing the RFP, the CGS received three [3] private sector requests for proposals as follows and one submission to operate all concessions

- one submission to operate the Centennial Community Centre/Arena and the Raymond Plourde Arena 2]
- one submission to operate the Coniston Community Centre/Arena and the Carmichael Arena

Submissions have been reviewed and the following options are identified for Council's consideration.

Option 1 - Contract all Municipal Arena Concessions

The net revenue generated as per submitted bid proposal is \$284,237 over five [5] years. This option is not recommended to Council.

Title: Operation of Municipal Arenas Concession Booths

Date: May 11, 2005

Option 2 - Combination of private and municipally operated concessions

This option is developed based on the results of approving the privatization of the Coniston Community Centre/Arena, the Centennial Community Centre/Arena, the Raymond Plourde Arena and the I.J. Coady Memorial Arena, as per bid submission and the results of the 'Last and Final Offer'. The option would include the City operating the additional nine [9] arenas. The estimated revenue over five [5] years based on this option is \$424,314.

Option 3 - City operating all Municipal Arena Concessions

The estimated revenue over five [5] years, based on this proposal is \$418,852.

Recommendation

Based on the financial analysis of each option, Option 2 is recommended.

Page: 2

Appendix 'A'

5 year Municipal Arenas Concession Operations Net Revenues

VENUE	Deb & Ken Owen proponent I	KVW Services proponent 2	Time-Out proponent 3	OPTION 1 All Privately Operated	OPTION 2 Privately/Municipally Operated	OPTION 3 Municipally Operated
	5 Year Bid Amt	5 Year Bid Amt	5 Year Bid Amt	5 Year Estimate	5 Year Estimate	5 Year Estimate
	\$	\$	\$	\$	₩.	\$
Cambrian Arena		14,850		14,850	CGS 19,661	19,661
Capreol Com. Centre/Arena		22,050		22,050	CGS 52,024	52,024
Carmichael Arena	25,025	22,050		25,025	CGS 37,213	37,213
Centennial Com. Centre/Arena		11,550	27,125	27,125	Time Out 27,125	27,000
Chelmsford Com. Centre/Arena		16,800		16,800	CGS 29,000	29,000
Coniston Com. Centre/Arena	19,175	10,725		19,175	Debbie Owen 19,175	19,000
Countryside Sports Complex		28,800		28,800	CGS 39,109	39,109
Dr. Edgar Leclair Com. Centre/Arena		15,600		15,600	CGS 24,933	24,933
Garson Com. Centre/Arena		27,375		27,375	CGS 58,321	58,321
L.J. Coady Memorial Arena		9,100		9,100	KVW Services 9,100	4,000
McClelland Com. Centre/Arena		16,125		16,125	CGS 37,642	37,642
Raymond Plourde Arena		10,500	29,062	29,062	Time Out 29,062	29,000
T.M. Davies Com. Centre/Arena		33,150		33,150	CGS 41,949	41,949
	Total I	Total Estimated Revenue - 5 years	nue - 5 years	284,237	424,314	418,852
	Total	Total Estimated Revenue per year	anue per year	56,847	84,862	83,770

Request for Decision City Council



					Туре	of	Decision				
Meeting Date	June 16,	2005					Report Date	May	/ 25, 2005		
Decision Reque	ested	х	Yes		No		Priority	х	High	Low	
		Dir	ection Or	nly			Type of Meeting	х	Open	Closed	1

Report Title

Upgrade of PeopleSoft ERP Human Capital Management System and Implementation of eRecruit

Policy Implication + Budget Impact

Х

This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.

That funding in the amount of \$237,000 plus taxes will be from the current budget allocation in Information Technology, and \$311,000 plus taxes will be from the Human Resources Management Reserve Fund.

The purchases are made in accordance with the Purchasing By-Law.

X Background Attached

Recommendation

THAT xwave be selected to assist in the upgrade of the Human Resources module at a cost of \$237,00 plus taxes and:

THAT the E-Recruit Module of the Peoplesoft System be purchased at a cost of \$70,000 plus taxes from Peoplesoft which is the vendor of record for the Enterprise Resource Planning modules and;

THAT xwave be selected to assist in the implementation of the eRecruit module at a cost of \$241,000 plus taxes and:

THAT the Director of Information Technology be authorized to enter into the appropriate contracts and;

THAT funding be provided as follows:

\$237,000 plus taxes from the current budget allocation in Information Technology and \$311,000 plus taxes from the Human Resources Management Reserve fund.

Recommendation Continued

Recommended by the General Manager

C. Hallsworth

Executive Director Administrative Services

Recommended by the C.A.O.

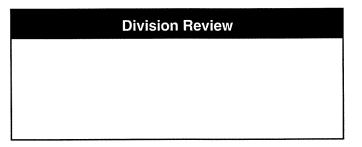
M. Mieto

Chief Administrative Officer

Title: Upgrade of PeopleSoft ERP Human Capital Management System and Implementation of eRecruit

Date: May 25, 2005

Report Prepared By
& Mangrarde
B. Mangiardi, Director of Information Technology



Page: 1

The Information Technology Department in conjunction with the Finance and Human Resources Department is in the process of upgrading our current PeopleSoft ERP Human Capital Management System (HCMS), which is our primary human resources management tool. ERP stands for Enterprise Resource Planning software. ERP is an integrated business system that provides the organization with the appropriate decision making tools to effectively manage operations. This serves to enhance responsiveness and provide consistent and key information to all users. ERP projects are not finite as they have a continuous life cycle of implementation and optimization.

As part of our maintenance agreement with PeopleSoft, we are entitled to receive all upgrades to the system. However, the implementation of the upgrades is not part of the maintenance agreement. These upgrades must be implemented to ensure that we continue to receive support for the product. As of March 2006, the current release of the software will be obsolete and no longer supported by Peoplesoft so it is imperative that we upgrade. When serious issues occur, repairs to the software required from Peoplesoft will not be available and will affect operations in Human Resources and Payroll. It is industry practice to use the assistance of outside experts, who have specialized technical and functional knowledge, to assist in implementing major upgrades. These experts add value by building on their knowledge of new functionality to assist the City in further improving our business processes. These improvements can range from eliminating administrative steps, taking advantage of functionality to assist us in tracking and reporting on health and safety issues and streamlining the administration of employee training modules. During this process a knowledge transfer between outside experts and city staff assures we can take over operation of the optimized new system once the implementation project is complete. The cost of implementation for the upgrade is \$237,000 plus taxes.

Human Resources, as part of a new initiative, decided to purchase and implement the eRecruit module for managing employee recruitment at a one-time capital cost of \$70,000 plus taxes. In any given year, staff handle in excess of two hundred thousand (200,000) documents related to recruitment. This system would enable CGS to transform the paper-intensive processes into a streamlined electronic system. By automating all time-consuming administrative tasks such as requisitioning, creating and posting job vacancies, matching candidate qualifications to job requirements, short-listing candidates for interviews and converting applicants to employees, an eRecruitment solution would enable hiring managers to compress the entire recruiting cycle, improving the quality of recruitments and shorten the time to fill a vacancy. This would allow the organization to realign resources to improve delivery of services. The implementation cost for the eRecruit module is \$241,000 plus taxes.

Title: Upgrade of PeopleSoft ERP Human Capital Management System and Implementation of eRecruit

Date: May 25, 2005

A Request for Proposal was issued for both the upgrade of our system from version 8.0 to 8.9, along with the implementation of the eRecruit module. A staff committee short-listed to two final vendors who were requested to submit a last and final offer. The proposals were scored for price, experience with software, experience of staff, proposal, quality of the reference sites, and local partnerships.

Vendor	Price	Score / 100
xwave	\$458,000 + taxes	79
Cedar	\$412,812 + taxes	65

The bid submitted by xwave was submitted in partnership which assures full support from and access to Peoplesoft resources and will assist us in completing the project on time and on budget. All of the xwave staff assigned to our implementation project are Peoplesoft certified consultants. xwave has also completed projects for other large municipalities and received excellent references when they were contacted. xwave assisted the City with the upgrade to the Peoplesoft Financials System in 2004 and has demonstrated their experience and understanding of the integration between the financial and HR systems. xwave has completed a number of projects for similarly sized municipalities and their references were excellent. Therefore, staff recommend that xwave be selected as the vendor to assist in the upgrade of our PeopleSoft HCMS system and to implement the Peoplesoft eRecruit module.

The cost of the project will be funded through the current budget allocation in Information Technology (\$237,000 + taxes) and the Human Resources Management Reserve fund (\$241,000 + taxes). The purchase of the eRecruit module from our vendor of record, Peoplesoft, will also be purchased through the Human Resources Management Reserve fund (\$70,000 + taxes).

Request for Decision City Council



				Туре	of	Decision					
Meeting Date	June 16 th ,	2005				Report Date	June 8 th , 2005				
Decision Reque	sted	х	Yes	No		Priority	х	High		Low	
	Direction Only					Type of Meeting	x	Open		Closed	

Report Title

Award of Contract 2005-15 South End Rock Tunnel

Policy Implication + Budget Impact

X

This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.

Funding for the project has been identified and is outlined in the resolution approving the tender award.

