



July 22, 2022

Client File No.: 1071.1  
Our File Nos.: S-972, S-1146 EMS  
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020-17-08-11-0N

Environment, Climate and Parks  
Environmental Stewardship Division  
Environmental Approvals Branch  
1007 Century Street  
Winnipeg, MB R3H 0W4

Attention: James Capotosto, Director

**RE: NEWPCC UPGRADE PROJECTS REPORT NO. 5 – Q2 QUARTERLY REPORT FOR  
APRIL 1 TO JUNE 30, 2022 – ENVIRONMENT ACT LICENCE NO. 2684 RRR AND  
INVESTING IN CANADA INFRASTRUCTURE PROGRAM GIS-EQ-1087**

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The City of Winnipeg (the City) is submitting the NEWPCC Upgrade Projects Report No. 5 for Q2 Quarterly Report for the period of April 1 to June 30, 2022. This report is to satisfy conditions identified in the Environmental Act Licence No. 2684RRR as required by Manitoba Conservation and Climate on May 28, 2021, and Investing in Canada Infrastructure Program (ICIP) GIS-EQ-1087 letter dated June 2, 2021. The work tasks required to complete the NEWPCC Upgrades to meet the Environmental Act Licence requirements are summarized in this report.

The works to be conducted as part of the NEWPCC Upgrades include the Power Supply and Headworks Facilities, Biosolids Facilities, and Nutrient Removal Facilities projects.

### **Power Supply**

- Total Performance of the Power Supply Upgrade project to be achieved when closeout documents, such as O&M manuals, have been submitted and accepted by the City. The Design Build (DB) contractor is making progress on the submission of these documents but has not provided a defined schedule for completion at this time. The system is operating without issue
- Liquidated damages are being applied to the DB contractor's contract until Total Performance is achieved.

### **Headworks Facilities**

The contractor is tracking slightly behind schedule during this period; however, there is no change in the critical path. Table 1: Tasks and Milestone – Headworks Facilities, shows the planned completion dates for major design and construction tasks. Changes in these dates are not necessarily an indication of a slide in the overall schedule. The Design Builder may make changes (forward or backward) to any and all task completion dates as long as the Substantial Completion Milestone date does not change. The graphical representation (Table 2: Earned Value) compares the performance measurement baseline (baseline schedule of how they intend to do the work) to the actual schedule performance (work actually complete).

This graph shows that at the beginning of the project, they planned to be 22.1% complete by the end of June 2022, but are only 17.1% complete. The reasons for the difference include:

- Minor changes being made to engineering deliverables based on lead times for ordering materials
- Delay in the installation of secant piles as a result of a mechanical breakdown of the secant piling rig. To mitigate the slippage in the secant piling schedule Red River Solutions (RRS) has mobilized a second drill rig and crew

Although slightly behind schedule, there is no variation in the Substantial Completion date as RRS has contingency built into their schedule.

The following are key work elements advanced or completed by RRS during this period:

- Continued submittal of various 60% Design Submission packages
- Started the submission of 90% Design Submission packages
- Continued grit building footprint excavation
- Started secant pile installation
- Rock grouting scope completed at the end of June and the sub-contractor has now demobilized from site
- Driven Pile installation began in July and will continue until approximately October 2022
- Commenced and significantly advanced the new duct bank relocation
- Ongoing disposal of impacted soil to licenced facilities as approved by the Province

### **Biosolids and Nutrient Removal**

- The City is working to finalize the procurement strategy for the Biosolids Facilities project
- AECOM has completed the enhanced preliminary design report and provided a class 3 construction cost estimate
- Hanscomb, a third-party firm, provided an independent review for the construction estimate provided by AECOM
- ICIP funding has been submitted to the Federal Government by the Province
- A constructability review for the full NEWPCC Upgrade works will be carried out after biosolids is awarded
- The Nutrient Removal Facilities project currently remains unfunded
- A schedule of milestones is identified in Table 3



