

**Minutes – Standing Policy Committee on Finance and Economic Development –
March 7, 2025**

REPORTS

**Item No. 8 South End Sewage Treatment Plant (SEWPCC) Upgrading and
Expansion,
Project ID: 20320002EL, 2032000207, and 203210002B,
Quarterly Project Status Report No. 41
For the Period Ended December 31, 2024**

STANDING COMMITTEE DECISION:

The Standing Policy Committee on Finance and Economic Development concurred in the recommendation of the Winnipeg Public Service and received the financial status of the South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion, as contained in this report, as information.

**Minutes – Standing Policy Committee on Finance and Economic Development –
March 7, 2025**

DECISION MAKING HISTORY:

Moved by Councillor Lukes,

That the recommendation of the Winnipeg Public Service be concurred in.

Carried

ADMINISTRATIVE REPORT

Title: South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion,
Project ID: 20320002EL, 2032000207, and 203210002B,
Quarterly Project Status Report No. 41
For the Period Ended December 31, 2024

Critical Path: Standing Policy Committee on Finance and Economic Development

AUTHORIZATION

Author	Department Head	CFO	CAO
C.D. Wiebe, P. Eng., CAMP, Manager of Engineering Services	T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department	T. Graham	S. Armbruster, Interim CAO

EXECUTIVE SUMMARY

Project On Schedule: Yes ☐ No ☒

Project On Adopted Budget: Yes ☐ No ☒

Percent of Schedule Complete: 132%

Percent of Adopted Budget Spent: 106%

The Amended Capital Budget for the South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion is \$375.6 million, with expenditures to date totaling \$356.1 million. A total of \$7.6 million was spent during this reporting period.

During this reporting period, the C4 Contractor focused on the following:

- Continued to address outstanding deficiencies with the high rate clarifier (HRC)
- Completed the installation of the replacement waste activated sludge rotary drum thickeners (WAS RDTs)
- Continued to commission and optimize the RDTs and polymer system
- Completed the Biological Nutrient Removal (BNR) mixer repairs
- Continued automation works for various areas
- Continued to commission the fermenters and odour control process areas
- Continued to commission the HVAC system

The Total Performance date was changed to February 25, 2022, through the resolution of appeals 10 and 15. The C4 Contractor remains behind schedule based on missing key contractual schedule milestones, including the revised Total Performance date.

During this reporting period, no appeals were resolved and one new appeal was submitted. As of December 31, 2024, there are a total of five open appeals with the C4 Contractor. The City and C4 Contractor continue to work towards collaborative resolution of appeals.

Effluent quality targets are being met at SEWPCC. However, performance guarantees with respect to chemical use and sand loss for the HRC are not being achieved. Efforts by the HRC vendor are ongoing to resolve these issues.

Legal disputes related to Contract C1 were settled in September 2024.

The Advisory Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance and Economic Development.

RECOMMENDATIONS

That the financial status of the South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion, as contained in this report, be received as information.

REASON FOR THE REPORT

Major Capital Projects are required to report quarterly to the Standing Policy Committee on Finance and Economic Development. The threshold for reporting is reviewed at the beginning of each multi-year budget cycle and revised, if required, for Council consideration. For the 2024-2027 multi-year budget cycle Council approved that the threshold be maintained at \$25 million. The Standing Policy Committee on Finance and Economic Development may also request reporting on any capital project.

IMPLICATIONS OF THE RECOMMENDATIONS

No implications.

HISTORY/DISCUSSION

See Appendix C – Key Project Events (History)

Construction (Update from last report)

RFP 682-2012 (Professional Consulting Services)

- The Consultant continues to provide Contract Administration services and develop operational documents.
- Delay by the C4 Contractor extends the requirement for the Consultant to be on-site to provide technical oversight and direction.

