

ONTARIO INFRASTRUCTURE AND
LANDS CORPORATION



Value for Money Assessment

Rutherford Station Project

March 2019

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I. EXECUTIVE SUMMARY

This report provides a summary of the procurement process for the Rutherford Station project and demonstrates how value for money was achieved by delivering the project using Infrastructure Ontario's (IO) Public-Private Partnerships 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.

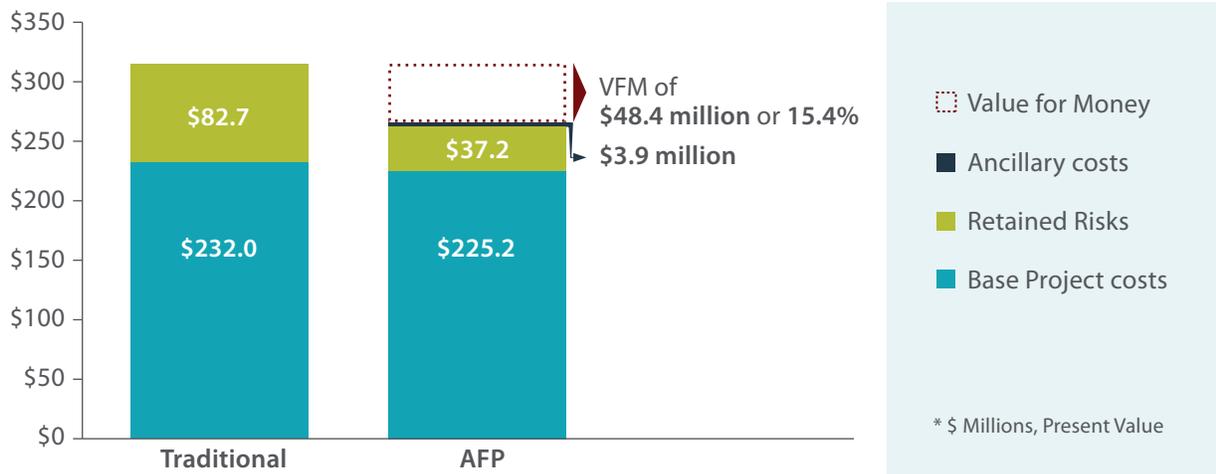
➤ Public-Private Partnerships in Ontario

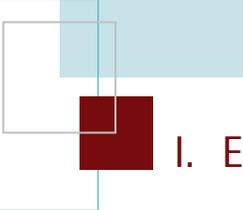
IO delivers public infrastructure projects using a project delivery model called Public-Private Partnerships (P3). The P3 model brings together private and public sector expertise in a unique structure that transfers to the private sector partner the risk of project cost increases and scheduling delays typically associated with traditional project delivery. The goal of the P3 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 a P3 project. The decision to proceed with a P3 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 P3 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 P3 relative to the traditional delivery model.

➤ Achieving Value for Money

The VFM assessment of the Rutherford Station project indicates an estimated cost savings of \$48.4 million or 15.4 percent (in present value terms) by using the P3 approach compared to traditional delivery.





I. EXECUTIVE SUMMARY

► External Review

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

- Deloitte was retained to complete the VFM assessment; and,
- P1 Consulting acted as the Fairness Monitor for the project.

II. PROJECT HIGHLIGHTS

➤ Rutherford Station Project



Courtesy of Metrolinx

Purpose	To deliver the Rutherford Station 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	\$239 million
Construction Period	Spring 2019 - 2023
Length of Project Agreement	5 years
Estimated Value for Money (Present Value)	\$48.4 million or 15.4 percent

➤ 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 Rutherford Station along the Barrie 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.