In addition, staff have been directed to prepare financing options for the repayment of the loan.

This certifies that this future commitment is within the Annual Repayment Limit for the City of Greater Sudbury as re-calculated.

Splaff

S. Jonasson,

City Treasurer/Director of Finance

x Background Attached

Recommendation

THAT the tender for this Rock Tunnel Project be awarded to McNally Construction Inc. in the tendered amount of \$28,274,558.78, which includes a reduction of \$750,000 in the contingency allowance in the contract, being the lowest tender received meeting all terms and conditions of the tender, and,

THAT the total overall cost of the project, estimated to be \$31.075 million, including engineering, property acquisition and construction insurance costs, and after the GST rebate, be funded as follows:

Recommendation Continued

Recommended by the Department Head

Alan Stephen

General Manager of Infrastructure &

Emergency Services

Recommended by the C.A.O.

Mark Mieto

Chief Administrative Officer

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Title: Award of Contract 2005-15, South End Rock Tunnel Page:

Date: June 8th, 2005

Recommendation continued:

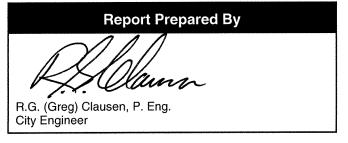
\$14,248,300	Approved for this project
\$ 965,000	Approved for Marcel / Bouchard and Oriole lift stations projects
\$ 8,400,000	Commitment from Province
\$23,613,300	Previously committed / approved funding
\$ 340,000	Culvert work from the 2006 Roads Capital envelope
\$ 106,700	From the Sewer and Water Payments Reserve Fund
\$ 4,000,000	External Borrowing
\$ 1,000,000	Additional contribution from the 2006 Waste Water Capital Envelope
\$ 1,000,000	From the 2007 Waste Water Capital envelope
\$ 1,015,000	From the 2008 Waste Water Capital envelope
\$31,075,000	

and,

THAT, staff be directed to come back with a report outlining financing options for the repayment of the loan in accordance with the report from the General Manager of Infrastructure and Emergency Services dated June 8th, 2005.

Title: Award of Contract 2005-15, South End Rock Tunnel Page: 2

Date: June 8th, 2005



Division Review

Introduction:

This report is a follow-up to our report to City Council on February 24th, 2005, contained as **Appendix 'A'.**

Tenders were called for the construction of the rock tunnel on March 21, 2005. The low bidder recommended for award is McNally Construction Inc., in the adjusted tender amount of \$28,274,556.78.

Background:

In 2001, the City commenced an Environmental Assessment (EA) process for the necessary sewer capacity improvements in the south end of the sewer system. The EA reviewed existing sewage system problems and also environmental impacts. The public participated and provided consultation on all phases of this EA process.

A copy of the Executive Summary of the South End Sewer System, Schedule 'B', EA Report, is included as **Appendix 'B'**. As part of the EA, four alternative solutions were developed and considered as follows:

Alternative No. 1 Upgrade Existing System

Alternative No. 2 Expand Existing System

Alternative No. 3 Rock Tunnel Collector

Alternative No. 4 Do Nothing

Excerpts from Section 5 of the EA report which deals with the Alternative Solutions, are included in **Appendix 'C'.** Of the alternatives considered, the Rock Tunnel alternative was the preferred and recommended option.

November 29th, 2001, Council Resolution 2001-627 accepted the preferred option. A copy of Resolution 2001-627 and accompanying Staff Report, is attached as **Appendix 'D'.** The Resolution clearly indicated that City Capital allocation would only occur if matching funding was received from both the Provincial and Federal Governments.

On April 23, 2003, the General Manager of Public Works presented an update report to Council on this project. The report provided a detailed history of the project including the background of development in the south end of the City and the rational and results of the EA project. Also, the results of discussions / negotiations and funding commitments from both the Province and Federal Government on Municipal projects was provided. A copy of the report is attached as **Appendix 'E'.** Council approved that the project proceed with the funding formula provided as recommended by the General Manager of Public Works, and that R.V. Anderson Limited (Dennis Consultants), be appointed to design, tender and supervise the project (construction) and further that the City continue to pursue Federal financial participation in this project.

Title: Award of Contract 2005-15, South End Rock Tunnel Page: 3

Date: June 8th, 2005

As highlighted in the 2003 report, by the late 1990's, the existing sanitary sewer system had exceeded its capacities. New development in the south end of the City has been permitted since this project was approved by Council in 2003. It is essential that this project proceed at this time.

Since 2003, Dennis Consultants have completed the detailed design, construction drawings and tender preparation for this project. An update / status report was presented to Council on February 24th, 2005 and is included in **Appendix 'A'**.

Tender Results:

On March 21, 2005, tenders were called for the rock tunnel project. A total of five contractors prequalified for the project and were provided tender documentation. Three contractors submitted tenders as described below.

Contractor	Tender Amount
McNally Construction Inc. (There were no errors)	\$29,024,556.70
R.M. Belanager Limited (There were no errors in total)	\$41,133,539.20
Pioneer Construction Inc. (There was an extension error of \$0.65)	\$49,060,215.98
(There was an extension error of \$0.65) The corrected tender amount is	\$49,060,215.33

As part of the review of the tenders, the tendered prices were compared to the cost estimate developed during the EA process to ensure that this option was still the most economical and had the best cost benefit for the Municipality.

The cost estimates for the three alternatives in the 2001 EA Report are shown on Tables 5.1, 5.2, and 5.3 of **Appendix 'C'.** The updated 2005 cost estimate for the same three alternatives is shown on **Table 1**, below. The estimate includes the tendered price from McNally Construction Inc. for the Rock Tunnel option. The costs for the Upgrade and Expansion alternatives have been updated to typical 2005 construction unit prices received from similar projects.

Table 2 shows a cost comparison of the various options that staff has prepared as part of the review of the tenders received. **Table 2** also includes a cost estimate for a combination of rock tunnel and conventional construction techniques. The rock tunnel option is still the recommended option. Although the initial construction costs are relatively close, the significant difference in annual operating and maintenance costs quickly preclude this option from further review. It should be noted that the project cannot be done piecemeal (i.e. rock tunnel for Main and Paris and conventional for balance) at the prices shown in the first two columns. Splitting the project increases the costs, as shown on **Table 2**.

As shown on both **Table 1 and Table 2**, the Rock Tunnel option is the most economical option based on current construction costs. If long term operating and maintenance costs are included, the savings are much greater.

Title: Award of Contract 2005-15, South End Rock Tunnel

Page: 4

Date: June 8th, 2005

Funding:

The total cost of the project is estimated at \$31.075 million and funding is provided as follows:

\$23,600,000	Previously approved
\$ 340,000	Transfer to Roads Capital Budget
\$ 101,7700	Waste Water Repayments Reserve Fund
\$ 3,015,000	2006 to 2008 Waste Water Capital envelopes
\$ 4,000,000	Borrowing
\$31,075.000	

Consideration was given to funding this project, in part, from the Capital Financing Reserve Fund for Waste Water, which presently has a balance of \$4.5 million. This is not a recommended option as there should be money in this reserve fund to allow the City to deal with any emergencies and / or and upcoming Provincially mandated programs.

Options to fund the borrowing will include:

- 1) The implementation of a fee by-law (under Section 391 of the Municipal Act) whereby a fee will be changed to any <u>new</u> development (both residential and commercial) which will benefit from this new service.
- A mini development charges study which will impose development charges to partially fund this project. The charges could be applied to either the benefiting area only or City-wide as are all other development charges.
- 3) User fees by increasing the water / wastewater rates.

City staff and representatives from Dennis Consultants (R.V. Anderson) will be in available at the meeting to provide elaboration and / or additional information.

Date: June 8th, 2005

Table 1

Comparison to 2001 EA Report

Table 5.1 - Upgrade Alternative 2005 Cost Estimate

Item	Common Cost	Upgrade Cost	Total Cost
Capital (20 years)	\$1.8M	\$31.6M	\$33.4M
Operations & Maintenance (20 years)			\$8.8M
Land Cost			\$0.2M
Economic Impacts			\$3.9M
20 Year Total			\$46.3M
Capital (20 – 60 Years)	\$4.5M	\$10.8M	\$15.3M
Operations & Maintenance (20 – 60 Years)			\$19.8M
20 – 60 Years Total			\$35.1M
Total			\$81.4M

Table 5.2 - Expansion Alternative 2005 Cost Estimates

Item	Common Cost	Expansion Cost	Total Cost
Capital (20 years)	\$1.8M	\$31.5M	\$33.3M
Operations & Maintenance (20 years)			\$9.3M
Land Cost			\$0.2M
Economic Impacts			\$2.6M
20 Year Total			\$45.4M
Capital (20 – 60 Years)	\$4.5M	\$4.9M	\$9.4M
Operations & Maintenance (20 – 60 Years)			\$22.2M
20 – 60 Years Total			\$31.6M
Total			\$77.0M

