## REPORTS

**Item No. 4 Award of Contract for Design Build Agreement for Progressive Design Build of the NEWPCC Upgrade: Biosolids Facilities Request For Proposal No. 779-2021B**

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

The Executive Policy Committee concurred in the recommendation of the Winnipeg Public Service and recommended to Council:

1. That the City award a Design Build Agreement to Red River Biosolids Partners (RRBP), comprised of Aecon Water Infrastructure Inc., Oscar Renda Contracting of Canada, Inc., and MWH Constructors Canada Ltd., in the amount of $815,480,876.72 including MRST, GST extra, which is within the existing NEWPCC Upgrade: Biosolids Facilities and NEWPCC Upgrade: Nutrient Removal Facilities budgets.

2. That authority be delegated to the Chief Administrative Officer to approve and that the City enter into, execute, and deliver the Design Build Agreement for the NEWPCC Upgrade: Biosolids Facilities and all such other ancillary agreements, in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

DECISION MAKING HISTORY:

Moved by Councillor Browaty,

That the recommendation of the Winnipeg Public Service be concurred in and forwarded to Council.

Carried

# ADMINISTRATIVE REPORT

**Title:** Award of Contract for Design Build Agreement for Progressive Design Build of the NEWPCC Upgrade: Biosolids Facilities
Request For Proposal No. 779-2021B

**Critical Path:** Executive Policy Committee – Council

## AUTHORIZATION

| Author | Department Head | CFO | CAO |
|---|---|---|---|
| C. D. Wiebe, P. Eng., CAMP, Manager of Engineering Services | C. D. Wiebe for T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste Department | T. Graham | J. Dunford |

## EXECUTIVE SUMMARY

The Biosolids Facilities project will upgrade the existing facilities at the North End Wastewater Treatment Plant's (NEWPCC). The facilities accept sludge produced at the three wastewater treatment plants. The sludge is treated and turned into reusable biosolids.

Completion of the new Biosolids Facilities is critical to meet regulatory compliance. The upgrades add capacity needed for the continued growth of the City.

On July 13, 2023, Council approved the Progressive Design Build (PDB) delivery model for the Biosolids Facilities project. On July 18, 2024, Red River Biosolids Partners (RRBP) was selected as the Development Partner by the Standing Policy Committee on Water, Waste, and Environment. The Design Phase Agreement (DPA) was executed on September 5, 2024.

From September 2024 to June 2026, the Project Team and RRBP finalized the terms of the construction stage contract, the Design Build Agreement (DBA).

This report is for the award of a DBA to RRBP for the Biosolids Facilities in the amount of $815.5 million including MRST, GST extra. The contract will be funded from two approved Capital Budgets, NEWPCC Upgrade: Biosolids Facilities project and NEWPCC Upgrade: Nutrient Removal Facilities project.

The new facilities will start treating biosolids in October 2030. This will start increasing capacity at NEWPCC. The project is expected to be substantially complete by March 17, 2031.

The recommendations of this report are compliant with the Purchasing Policy and applicable trade agreements. The recommendations are the result of a fair and transparent procurement process. They are not a sole source award but rather a request to proceed to the construction phase of the established gated process.

## RECOMMENDATIONS

1. That the City award a Design Build Agreement to Red River Biosolids Partners (RRBP), comprised of Aecon Water Infrastructure Inc., Oscar Renda Contracting of Canada, Inc., and MWH Constructors Canada Ltd., in the amount of $815,480,876.72 including MRST, GST extra, which is within the existing NEWPCC Upgrade: Biosolids Facilities and NEWPCC Upgrade: Nutrient Removal Facilities budgets.

2. That authority be delegated to the Chief Administrative Officer to approve and that the City enter into, execute, and deliver the Design Build Agreement for the NEWPCC Upgrade: Biosolids Facilities and all such other ancillary agreements**,** in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

3. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing.

## REASON FOR THE REPORT

In accordance with the City of Winnipeg Charter, the City Organization By-law and the Purchasing Policy, Council has the authority to approve the award of this contract.