II. PROJECT HIGHLIGHTS

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:

- ▶ 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:

- ▶ New multi-level parking structure with integrated station building, and pedestrian bridge to new rail platform
- ▶ Re-design of surface parking, kiss and ride, bus loop and pedestrian access
- ▶ Rail/road grade separation on Rutherford Road, and pump station
- ▶ Pedestrian bridge over Rutherford Road
- ▶ New rail platforms
- ▶ A second heavy rail track and provision for future third express center track

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

- ▶ Design and Construct – lead the design and construction of the Rutherford Station project for completion in winter 2023;
- ▶ Finance – secure sufficient financing to fund 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 100 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 Rutherford Station project demonstrates a project costs savings of:

\$48.4 million or 15.4%

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 P3 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:

P3 Delivery

Estimated costs to the public sector of delivering the same project to the identical specifications using the P3 delivery model. Total risk-adjusted costs are known as P3 Costs.

$$\left\{ \text{Value for Money \$} = \text{PSC Costs} - \text{P3 Costs} \text{ or } \text{Value for Money \%} = \frac{(\text{PSC Costs} - \text{P3 Costs})}{\text{PSC Cost Costs}} \right\}$$

The difference between the total estimated PSC costs and the total estimated P3 costs is referred to as VFM. Positive VFM is demonstrated when the cost of delivery under P3 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)
 - ▼ 1.2. Financing Costs
- ▶ 2. P3 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 P3 Model			PSC – P3

Base costs include design and construction costs. 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 P3 models. These costs are then adjusted for:

- ▶ An innovation factor – the VFM methodology includes an innovation factor which recognizes that the base cost of the P3 model will be lower than the PSC model as a result of:
 - ▶ the use of performance based specifications in P3 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,
 - ▶ increased competitive environment on P3 projects which have resulted in cost reductions.

▼ 1.2. Financing Costs

Traditional Delivery Model (PSC)		P3 Delivery Model	
Financing Costs	Public sector notional financing costs	Financing Costs	Private sector financing costs
Estimated Savings / (Costs) from Financing under the P3 Model			PSC – P3

One of the common elements of the P3 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 P3 model, the government pays a portion of construction costs during construction as interim 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 paid earlier as compared to the P3 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 reflected in the discount rate used to assess and compare the project costs.

III. ACHIEVING VALUE FOR MONEY

- ▶ P3 Delivery Model – the private sector party borrows at private financing rates to pay for the 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 P3 model.

2. P3 Ancillary Costs

Traditional Delivery Model (PSC)		P3 Delivery Model	
P3 Ancillary Costs	N/A	P3 Ancillary Costs	P3 costs
Estimated Savings / (Costs) from Financing under the P3 Model		PSC – P3	

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 P3 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)		P3 Delivery Model	
Retained Risks	PSC costs	Retained Risks	P3 costs
Estimated Savings / (Costs) from Retained Risks under the P3 Model		PSC – P3	

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 P3 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 P3 model as “retained risks”. Risks retained under the P3 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:

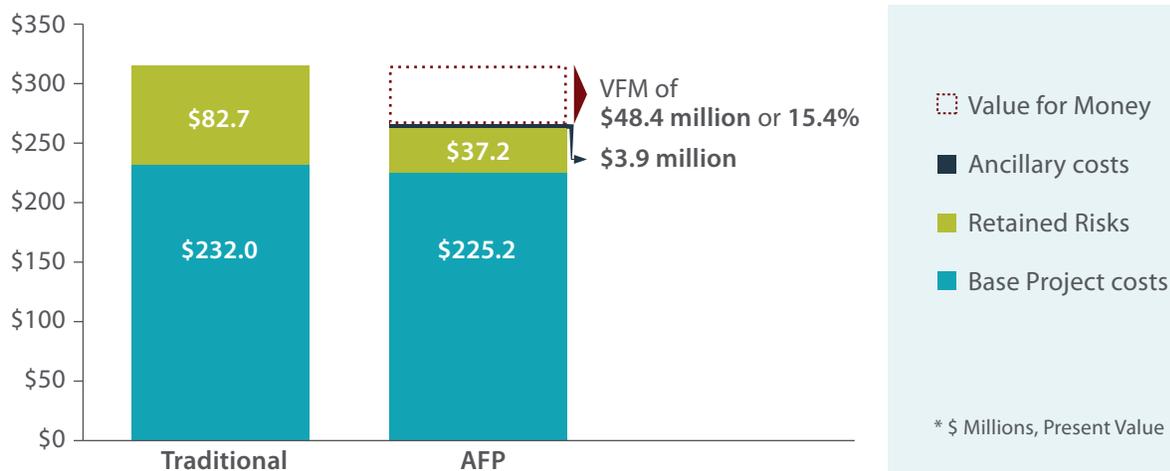
- ▶ Project Schedule – risk of a longer construction period and resulting in a higher total program cost.
- ▶ Scope Changes During Construction (directed by owner) – risk that the scope of work is changed by the owner during the construction.
- ▶ Due Diligence (by the owner in preparation of tender in 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.

