



## MEMORANDUM

TO:

FROM:

DATE:

SUBJECT:

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### I. BACKGROUND & CONTEXT

Infrastructure Ontario ("IO"), on behalf of the Ministry of Transportation ("MTO") has been engaged to review and advise on the proposed procurement strategy and commercial structure of the anticipated Ottawa Light Rail Transit Project. Specifically, IO has undertaken a review of the Summary of Deal Parameters, as presented to interested stakeholders on May 13, 2011.

In order to conduct our review and form opinions on the proposed procurement strategy and commercial structure, IO requested information from the current transaction advisor on the project, Deloitte and the City of Ottawa. Information that was requested included (but not limited to): cash flow projections, financing assumptions (rates and terms), performance security envisioned, schedule details, payment structure, value for money assumptions and a procurement, project management implementation strategy.

IO has reviewed the information provided and has requested additional information to solidify this opinion.

**Through discussion with the City of Ottawa, it has become clear that many of the deal parameters that will inform the RFP and Project Agreement will not be settled until July, 2011. Therefore, our comparison of a DBM and DBFM model is somewhat theoretical and not as deal specific as we would have liked. Without major commercial terms and deal structure established, it is impossible to opine on the gaps that we see with this procurement.**

### II. IO OPINION & GAP ANALYSIS

IO does not recommend the use of a design-build-maintain procurement model for the Ottawa LRT project. The reasoning and rationale is laid out below, but the primary concern is that a lack of private financing of the project, in our view, reduces the



## MEMORANDUM

enforceability of the envisioned risk transfer under the project agreement. The proposal to secure the project with a sizeable letter of credit, while potentially available in the market is not any more cost effective for the Sponsors than simply withholding cash payments from the private sector partner until meaningful milestones or substantial completion is achieved.

The introduction of maintenance obligations in the proposed agreement, without the existence of long-term equity or financing also prevents the ability to enforce the envisioned risk transfer

### **GAP ANALYSIS – DBM model vs. DBFM**

#### *Payment Structure*

The contemplated DBM model makes use of progress payments during construction to avoid the use of short term financing. Maintenance payments are made to the service contractor following substantial completion. It is our understanding that the construction contractor is fully paid at substantial completion.

While the payment structure under a DBM does reduce or eliminate the need for financing (and the costs associated with it), it does not leave any capital at risk in the project, through either debt or equity as security for on time and on budget performance. In order to secure the obligations of the construction contractor and maintenance contractor, the owner would have to impose some liquid security requirements, for example, through a sizeable letter of credit. We understand that the proposed approach will require Project Co. to post a sizeable letter of credit for the project. Given current interest rates, particularly during construction, it is our opinion that the cost difference between a sizeable LC and financing is negligible. Our assumption has been market sounded and confirmed by lenders in the AFP market. The example below demonstrates the cost of financing construction to a Sponsor using cash payments with an LC vs. short-term financing from lenders:

## MEMORANDUM

### Payment Sample For Illustration Only

#### Sponsor payments

(Amounts in millions of CDN dollar)

#### Option 1: Letter of Credit

Month	Sponsor Payment	Future Value
1	\$33.33	\$33.38
2	\$33.33	\$33.37
3	\$33.33	\$33.37
4	\$33.33	\$33.36
5	\$33.33	\$33.35
6	\$33.33	\$33.34
Total		\$200.17
LC Cost 2%		\$2.00
Total Cost		<b>\$202.17</b>

#### Option 2: AFP (financed) Model

Month	Sponsor Payment	Interest Charges
1	\$0.00	\$0.13
2	\$0.00	\$0.25
3	\$0.00	\$0.38
4	\$0.00	\$0.50
5	\$0.00	\$0.63
6	\$200.00	\$0.75
Total	\$200.00	\$2.63
Total Cost		<b>\$202.63</b>

The above example demonstrates that from a time value of money perspective, short-term construction financing is not materially more expensive than the proposed cash payment and LC combination approach. The added benefits of having lenders involved in the project and having cash held back as the ultimate form of security, in our view, is worth the minimal incremental cost. Based on latest AFP bid information, we would strongly encourage the Sponsor to take advantage of current conditions and use third-party debt.

