Agenda – Standing Policy Committee on Finance and Economic Development – June 10, 2025

REPORTS

Item No. 3 North End Sewage Treatment Plant (NEWPCC) Upgrade: Biosolids

Facilities,

Project ID: 203110028B,

Quarterly Project Status Report No. 9 For the Period Ended March 31, 2025

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

That the financial status of the NEWPCC Upgrade: Biosolids Facilities, as contained in this report, be received as information.

ADMINISTRATIVE REPORT

Title: North End Sewage Treatment Plant (NEWPCC) Upgrade: Biosolids

Facilities,

Project ID: 203110028B,

Quarterly Project Status Report No. 9 For the Period Ended March 31, 2025

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: 8% Percent of Adopted Budget Spent: 3.08%

The Capital Budget for the NEWPCC Upgrade: Biosolids Facilities project is \$1.035 billion with expenditures to date totaling \$31.8 million. A total of \$13.6 million was spent during this reporting period. The funding source(s) for \$453 million of the approved budget still needs to be confirmed.

Key project updates this quarter include:

- The Development Partner, Red River Biosolids Partners (RRBP), has completed the Start-Up Period of the Development Phase Agreement and has begun the Preliminary Design Period.
- Four new risks were identified in this reporting period: project budget exceedance, inability
 to commission the phosphorus removal system, potential for schedule delay due to
 interdependent scopes of work, and value for money validation.

Financial updates:

 The contribution agreement with the Provincial Government for an additional \$30 million in funding from the Strategic Infrastructure Basket (SIB) was executed.

- Construction on the Piping Installation, Soil Remediation, and Site Compound Development contract continues. A contract extension of \$1.1 million was approved due to unforeseen subsurface conditions and for additional contaminated soil removal.
- The contract for external legal advisory services was extended by \$219,600. This covers services during the Development Phase and contract and claims support during the Development and Implementation Phases.
- A contract for railway flagging services with Canadian Pacific Kansas City Limited (CPKC) was awarded for \$500,000.

NEWPCC Audit:

- KPMG presented the audit report on the three NEWPCC Upgrade projects to the Executive Policy Committee in January 2025. The Public Service is actively engaged in addressing and implementing the audit recommendations.
- Following on audit recommendations, authority to approve contract over-expenditures for the Owner's Advocate Engineer contract was delegated to the Public Service.
- KPMG has started developing a fit-for-purpose governance structure for the NEWPCC Upgrade projects. The governance structure is anticipated to be considered by Council in Q3 2025.

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 NEWPCC Upgrade: Biosolids Facilities, 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)

Procurement (Update from last report)

• **RFP 7-2017:** P1 Consulting Inc. (fairness advisor) provided the final fairness advisor report on the procurement process on January 27, 2025.

Development Phase (Update from last report)

- RFP 779-2021B: The Development Partner, RRBP, has completed the Start-Up Period and has achieved Stage Gate #1. The Preliminary Design Period has started and the Development Partner is working towards Stage Gate #2 which is anticipated in Q3 2025. By the end of this stage, the City will receive the 30 percent design.
- RFP 182-2015: Biosolids Development Phase: The Owner's Advisor, AECOM Canada Ltd. (AECOM), supported the Development Phase by reviewing submissions from the Development Partner and providing technical and project management advice to the City.
- RFP 102-2017: Blakes Cassels & Graydon LLP supported the Development Phase by providing legal advice to the City.

On February 3, 2025, a contract extension of \$219,600 for legal advisory services was approved by the Director of Water and Waste. This covers services during the Development and Implementation Phases.

Construction (Update from last report)

- RFP 182-2015: Biosolids Early Works: AECOM continues to assist the City with early work construction packages to minimize the risk to the main Progressive Design Build (PDB) contract.
 - Tender 447-2024: NEWPCC Piping Installation, Soil Remediation, and Site Compound Development.
 - Construction continues and is anticipated to be complete by Q4 2025.
 - On March 14, 2025, a contract extension of \$1.1 million was approved by the CFO for J-Con Civil Ltd. for unforeseen subsurface conditions and additional contaminated soil removal.
 - A future contract change for AECOM is pending for soil testing related to the additional contaminated soil removal under this tender.