III. ACHIEVING VALUE FOR MONEY

➤ Rutherford Station project Value for Money Results

The VFM assessment of the Rutherford Station project indicates an estimated cost savings of \$48.4 millions or 22 percent by using the P3 approach compared to traditional delivery.

Traditional Delivery Model (PSC)	\$ Millions, Present Value	P3 Delivery Model	\$ Millions, Present Value
I. Base Project Costs (Adjusted Base Costs + Financing)	\$232.0	I. Base Project Costs (Adjusted Base Costs + Financing)	\$225.2
II. P3 Ancillary Costs	N/A	II. P3 Ancillary Costs	\$3.9
III. Retained Risks	\$82.7	III. Retained Risks	\$37.2
Total	\$314.7	Total	\$266.3
Estimated Value for Money (cost difference)		\$48.4	
Estimated Percentage Savings		15.4%	



➤ External Review

Deloitte completed the VFM assessment for the project. Their assessment demonstrates projected cost savings of 15.4 percent by delivering the project using the P3 model versus what it would have cost to deliver the project using a traditional delivery model (see letter on page 14).

P1 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 15).

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 \$239 million fixed-price contract (includes inflation at contractually determined rate) to design, build and finance the Rutherford Station 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 2023. 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 2023.

V. COMPETITIVE SELECTION PROCESS

The procurement process for the Rutherford Station project, from RFQ to Financial Close, took 19 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 | May 2, 2017

- Metrolinx and IO issued a request for qualifications (RFQ) to solicit interested parties to design, build and finance the project.
- In June 2017, the RFQ period closed and the Sponsors received statements of qualifications from 6 teams.
- RFQ submissions were evaluated by IO and Metrolinx. High standards were set to ensure the shortlisted consortia exceeded the technical and financial standards required for this complex and large project. The evaluation process resulted in three proponents being shortlisted.

EllisDon Infrastructure Transit

- Constructor: EllisDon Civil Ltd.
- Design: Amec Foster Wheeler plc., Strasman Architects Inc., Mulvey & Banani International Inc., The Aquila Group, Condor Signals & Communications Inc.
- Financial Advisor: EllisDon Capital Inc

Steelhead

- Constructor: Aecon Infrastructure Management Inc., Dufferin Construction Company, Pomerleau
- Design: AECOM
- Financial Advisor: Scotiabank

Link Rutherford Station

- Constructor: Dragados Canada, Inc., Brennan Infrastructures Inc., BoT Construction Group Ltd., Black & McDonald Limited
- Design: Mott MacDonald, Morrison Hershfield
- Financial Advisor: ACS Infrastructure Canada Inc., Stonebridge Financial Corporation

ii. Request for Proposals | November 21, 2017

- A request for proposals (RFP) was issued to the shortlisted proponents, setting out the bid process and proposed project agreement for the project.
- The proponents had 9 months to prepare high-quality, competitive submissions.

iii. Proposal Submission | August 2, 2018

- The RFP period closed on August 2, 2018. All proponents submitted bids on time.
- August 9 – September 5, 2018: 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

V. COMPETITIVE SELECTION PROCESS

enlisted by the Sponsors. The extensive evaluation process resulted in EllisDon Infrastructure Transit receiving the highest score.

- ▶ In October 2018, 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 | November 8, 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 | December 13, 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 December 13, 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.

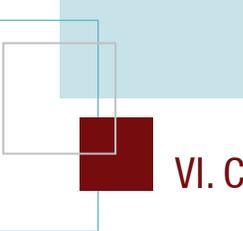
▶ Construction and Maintenance Phases

vi. Construction Phase | December 2018 to 2023

- ▶ The design phase began in December 2018, with construction to commencing in spring 2019 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 2023.



