



Value for Money Assessment

Kipling Bus Terminal Project

September 2018

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I. EXECUTIVE SUMMARY

This report provides a summary of the procurement process for the Kipling Bus Terminal project and demonstrates how value for money was achieved by delivering the project using Infrastructure Ontario's (IO) Alternative Financing and Procurement approach.

➤ Infrastructure Ontario

IO is a Crown agency owned by the Province of Ontario that provides a wide range of services to support the Ontario government's initiatives to modernize and maximize the value of public infrastructure and realty. Projects delivered by IO are guided by five key principles: transparency, accountability, value for money, public ownership and control, and public interest are paramount.

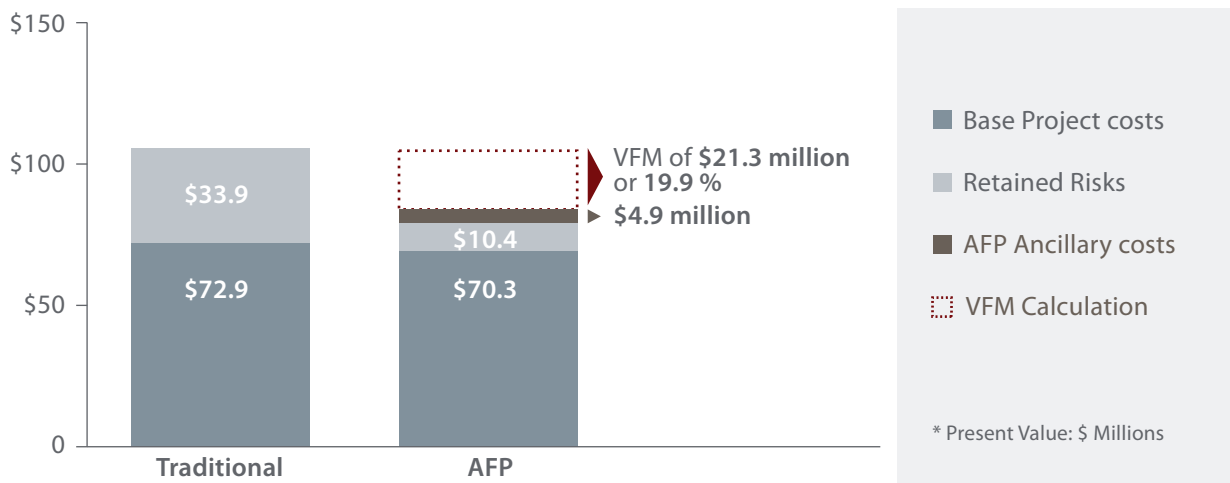
➤ Alternative Financing and Procurement in Ontario

IO delivers public infrastructure projects using a project delivery model called Alternative Financing and Procurement (AFP). The AFP model brings together private and public sector expertise in a unique structure that transfers to the private sector partner the risk of project cost increases and scheduling delays typically associated with traditional project delivery. The goal of the AFP approach is to deliver a project on time and on budget and to provide real cost savings for the public sector.

All projects with a cost greater than \$100 million are screened for their suitability in being delivered as an AFP project. The decision to proceed with an AFP delivery model is based on both qualitative considerations (e.g., size and complexity of the project) and a quantitative assessment. The quantitative assessment, called Value for Money (VFM), is used to assess whether the AFP delivery model will achieve greater value to the public compared to a traditional public sector delivery model. VFM compares the estimated total project costs of delivering public infrastructure using AFP relative to the traditional delivery model.

➤ Achieving Value for Money

The VFM assessment of the Kipling Bus Terminal project indicates an estimated cost savings of \$21.3 million or 19.9 percent (in present value terms) by using the AFP approach compared to traditional delivery.





I. EXECUTIVE SUMMARY

► External Review

As part of the procurement process and VFM assessment, three external parties were retained by IO:

- Deloitte was retained to complete the VFM assessment; and,
- PPI Consulting acted as the Fairness Monitor for the project.