Bid Opportunity 976-2016 (Contract C4 – Sitewide Mechanical, Electrical, Concrete and Site Works)

- Commissioning of the fermenters and odour control process areas continues.
- Outstanding deficiencies with the Ultraviolet (UV) Upgrades are being addressed.
- Outstanding deficiencies with the high rate clarifier (HRC) are being addressed.
- The undersized waste activated sludge rotary drum thickeners (WAS RDTs) have been replaced.
- Commissioning and optimization of the RDTs and polymer system continues.
- Biological Nutrient Removal (BNR) mixer repairs are complete.
- The project team continues to work with the C4 Contractor to resolve outstanding appeals. As of December 31, 2024, there are a total of five open appeals with the C4 Contractor. During this reporting period, no appeals were resolved and one new appeal was submitted.

Bid Opportunity 873-2013 (Procurement of High Rate Clarification Equipment)

- The HRC system vendor continues to work with the project team to optimize performance. Although effluent quality targets are being met, performance guarantees with respect to chemical use and sand loss are not being achieved. Efforts are ongoing to resolve this issue.
- Further testing to occur in the Spring of 2025 in high-flow conditions.

Request for Proposal 1056-2019 (External Legal Services)

- External legal is assisting in the development of an alternate dispute resolution (ADR) process to resolve the remaining appeals in Contract C4.

Bid Opportunity 334-2014 (Contract C1 –Site Preparation Works)

- Legal disputes related to Contract C1 were settled in September 2024.

Table 1 – Contracts

Contracts							
Bid Opportunity #	Company Name	Description	Original Contract Award Value (GST & MRST extra as applicable)	Total Approved Over-Expenditures (Over-Expenditure amount only)	Date of Award	Date of Total Completion	Estimated % Complete
682-2012	CH2MHill Canada Ltd.	Professional Consulting Services for SEWPCC Upgrading and Expansion	\$ 25,350,419.00	\$ 34,333,179.00	4/29/2013		99%
871-2013	Veolia Water Technologies Canada Ltd.	Procurement of Free-Floating Media and Associated Appurtenances	\$ 7,750,588.00	\$ 2,908,545.56	12/11/2014		87%
873-2013	Veolia Water Technologies Canada Ltd.	Procurement of High Rate Clarification Equipment	\$ 2,052,500.00	\$ 113,085.08	7/10/2014		80%
333-2014 ¹	PCL Constructors Canada Ltd.	Contract 1 - Site Preparation Works	\$ 22,646,510.00	81,235.25	10/20/2015	2/17/2015	100%
601-2015	Graham Construction and Engineering LP	Contract 2 - High Rate Clarifier and Grit Removal Concrete and Miscellaneous Works	\$ 9,515,100.00	-	10/20/2015	3/10/2017	100%
976-2016 ¹	NAC Constructors Ltd.	Contract 4 - Site wide Mechanical Electrical Concrete site works	\$179,997,000.00	\$ 7,500,000.00	10/4/2017		94%
1056-2019	Duboff Edwards Haight & Schachter	External legal services related to the SEWPCC Project	\$ 750,000.00	\$ 1,184,579.44	11/7/2019		62%
	Completed contracts	N/A	\$ 42,129,759.00	\$ 7,499.00	11/7/2019		100%
Total			\$290,191,876.00	\$ 46,128,123			

¹ - Includes MRST**Upcoming Procurements:**

Description	Anticipated Award Date

Schedule (Update from last report)

The Total Performance date was changed to February 25, 2022, through the resolution of appeals 10 and 15. Due to the ongoing issues, the construction of remaining works under Contract C4 was extended to Q2 2025.

On December 11, 2024, the City submitted a request for a compliance plan extension to December 31, 2025, to the Province. Although the SEWPCC is in compliance for all effluent requirements in the licence under all flow conditions, including biological phosphorus removal, final project completion remains outstanding.