Table 7.1 - Rock Tunnel Alternative 2005 Cost Estimate

Item	Common Cost	Tunnel Cost	Total Cost
Capital (20 years)	\$1.8M	\$32.2M	\$34.0M
Operations & Maintenance (20 years)			\$4.5M
Land Cost			\$0.3M
Economic Impacts			\$0.5M
20 Year Total			\$39.3M
Capital (20 – 60 Years)	\$4.5M	\$0.9	\$5.4M
Operations & Maintenance (20 – 60 Years)			\$9.4M
20 - 60 Years			\$14.8M
Total			\$54.1M

Date: June 8th, 2005

Table 2

2005 Cost Estimate

Section	Tunnel	Upgrade	Expansion	Combination Rock Tunn Sewer Sy	
				Construction Type	Estimate
Main Tunnel to Burwash	\$10,300,000	\$18,500,000	\$11,560,000	Tunnel	\$14,700,000
Walford Road	\$ 3,550,000	\$ 1,350,000	\$ 1,440,000	Conventional	\$ 2,430,000
Paris Street	\$ 830,000	\$ 1,600,000	\$ 1,600,000	Tunnel	\$ 1,170,000
Lo Ellen	\$ 5,460,000	\$ 5,200,000	\$ 6,670,000	Conventional	\$ 4,850,000
Green Avenue	\$ 8,900,000	\$ 7,140,000	\$ 8,080,000	Conventional	\$ 7,130,000
Total Estimates	\$29,040,000	\$33,790,000	\$29,350,000	Total Estimate	\$30,280,000 ⁽¹⁾
Annual Operating and Maintenance Costs - Year 1	\$ 10,000	\$ 255,000	\$ 340,000		\$ 210,000

Note (1) It should be noted that the project cannot be done piecemeal (i.e. rock tunnel for Main and Paris Street and conventional for balance) at the prices shown in the rock tunnel option. Splitting the project between construction types increases the costs, as shown.

Request for Decision City Council



					Туре	of	Decision					
Meeting Date	February 2	24, 20	05				Report Date	Feb	ruary 16,	2005)	
Decision Requ	ested		Yes	х	No		Priority		High	х	Low	
		Dir	ection O	nly			Type of Meeting	х	Open		Closed	

Report Title

South End Rock Tunnel Update

	Policy Implication + Budget Impact		Recommendation
	This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified.		
			For information only.
X	Background Attached		Recommendation Continued
L		_	

Recommended by the Department Head

Alan Stephen General Manager of Infrastructure & Emergency Services

Recommended by the C.A.O.

Mark Mieto Chief Administrative Officer

Page: 1

Title: South End Rock Tunnel Update

Date: February 16, 2005

Report Prepared By

Allan P. Sweetman, P. Eng. Sewer and Water Engineer

Division Review

R.G. (Greg) Clausen, P. Eng. Director of Engineering Services

Background:

The sewers in the South End of the City of Sudbury had reached their capacity by 1999. This caused a total freeze on development in the area. The following options for solving the problems were considered. Alternative 1 was to upgrade the existing system by replacing sewers as well as adding and expanding liftstations. Alternative 2 was to expand the existing system by constructing new liftstations and forcemains and adding some new sewers. This alternative was mainly different from Alternative 1 in that undersized sewers were by-passed with new forcemains. Alternative 3 was the construction of a rock tunnel connecting the Walford Road area, the Loach's Road area and the Green Avenue area to the existing rock tunnel at Marcel Bouchard.

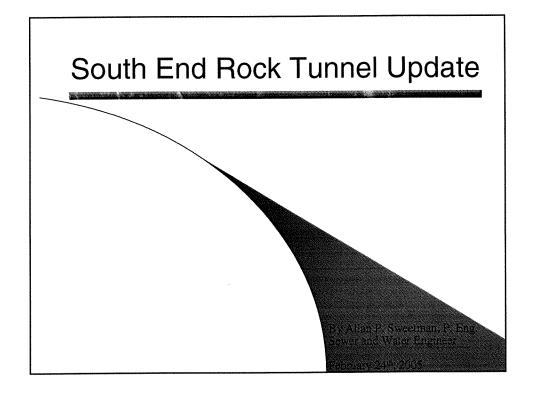
The Class Environmental Assessment which was completed in the Fall of 2001 recommended the extension of the existing rock tunnel. The rock tunnel will reduce our operating costs as six sewage lift stations will be eliminated. There will also be a significantly lower impact on the people and businesses during construction as 95 percent of the work will be done underground and out of sight.

While all alternatives had capacity for all the expected future growth in the area, the rock tunnel has nearly twice the capacity required which will accommodate any unknown growth patterns.

Funding of 36.68 percent to a maximum of \$8,400,000 was obtained from the Province of Ontario's Millennium SuperBuild program. Even though applications were made to the Federal Government's Canada-Ontario Infrastructure Program, (COIP) they did not allocate any funding for the project. The remaining funding has been put aside in the Capital Sewer Budgets since 2000 and in future budgets to 2007.

We have now completed the geophysical and engineering design for the tunnel and will be tendering the work early in March.

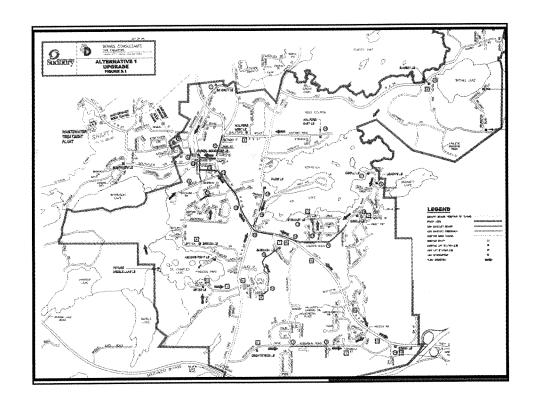
While all homeowners in the immediate vicinity of the construction will be contacted by the contractor directly and preblast surveys completed, the Councillors should anticipate some concerns about noise from drilling and blasting activities and some disruption in traffic due to hauling the rock to the disposal site. As this rock is of excellent quality it is being used to construct the base for the second access to Laurentian University in the area just north of Regent Street. There should be few complaints regarding the access shafts as they are located away from residential areas, one being in a future development area behind the Cardinal Hotel, one in the industrial area on Old Burwash Road and one in the future development area north of the Petro Pass service station on Regent Street South.

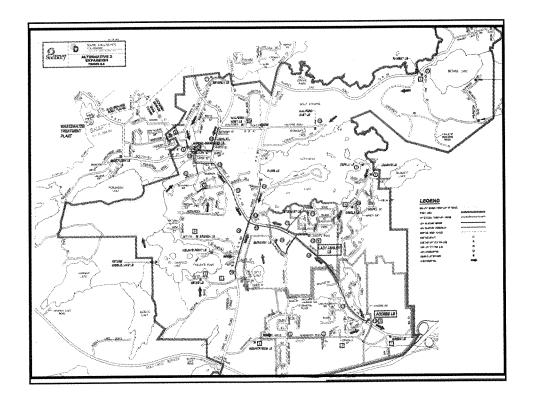


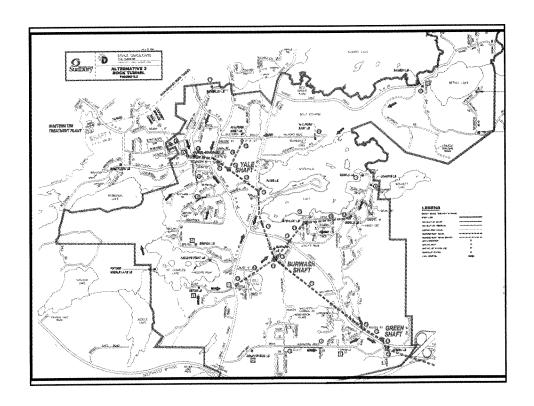
South End Rock Tunnel Update

- By 1999, sewers in the South End of the City of Sudbury had reached their capacity and development was frozen.
- Three options were reviewed to solve the problem.

Page 1 of 12







South End Rock Tunnel Update

- A Class Environmental Assessment was completed in Fall of 2001.
- The Rock Tunnel option was recommended.

