

## Report to Council

---

**To:** Waterworks Committee – Public Hearing  
**From:** Administration  
**Date:** September 12, 2016  
**Re:** City Council Direction required for the funding arrangement for WPCF upgrades

---

### ISSUE FOR DISCUSSION:

Administration requires direction from City Council regarding the funding of the Water Pollution Control Facility upgrade.

### ALTERNATIVES:

- 1) Accept that the project proceed as a Public/Private Partnership using the Design Build Finance Operate and Maintain model.
- 2) Deny the recommendation that the project proceed as a Public/Private Partnership using the Design Build Finance Operate and Maintain model.
- 3) Provide Administration with direction on Council's preferred funding option.

### BACKGROUND / ANALYSIS:

The City of Portage la Prairie operates a complex treatment facility, known as the Water Pollution Control Facility (“WPCF”), which provides preliminary and secondary treatment, as well as disinfection, of municipal wastewater from the City and some small surrounding residential and commercial areas located in the Rural Municipality of Portage la Prairie, as well as final treatment of pretreated industrial wastewater from three (3) major industries.

The City must upgrade (the “**Project**”) its wastewater treatment facility (the “**Facility**”) to conform to new effluent guidelines applied by the Province of Manitoba (the “**Province**”) and the Government of Canada. The most significant impact of these new regulations is the requirement to reduce nutrients in the effluent discharged to the Assiniboine River. The Province of Manitoba has recently enacted the Water Quality Standards, Objectives and Guidelines Regulation to limit total phosphorus and total nitrogen concentrations in the effluent of wastewater treatment facilities throughout Manitoba, but primarily focusing on facilities discharging to streams flowing into Lake Winnipeg. The following new limits will be applied:

- Total Phosphorus 1mg/L (30 day rolling average); from current levels of 20 mg/L
- Total Nitrogen 15 mg/L (30 day rolling average); from current levels of 60 mg/L

In addition to applying the above noted effluent criteria, the Province has further stipulated that processes used to achieve these limits must be sustainable, rely on biological processes to the extent possible and minimize the use of chemicals. The Regulation requires the best practical technology for beneficial use of valuable resources such as nutrients, organic matter and energy contained within biosolids and sludge. Based on the City's request, the Province has postponed the conformance date to January 1, 2018; further extension will be requested from the Province.

Administration does not expect resistance from the Province in granting and extension. To date the Province’s position has been that so long as the project continues advancing the Province wishes to work with the City.

In 2007, the City hired the engineering firm of AECOM as a technical advisor to design a facility that would be capable of handling the new provincial regulations. AECOM and the City worked together to develop a functional design that would incorporate the provincial requirements while taking into account the realities of the utility members in Portage la Prairie including the three (3) major industries. The estimated construction cost of the upgrade to the WPCF was projected at \$126 million in 2018 dollars, which would be the anticipated construction start.