II. PROJECT HIGHLIGHTS

► Kipling Bus Terminal Project

Purpose	To deliver the Kipling Bus Terminal project, an integral component of Metrolinx's long-term plan for Regional Express Rail – an integrated transportation network in the Greater Toronto and Hamilton Area.
Project Owner	Metrolinx
Private Partner	EllisDon Infrastructure Transit
Location	Toronto
Project Type	Design-Build-Finance (DBF)
Infrastructure Type	Transit
Contract Value	\$73 million (nominal/including inflation)
Construction Period	March 2018 – January 2020
Length of Project Agreement	5 years
Estimated Value for Money (Present Value)	\$21.3 million or 19.9 %

► Background

The Province announced the GO Transit RER program in 2014, which will provide faster and more frequent service across the GO rail network, and will include the electrification on core segments by 2024-25. GO RER is a transformative initiative that will change the GO rail network from being a commuter-focused rail service into an all-day, two-way regional transit service that will provide new transit options across the Greater Toronto and Hamilton Area (GTHA).

► Objectives

Work on the Kipling Station along the Milton GO corridor, is part of a larger, system-wide plan to improve overall GO Transit service, including the delivery of the Province's GO Regional Express Rail program (RER) by 2024-25.

Key objectives of RER projects includes:

- Increase urban transit capacity
- Manage congestion
- Seamless customer experience
- Minimize disruption during construction
- Design excellence
- Deliver on-time, on budget
- Public ownership

GO RER will provide faster and more frequent service on the GO Rail network, with electrified service on core segments:

II. PROJECT HIGHLIGHTS

- ▶ Electric trains running every 15 minutes or better, all day and in both directions, within the most heavily travelled sections of the network
- ▶ Four times the number of trips outside of weekday rush-hour periods, including evenings and weekends
- ▶ Twice the number of trips during weekday rush-hour periods

▶ Project Scope

The scope of work includes:

- ▶ An elevated pedestrian bridge to connect the new entrance/ancillary building to the new bus terminal building and rail platforms
- ▶ A new pedestrian underground tunnel to connect the new entrance/ancillary building to the new bus terminal building and from the new bus terminal building to the existing TTC pedestrian tunnel and pedestrian pick up and drop off building
- ▶ A new bus terminal building for MiWay and GO Transit operations
- ▶ Renovations to the existing Kipling GO station building and existing TTC pedestrian pick-up and drop off building
- ▶ Site infrastructure upgrades including parking and improved vehicular, bicycle and pedestrian accesses
- ▶ The construction of a new private driveway for vehicular, bicycle and pedestrian accesses, including a new signalized intersection.

The project agreement with EllisDon Infrastructure Transit contains their requirements to:

- ▶ Design and Construct – lead the design and construction of the Kipling Bus Terminal project for completion in winter 2019;
- ▶ Finance – secure sufficient financing to finance the construction and capital costs over the term of the project;
- ▶ Third-Party Certification – obtain a third-party independent certification that the system is built to the requirements of the Province as outlined in the project agreement.

▶ Economic Benefits & Job Creation

The project is generating economic stimulus by creating and supporting jobs. At the peak of construction, EllisDon Infrastructure Transit estimates that 80 workers will be on the site daily, with opportunities for subcontractors as the project progresses.

III. ACHIEVING VALUE FOR MONEY

Value for money assessment for the Kipling Bus Terminal project demonstrates a project costs savings of:

\$21.3 million or 19.9%

The VFM assessment methodology is outlined in *Assessing Value for Money – An Updated Guide to Infrastructure Ontario’s Methodology*, which can be found at www.infrastructureontario.ca.

► Value for Money Concept

The VFM compares the estimated total-risk adjusted project costs, expressed in dollars measured at the same point in time, of delivering the same infrastructure project under two delivery models: the Traditional Design, Bid, Build (DBB) model and the AFP model.