- Land Drainage System (LDS): AECOM's preliminary design for the LDS is complete and detailed design has commenced. The tender is anticipated to go out in Q3 2025 and construction to begin in Q4 2025. The subsurface railway crossing application in the vicinity of the work was submitted to Canadian Pacific Kansas City Limited (CPKC) on February 21, 2025.
- Flushing Water: To mitigate critical schedule risks, design of the flushing water system was transferred to the main biosolids PDB contract due to the interdependence of the two projects.
- **SS 301-2025: CPKC Rail Flagging Services:** On March 19, 2025, the CFO approved a single source negotiation for the supply of railway flagging services with CPKC. The flagging services are required during the installation of four subsurface railway crossings (to be performed within Tender 447-2024 and the LDS tender).

Table 1 – Contracts

		NEWPCC Up	gra	de: Bioso	lids	Facilitie	S		
				ble (Over \$25					
Bid Opportunity #	Company Name	Description		Original Contract Award Value (GST & MRST extra as applicable)		Al Approved Over- penditures r-Expenditure nount only)	Date of Award	Date of Total Completion	Estimated % Complete
182-2015 (Biosolids - Preliminary Design)	AECOM Canada Ltd	Owner's Advisor	\$	1,316,735	\$	-		-	94
182-2015 (Biosolids - Procurement) ¹	AECOM Canada Ltd	Owner's Advisor	\$	6,521,026	\$	-	4-Aug-2022	-	56
102-2017 (Biosolids) ¹	Blakes Cassels & Graydon LLP	External Legal Counsel	\$	804,373	\$	219,570	14-Sep-2022	-	47
182-2015 (Biosolids - Early Works) ¹	AECOM Canada Ltd	Professional Engineering Services for Early Works	\$	2,539,127	\$	-	23-Jun-2023	-	54
182-2015 (Biosolids - Flushing Water) ¹	AECOM Canada Ltd	Professional Engineering Services for Flushing Water	\$	1,645,000	\$	-	30-Oct-2023	-	10
779-2021B (Development Phase) ¹	Red River Biosolids Partners	Development Phase Agreement	\$	95,000,000	\$	-	18-Jul-2024	-	21
182-2015 (Biosolids - Development Phase) ¹	AECOM Canada Ltd	Owner's Advisor	\$	18,812,168	\$	-	28-Jun-2024	-	5
447-2024 (Biosolids Early Works) ¹	J-Con Civil Ltd.	NEWPCC Piping Installation, Soil Remediation, and Site Compound Development	\$	7,979,353	\$	1,092,359	28-Oct-2024	-	17
301-2025 (Biosolids Early Works)	Canadian Pacific Kansas City Rail (CPKC)	CPKC Flagging Services	\$	500,000	\$	-	19-Mar-2025	-	0
		Total	\$	135,117,781	\$	1,311,929			

¹The Original Contract Award Value includes MRST

Upcoming Procurements:

Description	Anticipated Award Date
Land Drainage System Construction Tender	Q3 2025

Schedule (Update from last report)

The date for Development Phase Agreement (DPA) Stage Gate 2 – Preliminary Period has been revised to Q4 due to the change in process from thermal hydrolysis to thermophilic

digestion (see Risk section for further details). This resulted in a three-month delay for redesign. This is not anticipated to impact the substantial completion date of December 2030 as thermophilic digestion facilities are quicker to build and commission.

Table 2 – Milestones

	Milestones											
	Deliverable	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete							
1	Preliminary Design Report	2022 Q1	-	2022 Q1	100							
2	2022 Cost Report ¹	2022 Q1	-	2022 Q1	100							
3	2023 Cost Report ¹	2023 Q2	-	2023 Q2	100							
4	RFP Step 1 Posted	2023 Q1	2023 Q2	2023 Q3	100							
5	RFP Step 2 Posted	2023 Q4	-	2023 Q4	100							
6	DPA Award	2024 Q2	-	2024 Q3	100							
7	DPA Stage Gate 1 - Start-Up Period	2025 Q1	-	2025 Q1	100							
8	DPA Stage Gate 2 - Preliminary Period	2025 Q3	2025 Q4	-	11							
9	DPA Stage Gate 3 - Intermediate Period	2026 Q2	-	-	-							
10	Design Build Agreement Award	2026 Q3	-	-	-							
11	Design Build Substantial Completion	2030 Q4	-	-	-							
12	Design Build Final Completion	2032 Q4	-	-	-							

¹ Cost Consultant Class 3 Estimate

Risk (Update from last report)

The following new risks were identified in this reporting period:

• **Project Budget Exceedance:** Due to the current market conditions and the uncertainty surrounding tariffs, there's a risk of exceeding the current approved funds.