	Costs as of Date of Cost Estimate-AECOM Functional Design Report (Appendix) (Real \$)				Costs as of Anticipated Start of Construction (Real \$)				Sum of Anticipated as Spent Costs During Construction (Nominal \$)
Construction Costs	1-May-15				17-Aug-17				
Low Rate Anaerobic Reactor	12,706,000	x Construction Escalation Factor	1.11857	=	14,212,510	x Construction Cost S-Curve	x Construction Period Inflation	=	15,086,993
Industrial Pretreatment Facility	11,363,000	x Construction Escalation Factor	1.11857	=	12,710,274	x Construction Cost S-Curve	x Construction Period Inflation	=	13,492,327
Deammonification	7,255,000	x Construction Escalation Factor	1.11857	=	8,115,202	x Construction Cost S-Curve	x Construction Period Inflation	=	8,614,524
Phosphorus recovery	9,072,000	x Construction Escalation Factor	1.11857	=	10,147,638	x Construction Cost S-Curve	x Construction Period Inflation	=	10,772,014
Headworks	2,423,000	x Construction Escalation Factor	1.11857	=	2,710,287	x Construction Cost S-Curve	x Construction Period Inflation	=	2,877,049
Septage Receiving	558,000	x Construction Escalation Factor	1.11857	=	624,160	x Construction Cost S-Curve	x Construction Period Inflation	=	662,564
SBR Pump Station	826,000	x Construction Escalation Factor	1.11857	=	923,936	x Construction Cost S-Curve	x Construction Period Inflation	=	980,785
Chemical Feed	1,801,000	x Construction Escalation Factor	1.11857	=	2,014,539	x Construction Cost S-Curve	x Construction Period Inflation	=	2,138,492
Tertiary Filters	2,698,000	x Construction Escalation Factor	1.11857	=	3,017,893	x Construction Cost S-Curve	x Construction Period Inflation	=	3,203,582
UV Disinfection	1,827,000	x Construction Escalation Factor	1.11857	=	2,043,622	x Construction Cost S-Curve	x Construction Period Inflation	=	2,169,364
Anaerobic Digesters (Including Central Pump Building)	9,506,000	x Construction Escalation Factor	1.11857	=	10,633,096	x Construction Cost S-Curve	x Construction Period Inflation	=	11,287,341
Biosolids Storage Facility	15,277,000	x Construction Escalation Factor	1.11857	=	17,088,345	x Construction Cost S-Curve	x Construction Period Inflation	=	18,139,776
Cogeneration Facility	12,656,000	x Construction Escalation Factor	1.11857	=	14,156,581	x Construction Cost S-Curve	x Construction Period Inflation	=	15,027,624
Yard Piping	2,418,000	x Construction Escalation Factor	1.11857	=	2,704,694	x Construction Cost S-Curve	x Construction Period Inflation	=	2,871,112
Site Work	935,000	x Construction Escalation Factor	1.11857	=	1,045,860	x Construction Cost S-Curve	x Construction Period Inflation	=	1,110,211
Scada System	338,000	x Construction Escalation Factor	1.11857	=	378,076	x Construction Cost S-Curve	x Construction Period Inflation	=	401,338
General Upgrades	631,000	x Construction Escalation Factor	1.11857	=	705,816	x Construction Cost S-Curve	x Construction Period Inflation	=	749,244
Construction Subtotal	92,290,000				103,232,529				109,584,340
<b>Engineering</b>									
Engineering	13,844,000	x Construction Escalation Factor	1.11857	=	15,485,439	x Construction Cost S-Curve	x Construction Period Inflation	=	16,438,245
<b>Total Base Construction Costs</b>	<b>106,134,000</b>				<b>118,717,968</b>				<b>126,022,584</b>

### Funding Source

In June, 2014 the City of Portage la Prairie submitted two (2) funding applications one to Building Canada Fund and one to PPP Canada for financial support in relations to the Water Pollution Control Facility (WPCF) upgrade. This was meant to ensure that all sources of available funding was sought by the City. In the fall of 2014, the City was advised that its project, due to the large scope and complexity, had been screened into Round 6 of the PPP Canada funding process. Later in 2014, the City was advised by the Federal Government that its application to the Building Canada Fund would be deferred pending the PPP Canada application process.

As part of the 2015 budget process, the Council of the City of Portage la Prairie identified funds to support a detailed value for money (VFM) assessment of the different types of funding models. The assessment was undertaken by Ernst and Young (EY) and compared delivery of the Project under a P3 approach (a DBFOM in this case) with delivery of the Project under the City’s “traditional” approach to deliver large capital projects – in this case a Design Bid Build (“DBB”) approach.

In accordance with generally accepted practice in Canada, the methodology for establishing VFM is based on discounted cash flow (“DCF”) analysis. This involves establishing a period by period cash-flow profile for each of the delivery options based on procuring the Project on a “like for like” basis (i.e. assuming consistent timeline, specifications, performance standards etc.).

These cash-flow profiles are then adjusted for the time value of money by discounting them to provide a Net Present Value (“NPV”) for each of the DBB and DBFOM delivery options and adjusted for any other key differentials between the options (such as the different risk profiles inherent in each option).

Two financial models were constructed for the VFM assessment:

- **Public Sector Comparator / DBB Model** - The public sector comparator (“PSC”) represents the costs associated with delivering the project under a traditional delivery model and is used as the benchmark against which, initially, the shadow bid model (see below), and ultimately, the private sector partners’ financial offer will be tested for VFM. The PSC will also be a key procurement evaluation tool as the Project moves through the P3 procurement process.
- **Shadow Bid / DBFOM Model** - The shadow bid model estimates the costs of delivering the project under DBFOM option and calculates the future payments which the City will make to the private sector partner over the life of the contract.