MODEL # 1:

Traditional DBB Delivery (PSC)

Estimated costs to the public sector of delivering an infrastructure project using a traditional procurement delivery model.

Total risk-adjusted costs are known as the Public Sector Comparator or PSC Costs.

MODEL # 2:

AFP Delivery

Estimated costs to the public sector of delivering the same project to the identical specifications using the AFP delivery model.

Total risk-adjusted costs are known as AFP Costs.

$$\left\{ \text{Value for Money \$} = \text{PSC Costs} - \text{AFP Costs} \text{ or } \text{Value for Money \%} = \frac{(\text{PSC Costs} - \text{AFP Costs})}{\text{PSC Cost Costs}} \right\}$$

The difference between the total estimated PSC costs and the total estimated AFP costs is referred to as VFM. Positive VFM is demonstrated when the cost of delivery under AFP is less than PSC.

► Calculating Value for Money – Inputs & Assumptions

The VFM is assessed and refined throughout the entire procurement process to reflect updated information and EllisDon Infrastructure Transit’s actual bid costs. All costs and risks in this report are expressed in present value terms and have been discounted back to present terms.

The VFM assessment relies on a number of inputs and assumptions, including:

- 1. Base Project Costs
 - ▼ 1.1. Adjusted Base Costs (design, construction, lifecycle and maintenance, as applicable)
 - ▼ 1.2. Financing Costs
- 2. AFP Ancillary Costs
- 3. Retained Risks

III. ACHIEVING VALUE FOR MONEY

1. Base Project Costs

▼ 1.1. Calculation of Base Costs

Traditional Delivery Model (PSC)		AFP Delivery Model	
Base Costs adjusted for:	(\$)	Base Costs adjusted for:	(\$)
Innovation Factor	N/A	Innovation Factor	↓ to Construction Costs
Adjusted Base Costs	Base Costs (\$) +/- Adjustments	Adjusted Base Costs	Base Costs (\$) +/- Adjustments
Estimated Savings / (Costs) in Base Costs under the AFP Model			PSC – AFP

Base costs in this scenario include design and construction cost. In the estimation of base costs, IO relies on external cost consultants to estimate the costs of the project. This becomes the starting point for both the PSC and AFP models. These costs are then adjusted for:

- ▶ An innovation factor (DBF and DBFM projects only) – the VFM methodology typically includes an innovation factor which recognizes that the base cost of the AFP model will be lower than the PSC model as a result of:
 - ▶ the use of performance-based specifications in AFP projects allow contractors to consider innovative and alternative ways to deliver a project, such that project costs are lower as compared to a traditional delivery which uses more prescriptive specifications; and,
 - ▶ an increased competitive environment on AFP projects which have resulted in cost reductions

▼ 1.2. Financing Costs

Traditional Delivery Model (PSC)		AFP Delivery Model	
Financing Costs	Public sector notional financing costs	Financing Costs	Private sector financing costs
Estimated Savings / (Costs) from Financing under the AFP Model			PSC – AFP

One of the common elements of the AFP model is the use of private finance for some or all of the project period. Under the traditional delivery model, the public sector makes progress payments throughout construction. Whereas under the AFP model, the government pays a portion of construction costs during construction as interim payments or milestone payments and/or pays the entire amount at the end of the construction period.

Financing costs are reflected as follows:

- ▶ Traditional Delivery Model or PSC – the public sector notionally incurs an “opportunity cost” for having

III. ACHIEVING VALUE FOR MONEY

paid earlier as compared to the AFP model. The notional public sector financing cost is calculated at the current Provincial cost of borrowing or weighted average cost of capital. This cost is also reflected in the discount rate used to assess and compare the project costs.

- ▶ AFP Delivery Model – the private sector party borrows at private financing rates to pay for project costs during construction and carries that financing until fully repaid by the public sector. This private sector financing cost is ultimately passed through to the public sector as a cost and reflected in the AFP model.

