Agenda – Council – July 21, 2022

Report – Standing Policy Committee on Water and Waste, Riverbank Management and the Environment – June 28, 2022

Item No. 5 Request for Budget Revision for the South End Sewage Treatment Plant (SEWPCC) Nutrient Removal/Expansion Capital Project

STANDING COMMITTEE RECOMMENDATION:

On July 13, 2022, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment and submitted the following to Council:

1. That a budget increase of $23,500,000 be approved for the Capital Budget of the SEWPCC Nutrient Removal/Expansion Project, in order for the Department to manage the upgrades/expansion to the SEWPCC Facility to meet provincial licensing requirements.

2. 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 Water and Waste, Riverbank Management and the Environment – June 28, 2022

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 13, 2022, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On June 28, 2022, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

ADMINISTRATIVE REPORT

Title: REQUEST FOR BUDGET REVISION FOR THE SOUTH END SEWAGE TREATMENT PLANT (SEWPCC) NUTRIENT REMOVAL/EXPANSION CAPITAL PROJECT

Critical Path: Standing Policy Committee on Water and Waste, Riverbank Management and the Environment – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
C. D. Wiebe, P. Eng., CAMP Manager, Engineering Services	T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department	C. Kloepfer	M. Jack

EXECUTIVE SUMMARY

The South End Sewage Treatment Plant (SEWPCC) Nutrient Removal/Expansion Capital Project is a significant milestone in City Council's commitment to protecting our rivers and Lake Winnipeg. The City of Winnipeg currently contributes four percent of the phosphorus load to Lake Winnipeg. The SEWPCC is scheduled to meet Environment Act Licence limits by Quarter 3 of 2023 and the City's overall phosphorus load will drop by 25 percent, or to three percent of the total loads to Lake Winnipeg.

When Bid Opportunity 976-2016 (the final contract) was awarded in October 2017, the project was only carrying a small contingency of $9 million. In 2021, Council approved a budget amendment of $16,500,000 for the project funded by the Environment Projects Reserve. The Public Service has been carefully monitoring contingency and has determined a budget increase is necessary.

The Public Service is asking for a budget increase of $23,500,000 funded from the Environmental Projects Reserve. Combined with the prior budget increase, this represents an increase of 11.9 percent to the original Council-approved budget of $335,600,000, for a total revised project budget of $375,600,000. Based on the Public Service forecast, budget and schedule review, it is anticipated that this budget amendment amount will fund the project through to December 2023.

The majority of the budget amendment includes project administration costs required due to extended third party costs such as contract administration, construction management, commissioning services, and ongoing legal support. These additional costs are required to manage the ongoing construction delays at SEWPCC as a result of the contract not meeting completion deadlines. The budget amendment also provides funds to engage third party experts for a project completion analysis. The intent of this is to develop a collaborative path forward with all parties to see the project to completion as quickly as possible and within the

amended budget. A small portion of the budget amendment is related to increased costs seen in the global shipping market.

Bid Opportunity 976-2016, awarded to NAC Constructors Ltd (NAC), is continuing to require additional third party project oversight and commissioning support beyond what was anticipated for the construction at the SEWPCC.

Additional project funds may be necessary depending on contractor performance and progress. The project schedule and budget remain under close review.

RECOMMENDATIONS

1. That a budget increase of $23,500,000 be approved for the Capital Budget of the SEWPCC Nutrient Removal/Expansion Project, in order for the Department to manage the upgrades/expansion to the SEWPCC Facility to meet provincial licensing requirements.

2. That the proper officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

Council approval is required to modify the capital budget of a project.

IMPLICATIONS OF THE RECOMMENDATIONS

The purpose of the report recommendation is to amend and increase the current capital project budget for the SEWPCC Nutrient Removal/Expansion Project.

Funds in the amount of $352,100,000 are included in the 2007-2021 Capital Budgets for SEWPCC Nutrient Removal/Expansion, Account Distribution No. 444 181000 200752 20320002EL, 2032000207 and 203210002B and will be funded from the Environmental Projects Reserve.