To mitigate cost risk, the project team transitioned from thermal hydrolysis to thermophilic digestion as an alternative process. This is a less expensive technology that will still produce the same low-pathogen class of biosolids product, but results in approximately five percent more material. Although this will increase hauling costs, there are operational cost savings due to lower energy, chemical, and labour requirements.

This change results in a three-month extension to the DPA, but should not impact the substantial completion date of December 2030, as thermophilic digestion facilities are faster to build and commission. Subsequent to the reporting period end date, the Provincial Regulator and Federal and Provincial Government funding partners were notified of the change.

This risk will continue to be monitored throughout the PDB process.

• Inability to Commission the Phosphorous Removal System: Due to the addition of ferric in the Interim Phosphorus Facility, approximately 85 percent of phosphorous in the

sludge will be unavailable to the phosphorous recovery system until the Nutrient Removal Facilities are online.

Without sufficient available phosphorous, there's a risk of damaging the phosphorous removal equipment while it operates outside of its design parameters. This also makes commissioning the equipment extremely hard.

To mitigate these risks, the phosphorous recovery system scope of work was transferred to the Nutrient Removal Facilities project. To account for the budget difference, work originally planned to be funded by both projects will now be fully funded by the Biosolids Facilities project.

The Provincial Regulator and Federal and Provincial Government funding partners will be notified of this change.

- Potential for Schedule Delay due to Interdependent Scopes of Work: Completion of
 the flushing water system is critical to commissioning the Biosolids Facilities. The
 flushing water scope was initially going to be delivered as an Early Works project. With
 the recent change to thermophilic digestion, the flushing water system needs to be redesigned. This will delay construction beyond the Early Works timeframe. Due to the
 dependence of the Biosolids project on the flushing water system, and to mitigate
 potential schedule delays, the flushing water scope of work was transferred to the main
 PDB contract.
- Value for Money Validation: The City needs to ensure it gets value for money spent. To validate costs, the Public Service will engage a third-party consultant to review cost estimates as they are developed by the Development Partner.

Table 3 – Significant Risks and Mitigations Strategies

Significant Risks	Significant Risks and Mitigation Strategies										
Risk Statement and Explanation	Risk Mitigation Management Plan										
New:											
Project budget exceedance: Due to current market conditions and the uncertainty surrounding tariffs, there's a risk of exceeding the current approved funds.	Transition to thermophilic digestion from thermal hydrolysis as an alternative process. This is a less expensive technology that will still produce the same low-pathogen class of biosolids product, but results in approximately 5% more material. Capital and lifecycle costs are anticipated to be lower. This change is expected to increase the design phase duration but is not anticipated to increase the overall substantial completion date. This risk will continue to be monitored throughout the PDB process.										
Inability to Commission the Phosphorus Removal System: Due to the addition of ferric in the Interim Phosphorous Facility, approximately 85% of phosphorus in the sludge will be unavailable to the phosphorous recovery system until the Nutrient Removal Facilities are online. This could lead to inadequate commissioning and possible damage to the new equipment.	The phosphorous recovery system scope of work was										
Potential for Schedule Delay due to Interdependent Scopes of Work: Completion of the flushing water system is critical to commissioning the Biosolids Facilities. The flushing water scope was initially going to be delivered as an Early Works project. With the recent change to thermophilic digestion, the flushing water system needs to be re-designed. This will delay construction beyond the Early Works timeframe.	The flushing water scope of work will be transferred to the main PDB contract to mitigate potential schedule delays.										
Value for Money Validation: The City needs to ensure it gets value for money.	A third party consultant will be engaged to review cost estimates as they are developed by the Development Partner.										
Ongoing:											
Potential retaliatory tariffs on equipment from the United States will increase project costs	Use the Progressive Design Build delivery model to collaboratively change the contract to minimize cost impacts										
The City is currently funding 61.5% of the Biosolids budget of \$1.035 billion	Seek additional external funding sources for consistent cost sharing										