2. AFP Ancillary Costs

Traditional Delivery Model (PSC)		AFP Delivery Model	
AFP Ancillary Costs	N/A	AFP Ancillary Costs	ⓘ AFP costs
Estimated Savings / (Costs) from Financing under the AFP Model		PSC – AFP	

There are significant costs associated with the planning and delivery of a large complex project. The VFM methodology quantifies the incremental ancillary costs arising under the AFP delivery model only. Ancillary costs typically incurred include legal, capital markets, fairness, transaction, and the cost of IO services.

3. Retained Risks

Traditional Delivery Model (PSC)		AFP Delivery Model	
Retained Risks	ⓘ PSC costs	Retained Risks	ⓘ AFP costs
Estimated Savings / (Costs) from Retained Risks under the AFP Model		PSC – AFP	

The concepts of risk transfer and mitigation are key to understanding the overall VFM assessment. To estimate and compare the total cost of delivering a project under the traditional delivery model versus the AFP model, the risks borne by the public sector, which are called “retained risks,” are identified and quantified. Details on how retained risks are identified and quantified are in *Assessing Value for Money – An Updated Guide to Infrastructure Ontario’s Methodology*, which can be found at www.infrastructureontario.ca.

Project risks are defined as potential adverse events that may have a direct impact on project costs. To the extent that the public sector retains these risks under both delivery models, they are included in the estimated cost under the PSC and AFP model as “retained risks”. Risks retained under the AFP model are lower than risks retained by the public sector under the PSC model. This reflects the transfer of certain project risks from the public sector to the private sector and the appropriate allocation of risk between the public and private sectors based on the party best able to manage, mitigate, and/or eliminate the project risk.

As a result of a comprehensive risk assessment, the following are examples of key project risks that have been transferred or mitigated under the project agreement to EllisDon:

- ▶ Project Schedule – risk of a longer construction period and resulting in a higher total program cost.

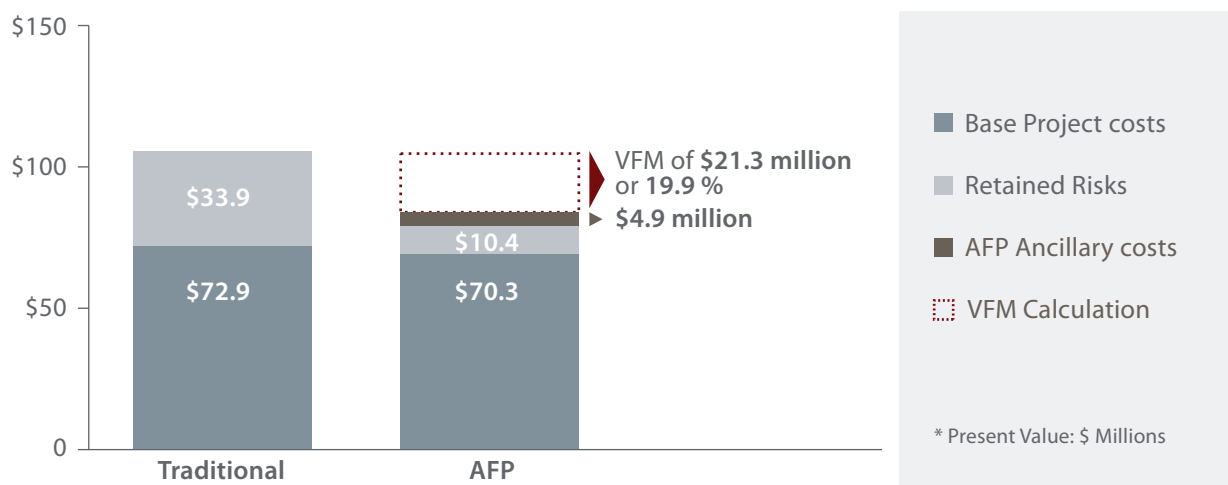
III. ACHIEVING VALUE FOR MONEY

- ▶ Scope Changes During Construction (directed by owner) – risk that the scope of work is changed by the owner during the construction.
- ▶ Due Diligence (by the owner in preparation of tender in RFP) – risk that an insufficient level of due diligence is undertaken and communicated to the proponents resulting in reduced tolerance to risk and higher bid price.