**Table 1: Tasks and Critical Milestone for NEWPCC Upgrade Projects – Headworks Facilities**

Task Description	% Complete Q1 Report	% Complete April Report	% Complete May Report	% Complete June Report**	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
Procurement and Contract Award	100%	100%	100%	100%	June 30, 2021		June 11, 2021
DB Mobilization Complete	100%	100%	100%	100%	December 31, 2021		December 15, 2021
30% Design	100%	100%	100%	100%	December 14, 2021		December 14, 2021
60% Design	30%	N/A	41%	53%	September 30, 2022		
90% Design	0%	N/A	2%	2%	January 23, 2023		
IFC Design	0%	N/A	2%	2%	April 17, 2023		
Driven Piles (All Areas)	N/A	N/A	0%	0%	August 19, 2022		
Secant Piles (H2, H1, Y5)	N/A	N/A	2%	8%	September 29, 2022		
Microtunneling (H1 to H2 & H1 to Y5)	N/A	N/A	0%	0%	December 20, 2022		
Generator Building, Structural & External Finishes	N/A	N/A	0%	0%	March 14, 2023		
Standby Generators, Install	N/A	N/A	0%	0%	August 3, 2023		
Raw Sewage Pumping Station (H2), Concrete	N/A	N/A	0%	0%	August 7, 2023		
H1 Chamber	N/A	N/A	0%	0%	September 5, 2023		
Standby Generator Facility & Fuel Storage System, Complete	N/A	N/A	0%	0%	September 15, 2023		
Grit Removal System, Install	N/A	N/A	0%	0%	September 18, 2023		
Y5 Chamber	N/A	N/A	0%	0%	December 7, 2023		
Raw Sewage Pumps, Install	N/A	N/A	0%	0%	January 23, 2024		
Headworks Building, Structural & External Finishes	N/A	N/A	0%	0%	June 7, 2024		
Odour Control System, Install	N/A	N/A	0%	0%	July 8, 2024		
Civil Works & Landscaping	N/A	N/A	0%	0%	July 26, 2024		
Headworks Building, Complete	N/A	N/A	0%	0%	November 5, 2024		
Commissioning	0%	0%	0%	0%	March 31, 2025	February 26, 2025	



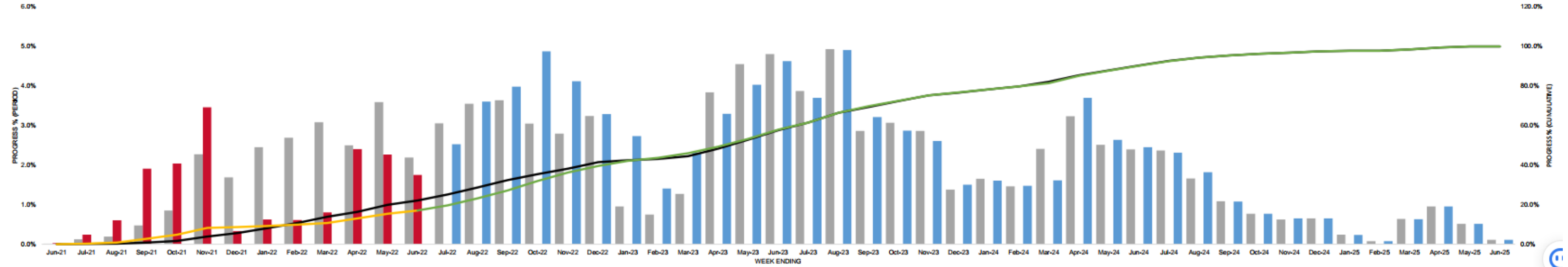
Decommissioning	0%	0%	0%	0%	May 14, 2025		
<b>*Substantial Completion</b>	0%	0%	0%	0%	<b>June 30, 2025</b>	May 22, 2025	

Note: The table has been updated for Headworks Facilities and therefore some tasks and critical milestones will show N/A as we don't have percentages for the previous months.

\*Substantial Completion: This is the only milestone that is contractual and cannot slide without penalty.

\*\*Data source: Red River Solution's May 2022 Monthly Report submitted June 10, 2022.