## IMPLICATIONS OF THE RECOMMENDATIONS

1. The funds are coming from two separate approved capital budgets. NEWPCC Upgrade: Biosolids Facilities:
   $1.035 billion is included in the approved 2019-2023 Capital Budgets for NEWPCC Upgrade: Biosolids Facilities, Account Distribution No. 444 181000 200752 203110028B Contractex. Following award of this contract, sufficient contingency will remain available to pay for the City-owned portion of the project's risk.

2. NEWPCC Upgrade: Nutrient Removal Facilities:
   Following award of this contract, $555.5 million will remain available from total funds in the amount of $575.9 million originally included in the approved 2022-2026 Capital Budgets for NEWPCC Upgrade: Nutrient Removal Facilities, Account Distribution No. 444 181000 200752 203110030B Contractex.

The City has an established contingency within the project budget to pay for the City-owned portion of the project's risk.

**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) | $620.8 million | $162.7 million |
| Person Years of Employment | 3,770 | 974 |
| Federal Government Tax Revenue | $66.8 million | $18.5 million |
| Provincial Government Tax Revenue | $54.8 million | N/A |

Source: Statistics Canada. Table 36-10-0595-01 Input-output multipliers, detail level.

The evaluated expenditure for this project is $940.6 million. The expenditure and estimated impacts are in 2026 dollars. The Design Builder's contingency is included while City contingency and most internal staff costs are excluded from the analysis. Some additional elements of the expenditure may be excluded to align with macroeconomic accounting principles.

The 2022 GDP at basic prices simple multiplier for other engineering construction [BS23C500] 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.

**HISTORY/DISCUSSION**

The City of Winnipeg's North End Wastewater Treatment Plant (NEWPCC) requires upgrading to replace end of life infrastructure, increase capacity to allow for future growth of the City, and meet the specifications of its Environment Act Licence and the Water Protection Act. The NEWPCC Upgrades are being delivered through three separate capital projects identified as:

- NEWPCC Upgrade: Power Supply and Headworks Facilities
- NEWPCC Upgrade: Biosolids Facilities
- NEWPCC Upgrade: Nutrient Removal Facilities

The Biosolids Facilities project will upgrade NEWPCC's existing facilities to accept, store, treat, and stabilize the sludge produced at all of the City's wastewater treatment plants into reusable biosolids that meet regulatory requirements.

**Progressive Design Build**

On July 13, 2023, Council approved that the Biosolids Facilities be delivered using the progressive design build (PDB) model. PDB can be broken down into three stages:

- A procurement stage
- A development stage
- A construction stage

Procurement Stage

In the procurement stage, up to three proponents are shortlisted based solely on their financial and technical ability to deliver the project. Out of the shortlisted proponents, the preferred proponent is selected in a competitive process.

This process is highly weighted on qualifications, however there is a financial component as well. At the end of this stage, a preferred proponent (Development Partner) is identified, the Development Phase Agreement (DPA) is executed, and the project advances to the development stage.

On July 18, 2024, the Standing Policy Committee on Water, Waste and Environment approved that Red River Biosolids Partners (RRBP), an Aecon Water Infrastructure Inc., Oscar Renda Contracting of Canada, Inc., and MWH Constructors Canada Ltd. Joint Venture, be the Development Partner for the Biosolids Facilities project. The City executed the Development Phase Agreement (DPA) with RRBP on September 5, 2024.

Development Stage

In the development stage, the City provides input and works collaboratively with the Development Partner to advance the design, cost, scope, schedule, and risk allocation. The terms of the construction stage contract, also known as the Design Build Agreement (DBA), are also finalized. The Project Team examines all of these thoroughly to ensure quality and value for money including:

- **Design**: The design is advanced to at least 60 percent complete. The design is reviewed by the City and external resources to ensure adequacy and completeness.

- **Cost**: Open book cost estimates are a requirement of the PDB model allowing for full transparency of costs. The cost estimates are reviewed by the City and several external resources to ensure value for money. External resources are engaged including experts, peer reviewers, and a third-party estimator. Cost estimates are also benchmarked against other projects.

- **Scope**: The design and cost estimates are advanced in an iterative process that often involves value engineering. Value engineering is a process whereby alternate options or proposed scope reductions are examined. As this is an open book process, the City has visibility on the cost impacts of changes and can make much more informed decisions.

- **Schedule**: The schedule is reviewed by the City and external resources to confirm its validity.