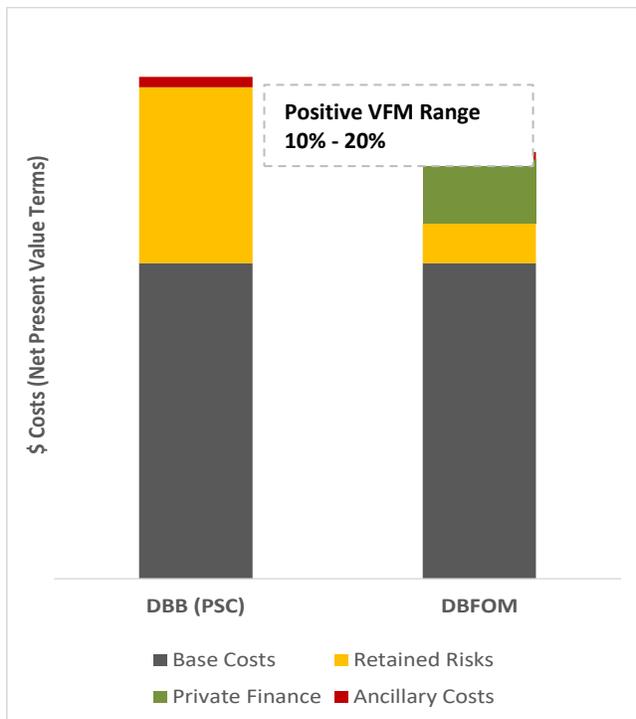
One of the key principles behind the use of a P3 procurement approach is the ability of the public sector to transfer risks that it would typically accept under a traditional procurement route to the private sector. The foundation for risk allocation is based on the premise that the party which is able to manage a given risk most efficiently (i.e. at the lowest cost) should assume that risk. Once the identified risks have been quantified, their value (i.e. the expected cost of these risks) is incorporated into the project cash flows in order to compare the procurement models on a risk-adjusted basis. As such, the value of the risk therefore is taken into account when considering the VFM of delivery options with significantly different risk profiles.

To quantify risks, a risk workshop was conducted by EY with representation of those with an understanding of relevant project risks including the City, AECOM and PPP Canada. A risk matrix of over 60 risks was developed, and each risk was quantified based on the applicable cost base, probability of occurrence, expected impact, and assumed risk allocation between the City and the private sector partner. The top 10 risks identified during the risk workshop were valued at more than \$100 million in value. Given the complexity of the project, the likelihood that one or more of these risks materialize is greatly increased.

Financial assumptions used in the VFM assessment including cost estimates, borrowing rates, and discount rate have been removed to ensure a competitive procurement process should this Project move forward under a P3 delivery option. The preliminary results of the VFM assessment<sup>1</sup> are set out below.

---

<sup>1</sup> Based on the current draft Business Case; these results may vary following further analysis and PPP Canada approval.



**Base Costs** include design & construction, contingencies, O&M Costs, rehabilitation (lifecycle) costs.

**Retained Risks** are the risks that are managed by the public sector.

**Private Finance** includes financing costs and equity returns incurred by the private sector. They also include transferred risks that are managed by the private sector partner.

**Ancillary Costs** are costs incurred by the public sector for planning, procurement and management of the Project.

(Figure 1)

The DBFOM delivery option is expected to provide VFM savings to the City within the range of **10% to 20%** relative to the “traditional” (DBB) delivery option for the Project on a risk-adjusted NPV basis over the contract term. Sensitivity analysis was also conducted on the VFM results to test for robustness of results to key variables such as capital contribution levels, capital costs, O&M costs, lifecycle costs, interest rates and discount rate, confirming the positive VFM of 10% to 20%.

It is Administration’s expectation that the Province of Manitoba and PPP Canada’s assumed contributions correspond to approximately 67% of the total eligible capital costs. The amount will be paid at the substantial completion date.

The remaining capital costs will be funded by the private sector in the form of a long term bond and private equity arranged by the private sector partner. This amount, along with costs incurred by the private sector partner related to the operations and maintenance of the Facility, will be repaid by the City through annual service payments over the contract term. It is the Administration’s expectation that the annual service payment will be shared based on usage among the local industries and the residential utility members.

**The recommendation to pursue a DBFOM procurement approach is based on the following factors:**

Internal City Resource Capacity

The WPCF upgrade is a large and complex project that only occurs once in a generation. Procurement and construction management would be a significant challenge under a traditional procurement approach. There are also significant challenges to coordinate construction and operations as the current WPCF will need to remain in operation during the construction phase. The DBFOM model would allow the Project Co. to begin operating the WPCF at time of construction. This results in better management of the risk of conflicts between construction schedules and operational needs. The DBB would ease some of the internal resource constraints; however, it would not address the risks from

potential conflicts between construction and operation. Resource constraints can be addressed for the DBB model by contracting with external resources during the construction phase, ramping up in the operating phase.

#### Financial Affordability

The WPCF must meet the City's needs and be economical. Design work done to date is specific enough to ensure the City has a contemporary facility that meets current and future regulatory requirements. The design does not include more than required, but will accommodate future add-on if and when they are needed. At this time the P3 Canada Fund is the only source of grant funding that is available for the Project within the timeline requirements of the project. The only model that has the potential to receive PPP Canada funding is a DBFOM. If the City is successful with its application for PPP Canada funding, it is expected that the City would receive a grant of up to \$82 million in addition to a similar grant from the Province. If the City were to pursue a DBFOM, the cost of financing the project would increase (private sector financing is more costly than public sector financing), which does reduce some of the value of a PPP Canada grant. Even with the additional cost of private sector financing, this analysis shows that the DBFOM is the procurement option that provides the greatest value for money; see Figure 1.