The 2024 to 2027 rates assume additional funding. There is the potential for significant rate increases due to not receiving additional funding	Seek additional external funding sources for consistent cost sharing
Running out of biosolids treatment capacity will limit Winnipeg's ability to grow and could result in provincial regulator violations leading to fines	Construction of both the Biosolids and Nutrient Removal Facilities will increase Winnipeg's biosolids capacity. Prioritize funding to ensure these key projects move forward. Engage qualified engineering and construction teams to build these key facilities. Track remaining biosolids capacity and report to Council through bi-yearly council reports
Duration of City approval processes causes schedule extension and additional costs to the project	Request delegated authority within the City's approval structure, and request special meetings where appropriate to shorten City's approval timelines
Contaminated soils on project site can cause construction delays and increased costs	Complete soil assessments early. Remove contaminated soils under a separate contract prior to the large construction project beginning
Heritage finds during construction can cause construction delays and increased costs	Complete heritage surveys early. Develop procedures for chance heritage finds and incorporate them into the contract documents during construction
Multiple major projects occurring at the same time at NEWPCC can lead to conflicts and schedule delays	Routinely coordinate between all NEWPCC projects. Use the same Owners Advocate and Veolia team across all major projects to minimize conflicts
Public complaints about increased traffic and road conditions during construction	Require contractors to create and follow traffic management plans.
Public complaints about dust during construction	Require contractors to follow specifications for construction which include dust control procedures, which includes roads onsite and any public roads used by construction activities
Public complaints about odour once the new facility is brought online	Include odour control systems in the scope of work
Mitigated:	
The draft ICIP funding agreement from the Province of Manitoba remains outstanding	The ICIP funding agreement was executed on March 26, 2024
No competition on a design-build procurement for the Biosolids Facilities project due to only one bidder	Changed project delivery model to Progressive Design Build and shortlisted two proponents

Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast.

Funding (Update from last report)

On March 31, 2025, the NEWPCC Upgrade: Biosolids Facilities Contribution Agreement under the Provincial Government's Strategic Infrastructure Basket (SIB) was executed. The additional Provincial contribution will be up to \$30 million. Table 4 has been updated to include this additional Provincial funding, while the City's External Debt has been reduced by \$30 million.

The Federal and Provincial Governments have signed an agreement (2026 to 2036) under the Provincial/Territorial Canada Housing Infrastructure Fund (CHIF) stream. It is the Province's desire to allocate all Federal funds available to Winnipeg (\$166M) under CHIF to the NEWPCC Biosolids project. The Public Service is working with the Province towards a funding agreement.

Table 4 – Project Funding Forecast

Funding Forecast												
Funding Source	Adopted Budget (in millions)	Amended Budget ^{1,2} (in millons)	Committed (in millions)									
Class of Estimate	Class 3	Class 3	Class 3									
NEWPCC Upgrade: Biosolids Facilities External Debt Federal Government - ICIP Provincial Government - ICIP Provincial Government - SIB Retained Earnings Environmental Projects Reserve	184.46 200.87 167.38	460.75 200.87 167.38 30.00 106.00 70.00	460.75 200.87 167.38 30.00 106.00 70.00									
Total	552.71	1,035.00	1,035.00									

¹On September 29, 2023 Council approved a budget increase of \$482.29 million funded by \$351.62 million debt, \$76 million retained earnings and \$54.67 million Environmental Projects Reserve.

Property Acquisition (Update from last report)

No new updates.

Stakeholder Engagements/Communications (Update from last report)

The Public Service continues to work with a number of stakeholders on this project including:

- Peguis First Nation regarding the cultural interest in the NEWPCC lands for the Biosolids Facilities project
- The Manitoba Government as the provincial regulator
- The International Institute for Sustainable Development, Lake Winnipeg Foundation, and Lake Winnipeg Indigenous Collective as environmental stakeholders
- Sustainable Procurement Advisory Table as a social procurement stakeholder

²On February 18, 2025, EPC received SIB funding amendment indicating \$30 million allocated to NEWPCC Biosolids and reduced NEWPCC Biosolids External Debt by equivalent value.