#### *Security Package – Construction Period*

A fundamental difference between the DBM model and DBFM model is the nature and level of prescription for the security package required on the project. In a DBFM model, the selection of the most appropriate and cost effective security package is determined by lenders requirements, taking into account the credit quality of the contractors on the project and the project risk. In contrast, a DBM model will force the Sponsor to prescribe a “one-size fits all” security package, that for some contractors may either not be robust enough or may be more than required, adding unnecessary cost to the project. Some contractors, for example, may have excellent credit quality, an impeccable track record of on time and on-budget delivery and outstanding subcontractors. The ability to customize the right security package for the right consortium is lost on a DBM approach. Furthermore, the sizeable letter of credit that is contemplated may prevent some contractors from bidding on the project, or may force them to find joint ventures that may not be the ideal. It is our view that lenders have more experience and more resources focussed on reviewing the credit quality of contractors and are best suited to customize the right security package at the right price.



## MEMORANDUM

### *Security Package – Maintenance Period*

The above points about an optimal security package also apply to the maintenance period. However, an even more fundamental difference in certainty of outcome between DBM and DBFM is the existence of risk capital in the project during the maintenance period. Under DBFM, private capital is at risk for the entire term of the agreement. The payment mechanism and deduction regime in place ensures that the project output specifications are met, with Project Co. and its lenders being penalized if issues arise and performance is not delivered. The payment mechanism drives incentive and behaviour during the maintenance period. Since equity capital is at risk, the equity investor will impose even stricter performance provisions and lower tolerances for failures than what the Sponsor imposes through the payment mechanism (e.g. will terminate their FM contractor before the Sponsor can). Lenders will also impose additional security during the maintenance period to secure both the maintenance and lifecycle obligations under the project agreement. If the lender feels that the lifecycle budget is not appropriate, they are afforded contractual remedies to force the service contractor to provide more budget, at their cost. The additional budget is often secured through letters of credit.

In short, the fact that risk capital is exposed for the term of the agreement incents the private sector to budget properly and deliver to a level of performance expected by the Sponsor.

### *Lender Value Add*

The AFP model makes use of third-party project debt, at a cost premium, to ensure certainty of outcome on the project. There is no question that at certain credit spreads, the value of having lenders involved in the project should be scrutinized. However, at current credit spread levels, the value they bring, as outlined below is worth the incremental financing cost.

Examples of how lenders add value to the project:

1. **Impose robust project security** – lenders require contractors to have a financial interest in the outcome of the project, either through the use of equity investments into the project, the issuance of parental guarantees, letters of credit, or performance bonds from a surety
2. **Conduct credit due diligence** – lenders (especially in Canada), have robust credit review processes and internal governance standards. The imposition of third party debt ensures that only credible contractors show up on the project.



## MEMORANDUM

Financially troubled contractors would not receive lending support on an AFP project, even if they were able to source project security. The AFP model and the lenders that are involved weed out troubled contractors

3. **Conduct technical due diligence** – lenders will hire an unbiased third party technical advisor to review every technical aspect of a contractor’s bid – the reasonableness of the schedule, construction budget, facilities management and lifecycle budget and overall project implementation strategy.
4. **Construction and Facilities Management Oversight** – lenders, through their technical advisors, have rights during construction and operations to ensure that the project is going smoothly and that the budget left in the project is adequate to ensure that contractors fulfill their obligations under various legal agreements. If the advisor, often acting in their sole discretion, believes that a construction or lifecycle issue has arisen, they have the ability to request that the contractor post additional performance security to ensure that the project is properly funded.  
CIVIL – ADD any oversight/PM commentary that lenders bring???
5. **Legal Remedies** – lenders have legal remedies in their credit agreement and within the project agreement to ensure that the project is completed on time and on budget. The best example of this is the lenders’ right to “step-in” to the shoes of Project Co. and take over the project. The lender could replace the troubled contractor with a more suitable contractor, at their discretion and at their own cost. If the lender decides to step in and not replace Project Co. or Project Co’s contractors, then they can walk away from the project. The Sponsors are protected financially in this worst case scenario, as cash has been withheld during construction. The compensation on termination regimes in place ensure that the Sponsor will not absorb the costs incurred due to Project Co. default