▶ Kipling Bus Terminal project Value for Money Results

The VFM assessment of the Kipling Bus Terminal project indicates an estimated cost savings of \$21.3M or 19.9 percent by using the AFP approach compared to traditional delivery.

Traditional Delivery Model (PSC)	\$ Millions Present Value	AFP Delivery Model	\$ Millions Present Value
I. Base Project Costs (Adjusted Base Costs + Financing)	\$72.9	I. Base Project Costs (Adjusted Base Costs + Financing)	\$70.3
II. AFP Ancillary Costs	N/A	II. AFP Ancillary Costs	\$4.9
III. Retained Risks	\$33.9	III. Retained Risks	\$10.4
Total	\$106.8	Total	\$85.6
Estimated Value for Money (cost difference)		\$21.3	
Estimated Percentage Savings		19.9%	





III. ACHIEVING VALUE FOR MONEY

➤ External Review

Deloitte completed the VFM assessment for the project. Their assessment demonstrates projected cost savings of 19.9 percent by delivering the project using the AFP model versus what it would have cost to deliver the project using a traditional delivery model (see letter on page 15).

PPI Consulting acted as the Fairness Monitor for the project. They reviewed and monitored the communications, evaluations and decision-making processes associated with the project, ensuring the fairness, equity, objectivity, transparency and adequate documentation of the process. PPI certified that these principles were maintained throughout the procurement process (see letter on page 16).

IV. PROJECT AGREEMENT

► Highlights of the Project Agreement

The Project Agreement signed between IO, Metrolinx and EllisDon Infrastructure Transit defines the obligations and risks of all parties involved. Key highlights that pertain to the construction terms are below:

- **Contract Price Certainty** – A \$73 million fixed-price contract (includes inflation at contractually determined rate) to design, build and finance the Kipling Bus Terminal project. Any extra costs incurred as a result of a schedule overrun caused by the contractor will not be paid by the Province.
- **Scheduling, Project Completion and Delays** – EllisDon Infrastructure Transit has agreed to a substantial completion date of Winter2019. The schedule can be modified in limited circumstances in accordance with the project agreement. A sizeable payment will be made by the Province at substantial completion, providing further incentive for EllisDon Infrastructure Transit to complete construction on time.
- **Site conditions and contamination** – EllisDon Infrastructure Transit is responsible for managing and where required, remediating any contamination at the site. This includes contamination that was disclosed or reasonably anticipated from site condition reports, or that is caused by EllisDon Infrastructure Transit or any of its parties.
- **Construction Financing** – EllisDon Infrastructure Transit is required to finance the construction of the project and is responsible for any additional financing costs if there is a delay reaching substantial completion of the project.
- **Commission and Facility Readiness** – EllisDon Infrastructure Transit must achieve a prescribed level of commissioning at substantial completion within the agreed-to schedule. This ensures Metrolinx will be able to achieve in-revenue service in January 2020.

V. COMPETITIVE SELECTION PROCESS

The procurement process for the Kipling Bus Terminal project, from RFQ to Financial Close, took 16 months to complete.

After concluding a fair and competitive procurement process, Metrolinx and IO entered into a project agreement with EllisDon Infrastructure Transit to design, build and finance the project.