Table 2 – Milestones

Milestones					
	Deliverable	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Project Definition Report	2013Q4	2014Q2	2014Q2	100%
2	Preliminary Design Report	2014Q2	2014Q4	2014Q4	100%
3	Detailed Design	2014Q4	2017Q3	2017Q3	100%
4	Construction of Site Preparation and Piling (Contract 1)	2014Q2	2016Q1	2016Q1 ²	100%
5	Construction of High Rate Clarifier and Grit Removal Structural and Misc. Works (Contract 2)	2016Q3	2017Q1	2017Q1 ²	100%
6	Construction of Major Concrete Works (Contract 3)	2017Q4	2018Q3	2018Q3 ²	100%
7	Construction of Remaining Works (Contract 4)	2021Q4	2025Q4 2025Q2		96%
8	Commissioning of interim BNR configuration (Contract 4)	2016Q4	2022Q4	2022Q4	100%
9	Commissioning of all project components (Contract 4) ¹	2021Q3	2025Q2		90%

¹ Manitoba Sustainable Development Notice of Alteration dated September 12, 2017 - City of Winnipeg South End Water Pollution Control Centre (SEWPCC)- Environment Act License No. 2716 RR identifies that the construction and commissioning of the upgraded wastewater treatment plant shall be completed before December 31, 2021

² Substantial Completion

Risk (Update from last report)

The following are updates for ongoing risks for this reporting period.

- The replacement WAS RDTs have been installed. Commissioning and optimization of the RDTs and polymer system are ongoing.
- The City will self-insure the remainder of the C4 Contract. The City's Wrap-Up liability insurance was renewed until October 25, 2025. Insurers have noted that no further extensions will be granted.

The following risks have been mitigated:

- The BNR mixers have been repaired and the process within the BNR trains has recovered.
- Legal disputes related to Contract C1 were settled in September 2024.

Table 3 – Significant Risks and Mitigations Strategies

Significant Risks and Mitigation Strategies	
Risk Statement and Explanation	Risk Mitigation Management Plan
Ongoing:	
The WAS RDTs have less capacity than specified and therefore have no redundancy. This issue affects operation of the facility and will extend the project schedule.	Adequately sized WAS RDTs have been supplied by the vendor and installation is complete. Commissioning and optimization of the RDTs and polymer system are ongoing.
Supplied HRC equipment is not meeting performance guarantees outlined in the contract.	The Project Team is continuing to work with Veolia Water Technologies in an effort to remediate the performance issues encountered with the supplied equipment.
Delamination in certain areas with the fermenters and odour control tanks has been observed.	Delamination of chemical resistant coatings have been repaired and tested. An insurance claim has been initiated for this issue.
The City's Builders Risk Policy for the SEWPCC upgrade expires December 31, 2023. Due to previous extensions, changes in the insurance market, more stringent underwriting criteria, reduction in capacity limits and the duration of this project, the current insurance carriers will no longer extend the policy.	The City, along with their insurance broker, have reached out to multiple other carriers who have declined to provide a Builders Risk policy. The City will self-insure the Builders Risk for the remainder of the C4 Contract. The City's Wrap-Up liability insurance was renewed until October 25, 2025. Insurers have noted that no further extensions will be granted.
There is potential that the IFAS media release insurance settlement will be much less than the claim by the Contractor. If this is the case, the Contractor may file a claim for the remainder of the costs with the City.	An insurance claim has been filed for the media release event. The City is working with their insurers to determine the level of coverage.
C4 Contractor progress tracking behind schedule.	The WSTP is reviewing each monthly schedule submission, providing commentary and meeting with the Contractor to rectify baseline issues. A review of previous schedule submissions, including four week look ahead and baseline, is being undertaken to assess the validity and continuity of the schedule.
C4 Contractor testing and commissioning planning documentation typically substandard and/or incomplete.	Commissioning planning meetings are being held with the contractor. Engineer of Record continues to develop Integrated Wet Testing and Demonstration test plans for Contractor to follow.
Actual C4 Contract construction performance takes longer than planned.	Key construction milestone dates with linked liquidated damages incorporated into Contract 4.
COVID-19 Impact on construction schedule.	Contract Administrator and Contractor are working to manage the impact. Claim has been received by the project team, Revay Constructions Claims Consulting Firm conducted a third party review of the claim.
Mitigated:	
Legal disputes related to Contract C1 are ongoing and have the potential to increase project costs.	The legal disputes have been settled.
Issues were identified with several of the BNR Mixers. Repairs required the BNR trains to be taken out of service one at a time. While the BNR trains are out of services, influent flows greater than 150 MLD have the potential to cause elevated effluent ammonia levels.	The BNR mixers have been repaired and the process within the BNR trains has recovered.