Page 5 of 12

Rock Tunnel Advantages

- Minimum disruption to traffic
- Minimum disruption to local busines
- Minimum operating cost
- Minimum long term cost
- Large excess capacity for future growth

Page 6 of 12

Rock Tunnel Disadvantages

• Higher initial cost

Page 7 of 12

Financing

- 36.68 percent of total project cost to a maximum of \$8,400,000 from Ontake Millennium SuperBuild Program
- Remaining from 2000 to 2007 City Capital Sewer Budgets

Page 8 of 12

Future

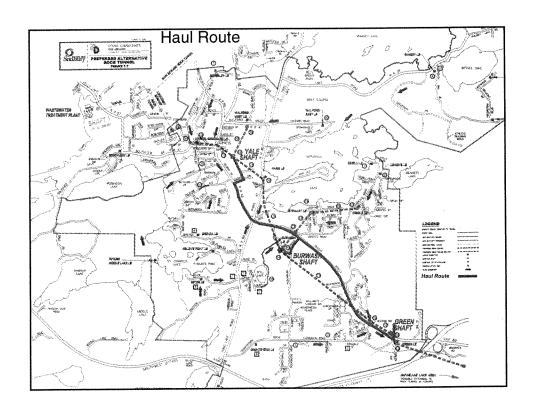
- March 2005
- Advertise Sender
- May 2005
- Award Tende
- June 2005
- Commence Construction
- December 2008
- Expected Construction Completion

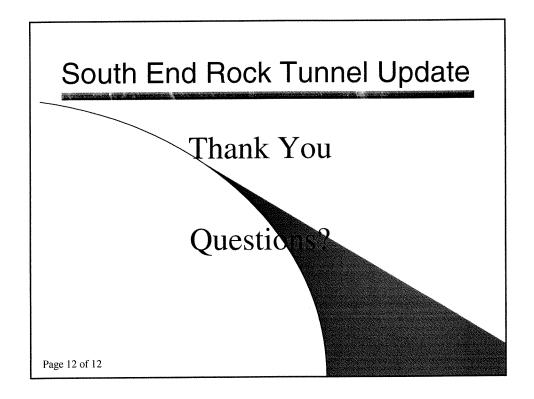
Page 9 of 12

Other Issues

- Noise complaints due to drilling and blasting
 - ✓ Preblast surveys conducted
 - ✓ Access Shafts located in future development and industrial areas
- Traffic delays due to hauling rock to disposal s
 - ✓ Haul route mainly uses Regent Street
 - ✓ Two of the shafts have no impact on the Regent Paris
 Street Intersection
- Construction of second access to Laurentian University

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EXECUTIVE SUMMARY

INTRODUCTION

At the time of the commencement of the South End Sewer Capacity Environmental Assessment (EA) process, the Region (now City of Greater Sudbury) had recently completed two studies: one pertaining to sewage problems in the Lo-Ellen Area that also reviewed problems regarding the Regent Trunk Sewer and Marcel Bouchard Area; and a second for tunnel methodology and costs for a South End Sewer Tunnel. Both of these studies dealt with resolving the sewage problems in the South End, but were not required to review the environmental impacts. The City subsequently hired Dennis Consultants, a division of R. V. Anderson Associates Limited to conduct an EA for the necessary sewer capacity improvements in the South End sewer system. The timing for this report is appropriate, as it will review these options, among others, with regards to environmental effects.

The Environmental Assessment process enables the City to identify a preferred solution, optimize capital works expenditure on the South End sewer system, review environmental concerns and give the public opportunities to present their opinions. The resulting preferred alternative, a rock tunnel, will provide for development of the South End while saving operation and maintenance costs for sewer servicing, minimizing environmental disturbance and providing for possible future servicing of the McFarlane Lake area.

ENVIRONMENTAL CONCERNS

One of the sources of environmental stress is through bypassing of sanitary sewage into surface lakes and streams during wet weather, due to capacity constraints of lift stations and sewers. The impact of bypassing sewage on the overall quality of lakes and streams is a serious concern. For example, Green lift station bypasses directly to McFarlane Lake, a private water supply for many shore line homes. Alternatives were required to minimize the bypassing of sewage, as well as the back up and flooding of basements in the service area. Three major basement flooding events have occurred in the past ten (10) years, while in April 2001 a minor event occurred. The study

identified a number of natural areas that should be preserved, either through mitigation measures or avoiding construction activities altogether. Also reviewed was the timing of construction along Regent Street and the effects on businesses and traffic.

CONCLUSIONS AND IMPLEMENTATION

The following alternatives were developed to address problems in the South End sewer system:

- 1. Undertake upgrade improvements to the existing system over an extended period of time as problems arise.
- 2. Expand the existing system with new facilities and design concepts to improve the system.
- 3. Construct an underground sewage rock tunnel extending from the Lockerby Rock Tunnel at Bouchard Street to the furthest point in the system – the Green L.S.
- 4. Do Nothing (This option is included in order to verify the need for action.)

These alternatives were reviewed with regards to the following criteria:

- Effectiveness at resolving the stated problems
- Technical merit, design and construction feasibility, time constraints and duration of implementation
- Operation and maintenance requirements and costs
- Economic environment and Capital costs
- Natural environment
- Social environment

A weighting criterion was designed and applied to assist in carrying out an objective evaluation of the process. The rock tunnel alternative scored highest in all criteria categories, and was therefore selected as the preferred alternative.

The preferred alternative, the rock tunnel, minimizes disturbance to the area, provides for financial long-term benefit and allows for the infilling of the South End.

5.0 ALTERNATIVE SOLUTIONS

The following alternatives were developed to address problems in the South End sewer system:

- 1. Undertake upgrade improvements to the existing system over an extended period of time as problems arise.
- 2. Expand the existing system with new facilities and design concepts to improve the system.
- Construct an underground sewage rock tunnel extending from the Lockerby Rock
 Tunnel at Bouchard Street to the furthest point in the system the Green LS
- 4. Do Nothing (This option is included in order to verify the need for action.)

Figures 5.1, 5.1a, 5.2, 5.2a, 5.3, 5.3a and 5.3b identify the works required under each alternative, numbers 1, 2 and 3 respectively.

5.1 Evaluation Of Alternatives

Analysis focused on the area between the upper end of the Lockerby Rock Tunnel and the Green Lift Station, being the furthest reach in the system. The Green Lift Station is located near the limit of the South End Local Area Development Plan and represents the current physical servicing limit of the South End. The major existing South End sewer servicing facilities are on Regent Street, lying almost linearly between Green and the Lockerby tunnel termination point. The proposed alternatives will tend to have a social and business economic impact along this corridor. All alternative construction activities were reviewed for positive and negative impacts within the study area. The natural environment was reviewed in the major construction areas. All alternatives were reviewed with regards to the positive and negative effects on the following:

· Effectiveness at resolving the stated problems

- Technical merit, design and construction feasibility, time constraints and duration of implementation
- Operation and maintenance requirements and costs
- Economic environment and Capital costs
- Natural environment
- Social environment

5.1.1 ALTERNATIVE 1 – Upgrade the Existing System

The three alternatives share several common elements to provide servicing to the South End. Common components to be completed within a 20-year time frame are:

- Modify Cerilli LS to pump at a lower volume and rate
- Loach's LS pump upgrades
- Extend Countryside force main to Maurice Street
- Replace Telstar sanitary near Skyward
- Replace Arnold to Yale sanitary sewer
- Ramsey LS pump upgrades
- Beverly LS pump upgrades
- Robinson and Southview tunnel interceptors
- Walford East LS upgrades

The ultimate (20 to 60 years) common elements for Alternatives 1 to 3 are:

- Replace Treeview to Ester LS sanitary
- Ester LS new LS and force main
- · Replace portions of Culver, Access, Algonquin sanitary
- Ramsey LS pump upgrades
- Countryside LS pump upgrades
- Brenda LS pump upgrades

Key components unique to Alternative 1 over the 0 to 20-year period are the following (refer to Figure 5.1):

- Reconstruct Regent Street gravity sewer from Old Burwash Road to Lockerby Tunnel shaft at Bouchard Street.
- Replace portions of Loach's, Millwood and Stewart sanitary sewer
- New Green Lift Station
- Replace Harty Burwash sewer
- Oriole LS, add standby power, upgrade pumps, expand well, extend forcemain
- Stewart LS new LS
- Replace gravity sewer on Paris Street from Rumball Terrace to the Four Corners
- Replace Paris LS force main.
- Replace portion of sewer on Regent between Anthony and Austin and on Bouchard

Key components unique to Alternative 1 over the ultimate period are the following:

- Burwash LS new LS and forcemain
- New Ester Hulda sanitary sewer
- Walford West LS upgrade pumps and new forcemain
- Green LS upgrade pumps and new forcemain
- Oriole LS new LS
- Stewart LS upgrade pumps
- Replace Regent sanitary from Muriel to Green

Major works commissioned at the outset would take approximately 4 years to complete. The majority of the work will have to occur within this time frame to alleviate current flooding and bypassing.

a) Potential Impacts and Mitigating Measures

Reconstruction of the gravity sewer on Regent Street will occur along the centerline and likely occupy three lanes of traffic during construction.

This option will affect businesses directly and indirectly during construction. Indirect effects are due to construction resulting in traffic being diverted away from businesses. The economic impact model in Appendix D predicts a gross profit effect on businesses¹.

The work required for this option will not have any permanent impact on the natural environment. Construction will take place mainly on City owned right-of-ways and precautions taken to eliminate short-term impacts from erosion and sedimentation, silt fencing and straw bales along drainage courses, easements and low areas.

Long-term operation and maintenance costs were based on the latest actual data to operate and maintain lift stations. Figures shown in the charts are present value and have not been factored for inflation.

The cost for this Alternative is estimated as follows:

Table 5.1 - Upgrade Alternative Costs

Item	Common	Alternative 1	Total
	Cost	Cost	Cost
Capital (20 years)	\$1.4M	\$14.0M	\$15.4M
Operations & Maintenance (20 years)			\$7.6M
Land Cost			\$0.2M
Economic Impacts			\$3.5M
20 Year Total			\$26.7M
Capital (20 – 60 Years)	\$3.0M	\$7.0M	\$10.0M
Operations & Maintenance (20 - 60 Years)			\$17.0M
20 – 60 Years Total			\$27.0M
Total			\$53.7M

¹ Appendix D – Economic Impact of South End Sewer Capacity Alternatives by Freelandt Caldwell Reilly Consultants Limited, 2001.