► Procurement Process

i. Request for Qualifications | November 30, 2016

- ▶ Metrolinx and IO issued a request for qualifications (RFQ) to solicit interested parties to design, build and finance the project.
- ▶ In January 2017, the RFQ period closed and the Sponsors received statements of qualifications from four teams.
- ▶ RFQ submissions were evaluated by IO and Metrolinx. High standards were set to ensure the pre-qualified consortia exceeded the technical and financial standards required for this complex and large project. The evaluation process resulted in three proponents being pre-qualified.
 - ▶ Bird/Kiewit JV
 - ▼ Developer: Bird Design-Build Construction Inc. and Peter Kiewit Sons ULC
 - ▼ Constructor: Bird Design-Build Construction Inc. and Peter Kiewit Sons ULC
 - ▼ Designer: Stantec
 - ▼ Financial Advisor: Kiewit Development Bird Capital
 - ▶ EllisDon Infrastructure Transit
 - ▼ Developer: EllisDon Capital Inc.
 - ▼ Constructor: EllisDon Design-Build Inc.
 - ▼ Designer: Strasman Architects, NAK Design Strategies and WSP Canada Inc.
 - ▼ Financial Advisor: EllisDon Capital Inc.
 - ▶ Kipling Infrastructure Partnership
 - ▼ Developer: Buttcon Ltd. and OHL Canada
 - ▼ Constructor: Buttcon Ltd., OHL Canada and Grascan Construction Ltd.
 - ▼ Designer: Reinders + Rieder Ltd.
 - ▼ Financial Advisor: Stonebridge Financial Corporation

ii. Request for Proposals | April 3, 2017

- ▶ A request for proposals (RFP) was issued to the pre-qualified proponents, setting out the bid process and proposed project agreement for the project.
- ▶ The proponents had six-months to prepare high-quality, competitive submissions.

iii. Proposal Submission | October 12, 2017

- ▶ The RFP period closed on October 12, 2017. All proponents submitted bids on time.

V. COMPETITIVE SELECTION PROCESS

- ▶ Fall 2017: bids were evaluated using criteria as set out in the RFP by an Evaluation Committee comprised of subject matter experts from IO, Metrolinx and technical consultants enlisted by the Sponsors. The extensive evaluation process resulted in EllisDon Infrastructure Transit receiving the highest score.
- ▶ In December, 2017, the ‘first-ranked proponent’ – also referred to as the First Negotiations Proponent – EllisDon Infrastructure Transit, was then notified of their standing.

iv. Preferred Proponent Notification | January, 2018

- ▶ After successful negotiations with the First Negotiations Proponent, EllisDon Infrastructure Transit was selected as the preferred proponent. EllisDon Infrastructure Transit best demonstrated the ability to meet the specifications outlined in the RFP, including technical requirements, construction schedule, price and financial backing.

v. Commercial and Financial Close | March 22, 2018

- ▶ Upon conclusion of negotiations and once a financing rate was set, a Project Agreement (contract) was executed between EllisDon Infrastructure Transit, Metrolinx and IO on March 22, 2018.
 - ▶ EllisDon Infrastructure Transit
 - ▼ Developer: EllisDon Capital Inc.
 - ▼ Constructor: EllisDon Design-Build Inc.
 - ▼ Designer: Strasman Architects, NAK Design Strategies and WSP Canada Inc.
 - ▼ Financial Advisor: EllisDon Capital Inc.

▶ Design and Construction Phase

vi. Construction Phase | March 2018 to January 2020

- ▶ The design phase began March 2018, with construction commencing on April 13, 2018 and will be carried out in accordance with the project agreement and the builder’s schedule as approved by the Sponsors.
- ▶ During the construction period, the builder’s construction costs will be funded through their own equity, bond and lending arrangements, which will be paid in monthly installments based on the construction program set out by EllisDon Infrastructure Transit.
- ▶ Project construction will be overseen by Metrolinx with IO providing contract management oversight.

vii. Payment

- ▶ EllisDon Infrastructure Transit will receive substantial completion payment expected in December 2019.



VI. CONCLUSION

This report provides a project overview and summary of the procurement process for the Kipling Bus Terminal project, and demonstrates that a VFM of \$21.3 million or 19.9 percent will be achieved by using the AFP approach compared to traditional delivery.

Going forward, IO, Metrolinx and EllisDon Infrastructure Transit will continue to work together to ensure the successful delivery of the Kipling Bus Terminal project.