<u>Audit</u> (Update from last report)

KPMG presented the audit report on the three NEWPCC Upgrade projects to the Executive Policy Committee on January 21, 2025. The Public Service is actively implementing a number of the audit recommendations. The quarterly Implementation of Audit Recommendation Reports can be found here: https://winnipeg.ca/audit/reports.stm#tab-QuarterlyReports

On February 27, 2025, Council approved delegation of authority to approve contract over-expenditures for the NEWPCC Upgrade: Power Supply and Headworks Facilities projects and over-expenditures for the Owner's Advocate Engineer (RFP No. 182-2015). This report followed from audit recommendations 2: Authority and Accountability and 40: Change Order Approval Timelines.

On March 18, 2025, a sole source contract was executed with KPMG to develop a fit-for-purpose governance structure for the NEWPCC Upgrade projects. KPMG is seeking input from the Public Service and City Councillors while developing the new governance structure. The final report from KPMG is anticipated in Q2 2025 and will be considered by Council in Q3 2025.

Subsequent Events after Report Period End Date

N/A

FINANCIAL IMPACT

Financial Impact Statement

Date: May 14, 2025

Project Name:

North End Sewage Treatment Plant (NEWPCC) Upgrade: Biosolids Facilities,

Project ID: 203110028B,

Quarterly Project Status Report No. 9

For the Period Ended March 31, 2025

COMMENTS:

Financial forecast for NEWPCC Upgrade Biosolids can be found in Appendix B.

Lucy Szkwarek, FCPA, FCGA Lucy Szkwarek, FCPA, FCGA Manager of Finance and 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

NEWPCC Upgrade: Biosolids Facilities Project aligns with the Strategic Opportunity #6 Waste Reduction and Diversion found on page 51 of the Climate Action Plan approved by Council on September 20, 2018, Key Direction 6.3 and 6.4.

The Water Protection Act requires the City to reuse the wastewater biosolids and to recover the nutrients from the biosolids to the maximum extent possible. The intent is for the facility to produce Class A Biosolids which can be reused resulting in diversion of biosolids from the landfill.

WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

On February 24, 2022, Council directed that bidders for the Biosolids Facilities Project include the following their submissions:

- Specific commitments to engage skilled labour including targets for employment of Indigenous peoples and other under-represented groups within the Manitoba market
- Proposed plans and partnerships with organizations to promote employment and training initiatives for Indigenous and other under-represented groups within the Manitoba market

This aligns with Goal 1 - Equity and a Culture of Caring are Demonstrated through Strategy Implementation and Systems Change; Topic- Community Benefits in City Projects; of the Winnipeg Poverty Reduction strategy Implementation Plan.

SUBMITTED BY

Department: Water and Waste

Division: Engineering Services

Prepared by: Lana Obach, P. Eng., MASc., PMP

Date: May 21, 2025

Appendices

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

Appendix D – Funding

Appendix A – Key Project Facts

Appendix A – K	ey Project Facts					
Project Name	NEWPCC Upgrade: Biosolids Facilities					
Business Owner (Department)	Water and Waste Department					
Project ID	203110028B					
Project Sponsor	Director of Water and Waste					
Department Responsible for Project Delivery	Water and Waste Department					
Owner's Advisor (Company Name)	AECOM Canada Ltd.					
Adopted Budget	\$ 552,712,000.00					
Class of Estimate (Adopted)	3					
Range of Estimate (Adopted)	-20% to 30%					
Amended Budget	\$ 1,035,000,061.00					
Class of Estimate (Amended)	3					
Range of Estimate (Amended)	-20% to 30%					

Project Scope

The Biosolids Facilities project will address end of life equipment and regulatory requirements regarding the recovery of nutrients and maximize biosolids reuse. It will add new facilities to treat the sludge from the City of Winnipeg's three sewage treatment plants and replace end-of-life equipment.