5.1.2 ALTERNATIVE 2 - Expand the Existing System

Unique components of Alternative 2 are the following (refer to Figure 5.2):

- Construct new Lift Station on Loach's Road, across from Lady Ashley Court (on vacant Parcel 48234). Construct new force main for Lady Ashley LS on Regent Street, Yale Street, and Marcel Street – outlet at Lockerby Tunnel.
- Construct new Lift Station on Regent Street across from Access Road (on Parcel 2132) complete with forcemain. Construct a new sanitary sewer from the north side of the Remington-Regent intersection to the new Lady Ashley station.
 Green to pump to Access LS
- Construct new trunk sewer on Long Lake Road from the intersection of Ester Road to Paris- Regent (Four Corners).
- Construct new sewers from Burwash Lift Station to the Lady Ashley station and eliminate Burwash LS
- Oriole LS to be upgraded, add standby power and pump to Lady Ashley LS Stewart possibly downsized.
- Replace gravity sewer on Paris Street from Rumball Terrace to the Four Corners
- Replace Paris LS forcemain
- Replace portion of sewer on Regent between Anthony and Austin
- Replace Marcel Bouchard sanitary sewer

Unique components of Alternative 2 over the ultimate period are the following:

- Green LS pump upgrades
- Lady Ashley LS pump upgrades
- Access LS pump upgrades
- Walford West LS pump upgrades and new forcemain
- Oriole LS new LS and forcemain

Major works commissioned at the onset would take approximately 4 years to complete.

a) Potential Impacts and Mitigating Measures

This option will also affect businesses directly and indirectly during construction, although somewhat less than the upgrade alternative. The economic impact model in Appendix D predicts a gross profit effect on businesses².

The "Expansion" alternative is somewhat less disruptive than the "Upgrade" alternative to businesses in the South End. This is due to the fact that fewer lanes of traffic would be affected during the construction, and a quicker pace of construction along the designated routes.

Expansion of the existing system will have no long-term detrimental effects on the natural environment through proper mitigation. Proper mitigation will require silt fencing and straw bales along drainage courses. Attention should also be given to silt fencing stockpiles to prevent silt and sand from entering the storm sewer system. Inspection will be required to ensure that mitigation measures are used correctly and at the proper locations. There will be some social impacts with the purchase of property for the lift station facilities that are required.

Long-term operation and maintenance costs were based on the latest actual data to operate and maintain lift stations³. Operation figures were interpolated for future lift stations.

The costs for Alternative 2 are as follows:

² Appendix D – Economic Impact of South End Sewer Capacity Alternatives by Freelandt Caldwell Reilly Consultants Limited, 2001.

³ Appendix I – Operations and Maintenance

Table 5.2 - Expansion Alternative Costs

Item	Common Cost	Alternative 2 Cost	Total Cost
Capital (20 years)	\$1.4M	\$15.4M	\$16.8M
Operations & Maintenance (20 years)			\$8.1M
Land Cost			\$0.2M
Economic Impacts			\$2.3M
20 Year Total			\$27.4M
Capital (20 – 60 Years)	\$3.0M	\$4.0M	\$7.0M
Operations & Maintenance (20 - 60			\$19.2M
Years)			\$26.2M
20 – 60 Years Total			
Total			\$53.6M

5.1.3 ALTERNATIVE 3 - Rock Tunnel Collector

Unique components of this alternative are the following (refer to Figure 5.3):

- Construct a rock tunnel extending from the upper end of the Lockerby Tunnel to the Green Lift Station.
- Construct three branches, one to Walford West LS, one to Stewart LS and Oriole
 LS, and one to Long Lake Road at Ester Street from proposed shaft locations
- Construct a shaft on Parcel 34881 (behind Cardinal Motor Inn) along with a right-of-way and easement from Regent Street for access and possible sewers.
- Construct a shaft on Parcel 1754 off Old Burwash Road near Algonquin Road
 North
- Construct a shaft on Parcel 2132 across from Algonquin Road/Green Avenue at Regent Street.
- Connect Walford West LS, Marcel Bouchard LS at Marcel Street, Paris LS, Burwash LS, Stewart LS, Oriole LS and Green LS to the tunnel.
- Construct sewer down pipes at Long Lake Road / Ester Street intersection,
 Service Road at Loach's Road, Regent at Bouchard Street and Access Road at Regent Street.
- Decommission seven lift stations: Walford West LS, Marcel Bouchard LS, Paris LS, and Burwash LS, Stewart LS, Oriole LS and Green LS

Alternative 3 Rock Tunnel entails no specific ultimate time period improvements.

Preliminary investigation indicates that there is adequate cover to construct the entire Tunnel in rock. The major works for this Alternative will take approximately 2 years to complete.

a) Potential Impacts and Mitigating Measures:

Construction of the Rock Tunnel is not expected to have any long-term impact on the natural environment through proper mitigation techniques. The rock tunnel is a fully subsurface structure except for the envisioned three shafts. Mitigation will be required at shaft locations such as silt fencing and straw bales to prevent run-off from excavated materials from reaching drainage courses. Interceptor construction will require short-term mitigation such as straw bales to prevent silt from reaching drainage courses.

The Tunnel alternative would significantly reduce operation and maintenance cost of maintaining the South End system by eliminating seven Lift Stations and the inherent problems at each.

The Rock Tunnel alternative was found to be the least disruptive alternative due to significantly less traffic impacts. Proposed sewer down pipes and tunnel shafts would cause localized, as opposed to widespread, impacts on businesses. Construction of the three shafts will not necessitate lane closures, as the shafts are located off the road allowances. The economic impact model in Appendix D predicts a small gross profit effect on businesses⁴.

Long-term operation and maintenance costs were based on the latest actual data to operate, maintain and bypass at lift stations⁵. As lift stations are removed from service the associated operation cost would also decrease.

⁴ Appendix D – Economic Impact of South End Sewer Capacity Alternatives by Freelandt Caldwell Reilly Consultants Limited, 2001.

⁵ Appendix I – Operations and Maintenance

The costs for Alternative 3 are as follows:

Table 5.3 - Rock Tunnel Alternative Costs

Item	Common Cost	Alternative 3 Cost	Total Cost
Capital (20 years)	\$1.4M	\$23.4M	\$24.8M
Operations & Maintenance (20 years)			\$3.6M
Land Cost			\$0.4M
Economic Impacts			\$0.4M
20 Year Total			\$29.2M
Capital (20 – 60 Years)	\$3.0M	\$0	\$3.0M
Operations & Maintenance (20 - 60 Years)			\$7.0M
20 – 60 Years			\$10.0M
Total			\$39.2M

5.1.4 ALTERNATIVE 4 - Do Nothing

The "do nothing" alternative allows for only limited growth. Earlier in 2001 the City allowed its last new development in the South End contingent upon implementation of a solution to sewage capacity problems in the area. Until an effective and environmentally sound alternative is found, new growth has been effectively stopped in the South End.

With this alternative, peak overloading of the system with relief through bypassing of sewage to surface watercourses will continue. Short and long term impacts to the environment are anticipated. These impacts, over time, will have detrimental effects on the natural environment particularly as they relate to watercourses and associated biota.

Potential degradation to surface water and sediment quality and the loss of fish and fish habitat in locations such as Lily Creek, the Lily Creek delta and the Still Lake watercourse crossing at Old Burwash Road, could result from this option.

Further impacts to Robinson Lake, Nepahwin Lake and McFarlane Lake may also result from periodic overflows of the lift stations in those areas. These impacts may include degradation of fish habitat in violation of the *Federal Fisheries Act*.

The system will continue to cause high maintenance and operational costs and will restrict development of the South End of the City of Greater Sudbury.

Periodic flooding of homes and businesses will continue, and subsequent time and effort spent reviewing claims from flooding.

The high cost of operations and maintenance will continue and will rise over time with aging and future deterioration of the system. The twenty-year cost of operations and maintenance for the South End is currently \$5,600,000.

The environmental impact of this "Do Nothing" Alternative is the benchmark for the other three Alternatives.

5.2 Analysis & Scoring

As part of the second Public Information Centre (PIC), the Public was asked to comment on the relative importance that should be accorded to the Natural, Social, Economic and Technical values to be assessed during review of the alternatives.

The Public responses, although limited, resulted in the following average degrees of importance. Also known as "weighting", these indicate the degree of importance particular factors should have when determining the preferred solution.

Natural Environment	25%
Social Environment	10%
Economic Environment	25%
Technical Merit	40%

Table 5.4 – South End Sewer Capacities Numeric Evaluation of Alternatives reviews the key indices from the Second PIC Chart from Appendix M – Public Process.