Mitigated:	
Issues were identified with several of the BNR Mixers. Repairs are underway which require the BNR trains to be taken out of service one at a time. The repairs have begun and are scheduled to be completed by Q4 2024. While the BNR trains are out of services, influent flows greater than 150 MLD have the potential to cause elevated effluent ammonia levels.	The BNR mixers have been repaired and the process within the BNR trains has recovered.
1.0 mg/L Biological Phosphorus Licence compliance date of December 31, 2020.	The project continues to meet Phosphorus licence requirements with the use of ferric chloride (Chemical Removal).
Unknown existing conditions are encountered during construction causing schedule delays and additional costs. Internal condition of high purity oxygen reactors is unknown.	Shutdown and interior inspection of existing high purity oxygen reactor was performed in February 2018.
Low flow work is not completed and the seasonal low flow work window is closing for 2023, putting the project at risk of increased costs and schedule extensions.	All 2023 low flow work has been completed.

Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast

Funding (Update from last report)

N/A

Table 4 – Project Funding Forecast

Funding Forecast & Receivable			
Funding Source	Adopted Budget (in millions)	Amended Budget (in millions)	Committed (in millions)
Class of Estimate	Class 3	Class 3	Class 3
City of Winnipeg	298.18	316.18	316.18
Retained Earnings	75.82	75.82	75.82
External Debt	222.36	200.36	200.36
Environmental Projects Reserve 1,2		40.00	40.00
Province of Manitoba	6.08	17.08	17.08
Federal Government of Canada	31.34	42.34	42.34
Total	335.60	375.60	375.60

1 On May 27, 2021 Council approved a budget increase of \$16.5 million.

2 On July 21, 2022 Council approved a budget increase of \$23.5 million.

Property Acquisition (Update from last report)

N/A

Stakeholder Engagements/Communications (Update from last report)

The City continues to work with Manitoba Government as a licence stakeholder

Subsequent Events after Report Period End Date

On January 3, 2025, the Province advised the City is no longer required to submit quarterly progress reports. However, monthly reports are still required.

On December 11, 2024, the City submitted a request for a compliance plan extension to December 31, 2025, to the Province. On January 6, 2025, the Province accepted the submission as an amendment to the compliance plan.

An over-expenditure will be forthcoming for the extension of consultant services under RFP 682-2012 due to delays in completing the SEWPCC project.

FINANCIAL IMPACT

Financial Impact Statement **Date:** February 4, 2025

Project Name:

**South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion,
Project ID: 20320002E1, 2032000207, and 203210002B,
Quarterly Project Status Report No. 41
For the Period Ended December 31, 2024**

COMMENTS:

Financial forecast for the SEWPCC Upgrade and Expansion project can be found in Appendix B.

A. Wiebe, on behalf of
Lucy Szkwarek, CPA, CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

N/A

OURWINNIPEG POLICY ALIGNMENT

This report aligns OurWinnipeg 2045, Policy 2.17 Regional Water Resource Management, by addressing long-term capacity of water-related systems including wastewater management. Objective: Protect and value ecosystems as essential components to quality of life through municipal activities and urban environment.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

Consideration was given as to whether this report connects to the Winnipeg Poverty Reduction Strategy (PRS) and its Goals and Objectives, and it was determined that the PRS is not applicable to this specific report.