Major Capital Projects Advisory Committee Membership:

- Matt Dryburgh, Deputy Chief Administrative Officer
- Tracy Graham, Chief Financial Officer
- Geoffrey Patton, Director of Assets and Project Management
- Danny Tooth, Acting Manager of Major Projects 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

Appendix B – Financial Forecast

Appendix B - North End Sewage Treatment Plant (NEWPCC) Upgrade: Biosolids Facilities Project Financial Forecast
As at Mar 31, 2025

	Budget (in 000's)						Expenditure Forecast (in 000's)																				
Project Component Deliverables		Adopted Budget	A	Council pproved Change		mended		ual Costs To r 31, 2025		maining 2025		2026		2027		2028		2029		2030	2031		2032			Surplus (Deficit) From Amended Budget	
Engineering, Design and Other	\$	30,967	\$	38,303	\$	69,270	\$	8,900	\$	7,646	\$	18,241	\$	12,004	\$	4,822	\$	4,772	\$	5,932	\$ 3,715	\$	3,238	\$	69,270	\$	(0)
Construction	\$	377,967	\$	300,721	\$	678,688	\$	21,798	\$	16,095	\$	66,123	\$	226,966	\$	205,628	\$	97,853	\$	31,331	\$ 6,352	\$	6,542	\$	678,688	\$	-
Land Acquisition	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-
Internal Financing/Overhead Costs	\$	43,161	\$	89,656	\$	132,817	\$	1,172	\$	461	\$	2,635	\$	8,530	\$	17,197	\$	22,692	\$	25,940	\$ 27,139	\$	27,051	\$	132,817	\$	-
Contingency	\$	100,617	\$	53,608	\$	154,225	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$ 1	154,225	\$	154,225	\$	-
Total Project Budget	\$	552,712	\$	482,288	\$	1,035,000	\$	31,870	\$	24,202	\$	86,999	\$	247,500	\$:	227,647	\$	125,317	\$	63,203	\$ 37,206	\$ 1	191,056	\$	1,035,000	\$	(0)

3.08%

% of Project Budget Spent

(Actual Costs to Date / Adopted & Amended Budget)

	L	iance ast port	ange in riance
)	\$	-	\$ (0)
	\$	-	\$ -
)			

Appendix C – Key Project Events (History)

The NEWPCC Upgrade will be delivered in three separate capital projects:

- 1. NEWPCC Upgrade: Power Supply and Headworks Facilities
- 2. NEWPCC Upgrade: Biosolids Facilities
- 3. NEWPCC Upgrade: Nutrient Removal Facilities

The Biosolids Facilities upgrade will focus on new sludge processing facilities to treat waste solids from the NEWPCC, SEWPCC and WEWPCC. The new sludge processing facilities will include pre-treatment of the combined sludge streams using thermal hydrolysis and mesophilic anaerobic digestion.

On September 26, 2019, Council approved a 2019 capital project budget of \$552.712 million, for the NEWPCC Upgrade: Biosolids Facilities, subject to final written confirmation of federal and provincial funding satisfactory to the Chief Financial Officer.

On January 30, 2020, Council approved \$15.334 million from the Biosolids Facilities Budget to commence engineering services.

On September 20, 2020 Council approved that the City agree to transfer \$321.24 million of Federal Government's funding under the ICIP from the Public Transit Infrastructure Stream to the Green Infrastructure Stream to fund the Federal Government's funding portion for the NEWPCC Upgrade: Headworks Facilities Project and the NEWPCC Upgrade: Biosolids Facilities Project as per the Province of Manitoba's requirement, subject to certain conditions.

On March 25, 2021, Council adopted that:

- The Government of Canada and the Province of Manitoba be requested to provide confirmation of approval of ICIP for the NEWPCC Upgrade Projects: Headworks Facility Project and Biosolids Facility Project
- The Province of Manitoba be requested to confirm the City's recommended procurement methodology for the Biosolids Facility Project
- The Public Service be directed not to proceed with detailed engineering design for the Biosolids Facility design-bid-build project, in the amount of \$15.334 million, as approved by Council on January 30, 2020, until such time as the confirmation requested in recommendations 1 and 2 have been received

On May 18, 2021, the Executive Policy Committee concurred in the recommendation of the Public Service, as amended, that:

- The current Operation and Maintenance of Winnipeg's sewage treatment utility shall remain public and that the Operation and Maintenance not be included as part of the P3 market sounding
- That a single source contract be approved with Deloitte LLP of up to \$400,000 to conduct a market sounding for a Design, Build and Financing P3 for the Biosolids and Nutrient Removal facilities projects of the NEWPCC upgrades