#### Operational Goals and Strategies

A third important consideration is ensuring the facility receives the appropriate investment over its full lifecycle. The WPCF is a critical piece of City's infrastructure and requires reinvestment to ensure it meets the longer term needs of the community and protection of public health and the environment. P3 arrangements that include a maintenance component must be life-cycle costed at the time of procurement. The DBFOM will contractually require Project Co. (who as part of its operations) to undertake maintenance at defined times within the Project Agreement. This contractual requirement removes the possibility of deferred maintenance at the WPCF. The DBB does not extend into the operating period and cannot ensure required maintenance is occurring at the facility. The possibility of deferred maintenance in the absence of a contractual commitment to scheduled maintenance is highly probable, although not an absolute certainty.

The benefit of the engineering and business analysis is that the City has an understanding of the financial commitment required at the facility over its lifecycle. That information provides for better planning and decision-making should a decision be made not to proceed with a P3 procurement method.

Another important consideration in determining the most appropriate procurement method is the longer term operating needs of the WPCF. The Project will require a new treatment process for the City's waste water. The new treatment process will require a higher degree of automation, monitoring and control than the existing treatment process. There is some expertise at the City with the new treatment process, but there are some knowledge gaps. The DBFOM procurement approach will address the City's operating challenges. The P3 contractors that submit proposals to the RFP will be required to have expertise operating modern WPCFs.

Non-P3 approaches will require the City to operate the facility and assume these risks. These include training, recruiting and retaining qualified staff to operate the facility in a labour force environment that is very competitive across North America.

### Regulatory Timelines

The City is required to have most of the upgrades to the WPCF completed by January, 2018 to comply with the Province’s regulatory requirements. The strategic analysis concluded that DBB would likely be the quickest method of procurement to initiate. The DBFOM procurement approach will not meet timelines (see below critical path table.) However, once in place the DBFOM delivery model has an excellent track records of meeting completion deadlines.

### Innovation

Administration would like to see as much innovation as possible in the Project. The P3 approach provides the most potential for innovation to the Project. A P3 procurement approach will bundle the design, construction, maintenance of operation components of the WPCF into one bid to make it as effective and efficient in meeting the City’s specifications. The competitive procurement process of the P3 will further enhance the opportunities for innovation. The P3 procurement process is outcome based and not design driven, which means that the proponents can bring forward ideas so long as they address the output specifications of the RFP. The other procurement approaches can deliver innovation; however they are not as robust as P3s.

### **Financial Analysis**

There are a number of differences between the various options that have implications for the full lifecycle costing of the Project. Under the DBB methodology, cash flow to pay for construction would be required much earlier in the Project. As a result, the City would be required to take debt earlier in the Project. With DBFOM, the majority of the cash flow is deferred until substantial completion of the Project. However, Project Co. does include interim financing costs which are passed along in its price to the City and such interim financing costs (incurred by the contractor) are also calculated as part of the cost of the Project.

EY assisted the City in developing the Value for Money analysis as well as developing a model showing the costs and funding for the Project through its life in 2018 dollars (see figure 2.)

DBFOM	Utility	Industry	Total
Share	38%	62%	
Capital Cost	\$ 40,121,715	\$ 66,081,063	\$ 106,202,779
Annual Capital Payments	\$ 1,337,390	\$ 2,202,701	\$ 3,540,092
Average Annual Lifecycle Payments	\$ 1,404,760	\$ 2,313,662.30	\$ 3,718,423
Share	50%	50%	
Average Annual Operating Payments	\$ 2,930,986	\$ 2,923,077	\$ 5,854,063
Total Average Annual Payment	\$ 5,673,138	\$ 7,439,442	\$ 13,112,579

DBB	Utility	Industry	Total
Share	38%	62%	
Capital Cost	\$ 30,516,584.03	\$ 50,261,269	\$ 80,777,853
Annual Capital Payments	\$ 1,017,219.47	\$ 1,675,375	\$ 2,692,595
Average Annual Lifecycle Payments	\$ 1,404,760.98	\$ 2,313,662	\$3,718,423
Share	50%	50%	
Average Annual Operating Payments	\$ 2,930,986.09	\$ 2,923,077	\$ 5,854,063
Total Average Annual Payment	\$ 5,352,967	\$ 6,912,116	\$ 12,265,082

(Figure 2)

## **Implications of DBFOM Procurement Decision**

### Public Acceptability

There are a number of stakeholders that will have interest in the Project, and in particular the procurement decision. They include the residents of Portage la Prairie, the Government of Manitoba, Canadian Union of Public Employees (CUPE), WPCF employees, the local industries and downstream water users.