SUBMITTED BY

Department: Water and Waste Department
Division: Engineering Services
Prepared by: Isaac D. Orah, P.Eng., PMP, LEED Green Assoc.
Date: February 7, 2025

Appendices

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

Appendix A – Key Project Facts

Appendix A - Key Project Facts	
Project Name	South End Sewage Treatment Plant (SEWPCC) Upgrading and Expansion
Business Owner (Department)	Water and Waste
Project ID	20320002EL, 2032000207 and 203210002B
Project Sponsor	Director of Water and Waste
Department Responsible for Project Delivery	Water and Waste
Consultant Engineer (Company Name)	CH2M Hill Canada Ltd.
Adopted Budget	\$335,600,000
Class of Estimate (Adopted)	3
Range of Estimate (Adopted)	-20% to +30% \$268,500,000 to \$436,300,000
Amended Budget	\$375,600,000
Class of Estimate (Amended)	3
Range of Estimate (Amended)	-20% to +30% \$300,500,000 to \$488,300,000
<u>Project Description (Scope)</u>	
The project is to expand the capacity of the SEWPCC for expected 2031 flows and upgrade the process to meet new effluent limits for nitrogen and phosphorous. The project design is based on the lowest life cycle cost (Net Present Value or NPV). In addition, the plant must operate continuously during the work and meet current effluent limits to the greatest extent possible.	
<u>Committee Membership:</u>	
Matt Dryburgh, Interim Deputy Chief Administrative Officer Tracy Graham, Chief Financial Officer Geoffrey Patton, Director of Assets and Project Management Danny Tooth, Acting Manager of Major Project Oversight Tim Shanks, Director of Water and Waste Cynthia Wiebe, Manager of Engineering Services, Water and Waste Lucy Szkwarek, Manager of Finance and Administration, Water and Waste Linda McCusker, Project Director, Winnipeg Sewage Treatment Program, Water and Waste	

(*) – Projects with aggressive schedules are inherently more risky and more likely to experience cost overruns and schedule delays.

Appendix B – Financial Forecast

Appendix B - Project SEWPCC Financial Forecast As at December 31, 2024

Project Component Deliverables	Budget (in 000's)			Expenditure Forecast (in 000's)							Surplus (Deficit) From Amended Budget	Variance Last Report	Change in Variance
	Adopted Budget	Council Approved Change	Amended Budget	Actual Costs To December 31, 2024				Total Forecasted Costs					
					2025	2026	2027						
Engineering, Design and Other	\$ 45,351	\$ -	\$ 45,351	\$ 76,418	\$ 641	\$ 80	\$ 31	\$ 77,170	\$ (31,819)	\$ (31,849.00)	\$ 30		
Construction	\$ 257,242	\$ -	\$ 257,242	\$ 280,952	\$ 14,929	\$ 371	\$ 189	\$ 296,441	\$ (39,199)	\$ (38,363.00)	\$ (836)		
Land Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Internal Financing/Overhead Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Contingency	\$ 33,007	\$ 40,000	\$ 73,007		\$ 1,989	\$ -	\$ -	\$ 1,989	\$ 71,018	\$ 70,212.00	\$ 806		
Total Project Budget	\$ 335,600	\$ 40,000	\$ 375,600	\$ 357,370	\$ 17,559	\$ 451	\$ 220	\$ 375,600	\$ -				
% of Project Budget Spent													
(Actual Costs to Date / Adopted & Amended Budget)	106%		95%										

Project ID	Project Year	Adopted Budget	Costs to Date
20320002EL ¹	2002	\$222,752	\$222,752
2032000207 ¹	2007	\$10,695,000	\$10,695,000
203210002B	2012-2022	\$364,682,248	\$346,452,359
Total Project Budget		\$375,600,000	\$357,370,111

¹ Does not appear in the Capital Expenditures Monthly Report as the funds have been expended and it is designated as a closed Project ID.