Economic Impact Analysis (EIA)

The estimated direct and indirect economic impact of this expenditure is:

Economic Impact	Manitoba	Rest of Canada
Gross Domestic Product (GDP)	$16.6 million	$2.3 million
Person Years of Employment	126	19
Federal Government Tax Revenue	$1.7 million	$0.3 million
Provincial Government Tax Revenue	$1.2 million	N/A

Source: Statistics Canada. Table 36-10-0594-01 Input-output multipliers, detail level. Note that the 2018 GDP at basic prices simple multiplier for architectural, engineering and related

services [BS541300] was used to assess this investment. Federal and provincial government tax revenue estimates include GST, MRST, personal income taxes, corporate income taxes and other sources of taxes and fees. These are estimated using the multipliers noted above in conjunction with effective tax rates calculated from the economic accounts produced by Statistics Canada.

Not proceeding with the budget increase will result in the inability to complete the project and meet Environment Act Licence requirements for SEWPCC.

HISTORY/DISCUSSION

This South End Sewage Treatment Plant (SEWPCC) Nutrient Removal/Expansion Capital Project will expand the capacity of the SEWPCC for expected future flows and upgrade the treatment processes to meet new more stringent effluent limits outlined in the Environment Act Licence. In addition, the SEWPCC must operate continuously during the upgrade/expansion work and meet current effluent limits to the greatest extent possible.

In 2015, Council approved the $335,600,000 total project budget for the SEWPCC Nutrient Removal/Expansion Capital Project.

On May 27, 2021, Council approved a budget increase of $16,500,000.00, bringing the amended budget to $352,100,000.

A total of four major construction contracts have been awarded for the upgrade and expansion works at SEWPCC. Additional contracts, as detailed in the ongoing major capital project financial status reports to the Standing Policy Committee on Finance, have been awarded to support the work at SEWPCC. Of the major construction contracts, Contract 1 (Bid Opportunity 333-2014), Contract 2 (Bid Opportunity 601-2015), and Contract 3 (Bid Opportunity 899-2015) are complete. Contract 4 (Bid Opportunity 976-2016), awarded to NAC Constructors Ltd (NAC), is ongoing.

On January 21, 2022, the City issued a Notice of Default to NAC with respect to the missed total completion date of January 20, 2022.

On February 9, 2022, the City issued a letter to NAC requiring a detailed description, with supporting documentation, of their allegation of delays as a result of COVID-19 pandemic. A response from NAC is expected in the near future, following which it will be reviewed by the Department and determination(s) will be made.

Additional budget is required in order for the Department to complete the SEWPCC Project to meet Provincial Environment Act Licence requirements, including:

- Additional consultant costs for Contract Administration (CA) continue to be incurred due to the project schedule delays and the Contractor's limited quality control (QC) resulting in substantial rework and commissioning delays.

- Construction Management (CM) Services for this final contract package have been performed by the Winnipeg Sewage Treatment Program (WSTP - Veolia) since June 2019. Due to the schedule delays, additional funds for these services are required.

- Due to the Contractor's limited QA/QC, the CA and CM teams have needed to augment resources to provide additional inspection of pre-testing that would normally be undertaken by the Contractor. This, in turn, has identified further deficiencies and non-conformance work that has resulted in significant rework and schedule impacts.

- Increased shipping costs have continued to be seen. The IFAS media has all been shipped from Korea, but global shipping rates remained volatile and shipments were charged at market value.

- At the time of award for the final construction package (Bid Opportunity 976-2016 awarded in October 2017), the overall project contingency was approximately $9,403,936. In the 2021 budget revision report, the Public Service noted that additional funds may be required pending contractor performance. Over the course of the project, the Public Service has been closely monitoring contingency and the remaining allowance is not sufficient to complete the upgrades and meet Licence compliance. As a result of the Contractor's ongoing performance, the project schedule has been extended and additional budget funds are required for project completion.