All stakeholders are interested in ensuring the City's WPCF is working well to protect health and safety of people and the environment. Those same stakeholders, but in particular, Utility customers, also want the upgrades to be cost effective. There is a range of opinions on the advantages and disadvantages of P3 procurement. The experience of P3 projects in other jurisdictions serve as examples of how different stakeholders will view P3.

In Manitoba the Public Utility Board (PUB), an organization appointed by the Province, is responsible for approving any type of utility rate increases. Under the DBFOM funding model this requirement would be maintained. Project Co. would not be permitted to set the utility rates paid by the utility users. The City would retain the responsibility of applying for rate approvals; therefore public consultation and the opportunity for the public to raise concerns directly with the PUB would also remain.

### WPCF Staffing

The City will retain ownership of all assets of the WPCF. There are seven (7) employees at the WPCF, of which six (6) are members of CUPE, one is a member of the management group and therefore out of scope. If the City chooses to proceed with a DBFOM procurement approach there will be significant implications for these employees. It is Administration's expectation that with the DBFOM model, the employees will become employees of the Project Co or remain City employees but with different responsibilities. This change in employment relationship will occur within months of the City entering into a contract with the Project Co. There are many similar projects in the country where employees have been transitioned from the municipality to a private sector contractor with success. The City of Regina is the latest example of such transition. Two years ago, the City of Regina broke ground on its waste water plant upgrade funded through PPP Canada. The City of Regina employees have transitioned to Project Co. very successfully.

The City of Portage la Prairie appreciates this change will be a concern for its employees. The RFP will contain requirements for the Project Co. to protect these employees during and after transition. In order to be the successful proponent in the RFP process the Project Co. will have to accept the terms and conditions set out in the RFP, including the terms and conditions relating to employees. These terms and conditions will then be incorporated into the Project Agreement with Project Co. Therefore, Project Co. will be required to accept the WPCF employees and the collective agreement in place with such employees.

By accepting the collective agreement in place at the time that employee's transition from City employees to employees of the new contract it means that:

- A. Employees will be employed by Project Co. (or a Project Co Party) from and after Transfer Date;
- B. Project Co. assumes existing collective agreement obligations;
- C. No layoffs or loss of pay, pension, seniority, sick time or benefits as a result of the transfer;
- D. Project Co. will recognize prior service, seniority and entitlements;

- E. Project Co. will continue existing pension plan and become a participating employer in the City's pension plan;
- F. Project Co. will enter into a new Collective Agreement with the affected employee group at the expiration of the collective agreement in place as of the transfer date;
- G. Project Co. will provide equivalent benefit plans during the collective agreement in place on the Transfer Date, but may offer different benefit plans when a new collective agreement is negotiated in the future between Project Co. and the employees, subject to applicable laws and as may be permitted by the pension plan; and
- H. Employees will have an opportunity for transfer back. Transferred employees can elect to revert to City employee status within a prescribed period of time (likely 6 to 12 months);

There may be additional protections that the employees would want and the City's Administration plans to meet with the union representatives to gain their suggestions for additional employee protections.

#### Timing

A high level timeline for the procurement of the project with major milestones and accountabilities is set out below should the project continue as DBFOM:

<b>Milestone</b>	<b>Accountability</b>	<b>Estimated Date</b>
Preparation of Business Case	City of Portage la Prairie	September 2015
Business Case Review	PPP Canada, City of Portage la Prairie	February 2016
Stakeholder consultation document development/strategy	City of Portage la Prairie	March 2016
Stakeholder consultation (Industry, Public, Employees, Union)	City of Portage la Prairie	August 2016
Approval of Business Case subject to PPP Canada and provincial government funding assistance	City Council	August 2016
Recommendation for Ministerial approval of the Business Case by PPP Canada Board	PPP Canada	September/October 2016
Release of RFQ	City of Portage la Prairie	January 2017
Announcement of Shortlisted proponents	City of Portage la Prairie	March 2017
Release of RFP and draft Project Agreement	City of Portage la Prairie	April 2017
RFP responses received	City of Portage la Prairie	November 2017

<b>Milestone</b>	<b>Accountability</b>	<b>Estimated Date</b>
Evaluation of RFP responses	City of Portage la Prairie, external advisors	January/February 2018
Announcement of Preferred Proponent	City of Portage la Prairie	March 2018
Financial Close/Design	City of Portage la Prairie, external advisors, Preferred Proponent	March 2018
Completion of Construction	Project Co.	September 2020
Final Commissioning	Project Co./City of Portage la Prairie	October 2020- December 2020

### **Consideration of Alternatives to the Recommendation**

The Administration is recommending that City Council approve a DBFOM procurement approach for the project subject to the receipt of funding from PPP Canada and the Province. The recommendation is supported by the Administration’s analysis and the advice of external advisors. The analysis also showed that the alternative procurement approach would provide greater value for money than the traditional DBB.