1) BLE 5.4 - SOUTH END SANITARY SEWER CAPACITIES

Numeric Evaluation of Alternatives

		L	npg	Upgrade	Expai	Expansion	Rock .	Rock Tunnel	Do Nothing	thing
Reference & Criteria	Heading Weighting	Weighting	score	weighted	score	weighted score	score	weighted score	score	weighted score
Natural Environment	25%									
Impact on terrestrial systems in the short-term (construction)		2	9	12	7	14	6	18	8	16
Impact on terrestrial systems in the long term (operations/decommissioning)		5	6	45	8	40	10	20	9	30
Impact on aquatic systems - fish habitat and water quality (construction)		2	7	14	6	18	10	20	2	4
Impact on aquatic systems - long term (operations/decommissioning)		5	10	50	10	50	10	50	2	10
Impact on wetland systems - short term (construction)		2	9	12	7	14	6	18	3	9
Impact on welland systems - long term (operations/decommissioning)		5	10	22	10	20	10	50	3	15
Long Term Impact on Atmospheric Environment		4	6	36	8	32	6	36	8	32
		Subtotal		219		218		242		113
Social Environment	10%									
Disruption to community lifestyle - short term		-	5	5	7	7	6	6	2	2
Disruption to community lifestyle - long term		33	6	27	8	24	10	30	4	12
Impact on active and passive recreational areas and facilities		2	7	14	7	14	10	20	5	10
Compatibility with planning policies / regulations (municipal)		-	10	10	10	10	10	10	2	2
Compatibility with planning policies / regulations (provincial)		1	10	10	10	10	10	10	2	2
Compatibility with planning policies / regulations (federal)		-	10	10	10	10	10	10	2	2
Impacts to archaeological or heritage sites of significance		_	10	10	10	10	10	10	5	5
		Subtotal		98		85		66		32
Economy	25%									
Impact on development		5	10	50	6	45	10	50		0
Impact on businesses and institutions		5	5	25	7	35	10	20	0	0
Capital Cost		5	6	45	10	20	8	40	9	50
Life Cycle (Present Value) Cost		5	8	40	6	30	10	50		0
Dependency on consumables		2	8	16	9	12	10	20	2	4
Potential savings in long term cost		3	4	12	4	12	10	30	9	೫
		Subtotal		188		184		240		84
Technical Merit	40%				ľ		í	5		,,
Constructability		6	8	72	8	72	8	77	2	£ 6
Phasing Flexibility		9	6	¥	8	48	٩	န	5	
Long term operational ease and reliability		8	4	32	3	24	6	72	0	0
Operational flexibility		6	4	36	5	45	9	81	2	18
Other technical merits or demands (McFarlane Lake - future servicing)		8	7	56	9	48	6	72	-	8
		Subtotal		250		237		333		71
		Maxim	Maximum Score							
TOTAL	100%		1000	743		724		914		303
Note: 10 is best, 0 is worst										

Memorandum

TO:

J. Rule, Chief Administrative Officer

D. Belisle, General Manager of Public Works

D. Wuksinic, General Manager of Corporate Services S. Jonasson, Director of Finance/City Treasurer

A. Sweetman, Sewer and Water Engineer

J.P. Graham, Plants Engineer

FROM:

Gloria Ward, Council Secretary

DATE:

November 30th, 2001

SUBJECT:

Class Environmental Assessment

South End Sanitary Sewer Capacity

On 2001-11-29, the Council of the City of Greater Sudbury passed the following resolution:

2001-627 THAT the City of Greater Sudbury accept Alternative 3, Rock Tunnel Collector, as the preferred solution identified in the Class Environmental Assessment, South End Sanitary Sewer Capacities, dated October 19, 2001, prepared by R.V. Anderson Associates Limited;

And that capital allocation only be directed to this project if matching funding is provided by the Provincial and Federal governments.

For your information.

Item 6
Class Environmental
Assessment, South
End Sanitary Sewer
Capacity

Report dated 2001-11-21 from 3 General Manager of Public Works regarding Class Environmental Assessment, South End Sanitary Sewer Capacity was received.

Mr. R. Andres, Vice President, R.V. Anderson Associates Ltd., Mr. Therrien, Mr. Sorenson and Mr. J. Dennis addressed Council with an overhead presentation of the South End Sewer System.

Following a lengthy debate by Council, the following resolution was presented:

Bradley/Gainer: THAT the City of Greater Sudbury accept Alternative 3, Rock Tunnel Collector, as the preferred solution identified in the Class Environmental Assessment, South End Sanitary Sewer Capacities, dated October 19, 2001, prepared by R.V. Anderson Associates Limited

AND THAT capital budget allocations be directed to this project commencing in 2002.

The following amendment was then presented:

Courtemanche/Bradley: That funding for Alternative 3 be referred to the Committee of the Whole - Budget, Capital 2002 deliberations.

With the approval of the Mover and the Seconder and the concurrence of all Members of Council present, the amendment was withdrawn.

A further amendment was then presented:

2001-627 Courtemanche/Bradley: And that the foregoing motion be amended as follows:

That capital allocation only be directed to this project if matching funding is provided by the Provincial and Federal Governments.

CARRIED

Item 6 (Continued) The original motion, as amended, was then presented:

2001-628 Bradley/Gainer: THAT the City of Greater Sudbury accept Alternative 3, Rock Tunnel Collector, as the preferred solution identified in the Class Environmental Assessment, South End Sanitary Sewer Capacities, dated October 19, 2001, prepared by R.V. Anderson Associates Limited

AND THAT capital budget allocations be directed to this project commencing in 2002;

AND FURTHER THAT capital allocation only be directed to this project if matching funding is provided by the Provincial and Federal Governments.

GOVERNIONS.		
APPROVED		CARRIED
Committee Date	<u>\</u>	
Approved C'C Date The Dillet	220 72 2 7	
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City Agenda Report

ort To: CITY COUNCIL ort Date: November 21, 2001 Mee	eting Date: November 29, 2001
Subject: Class Environmental Asso South End Sanitary Sewe	
Department Review:	Recommended for Agenda:
DBelish	
0 10000	LL (lim) Bula
D. Bélisle General Manager of Public Works	J.L. (Jim) Rule Chief Administrative Officer
Report Authored by: D. Bélisle, Gene	eral Manager of Public Works
commendation:	
the City of Greater Sudbury accept Alterred solution identified in the Class En	vironmental Assessment, South End
tary Sewer Capacities, dated October ociates Limited, and	
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The firm of R. V. Anderson Associates Limited completed the Class Environmental Assessment for South End Sanitary Sewer Capacities on October 19, 2001. On October 20, 2001, the required public notice was posted, inviting comments from anyone having concerns with the outcome of the study. No concerns have been raised, and it is now in order for Council to review the study in some detail, and decide on a future course of action.

The firm of R. V. Anderson Associates Limited will be making an audio-visual presentation of the highlights contained in the study at the Council meeting of November 29, 2001.

Request for Recommendation **Priorities Committee**



					T	ype of l	Decision				
Meeting Date	April 23, 20	003					Report Date	Apr	il 16, 2003		
Recommendation	on	x	Yes		No		Priority	x	High	Low	
		Dire	ection C	nly			Type of Meeting	х	Open	Closed	

Report Title

South End Rock Tur	nnel Sewer Project
Policy Implications + Budget Impact	Recommendation
This report and recommendation(s) have been reviewed by the Finance Division and the funding source has been identified	That the City of Greater Sudbury proceed with the construction of the South End Rock Tunnel Sewer project, to be funded as follows: continued
X Background attached Recommended by the General Manager	Recommendation attached Recommended by the C.A.O.

D. Bélisle
General Manager of Public Works

M. Mieto
Chief Administrative Officer | 2

Date: April 16, 2003

Page: 1

Report Authored By

D. Bélisle

General Manager of Public Works

Division Review

RECOMMENDATION continued

Province of Ontario SuperBuild Contribution

2000 to 2003 existing City of Greater Sudbury Reserves and Capital Allocations

2004 City of Greater Sudbury contribution from the Sanitary Sewer Reserve Fund

2004 to 2007 City of Greater Sudbury Sewer Capital Allocations of \$1,600,000 per year

6,400,000

and that the firm of R. V. Anderson Associates Limited be appointed to design, tender, and supervise the project, and

That the City of Greater Sudbury continue to pursue Federal financial participation in this multi-year project.

BACKGROUND

History of the Project

The sanitary sewers servicing the south end of the City of Sudbury were constructed in part by the former Township of McKim, starting in 1959. In 1960, McKim Township, then known as Lockerby, was amalgamated into the City of Sudbury who took over the completion of the sanitary sewers. Communal servicing ended at the southern limits of the City, roughly defined as the east-west alignment of Loach's Road. Everything south of the McKim Township line depended on private septic systems, and there was considerable residential development in this area in the 1960's and 1970's, in response to the booming mining industry and lower property taxes just outside the City limits. In 1973, these areas were amalgamated into the City when the Regional Municipality of Sudbury was created. One of the first sewer and water servicing projects undertaken by the former Region in the mid 1970's was in the City's south end, and was known as the Algonquin project. This project extended southerly from the former City limits at Loach's Road, ending along the alignment of the current South-West By-pass.

Considerable residential development evolved in the City's south end throughout the 1980's and 1990's, in response to the area's rural flavour and natural attractions, as well as its close proximity to the City core. Retail and commercial development followed. Today, the City's south end can be categorized as the "hotspot" of residential, commercial, and institutional development in the community.