The breakdown of the $23,500,000 budget revision is summarized as follows:

Budget Revision	
Contract Administrative Services(1)	$11,115,000
Construction Management Services(2)	$10,185,000
Increased Shipping Costs (3)	$ 2,200,000
Total	$23,500,000

(1) Value was forecasted based on required CA services, such as review of numerous contractor submittals, increase in witnessing contractor testing for automation works due to quality of work to date, participation in various project-related meetings, participation in construction and commissioning activities, increase in the construction site inspection of contractor works due to quality of workmanship seen by the contractor onsite, preparation and submission of as-built drawings, provision of many operational documents for the new upgraded plant etc.

(2) Value was forecasted based on required CM services, such as administering the contract changes and making recommendations to the City, coordinating with applicable parties to resolve project issues, monitoring and reviewing construction and commissioning schedules, coordinating all project-related activities, review and certification of progress estimates submitted by Contractor, reviewing and making a determination on submitted claims by the Contractor, lead and participate in numerous project-related meetings, leading the commissioning activities with all required parties, etc. Also includes general site costs and insurance costs for City policy extensions due to C4 contract running longer than anticipated. Funds to engage third party experts for a project completion analysis and ongoing Legal support and advice.

(3) Increased shipping costs for material from Korea have continued to be seen. The cost of shipping has increased 610% and with an increasing backlog of shipping, there is an increased delay in receiving shipments. The City continues to take necessary steps to protect its legal position in respect of the ability to recover some or all of these costs.

The increase to CA and CM services will ensure the project delivery team, consisting of nine WSTP – Veolia staff augmented with 96 consulting staff, can support the project to completion.

The Department is recommending that an increase of $23,500,000 be approved for the Capital Budget for the SEWPCC Nutrient Removal/Expansion Project, in order for the Department to continue with the upgrades/expansion works to the SEWPCC Facility and meet Provincial Environment Act Licence requirements. The project schedule and budget remain under review.

The budget adjustment does not include any provision for penalties that could be levied against the City for non-compliance under the Environment Act. As disclosed in the SEWPCC Quarterly Financial Status Report tabled at Standing Policy Committee on Finance on May 10, 2022, the Province denied a Notice of Alteration request for a schedule extension. Under the Act, the penalties for a first offence could include a fine of up to $0.5 million and up to $1.0 million for each subsequent offence.

FINANCIAL IMPACT

Financial Impact Statement

Date: June 9, 2022

Project Name:

First Year of Program **2022**

REQUEST FOR BUDGET REVISION FOR THE SOUTH END SEWAGE TREATMENT PLANT (SEWPCC) NUTRIENT REMOVAL/EXPANSION CAPITAL PROJECT

	2022	2023	2024	2025	2026
Capital					
Capital Expenditures Required	$ 23,500,000				
Less: Existing Budgeted Costs					
Additional Capital Budget Required	$ 23,500,000	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal					
Debt - External					
Grants (Enter Description Here)					
Reserves, Equity, Surplus	23,500,000				
Other - Enter Description Here					
Total Funding	$ 23,500,000	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ 23,500,000				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs					
Less: Incremental Revenue/Recovery					
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts					
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Capital Budgets for SEWPCC Nutrient Removal/Expansion are in Account Distribution No. 444 181000 200752 2032000207EL and 203210002B. A budget amendment increase of $23,500,000.00 is recommended to be approved for the Capital Budget for the SEWPCC Nutrient Removal/Expansion Project, in order for the Department to manage the upgrades/expansion to the SEWPCC facility and meet provincial licensing requirements. The total cost of the capital budget increase is to be funded from the Environmental Projects Reserve.

Lucy Szkwarek, CPA, CGA

Lucy Szkwarek, CPA, CGA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

- Legal Services (as to legal issues)
- Assets and Project Management Department

OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg policies through Section 02-2 Environment as it will reduce the environmental impact of our citizens on the Red River and the downstream lakes and rivers. It is in collaboration with the Regulatory Licence requirements issued by the Province of Manitoba.

OurWinnipeg Reference: Section 02-2 Environment

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

N/A

SUBMITTED BY

Department: Water and Waste
Division: Engineering Services
Prepared by: Reetu Dewitt, P. Eng., Cynthia Wiebe, P. Eng., CAMP
Date: June 19, 2022
File No: S-926

Attachments:

Appendix A: 2022 Capital Budget Sheet for SEWPCC Upgrade/Expansion Project