Appendix C – Key Project Events (History)

1. THE PROJECT

The goal of this project is to expand the capacity of the SEWPCC for expected 2031 flows and upgrade the processes to meet new effluent limits for nitrogen and phosphorous. The project design is based on the lowest life cycle cost (Net Present Value, or NPV). In addition, the plant must operate continuously during the work and meet current effluent limits to the greatest extent possible.

As a result of the 2003 Clean Environment Commission Hearings on the City's wastewater collection and treatment systems, Manitoba Conservation and Water Stewardship (the Regulator) notified the City that it intended to issue a licence for the South End Water Pollution Control Centre (SEWPCC) that would require control of nutrients discharged to the Red River.

Between 2001 to 2010, Council has approved \$203,250,000.00 for the Nutrient Removal Upgrade/Expansion at the SEWPCC.

On January 9, 2006, the Chief Financial Officer concurred with the recommendation to authorize an assignment to Stantec Consulting Ltd. for preliminary and conceptual engineering services related to the South End Water Pollution Control Centre upgrading and expansion at an estimated cost of \$3,250,000.00.

On May 16, 2007, Council authorized the Chief Administrative Officer to finalize the terms and conditions of a contribution agreement with the Government of Canada and the Province of Manitoba for funding of Wastewater Treatment Plant upgrades under the Canada Strategic Infrastructure Fund.

In late 2007, the Winnipeg Public Service was directed to initiate an assessment of alternate project delivery methods for the SEWPCC upgrade and expansion. Consequently, the assignment to Stantec was suspended after the conclusion of the conceptual and preliminary engineering work.

On November 19, 2008, City Council authorized the Winnipeg Public Service to:

- Begin the procurement of a strategic partner that could bring private sector experience to the design, construction, finance and potentially the operation of the North and South End Sewage Treatment Plants as well as potential operation of the West End Water Sewage Treatment Plant, and
- Authorize the Chief Administrative Officer to approve and issue the Request for Expressions of Interest followed by a Request for Qualifications and the Request for Proposals

On June 19, 2009, the Regulator issued a revised Environment Act Licence No. 2716 R for the SEWPCC.

On November 25, 2009, the Chief Financial Officer approved an award to Taillieu Construction Ltd. for SEWPCC Installation of Outfall Pipe, Effluent Sampling Facility and Associated Works, Contract No. 2 at an estimated cost of \$4,884,450.00.

On May 19, 2010, Council:

- Directed the Chief Administrative Officer to approve and issue a Letter of Notification to Veolia in order to immediately begin design and construction of the South and North End sewage treatment plant upgrades and expansion and biosolids handling facility; and
- Delegated the authority to the Chief Administrative Officer to “approve contract awards for upcoming South and North End sewage treatment plant capital projects where the value of each contract does not exceed \$30 million and there are sufficient funds in a budget approved by Council

On September 6, 2011, the City submitted to the Regulator, an engineering plan for the upgrading and expansion of the SEWPCC in accordance with Environment Act Licence No. 2716 R.

On April 18, 2012, the Regulator issued a revised Environment Act Licence No. 2716 RR for the SEWPCC effective May 1, 2012.

On October 5, 2012, the City submitted to the Regulator a revision to the engineering plan wherein the main treatment process was revised from Biological Aerated Filter to a Fixed-film Activated Sludge process.

On April 25, 2013, the Chief Administrative Officer approved a recommendation to award a contract to CH2M Hill Canada Ltd. to provide Professional Consulting Services for SEWPCC Upgrading/Expansion Project at an estimated cost of \$25,350,419.00.