In the early and mid 1990's, it was becoming apparent that development pressures were outstripping sewage collection capacities in the City's south end. Sporadic sewage overflows and house floodings were occurring during spring runoff and heavy rains. The Public Works Department responded and developed operational plans devised to minimize house floodings by diverting sewage overflows into local lakes and watercourses. This was by no means environmentally acceptable, but it did work for a few years at preventing homes from flooding. Eventually, sewage flows exceeded the City's best efforts to

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Title: South End Rock Tunnel Sewer Project

Date: April 16, 2003

by-pass untreated sewage to the natural environment in order to protect private property. By the late 1990's, untreated sanitary sewage was being dumped into watercourses while private homes continued to flood almost every spring. The sanitary sewer system had exceeded its capacities.

In May of 2000, the Region appointed the firm of R.V. Anderson Associates Limited to undertake a Class Environmental Assessment (Class EA) of the City's south end sewers. The study was commissioned to identify immediate, mid-term, and long-term solutions, to sewage collection capacities in the City's south end. The Class EA was completed in 2001 following a lengthy public consultation process and on November 29, 2001, the Council of the City of Greater Sudbury adopted the construction of a Rock Tunnel sewer as the preferred solution to sewage capacity issues in the City's south end. The project would put an end to ongoing environmental degradation, as well as provide opportunities for economic growth in the City's south end. The project would cost \$22.7 million over several years, with the majority of costs (\$21.3 million) occurring in the first four years.

Federal/Provincial Funding

In September, 2001, the Province of Ontario announced its Millennium SuperBuild initiative, designed to fund infrastructure projects in concert with the Federal Government through the Canada-Ontario Infrastructure Program (COIP). The COIP provided for equal partnership funding of one-third each by Municipalities, Ontario, and Canada. This Federal/Provincial announcement came just at the time that the City's Class EA for the south end sewers was nearing completion. Anticipating City Council's adoption of the preferred solution for the City's south end sewer problems, City staff initiated an aggressive pursuit of COIP grants. Three priority projects were sanctioned by City Council in the pursuit of these grants:

- David Street Water Treatment Plant, Filtration Upgrades, \$20 million
- Municipal Road #35 Four-Laning, Sudbury to Azilda, \$10 million
- City's south end Rock Tunnel Sewer, \$22.7 million

Council is well aware of the current status of these priority projects. For the record, here is where they stand.

- David Street Water Treatment Plant. This \$20 million project is under construction, with completion slated in December of this year. It is fully funded in equal shares, by the City, Ontario, and Canada, under the COIP.
- Municipal Road #35. This \$10 million project is currently out to public tender, for construction in 2003 and 2004. It ended up being funded on a 50-50% formula between the City and the Province of Ontario under the Northern Ontario Heritage Fund Program.
- City's south end Rock Tunnel Sewer. In December, 2001, the Province of Ontario announced that it would contribute \$8.4 million to this project under its Millennium SuperBuild program. This amount was slightly more than the 33 1/3 % share prescribed under the COIP formula, but the Province wanted to max-out its \$15 million commitment to Sudbury under the Millennium SuperBuild Program (\$6.6 million for David Street, \$8.4 million for the Rock Tunnel Sewer). A copy of the December 17, 2001 Provincial News Release on funding for the Rock Tunnel Sewer is appended (Appendix "A").

The City immediately looked to the Federal Government for its one-third share of this project under the COIP. Months of countless communications with Ottawa by City staff and Councillors yielded no results, neither positive nor negative. All the while, sewage spillage events continued in the City's south end,

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compounded by accelerating development pressures in the City's fastest growing residential, commercial, and institutional area. By late 2002, the following developments were at various stages along the City's approvals process.

1,745 single family lots in 14 residential subdivisions

- 225 units in a Seniors' Community complex near Laurentian University
- expansion of the Sudbury Regional Hospital
- a new Seniors' and Alert Care complex between Paris and Regent Streets
- a major truck fuelling station near the South East By-Pass
- the new Medical School
- the proposed 278,000 square feet WalMart development on Regent Street
- the proposed 150,000 square feet expansion of the Southridge Mall

In the face of these environmental and development pressures, the City would have been well justified in freezing all new development in the City's south end. Instead, the City kept relying on a positive response for funding assistance from the Federal Government and allowed development to proceed.

In October 2002, I wrote to the Federal Government, seeking what I believed to be a reasonable compromise to the City's dilemma (Appendix "B"). I asked that the City be allowed to commence construction of this multi-year project, using the City's and the Province's financial contributions. I was seeking a commitment from Ottawa that commencement of the project would not jeopardize any future Federal grants for the project. To this day, we have not received a reply to this letter, one way or another.

In January 2003, Mayor Gordon wrote to the Federal Minister of Industry, Allan Rock, once again asking for Federal participation in this essential project (Appendix "C"). Once again, neither a positive nor a negative reply was received.

In February 2003, Councillor Craig and I held a conference call with Mr. Kim Bulter, Federal Co-Chair of the COIP, seeking responses to our October 2002 non-jeopardy request, as well as Mayor Gordon's January 2003 letter to Minister Rock. Once again, neither a positive nor a negative response was obtained, although Mr. Bulter did indicate that some assistance may be forthcoming in the imminent Federal Budget. That Budget has come and gone, with no assistance for Sudbury's Rock Tunnel Sewer project.

Finally, on March 27, 2003, we received a letter dated March 21, 2003, from Mr. Kim Butler, Federal Co-Chair of the COIP, essentially advising the City that there is no more Federal funding available to Sudbury in the foreseeable future (Appendix "D").

Under the circumstances, I am compelled to recommend to City Council that all new development in the City's south end be frozen immediately. Further, I recommend that all pre-existing development approvals in the City's south end, be retroactively rescinded wherever legally possible. These measures are essential in order to shield the City from environmental and civil suits.

In the alternative, the City can proceed with the construction of the South End Rock Tunnel Sewer. That is my preferred recommendation.

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Project Phasing & Financing

This is a large project spanning several years, with the majority of the works occurring in the first four years at a cost of \$21.3 million. These earlier works will eliminate south end flooding and respond to emerging development pressures. In the following years, about \$1.4 million will be needed to complete the project, with actual construction paced to development activity. Total project costs are estimated at \$22.7 million. The following table outlines the recommended construction schedule and corresponding costs.

2003 - Design, land acquisition, tendering,

start of construction, \$ 2,900,000

• 2004 - Construction, 7,400,000

• 2005 - Construction, 8,900,000

2006 - Construction, 2,100,000

2007 + Construction, <u>1,400,000</u> Total: \$22,700,000

From the very onset of this project in 2001, City Council prudently marshalled its finances to meet its one-third share of the project costs. Accordingly, \$6,735,000 is in place to fund the City's share. The Province has committed \$8,400,000 to the project, leaving a shortfall of \$7,565,000, which was to have been funded by the Federal Government.

The following tables depict how the project can be funded.

Existing Funding

Province of Ontario, Millennium SuperBuild Program	\$ 8,400,000
2000 City Reserves, sewer & water replacements	1,350,000
2000 City sewer & water capital allocations, banked for COIP	2,215,000
2002 City sewer capital allocation	1,884,000
2003 City sewer capital allocation	1,286,000
Sub Total, existing funding	\$15,135,000

Future Funding

2004 City Contribution from Sewer Reserve Fund (Leaves balance of \$2,311,000)	\$ 1,165,000
2004 City sewer capital allocation (leaves an annual balance of \$4,992,000)	1,600,000
2005 City sewer capital allocation (leaves an annual balance of \$5,467,000)	1,600,000
2006 City sewer capital allocation (leaves an annual balance of \$5,865,000)	1,600,000
2007 City sewer capital allocation (leaves an annual balance of \$6,478,000) Sub Total, future funding	1,600,000 \$ 7,565,000
Total Funding:	\$22,700,000

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In conclusion, it is evident that the City has the financial ability to undertake this project, albeit to the detriment of other much needed sewage works throughout the entire City. Of course, the Province's \$8.4 million contribution is essential. Without it, the project cannot proceed.

I recommend that Council proceed with this project now, notwithstanding the missing one-third Federal share. The project will span several years, providing ample opportunities for Federal participation at some future time.

Further, I recommend that Council appoint the firm of R.V. Anderson Associates Limited to undertake the design, tendering, and construction supervision required for the project. This firm undertook and completed the Class EA for this project, and is best suited to see the project to completion.

News Release Communiqué

APPENDIX "A"



Ministry of Finance

Ministère des Finances

FOR IMMEDIATE RELEASE December 17, 2001

SUPERBUILD INVESTS \$15 MILLION TO EXPAND AND UPGRADE SEWER AND WATER SERVICES

SUDBURY — Dan Newman, Minister of Northern Development and Mines, on behalf of Jim Flaherty, Ontario Minister of Finance and Deputy Premier, today announced a \$15-million SuperBuild contribution to two sanitary sewer and water treatment projects that will support future growth in south Sudbury, and ensure the area continues to enjoy a clean and healthy environment.