If Council does not support the administrative recommendation of the DBFOM procurement model, the next best alternative based on the Administration’s analysis would be a traditional DBB approach. The Administration would return to council at the earliest opportunity with another report and recommendation. However, the following needs to be considered if Council decides to pursue an alternative to the recommendation.

#### Timing to Meet Construction Completion Deadlines

The City has a timeline to meet new effluent standards by early 2018 in accordance with provincial operating permit requirements. While Administration recognizes that the DBFOM model will not meet this deadline either, Council must acknowledge that under a DBFOM timelines are respected or else severe penalties are levied against the builder. A DBFOM would transfer the risk of construction delays to the Project Co. In a DBB, some risk of construction delay can be reduced; however, there will still be more risk to the City than if it was a DBFOM.

#### Access to PPP Canada Funding

The only option for receiving PPP Canada funding is a DBFOM model. The finance component provides a strong and liquid security that ensures Project Co.’s long-term performance of the Project Agreement’s specifications in relation to construction, operation and maintenance.

Under phase 1 of the new Building Canada fund the Government of Canada has imposed a strict deadline for completion of projects. Phase 1 requires fully executed projects by April of 2018. Given the state of our current project schedule, it is unrealistic to expect that full construction will have taken place and all invoices paid on or before April of 2018.

Discussions with Canada/Manitoba Infrastructure Secretariat reveals that Phase 2 of the new Building Canada fund has yet to be announced by the Federal Government. The Secretariat does not expect funding announcement and program criteria until 2<sup>nd</sup> or 3<sup>rd</sup> quarter of 2017. Therefore it is impossible to predict at this time what type of funding will be available and at what ratio of

funding. While it has traditionally been the Federal Government’s practice to offer 33% funding we cannot predict how the Phase 2 timelines will affect the City’s project. Moreover, it is anticipated that Phase 2, similar to Phase 1, criteria will be based on per capita funding rather than based on project merit.

City Operation of the Plant

The Administration has identified risks of retaining responsibility for operations and maintenance. If the operation and maintenance of the plant is not transferred to a private operator, the Administration would recommend that a commissioning period be in place in the first few years of the plant being in operation. That commissioning period would allow the City to work in tandem with a private operator to learn the treatment process so that it can effectively operate the plant.

**SWOT Analysis**

A strength and weakness as well as opportunity and threat analysis is provided to further support Administrations recommendation. Both diagrams demonstrate the strengths, weaknesses, opportunities and threats for both DBFOM and the traditional DBB funding models.

**Public-Private Partnership (DBFOM)**

Strengths	Weaknesses
<b>Public Ownership</b> - Public Sponsor (the City) owns the asset under a P3 and establishes the operating parameters through a performance based agreement with the private partner.	<b>Private Cost of Financing</b> – Private sector financing effectively anchors risks transference to the Private Partner. This financing is at a higher rate (in the area of 200 basis points within the last year) than public financing and therefore must be offset by risk transfer, efficiencies and cost savings demonstrated by the Private Partner in the business case and at financial close to achieve positive value for money.
<b>Schedule Certainty</b> - The Private Partner is paid only when the asset is delivered (or key milestones are met), strongly incentivizing on-time delivery. According to Infrastructure Ontario's 2015 Track Record Report, 91% of their P3 portfolio (valued at \$18.7B across 45 projects) were completed on-time or within 3 months of scheduled completion.	<b>Large Capital Projects</b> - P3s are best suited for projects that are sufficiently large to attract private sector interest and financing (typically \$50M or larger). Projects below this threshold have similar transaction costs and struggle to demonstrate value for money and the P3's full benefits.
<b>Cost Certainty</b> - The Private Partner delivers the project at a fixed price including construction as well as operations and maintenance. Any unforeseen cost overruns are assumed by the Private Partner. Budget accuracy through this whole life costing approach is a key benefit for public sector sponsors. According to Infrastructure Ontario's 2015 Track Record Report, 98% of their P3 portfolio (valued at \$18.7B across 45 projects) were completed on-budget.	<b>P3 Capacity</b> – Jurisdictions that are new to P3 delivery require advisor support that is incremental (e.g. fairness monitoring) to traditional delivery through the business and transaction stages. Some of these costs are off-set by the P3 Canada Program.
<b>Performance Based Payments</b> - Payments to the Private Partner are tied to the performance of the asset. If the Private Partner does not meet specified performance standards, it receives a deduction to its payment.	<b>Change Orders</b> – On budget and on time delivery requires an upfront planning discipline that anticipates required changes to the project scope. P3 agreements do provision for needed changes within the construction and operating period however a process that ensures competitive tension with an incumbent P3 partner will be required.
<b>Innovation and Efficiency</b> - In a P3, the Public Sponsor specifies what it needs and leaves as much scope as possible to the private sector to develop the best solution to meet those needs. The focus is on the what, rather than the how, enabling the private sector to develop innovative solutions.	
<b>Asset Quality, Longevity and Availability</b> - The full Design-Build-Finance-Operate-Maintain (DBFOM) P3 model incentivizes the Private Partner to build a quality asset as it will	