Table 2: Earned Value



Month	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	
Plan (Period)	0.0%	0.1%	0.2%	0.5%	0.9%	2.3%	1.7%	2.4%	2.7%	3.1%	2.5%	3.6%	2.2%	3.1%	3.5%	3.6%	3.1%	2.8%	3.2%	1.0%	0.8%	1.3%	3.8%	4.5%	4.8%	3.9%	4.9%	2.9%	3.1%	2.9%	1.4%	1.7%	1.5%	2.4%	3.2%	2.5%	2.4%	2.4%	1.7%	1.1%	0.8%	0.6%	0.7%	0.2%	0.1%	0.6%	1.0%	0.5%	0.1%	
Earned (Period)	0.0%	0.2%	0.6%	1.9%	2.0%	3.5%	0.3%	0.6%	0.6%	0.8%	2.4%	2.3%	1.8%																																					
Forecast (Period)														2.5%	3.6%	4.0%	4.9%	4.1%	3.3%	2.7%	1.4%	2.3%	3.3%	4.0%	4.6%	3.7%	4.9%	3.2%	2.9%	2.6%	1.5%	1.6%	1.5%	1.6%	3.7%	2.6%	2.4%	2.3%	1.8%	1.1%	0.8%	0.7%	0.7%	0.2%	0.1%	0.6%	1.0%	0.5%	0.1%	
Plan (Cumulative)	0.0%	0.1%	0.3%	0.8%	1.7%	3.9%	5.6%	8.1%	10.8%	13.9%	16.4%	19.9%	22.1%	25.2%	28.7%	32.4%	35.4%	38.2%	41.5%	42.4%	43.2%	44.4%	48.3%	52.8%	57.6%	61.5%	66.4%	69.3%	72.4%	75.2%	76.6%	78.3%	79.7%	82.1%	85.4%	87.9%	90.3%	92.7%	94.3%	95.4%	96.2%	96.8%	97.5%	97.7%	97.8%	98.4%	99.4%	99.9%	100.0%	
Earned (Cumulative)	0.0%	0.3%	0.9%	2.8%	4.8%	8.3%	8.6%	9.2%	9.9%	10.7%	13.1%	15.3%	17.1%																																					
Forecast (Cumulative)														19.6%	23.2%	27.2%	32.1%	36.2%	39.5%	42.2%	43.6%	45.9%	49.2%	53.3%	57.9%	61.6%	66.5%	69.7%	72.6%	75.2%	76.7%	78.3%	79.8%	81.4%	85.1%	87.7%	90.2%	92.5%	94.3%	95.4%	96.2%	96.8%	97.5%	97.7%	97.8%	98.4%	99.4%	99.9%	100.0%	



**Table 3: Tasks and Critical Milestones for NEWPCC Upgrade Projects – Biosolids Facilities & Nutrient Removal Facilities**

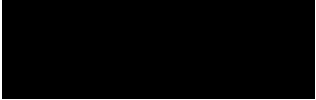
Deliverable	Description	% Complete Q1 Report	% Complete April Report	% Complete May Report	% Complete June Report	Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Dates
Biosolids Facilities	Updated Preliminary Design & Procurement Strategy	95%	95%	97%	97%	December 31, 2021	<del>April 1, 2022</del> July 21, 2022 pending Council Approval	
	Procurement and Contract Award	0%	0%	0%	0%	December 31, 2023		
	Substantial Completion	0%	0%	0%	0%	September 30, 2029	*December 31, 2030	
Nutrient Removal Facilities	Updated Preliminary Design	0%	0%	0%	0%	September 30, 2023		
	Procurement and Contract Award	0%	0%	0%	0%	June 30, 2026		
	Substantial Completion	0%	0%	0%	0%	June 30, 2032		

\*Pending funding approvals



Should you have any questions, please contact Colin Javra at 204-986-4480 or by email at [cjavra@winnipeg.ca](mailto:cjavra@winnipeg.ca).

Sincerely,

  
Colin Javra, P. Eng.  
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CJ/dr

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Figure 1: Secant Pile Installation for Pump Station



Figure 2: Excavation of Grit Building





Figure 3: H2 Area and duct bank