In one project, SuperBuild is providing \$8.4 million towards a \$22.9-million sanitary sewer expansion. The major underground sanitary sewer line, now ending near Marcel and Bouchard streets, will be extended to the vicinity of Algonquin Road and Green Avenue. The 6.3 kilometre extension will increase the line's total length to more than 21 kilometres. As previously announced, SuperBuild is also contributing \$6.6 million for a modernization of the David Street Water Treatment Plant, which has been in operation for approximately 40 years.

"SuperBuild's investment recognizes a key priority – building the water treatment and sewer systems that now serve the south end of Sudbury, the fastest growing part of the city," Newman said. "This area is designated for retail, commercial and residential development and the expansion of institutions such as Laurentian University, Sudbury Regional Hospital, Science North and the new Northern Medical School. Another top priority addressed in the sewer line extension is to stop flooding and spillages that now affect homes and business in the south during times of high water run-off.

"This is an investment in Sudbury's future," Flaherty said. "SuperBuild is partnering with municipalities on priority projects throughout the province to create jobs and keep communities and the provincial economy moving ahead in the 21st Century. We have nominated both projects to the federal government to participate in supporting the Sudbury sewer and water projects, and we are looking forward to a favourable response."

"The province has recognized that the proposed expansion of the south end sanitary sewer system and upgrades to the David Street Water Treatment Plant are essential to the well-being of our city," said Jim Gordon, Mayor, City of Greater Sudbury. "With today's generous contribution of funds for these critically important infrastructure projects in our community, the province has demonstrated its commitment to environmental protection, economic growth and quality of life."

By March 31, 2002, SuperBuild will have approved total investments across Ontario for almost \$9 billion in projects. When combined with investments by all partners, the total value of these projects is more than \$13 billion.

The sanitary sewer line and water treatment projects are the first in a series of provincial investments planned for Sudbury. Through SuperBuild, more than \$206 million will be provided for health care, education, transportation and other local public works projects.

Other major SuperBuild investments include:

- \$160.7 million to upgrade facilities used for patient care at Sudbury Regional Hospital;
- \$25.6 million to create 1,240 additional student spaces at Cambrian College;
- \$20 million to establish a telecommunications network in Northern Ontario to better link schools, hospitals, municipalities, tourism businesses, environmental groups and youth organizations;
- \$5 million to repair Highway 144 north and south of Sudbury Road 15 to improve driving safety and highway operations.

-30-

· Contacts:

Natalie James
Office of Dan Newman
Minister of Northern Development and Mines
416- 327-0655

Mohammed Nakhooda SuperBuild Communications 416- 325-1697

Disponible en français

For more information on SuperBuild's investments in your community, visit www.SuperBuild.ca



October 18, 2002

APPENDIX "B"

Mr. Brian Booth A/Director Canada-Ontario Infrastructure Program 151 Yonge Street, 3rd Floor Toronto ON M5C 2W7

Dear Sir:

RE: Canada-Ontario Infrastructure Program

It was a pleasure to welcome you to Sudbury on October 9, 2002, as we toured the retrofit project underway at the City's David Street Water Treatment Plant.

As we discussed during your visit, the City of Greater Sudbury has another significant infrastructure project, the South End Rock Tunnel, currently under review for Canada-Ontario Infrastructure Program funding. The Province of Ontario has committed one-third funding, and the City of Greater Sudbury has developed a four-year cash flow plan to meet its one-third contribution as well. This \$2 3 million project will take a minimum of three years to construct, following one year of detailed engineering design, and tendering.

This project has undergone extensive public review through the Class Environmental Assessment process, and has emerged as an essential undertaking, providing environmental protection to nearby sources of drinking water, and numerous lakes and streams within our City. The project must proceed under any circumstances, and given its lengthy construction schedule, it is essential that the City proceed as quickly as possible.

Under the circumstances, I am seeking your Ministry's approval to proceed with this project, notwithstanding the fact that we have received neither approval nor rejection of Federal funding for this project under the Canada-Ontario Infrastructure Program. We are requesting confirmation that initiating construction of this project would not jeopardize Federal consideration for funding under the Canada-Ontario Infrastructure Program.

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I look forward to your reply.

Yours truly,

D. Bélisle General Manager of Public Works

/vg

cc: Mayor and Members of Council

M. Mieto

General Managers

APPENDIX "C"



January 24, 2003

The Honourable Allan Rock Minister of Industry 11th Floor, East Tower CD Howe Building 235 Queen Street Ottawa ON K1A 0H5

PO BOX 5000 STN A 200 BRADY STREET SUDBURY ON P3A 5P3

Fax: (613) 992-0302

CP 5000 SUCC A 200 RUE BRADY SUDBURY ON P3A 5P3 Dear Minister Rock,

705.671.2489

www. city.greatersudbury .on.ca As Mayor and on behalf of City Council and the people of Greater Sudbury, I am requesting your help on an infrastructure project of vital importance to our community. Minister, your leadership is needed now to champion this project and help us bring this essential capacity-building initiative to fruition through the Canada-Ontario Infrastructure program.

The City of Greater Sudbury has identified construction of a rock tunnel in the fast-growing south end of our community as a project of highest priority. The rock tunnel is required to expand our water and sewer capacity in that part of the city to facilitate further planned development. This is a \$23 million project that will take a minimum of three years to construct, following one year of detailed engineering design and tendering. The City has developed a four-year cash flow plan to manage one-third of the cost.

The project has undergone extensive public review through the Class Environmental Assessment process and emerged as an essential undertaking, providing environmental protection to nearby sources of drinking water and to numerous lakes and streams within our city. The project must proceed, and given its lengthy construction schedule, it is essential that we proceed as quickly as possible.

On December 17, 2001, the Honourable Dan Newman, then Minister of Northern Development and Mines for the Province of Ontario, announced a Provincial contribution of \$8.4 million for the construction of the South End Rock Tunnel. This initiative was also nominated by the Province for one-third Federal Government participation in the Canada-Ontario Infrastructure Program.

..../2

The Honourable Allan Rock Minister of Industry January 24, 2003

Now we need the participation of the Federal Government to take this project over the top by committing the final one-third of cost through the Canada-Ontario Infrastructure Program. Our own MPs, the Hon. Diane Marleau and Ray Bonin, are both in full support. But your support as Minister is needed now to help us make this vital project a reality.

I know that Sudburians can count on you.

Yours sincerely,

Jim Gordon

Mayor

The Honourable Diane Marleau, MP for Sudbury Mr. Ray Bonin, MP for Nickel Belt

APPENDIX "D"

Industry Canada

Industrie Canada

151 Yonge Street 3rd Floor Toronto, Ontario

M5C 2W7

151, rue Yonge 3º Étage Toronto (Ontario) Telephone: (416) 954-7175 Facsimile: (416) 954-6654

M5C 2W7

March 21, 2003

Mr. Mark Mieto Chief Administrative Officer City of Greater Sudbury 200 Brady Street Sudbury, Ontario P3A 5P3

Dear Mr. Mieto:

This letter will confirm the Federal Government's contribution to the City of Greater Sudbury under the Canada-Ontario Infrastructure Program (COIP).

I am delighted to confirm, further to the announcement on December 22, 2001, that the Government of Canada has approved a federal investment of up to \$6,666,667 to upgrade the City of Greater Sudbury's David Street Water Treatment Plant. I am pleased that the Federal Government was able to approve this project, which was identified by the City of Greater Sudbury as its highest municipal infrastructure priority. This investment will have a positive impact on the citizens in your community. The project also meets the Federal Government's primary objective of addressing green infrastructure in Ontario municipalities. I am also pleased to confirm that the City of Greater Sudbury is receiving additional federal support of up to \$337,415 toward the upgrading of 16 community arenas, as announced on May 2, 2002. This investment was also based on its ability to address health and safety concerns.

These two projects complete the Federal Government's COIP investment in the City of Greater Sudbury. Because of the extraordinarily positive response to the Canada-Ontario Infrastructure Program, all federal funds available under the program have been earmarked for eligible projects nominated by the Province of Ontario.

The Government of Canada has been very pleased to partner with the Province of Ontario and local governments through COIP. Working together, we have jointly approved and announced 360 projects across Ontario to date, representing a federal investment of approximately \$500 million and total project costs of more than \$2.2 billion. Through participation in the Canada-Ontario Infrastructure Program, the Government of Canada has significantly augmented provincial and local resources available for priority infrastructure projects.

On September 30, 2002, the Government of Canada's Speech from the Throne acknowledged the success of programs such as the Canada-Ontario Infrastructure Program by signaling a long-term federal commitment to infrastructure: Working with provinces and municipalities, the government will put in place a ten-year program for infrastructure to accommodate long-term strategic initiatives essential to competitiveness and sustainable growth.

The Budget speech on February 18, 2003 re-affirmed this *commitment* by announcing a further \$3 billion federal investment over ten years for the renewal of Canada's infrastructure. Details will be forthcoming.

I wish you continued success in your efforts to improve the quality of life in the Greater Sudbury area.

Yours sincerely,

Kim Butler

Federal Co-Chair

Canada-Ontario Infrastructure Program

c.c. Ms. Dana Richardson, Provincial Co-Chair Canada-Ontario Infrastructure Program

The Honourable Diane Marleau, MP Sudbury