be responsible for its performance over the long-term operations period (typically 30 years).	
<b>Risk Transfer to Private Sector</b> - The P3 model transfers key risks to the Private Partner including design errors, schedule adherence, latent defects associated with the new construction, fixed price budget overruns and meeting a specified handback condition at the end of the operations period.	
<b>Handback Condition</b> - A key benefit of the P3 model is that the Private Partner will maintain the asset so that at the end of the concession period (typically 30 years), the Public Sector will receive a high quality asset that meets pre-specified handback conditions.	
<b>Opportunities</b>	<b>Threats</b>
<b>Lender Oversight</b> - If the Private Partner fails to achieve certain performance requirements and has its performance payments deducted, then the financiers are at risk of not being repaid. The financiers have a strong incentive to fully undertake this oversight function and this role is unique to P3 projects.	<b>Communication</b> - As P3s are a newer procurement method, there are a number of myths revolving around the model which need to be dispelled (such as P3s are privatization, which they are not). It is important to have a communications strategy in place to inform stakeholders with accurate information. PPP Canada is able to support Public Sponsors in developing and managing their communications strategy.
<b>Competitive Bid Process</b> - Best practices for P3 procurement involves at least three shortlisted bidders at the Request for Proposals (RFP) stage, and will enhance competitive tension.	<b>Procurement does not follow best practices</b> - External advisors and PPP Canada are well versed in P3 procurement and will ensure that best practices are followed.
<b>Flexibility to End Procurement</b> - The Public Sponsor of the project typically reserves its right to terminate the procurement process at any time before selecting a preferred proponent and executing the P3 project agreement. After a project agreement is signed, if the Public Sponsor elects to terminate the P3 project agreement, it will typically be required to compensate the Private Partner for an amount specified under the project agreement.	<b>Construction &amp; Concession Management</b> – A P3 with an operating and maintenance component is a long term commitment that requires the Public Sponsor to allocate appropriate resources to oversee the P3 contract. PPP Canada will help to share best practices for managing the P3 contract during construction and into the operations phase.
<b>Integration of Existing Staff</b> - Typically in Canadian P3s where public sector staff is being transferred and cannot be reassigned, project companies offer employment to these employees on the same (or similar) terms they had with the public sector. An example of this is Regina Wastewater Treatment Facility where the Private Partner was required to accept all of the current WWTF staff and become a participating employer under the pension and LTD plan.	
<b>Local Business Participation</b> - Smaller sized construction companies can and have participated in the P3 via sub-contracts (e.g. City of Ottawa's Confederation LRT)	

#### Traditional Design Bid-Build

<b>Strengths</b>	<b>Weaknesses</b>
<b>Public Ownership</b> - Public Sponsor owns the asset under a DBB.	<b>Lack of Opportunity for Innovation</b> - The design contract is procured separately from the construction and operations contracts, reducing the opportunity for innovation and the construction of a more resilient asset over the long-term.
<b>Public Cost of Financing</b> - Monthly progress payments to the contractors are at the public cost of financing, which is typically the lowest cost of financing available.	<b>Constructor does not have a long-term interest in the asset</b> - The constructor only has interest in the project until it is built and has no payments withheld to warrant performance during the long-term operations and maintenance period in the case of a DBFOM P3.