VI. CONCLUSION

This report provides a project overview and summary of the procurement process for the Rutherford Station project, and demonstrates that a VFM of \$48.4 million or 15.4 percent will be achieved by using the P3 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 Rutherford Station project.

March 22, 2019

Private and confidential

John Traianopoulos
Senior Vice President, Transaction Finance
Infrastructure Ontario
777 Bay Street, 9th Floor
Toronto M5G 2C8
Canada

Dear Ms. Traianopoulos,

Subject: Financial Close Value for Money Analysis – Rutherford Station DBF

Deloitte LLP ("Deloitte") has prepared the Financial Close stage Value for Money Analysis ("VFM") assessment for the **Rutherford Station – Design Build Finance** 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 Adjusted Shadow Bid.

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

1. A Base Risk Matrix developed for IO by MMM Group and adapted to reflect the Project specific risks;
2. Cost and other input assumptions developed by IO and its external advisors; and
3. 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 15.4% or \$48.4 million in comparison to the traditional delivery approach.

Sincerely,



Deloitte LLP

February 12th, 2019

Mr. Michael Inch
Vice President, Procurement
Infrastructure Ontario
777 Bay, 9th Floor
Toronto, Ontario, M5G 2C8

Subject: Fairness Attestation - Request for Proposal to Design-Build-Finance Regional Express Rail – Rutherford Station Project (RFP No. 17-017)

Dear Mr. Inch:

P1-Consulting acted as the Fairness Monitor to review and monitor the communications, evaluations and decision-making processes associated with the procurement process for the **Request for Proposal to Design-Build-Finance the Regional Express Rail – Rutherford Station Project (the “Project”)** in terms of ensuring fairness, equity, objectivity, transparency and adequate documentation of the evaluation process.

The Metrolinx RER Program is part of The Big Move, which was announced by the Province of Ontario in 2014. The Big Move is a 25-year integrated land use and transportation plan which will increase the frequency and number of GO Trains across its rail network over the next decade, including two-way, all-day train service on most of the rail lines which Metrolinx owns. The Rutherford GO Station Project is to be delivered under the Design-Build-Finance model to expand parking and rail corridor infrastructure as required for the RER Program. The Rutherford Road grade separation will improve capacity, safety, network connectivity, and mobility of pedestrians, cyclists, transit users and motorists along the Rutherford Road corridor.

In our role as Fairness Monitor, P1 Consulting confirmed that the following steps were taken to ensure a fair and transparent process:

- Clarity and consistency of the RFP, evaluation framework and related documentation;
- Adherence to the processes described in the RFP and evaluation framework, including the evaluation process;
- Objectivity and diligence during the procurement process in order to ensure that it was conducted in a transparent manner;
- Compliance of participants with strict requirements of conflict of interest and confidentiality during the procurement and evaluation processes;
- Security of information;
- Oversight to provide a process where the Applicants are treated fairly.

The Fairness Monitor actively participated in the following steps in the process to ensure that fairness was maintained throughout:

P1 Consulting Inc.



Mr. Inch
February 12th, 2019
Page 2 of 2



- Review of the draft RFP and related documentation;
- Review of the Evaluation Framework;
- Review of the Submission receipt of process; and
- Monitoring the proposal evaluation and the selection of the First Negotiations Proponent

As the Fairness Monitor for the **Request for Proposal to Design-Build-Finance the Regional Express Rail - Rutherford Station Project**, we certify that, up until selection of the First Negotiations Proponent, the principles of fairness, consistency and transparency have been, in our opinion, maintained throughout the procurement process. Furthermore, no issues have emerged during the procurement process, of which we were aware, that would have impaired the fairness of this initiative.

Yours truly,

A handwritten signature in black ink, appearing to read "Stephanie Braithwaite". The signature is written in a cursive, flowing style.

Stephanie Braithwaite,
Fairness Monitor, P1 Consulting

cc: Jill Newsome, Vice President, P1 Consulting
Louise Panneton, President, P1 Consulting



Infrastructure Ontario

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