On March 13, 2014, the Standing Policy Committee on Finance recommended that the South End Water Pollution Control Centre Financial Status reports and future reports pertaining to the North End, South End or West End Water Pollution Control Centre, include:

- The total amount of federal and provincial funding received to date as well as the balance of outstanding for Winnipeg ratepayers
- Clarification of the cost estimates as a result of the regulatory requirements that have changed and the potential impact on the final budget; and
- A summary of the entire program in terms of funding from all levels of government

Environment Act Licence No. 2716 RR

On November 5, 2015, the City received a letter from the Province granting a Licence compliance extension to December 31, 2016, noting that consideration of further extensions will

be subject to the City providing quarterly status reports and consultation with the Clean Environment Commission.

To comply with the Provincial Licence requirements the City hired Associated Engineering to conduct an Alternative Analysis Review. This report is an independent review of the SEWPCC construction schedule, evaluating ways to accelerate the schedule and/or mitigate delays. The City and Associated Engineering met with the Clean Environment Commission multiple times to review the scope and findings of the report.

The factors contributing to the revised date include:

- Contract detailed design is trending later than the original schedule
- Critical low wastewater flow construction window will delay completion by 12 months
- There was no schedule contingency in the original project critical path; and
- There was no allocation in the schedule for project risk due to winter construction and unforeseen situations

The Alternative Analysis Review was submitted to Manitoba Sustainable Development on October 20, 2016.

A letter dated September 12, 2017, was received from Manitoba Sustainable Development – Environmental Approval Branch providing conditional approval of the City's Notice of Alteration - City of Winnipeg South End Water Pollution Control Centre (SEWPCC) - Environment Act Licence No. 2716 RR project completion date. The approval indicates that construction and commissioning of the upgraded wastewater treatment plant is to be completed before December 31, 2021.

In December 2020, a Notice of Alteration for the interim phosphorous control process at the SEWPCC was submitted to the Province. The Province did not approve the request and required additional reporting and the submission of a revised schedule to full completion. The City has been reporting project status to the Province on a monthly and quarterly basis.

In September 2021, following a meeting with the Province, the City requested an extension to the Notice of Alteration date from September 30, 2021, to November 30, 2021. This was approved by the Province.

In November 2021, following a meeting with the Province, the Department submitted a Notice of Alteration to the Province stating that, due to the C4 Contractor's performance preventing the completion of various critical pre-requisite works, seeding activities for the biological nutrient removal (BNR) process would not occur in 2021 and are anticipated to start in 2022.

In late December 2021, a power imbalance caused the protection controls to turn off for some pumps, which resulted in Integrated Fixed Film Activated Sludge (IFAS) media being released from the BNR system. The Engineer of Record investigated and recommended methods of IFAS media clean-up and recovery to the C4 Contractor. The C4 Contractor has cleaned up and recovered the media which was released to plant areas that were outside the BNR system.

As reported previously, a power imbalance in December 2021 resulted in a release of the Integrated Fixed Film Activated Sludge (IFAS) media from the BNR tanks. This release delayed the commissioning of the Biological Nutrient Removal (BNR) system and led to an adjusted seeding start of June 2022. A revised Notice of Alteration was submitted to the Province on February 25, 2022, notifying of the delay and requesting a revised compliance date.

On April 14, 2022, the Province advised that the Notice of Alteration request, submitted by the City on February 25, 2022 for a revised compliance date was denied. However, the Province acknowledged the delays and accepted the submission as a compliance plan and required the City to continue the monthly and quarterly status reports.

On May 22, 2024, the City requested a compliance plan extension to October 30, 2024, to the Province to account for the delamination and waste activated sludge rotary drum thickeners (WAS RDT) issues.

On December 11, 2024, the City submitted a request for a compliance plan extension to December 31, 2025 to the Province. Although the SEWPCC is in compliance for all effluent requirements in the licence under all flow conditions, including biological phosphorus removal, final project completion remains outstanding. On January 6, 2025, the Province accepted the submission as an amendment to the compliance plan.