	<b>Long-term Asset Condition</b> - Under traditional delivery, the maintenance of an asset is often neglected and performed sub-optimally due to budget constraints. This typically leads to a rundown asset after 30 years which requires costly repairs.
<b>Opportunities</b>	<b>Threats</b>
<b>Competitive Bid Process</b> - Competitive bidding processes are typically followed for large capital projects.	<b>Schedule Delays</b> - The chance for schedule delays is higher under a DBB model as private financing is not withheld until milestone or substantial completion of the asset. Traditional securities involving letters of credit, parent company guarantees and bonding is not as robust and projects have been delayed as a result.
<b>Flexibility to End Procurement</b> - Typically the ability for the Public Sponsor to end procurement is built into the procurement process.	<b>Cost Overruns</b> - Unlike a P3, there is no fixed price bid for the long-term delivery of the project including operations and maintenance. In a DBB, the construction payments are typically paid based on monthly progress and not at substantial completion of the asset. Scope adjustments occur more frequently with this model resulting additional unanticipated budget pressures.
<b>Integration of Existing Staff</b> - Status quo.	<b>Procurement does not follow best practices</b> - The risk of running into procurement related issues and managing multiple DBB procurements. PPP Canada specializes in P3 delivery and applies best practices and advisory services to P3 delivery at no cost to screened-in applicants.
<b>Local Business Participation</b> - Likely through multiple relatively smaller DBB contracts.	

## ADMINISTRATIVE RECOMMENDATIONS:

1. That the Council of the City of Portage la Prairie approve proceeding with the WPCF upgrade project to address the Provincial Nutrient Removal requirements and that the project proceed as a Public/Private Partnership using the Design Build Finance Operate and Maintain model (DBFOM).
2. That City Council authorize the City Manager to proceed with the preparation of procurement documents (Request for Qualifications (“RFQ”) and Request for Proposals (“RFP”) in support of the DBFOM model for the upgrade of the WPCF (the “Project”) based upon the following scope:
  - a. the design and construction of WPCF upgrade meets the established provincial regulations;
  - b. a construction period that results in substantial completion of the Project during the third quarter of 2020; and
  - c. a maximum 30 year term in the Project Agreement, which will include construction, operation and maintenance by the successful proponent. This includes the period for private operation of the current WPCF during construction and monthly payments, which will provide a performance based payment for operation, maintenance and financing of the Project. The City will continue to retain ownership of the WPCF.
3. That City Council authorize the City Manager to prepare and issue a RFQ to identify short-listed proponents who could deliver the Project.
4. That City Council authorize the City Manager to award an opportunity to participate in the RFP process to the three highest scoring proponents identified by the RFQ process.
5. The City Council authorize the City Manager to prepare and issue a RFP to identify the successful proponent who will deliver the Project.

6. Subject to the preferred proponent meeting all RFP requirements, that City Council authorize the City Manager to enter into a P3 Project Agreement (“Project Agreement”) to deliver the Project with the preferred proponent identified by the RFP.
7. That City Council authorize the City Manager to pursue discussions with PPP Canada, negotiate and finalize any funding agreements required by PPP Canada.
8. That City Council authorize the City Manager to proceed with an RFQ while awaiting a PPP Canada and Province of Manitoba funding decisions, but the City Manager shall not issue an RFP without first confirming that the City will receive PPP Canada and provincial funding for the Project.
9. That City Council require the City Administration seek further direction from City Council in the event the PPP Canada and/or the Province do not approve the Project for funding or in the event that the scope of the Project or capital requirement for the Project change.
10. That the following funding model for the WPCF Upgrade be approved:
  - a. Capital commitment of up to \$258.2 million for the design, construction, servicing, planning, procurement and project management costs, for the DBFOM procurement be funded from the following funding sources:
    - i. Up to 67% of eligible cost shared between the Federal and Provincial Governments.
    - ii. 33% of all costs from the City of Portage la Prairie’s utility members spread over the 30 year term.
  - b. In principle, the ability to pursue up to 30 year debt servicing up to \$88.5 million. In addition, the financial model includes payments to cover debt principal and interest payments that must be paid and recovered from revenue streams over 30 years.
  - c. In principle, a commitment to providing a performance-based payment for operations, maintenance and availability of the facility, compensating for a range of DBFOM service over the 30 year term, with an estimated cost of:
    - i. \$175.6 million in the operation and maintenance portion of the payment to P3 Contractor (“Project Co.”) for the WPCF. These costs are currently an ongoing part of the utility program;
    - ii. \$111.5 million in the major maintenance portion of the payment to Project Co., to ensure that the WPCF’s assets are maintained and upgraded appropriately through the WPCF’s lifecycle; and
    - iii. \$106.2 million towards the capital payment portion of the payment to Project Co.
  - d. That the operation, maintenance and the debt servicing costs be considered and funded through future budget proposals over 30 years and funded through revenue sources, including but not limited to the collection of:
    - i. \$223.2 million in funding from the Industrial Service Agreement (ISA);
    - ii. Up to \$170.2 million in utility revenues.
11. That the City Manager be authorized to execute the Project Agreement and any funding agreements required by PPP Canada, the Province of Manitoba and Industrial Service Agreements with local industries.