 That the Public Service report back to Council on the results of the market sounding and analysis

On May 27, 2021, Council approved

Review of the AACE Class 3 cost estimates for Biosolids and Nutrient Removal Facilities
projects and refer any increases to the 2022 capital budget process; and to update the
ten-year water and sewer financial plan and report back to Council in October 2021

On November 24, 2021, a joint news release by the Province of Manitoba and the City was issued regarding the advancement of the City's funding application to the Federal Government of Canada for the NEWPCC Upgrade: Biosolids Facilities Project through the ICIP.

On February 24, 2022, Council approved that future tenders for the NEWPCC Upgrade Projects require bidders to include the following as part of their bid submissions:

- Specific information on its intended partnerships or self-directed plans to secure a skilled project labour workforce
- Estimated numbers of and classifications of skilled tradespersons to be employed
- Specific commitments to engage skilled labour including targets for employment of Indigenous peoples and other under-represented groups within the Manitoba market
- Proposed plans and partnerships with organizations to promote employment and training initiatives for Indigenous and other under-represented groups within the Manitoba market

On July 21, 2022 the City Council approved:

- That the NEWPCC Upgrade: Biosolids Facilities Project be delivered using a Design Build procurement model
- That the revised cost estimate for the NEWPCC Upgrade: Biosolids Facilities Capital Budget be referred to the 2024-2027 Multi-Year Budget Process
- That the \$15.334 million 2019 Capital Budget for the NEWPCC Upgrade: Biosolids Facilities, approved on January 30, 2020, as part of the 2020-2023 Water and Sewer Rate Report, be funded from the Environmental Projects Reserve rather than external debt

On August 16, 2022, a formal press release regarding the approval of funding through the ICIP application for the Biosolids Facilities was carried out at the NEWPCC. All three levels of government were in attendance.

On December 20, 2022, written confirmation was received of the Biosolids Facilities inclusion in the ICIP, based on the current approved budget of \$552 million.

On February 23, 2023, the CFO approved a budget of \$552.71 million based upon written confirmation of government funding.

On March 23, 2023 City Council concurred in the Public Service's recommendation for:

- The use of escalation clauses as a negotiation option in the NEWPCC Upgrade:
 Biosolids Facilities project; and
- The Public Service be directed to request special meetings of the Standing Policy Committee on Water, Waste and the Environment, Executive Policy Committee, and Council for the advancement of the award of the Design Build Agreement.

On April 27, 2023 City Council concurred in the Public Service's recommendation to close a portion of the legally opened public road (Chief Peguis Trail), east of Ferrier Street to facilitate the development of immediately adjoining land to the south for the NEWPCC Upgrade: Biosolids Facilities project.

On July 13, 2023 City Council approved:

- That the NEWPCC Upgrade: Biosolids Facilities project be delivered using a Progressive Design Build (PDB) procurement model
- Delegated authority to the Chief Administrative Officer for awarding Early Works
 Contracts to the design builder up to a cumulative amount of \$50 million, and
- By-Law No. 67/2023 to close part of the Public Road (Chief Peguis Trail) East of Ferrier Street under Development Application No. DAC 5/2022

On September 29, 2023 City Council approved an increase of \$482 million to the previously adopted budget of \$552 million, for a total budget of \$1.035 billion.

On March 26, 2024, the NEWPCC Upgrade: Biosolids Facilities Contribution Agreement under the ICIP was executed. Federal contributions will be up to \$200.87 million and Provincial contributions will be up to \$167.38 million.

On July 18, 2024, the Standing Policy Committee on Water, Waste and Environment approved that Red River Biosolids Partners, an Aecon Water Infrastructure Inc. and Oscar Renda Contracting of Canada Inc. and MWH Constructors Canada Ltd. Joint Venture, be selected as the Preferred Proponent for the Development Phase Agreement for the NEWPCC Upgrade: Biosolids Facilities Project, in the amount of \$95,000,000.00 including MRST, GST extra, as applicable. The Development Phase Agreement was fully executed on September 5, 2024.