RISKS AND RISK MITIGATION STRATEGIES

The project has proceeded on a fast-track basis with construction contracts proceeding completion of the design. The detailed design is now complete with the largest and last construction contract, Contract 4 tendered. The cost estimate for Contract 4 (C4), which has an identified accuracy range of -10% to + 10%, is higher than the project allocation for this work. The adopted project budget of \$335.6 million was based on a Class 3 cost estimate which had an AACE expected accuracy range of -20% to +30% or \$268.5 million to \$436.3 million. On May 27, 2021 Council approved a budget increase of \$16.5 million, thereby approving an amended budget of \$352.1 million.

An ongoing risk management strategy has been implemented for the project encompassing a proactive process of identifying and assessing project risk, defining appropriate risk handling strategies and plans, and monitoring those actions to completion. A project risk register is being kept throughout the project and is updated by formal analysis.

Appendix D
South End Sewage Treatment Plant (SEWPCC) and Winnipeg Sewage Treatment Program (WSTP)

1) Funding for the SEWPCC is as follows:

SEWPCC Nutrient Removal/Upgrade (in \$millions)	Total Cost	Funded to Date		Funding Pending		Total Funding		City Share of Costs
		Canada	Manitoba	Canada	Manitoba	Canada	Manitoba	
Environment Act Licence Driven Funding								
CSIF BNR	\$ 147.0	\$ 27.14	\$ 6.08	\$ 4.20	\$ -	\$ 31.34	\$ 6.08	\$ 109.58
GIF Wet Weather Flow	60.0	9.90	9.90	1.10	1.10	11.00	11.00	38.00
Other	168.6							168.60
Estimated Program Costs	\$ 375.6	\$ 37.04	\$ 15.98	\$ 5.30	\$ 1.10	\$ 42.34	\$ 17.08	\$ 316.18

2) Funding for the Winnipeg Sewage Treatment Programs is as follows:

WSTP All Projects (in \$millions)	Total Cost	Funded to Date		Funding Pending		Total Funding		City Share of Costs
		Canada	Manitoba	Canada	Manitoba ⁴	Canada	Manitoba	
WEWPCC Biological Nutrient Removal ¹	\$ 33.23	\$ 5.07	\$ 8.19			\$ 5.07	\$ 8.19	\$ 19.97
NEWPCC Centrate and UV Disinfection ¹	52.08	5.59	14.54			5.59	14.54	31.95
SEWPCC Nutrient Removal/Expansion	375.60	37.04	15.98	5.30	1.10	42.34	17.08	316.18
NEWPCC Power Supply and Headworks ²	517.85	63.63	53.05	\$ 52.48	\$ 43.70	116.11	96.75	304.99
NEWPCC Biosolids ³	1,035.00			200.87	167.38	200.87	167.38	666.75
NEWPCC Nutrient Removal ⁴	828.06					-	-	-
Estimated Program Costs	\$ 2,841.82	\$ 111.33	\$ 91.76	\$ 258.65	\$ 212.18	\$ 369.98	\$ 303.94	\$ 1,339.84

¹ WEWPCC Biological Nutrient Removal and NEWPCC Centrate and UV Disinfection have been completed.

² On July 23, 2021 the Federal and Provincial governments announced \$212.86 million in Investment in Canada Infrastructure Program (ICIP) funding for the NEWPCC Upgrade Power Supply and Headworks project. \$116.11 million in Federal and \$96.75 million in Provincial funding.

³ On August 16, 2022 the Federal and Provincial governments announced an additional \$368.25 million in ICIP funding for the NEWPCC Upgrade Biosolids project. \$200.87 million in Federal and \$167.38 million in Provincial funding. Committing a total of \$581.11 million in funding to the NEWPCC Upgrade.

⁴ On January 26, 2023 Council approved a \$18 million budget to start the enhanced preliminary design and procurement process for the NEWPCC Nutrient Removal project. The total budget for the NEWPCC Nutrient Removal project has not been approved.

* Northwest Interceptor (NWI)