- **Risk Allocation**: There are various risks associated with the delivery of a project. Not all risks materialize but some will. The PDB model examines all the risks, determines which party has most control over an individual risk, and assigns ownership of each risk. The risk allocation is established in consultation with internal and external legal and risk resources. An external risk expert then performs a quantitative risk assessment (QRA) to set a contingency for City-owned risks.

- **Terms**: Internal and external legal resources and external experts are engaged to ensure the contract terms reflect industry standards and maintain the best interests of the City.

If the Development Partner and the City can come to agreement on cost, scope, schedule, risk allocation, and terms, the project advances to the construction stage. If they don't come to an agreement, the partnership is terminated and the City retains the design and could opt to proceed with a different procurement model. The recommendations of this report do not represent a sole source award of contract but rather a request to proceed to the construction phase of the established gated process.

Construction Stage

In the construction stage, the Design Builder completes the design and constructs the project in accordance with the DBA. For the Biosolids Facilities project, the cost for the construction stage is a negotiated fixed price. During this stage, the Design Builder owns some risk, and the City owns some risk.

The City knows that some of our risks will materialize (example: known onsite contamination). The City has an established contingency within the project budget to pay for the City-owned risk. If the Design Builder's risk materializes, the City does not need to pay for it because the cost is included in the Design Builder's negotiated fixed price.

Overall, the PDB process allows the City to build the best plant we can afford while balancing cost, risk, operability, and needs versus wants.

**Social Procurement**

The Biosolids Facilities will be the City's first project to incorporate the February 24, 2022, Council social procurement directive. This directive focuses on increasing representation from Indigenous peoples and other under-represented groups in skilled labour performed during construction.

To ensure these social procurement goals are met, the DBA includes minimums and stretch targets for different types of labour and apprenticeship ratios for the Design Builder during construction as shown below:

| Category | Minimum Threshold | Stretch Target |
|---|---|---|
| Skilled Labour | 15% | 20% |
| Semi-Skilled Labour | 20% | 30% |
| General Labour | 30% | 45% |
| Apprentice Ratio* | 0.8 : 1.0 | 1.0 : 1.0 |

*Apprenticeship Ratios are calculated by number of apprentices divided by number of journey persons (including designated trainers)

The Design Builder is required to meet the minimum threshold. If the minimum threshold is not met, they will be subject to a deduction payment. If the stretch target is met, they will receive an incentive payment.

The Design Builder is required to track and report their social procurement statistics. These statistics will be released in an annual report available to the public.

**Award Details**

From September 2024 to May 2026, RRBP advanced the design to 60 percent while collaborating in value engineering workshops and providing open book cost estimates to the Project Team. The final cost estimate was within three percent of the peer review and third-party cost estimates. The Project Team, in consultation with external advisors, is satisfied with the design, cost, scope, schedule, risk allocation, and terms and is recommending award of $815.5 million for the DBA. The scope of work includes infrastructure that will be shared by both the Biosolids and Nutrient Removal Facilities projects (such as odour control and heating systems). Accordingly, $4.4 million of this award will be funded by the Nutrient Removal Facilities project.

The contract award amount for the DBA will be $815.4 million, which is within the approved budgets and funded as follows:

- $811.0 million including MRST, GST extra, as applicable, funded by the NEWPCC Upgrade: Biosolids Facilities project
- $4.4 million including MRST, GST extra, as applicable, funded by the NEWPCC Upgrade: Nutrient Removal Facilities project

A QRA was performed by an external risk expert for City-owned risks. The amount of contingency recommended by the external risk expert is available within the existing budget.

Substantial completion for this project is March 2031. However, the construction schedule shows diversion of sludge from the old digesters to the new facility in October 2030. This is an important stage as sludge diversion will help alleviate the capacity concerns at NEWPCC prior to substantial completion.

RRBP construction team has the following valid Certificate of Recognition (COR) and letter of good standing (or Manitoba equivalency):

- Aecon Water Infrastructure Inc. has COR Equivalency provided by the Construction Safety Association of Manitoba, Equivalency Certification No. 31209-18-E5;
- Oscar Renda Contracting of Canada, Inc. has a COR provided by the Construction Safety Association of Manitoba, Certificate No. 144102-25; and
- MWH Constructors Canada Ltd. has provided a letter from an independent reviewer confirming the company’s safety and health certification meets SAFE Work Manitoba’s SAFE Work Certified Standard.