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June 4, 2018

Private and confidential

John Traianopoulos
Senior Vice President, Transaction Finance
Infrastructure Ontario
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Dear Mr. Traianopoulos,

Subject: Financial Close Value for Money Analysis - Kipling Bus Terminal DBF

Deloitte LLP ("Deloitte") has prepared the Financial Close stage Value for Money ("VFM") assessment for the Kipling Bus Terminal Project (the "Project"), in accordance with Infrastructure Ontario's ("IO") value for money assessment methodology ("VFM Methodology") outlined in *Assessing Value for Money: An Updated Guide to Infrastructure Ontario's Methodology (April 2017)*. The VFM Methodology appears consistent with approaches used in other jurisdictions.

The VFM assessment is based on a comparison of the present value of estimated total project costs under:

1. The traditional delivery approach, as reflected in the Public Sector Comparator (PSC) model; and
2. The Alternative Finance and Procurement (AFP) approach, as reflected in the Preferred Proponent's Bid at Financial Close.

The VFM assessment was compiled using the following information (collectively the "Information") within the VFM model:

- A. A Base Risk Matrix developed for IO by MMM Group and adapted to reflect the Project specific risks;
- B. Cost and other input assumptions extracted from the Preferred Proponent's Bid at Financial Close; and
- C. Other VFM model assumptions provided by IO.

While Deloitte did not audit or attempt to independently verify the accuracy or completeness of the Information, Deloitte confirms, based on our familiarity with the application of VFM methodologies, that the Information has been appropriately used in the VFM model. The VFM assessment demonstrates that the AFP approach will provide estimated value savings of 19.9% or \$21.3 million in comparison to the traditional delivery approach.

Sincerely,

Deloitte LLP



Request for Proposals (RFP #16-551)

Design-Build-Finance

Regional Express Rail

Kipling Bus Terminal Project

For

Metrolinx and

Infrastructure Ontario

Summary Fairness Monitor Report

Project:	Kipling Bus Terminal Project
Report Stage:	Request for Proposals (RFP) Fairness Report
Date of submission:	December 14, 2017
Submitted to:	Infrastructure Ontario – Vice President, Procurement

INTRODUCTION

PPI Consulting Limited was engaged by Infrastructure Ontario (IO), as Fairness Monitor to observe the Request for Proposal (RFP # 16-551) process of the Design-Build-Finance the Regional Express Rail - Kipling Bus Terminal Project.

PROJECT BACKGROUND

The Kipling Mobility Hub includes the area around the Kipling GO Station and the TTC's Kipling Subway Station. The redevelopment of this area will integrate TTC subway, GO regional rail and local and regional bus services (GO, TTC, MiWay) into a single mobility hub through a new inter-regional bus terminal and other supporting infrastructure.

RFP OPEN PERIOD

The RFP Open Period began when IO posted RFP 16-551 on MERX on April 3, 2017. The RFP solicitation period closed on October 12, 2017. IO received three responses before the submission deadline as stated in the RFP.

RFP EVALUATION PHASE

IO received three (3) responses by the closing date and time stated in the RFP. The Evaluation Committee followed the process outlined in the RFP for the evaluation of the submissions. The evaluation process followed seven (7) steps:

- Step 1 - Compliance of Technical Submissions
- Step 2 - Review of the Proposal Submission Form
- Step 3 – Review and Scoring of the Technical Submissions
- Step 4 – Compliance of Financial Submissions
- Step 5 – Review and Scoring of the Financial Submissions
- Step 6 – Establishing a Final Proposal Score
- Step 7 – Ranking the Proponents

It is our professional opinion that the Request for Proposal (RFQ # 16-55) process of the Design-Build-Finance Regional Express Rail – Kipling Bus Terminal Project Rail Grade Separation Project issued by Infrastructure Ontario and Lands Corporation that we observed was carried out in a fair, open and transparent manner.



Ian Brennan, CSCMP, Fairness Monitor



Infrastructure Ontario

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