On February 27, 2025. Council approved:

- the delegated authority to approve contract over-expenditures for Owner's Advocate Engineer (RFP No. 182-2015) where the total contract value does not exceed the following to:
 - A. the Chief Financial Officer, up to \$150 million
 - B. the Director of Water and Waste, up to \$100 million
- that the Public Service be directed to submit funding applications for the Southwest Interceptor to the Direct Delivery stream of the Canada Housing Infrastructure Fund, and the NEWPCC Upgrades: Biosolids Facilities to the Provincial and territorial agreement stream of the Canada Housing Infrastructure Fund.

On March 28, 2025, the NEWPCC Upgrade: Biosolids Facilities Contribution Agreement under the Provincial Government's Strategic Infrastructure Basket (SIB) was executed. The additional Provincial contribution will be up to \$30 million.

RISKS AND RISK MITIGATION STRATEGIES

There are risks associated with the cost and schedule for a project that is this large and complex, especially at the early stages. In addition, the final bid amounts for projects are unknown until the project agreement is finalized with the Progressive Design Builder.

An ongoing risk management strategy has been implemented. It includes a proactive process of identifying risks, performing qualitative and quantitative risk analyses, creating response plan strategies, and ongoing monitoring. The risk management process is an active part of the management of the project. The project will also incorporate structured Hazard and Operability Analysis and a Construction Hazard Assessment Implication Review. Since detailed design and construction will be carried out through a Progressive Design Build contract, the Winnipeg Sewage Treatment Program will be identifying and transferring as much risk as reasonable to the Design Builder.

The Risk Register for the project contains cost and schedule risks associated with design, procurement, construction, operation, and unknown events. This is reviewed and updated regularly.

Appendix D - Funding

Appendix D

North End Sewage Treatment Plant (NEWPCC) and Winnipeg Sewage Treatment Program (WSTP)

1) Funding for the NEWPCC is as follows:

NEWPCC Upgrade		Funded	to Date	Funding	Pending	Total F	Total Funding			
(in \$millions)	Total Cost	Canada	Manitoba	Canada	Manitoba	Canada	Manitoba	Costs		
Funding by Project										
Power Supply and Headworks Facilities	\$ 517.85									
Power Supply and Other Ineligible	52.28	-	-	-	-	-	-	\$ 52.28		
Headworks Facilities	421.10	\$ 92.23	\$ 76.85	\$ 23.88	\$ 19.90	\$ 116.11	\$ 96.75	\$ 208.24		
Headworks Facilities - NWI* Failure	44.47	-	-	-	-	-	-	44.47		
Biosolids Facilities	1,035.00	-	\$ -	200.87	\$ 197.38	200.87	197.38	636.75		
Funding Dependent										
Nutrient Removal Facilities	1,491.03	-	-	-	-	-	-	28.89		
Estimated Program Costs	\$ 3,043.88	\$ 92.23	\$ 76.85	\$ 224.75	\$ 217.28	\$ 316.98	\$ 294.13	\$ 970.63		

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

WSTP All Projects		Funded to Date Funding Pending					Total Funding				
(in \$millions)	Total Cost	Canada	Manitoba	Canada	Manitoba	Canada	Manitoba	Costs			
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	92.23	76.85	\$ 23.88	\$ 19.90	116.11	96.75	304.99			
NEWPCC Biosolids ³	1,035.00	-	-	200.87	197.38	200.87	197.38	636.75			
NEWPCC Nutrient Removal ⁴	1,491.03	-	-	-	-	-	-	28.89			
Estimated Program Costs	\$ 3,504.79	\$ 139.93	\$115.56	\$ 230.05	\$ 218.38	\$ 369.98	\$ 333.94	\$ 1,338.73			

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. On March 28, 2025, the Provincial government signed an agreement for an additional \$30 million in SIB funding for the NEWPCC Upgrade Biosolids project.

⁴ NEWPCC Upgrade Nutrient Removal project has not been approved. The cost estimate for the NEWPCC Upgrade Nutrient Removal project was updated from \$828.06 million to \$1,191.03 million in 2025. An additional \$10.894 million in City funding was approved for the NEWPCC Upgrade Nutrient Removal project by Council on March 27, 2025.

^{*} Northwest Interceptor (NWI)