As part of the RFP Step 2 submission, RRBP confirmed they have the ability to obtain Performance Security typical of projects of similar scope and complexity to the Biosolids Facilities Project. Performance Security requirements are included in the Design Build Agreement which RRBP is required to provide within 10 Business Days from the effective date of the Design Build Agreement.

This project is funded by the City of Winnipeg, the Government of Manitoba, and the Government of Canada as follows:

| **Funding Source** | **Contribution Amount** |
|---|---|
| City of Winnipeg | $ 332,130,061 |
| Manitoba (CHIF) | $ 335,833,000 |
| Canada (CHIF) | $ 367,037,000 |
| **Total** | **$ 1,035,000,061** |

The Public Service is satisfied that RRBP have the necessary resources and experience to perform the work in accordance with the DBA. The members of RRBP have satisfactorily carried out previous construction works of a similar nature.

Construction will not commence prior to the award of contract.

**FINANCIAL IMPACT**

## Financial Impact Statement

**Date:** June 18, 2026

**Project Name:**

**First Year of Program** **2026**

AWARD OF CONTRACT FOR DESIGN BUILD AGREEMENT FOR PROGRESSIVE DESIGN BUILD OF THE NEWPCC UPGRADE: BIOSOLIDS FACILITIES
REQUEST FOR PROPOSAL NO. 779-2021B

| | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|---|---|---|---|---|
| **Capital** | | | | | |
| Capital Expenditures Required | $ 132,221 | $ 184,984 | $ 173,159 | $ 158,719 | $ 149,719 |
| Less: Existing Budgeted Costs | 132,221 | 184,984 | 173,159 | 158,719 | 149,719 |
| Additional Capital Budget Required | $ - | $ - | $ - | $ - | $ - |
| **Funding Sources:** | | | | | |
| Debt - Internal | $ - | $ - | $ - | $ - | $ - |
| Debt - External | - | - | - | - | - |
| Grants (Enter Description Here) | - | - | - | - | - |
| Reserves, Equity, Surplus | - | - | - | - | - |
| Other - Enter Description Here | - | - | - | - | - |
| Total Funding | $ - | $ - | $ - | $ - | $ - |
| Total Additional Capital Budget Required | $ - | | | | |
| 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:** Funds for this project are included in the approved Capital Budgets for NEWPCC Upgrade:Biosolids Facilities, Account Distribution No. 444 181000 200752 203110028B ($811,040,364.02) and the NEWPCC Upgrade: Nutrient Removal Facilities, Account Distribution No. 444 181000 200752 203110030B ($4,440,512.70). Total Cost: $811,040,364.02 + $4,440,512.70 = $815,480,876.72. This project is financed by Retained Earnings, Environmental Project Reserves (EPR), the Canada Housing Infrastructure Fund (CHIF) and External Debt.

*Tanis Yanchishyn, CPA, CA*

bah
10-Jun-26

Tanis Yanchishyn, CPA, CA
Manager of Finance and Administration

## CONSULTATION

This Report has been prepared in consultation with:

- Legal Services Department (as to legal issues)
- Purchasing Division, Corporate Finance Department (as to procurement issues)
- Chief Construction Officer

## OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg 2045 policies through Policy 2.5 Climate Resilient Growth, by finding innovative and green solutions to land use, transportation, and infrastructure capacity constraints.

> Objective: Prioritize the transition to a resilient, low-carbon future through demonstrated organizational and community leadership, and collaborative actions that mitigate and adapt to a changing climate.

## WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This report aligns with the Winnipeg Climate Action Plan through Strategic Opportunity 6: Waste Reduction and Diversion.

> Key Direction:
> 6.3 Utilize Biosolids In Agriculture and Landscaping Industries

## WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

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

## SUBMITTED BY

Department: Water and Waste
Division: Engineering Services
Prepared by: Lana Obach, P. Eng., MASc., PMP
Sherrie Jirasek, C.E.T.
Date: June 18, 2026
File No.: S-1192