### *SPV and Contract Structure*

The DBM model contemplates an “SPV” structure for the project, where both construction and maintenance contractor report act as sub-contractors to the SPV. The obligations and risks of the project under the project agreement would be transferred to the appropriate party through construction and maintenance contract “drop-down agreements”, as appropriate.



## MEMORANDUM

The DBFM model is similar, however a very key fundamental difference is the existence of an equity sponsor or developer who manages and is ultimately responsible for the performance of the SPV. The AFP structure forces Project Co. to be accountable for all of the obligations of the project. While most material risks are dropped down to Project Co's prime team members (contractor and service provider), stranded risks are managed by Project Co, who has risk capital in the project. Examples of stranded risks include financing risk prior to financial close and during construction, management of the SPV and coordination issues between Project Co's contractor and service contractor and force majeure event risk, where compensation for such events does not make lenders whole.

The DBM model is inefficient at allocating risks between the construction contractor and the maintenance provider. Once the contractor is fully paid, there is little to no recourse that a maintenance contractor can have against that contractor for deficiencies. This may cause the service contractor to insist on extensive warranties for many years into operations, to ensure that they do not absorb risk that they cannot control. This warranty security is a very costly alternative.

We remain unclear on how the City of Ottawa plans to manage these integration and stranded risks, without having an equity role.

### Construction Risk Transfer – Transit Projects

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### Maintenance Risk Transfer – Transit Projects

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### Lifecycle Risk Transfer – Transit Projects

### Project Term –

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## III. REVIEW OF FINANCING ASSUMPTIONS AND VFM MODELS

IO Project Finance has reviewed the financing assumptions that were used by Deloitte for their VFM analysis. We have not received a copy of the VFM model or risk matrix, so the review of VFM, to the extent it informs the decision on a delivery model is limited to



## MEMORANDUM

the assumptions that have been provided to us. The key driver of any VFM analysis is the allocation and quantification of risk under any delivery model. We have not seen this information. Commentary on the reasonableness of financing assumptions is below:

### Long Term Financing Costs:

**-Interest rate of GOC + 275 bps.** We view this as very conservative for bond financings. Recent procurements at IO have seen credit spreads dip below 210 bps. We would recommend a more realistic assumption in the range of 220 bps – 250 bps for VFM purposes.

**-Gearing of 85/15** – We view this as conservative for DBFM projects. A majority of AFP procurements carry gearing of 90/10. We believe a reasonable VFM assumption (and still conservative) is gearing of 88/12.

**-Upfront Fees of 2.5%** - if modeling a bond solution, this assumption seems reasonable

### Short Term Financing Costs

**Interest Rate of Swapped CDOR + 250 bps** – We view this assumption as overly conservative. The median short term spread for bank solutions on IO's most recent procurements is below 180 bps (for bank solutions) over the swapped CDOR rate. A spread in the range of 160 bps – 200 bps is more realistic.

**Gearing of 86/14 (contingent equity)** – we query the need for contingent equity in a DBF scenario. A vast majority of DBF financings have 100% debt financing. It is unclear if these short-term financing assumptions relate to a DBFM or DBF scenario. Even under a DBFM, the equity is usually back-ended to lower project costs. We view 86/14 for short-term financing as too conservative and would like to explore the rationale for this.

**Upfront Fees of 2%** - for a bank solution, this assumption seems reasonable.

### VFM Review

**PENDING RECEIPT OF VFM MODEL**