

Winnipeg's Southwest Transitway – Navigating the P3 Procurement Process

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## Abstract

Stage 1 of the Southwest Transitway, the initial phase of the City of Winnipeg's rapid transit network, opened for service in April 2012 providing fast, frequent, reliable service without transfer for most passengers travelling between the southwest part of the City and downtown. The City's next rapid transit project, Stage 2 of the Southwest Transitway, will extend the transitway southerly to the University of Manitoba. The Southwest Rapid Transitway (Stage 2) and Pembina Highway Underpass Project (SWT2) includes the construction of 7.6 km of exclusive transitway runningway and active transportation paths; six transitway and three rail structures; a noise attenuation wall; two land drainage pump stations; eight rapid transit stations; park and ride facilities; extensive utility and rail relocation works; and reconstruction and widening of the Pembina Highway Underpass.

Advancing SWT2 from functional design to construction required the collaboration of engineering specialists, procurement lawyers, and financial advisors. This paper focuses on the engineering aspect of 1) the preparation of the business case and value for money assessment (VFM) for a PPP Canada funding application; 2) preparation and evaluation of the request for qualification (RFQ); 3) preparation and evaluation of the Request for Proposal (RFP), and 4) finalization of the project agreement (PA) for SWT2.

The business case and VFM assessment compared a Design, Build, Finance, (operate), and Maintain (P3) procurement against a traditional Design-Bid-Build approach. The engineering aspect for this process included preparation of detailed capital cost estimates. Due to the nature of SWT2, PPP Canada's Schematic Estimate Guide was not directly applicable (typically used for vertical infrastructure) so a modified costing format was developed.

Following confirmation of the P3 procurement method and project funding, an RFQ was issued that pre-qualified three Proponents. The RFP issued to the Proponents was separated into two main parts: 1) RFP (bidding instructions); and 2) PA (project contract) that detailed the terms of the project delivery. Engineering services provided during the RFP open period included Proponent requests for information, participation in commercially confidential design meetings, modifying the PA to facilitate Proponent innovations, and assistance in the evaluation of technical submissions.

The Government of Canada is contributing up to \$91.2 million through the PPP Canada Fund while the Province of Manitoba and City of Winnipeg will contribute the balance of the Project costs. At a cost estimate of \$467.3 million, this is the largest infrastructure investment undertaken by the City of Winnipeg to date.

## 1.0 PROJECT BACKGROUND AND SCOPE

### 1.1 Project Background

Since the 1970's, the City of Winnipeg (City) has identified the need for rapid transit infrastructure to support the City's long-term growth objectives. This need has been articulated most recently in *OurWinnipeg*, the City's strategic plan, and its Transportation Master Plan. The benefits delivered by a rapid transit system are becoming increasingly important as the City plans for the growth of its population to approximately one million residents by 2031. With consideration to important service and productivity advantages stemming from previous studies conducted, a bus rapid transit (BRT) system is considered to provide the optimal transit solution for Winnipeg. Based on the expected growth in population and corresponding congestion levels, the City's highest priority BRT project is the Southwest Corridor that connects the downtown with the rapidly growing southwest sector and the University of Manitoba.

Stage 1 of the Southwest Rapid Transit Corridor, the initial phase of Winnipeg's rapid transit network (3.6 kilometres in length, located between downtown and Pembina Highway and Jubilee Avenue) opened for service in April 2012 and is being used by a BRT network of 13 routes, providing fast, frequent, reliable service throughout the day on all days of the week. Rapid transit routes access the Stage 1 transitway at four locations to provide trips (without transfers) for passengers travelling between the southwest part of the City and downtown.

Stage 2 of the transitway includes a 7.6 kilometre southerly extension of the existing infrastructure of Stage 1 from Pembina Highway and Jubilee Avenue to the University of Manitoba on an exclusive transitway constructed within existing Manitoba Hydro and CN Rail rights-of-way. The alignment depicted below allows buses direct access to various neighbourhoods at intermediate points along the transitway, thereby providing the ability to more effectively and efficiently serve the travel needs of those who live, work, and study in the southwest quadrant of the City.

Figure 1: Alignment Overview of Southwest Transitway



## 1.2 Project Scope

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The functional design process, completed in 2013/2014, required critical integration and collaboration on a number of levels. The transitway had to be designed to accommodate the part of rapid transit service that operates off the transitway, which necessitates integration with Transit operational requirements. This includes such facilities as transit priority measures, park and ride facilities, bus staging areas, and loops. Because rapid transit vehicles can operate on and off the transitway and because the transitway will have some at-grade intersections, the functional design provided for effective integration with the street system at several locations. New AT facilities along the transitway also had to integrate effectively with the existing AT network.

Located in major railway and utility corridors, arguably one of the more critical aspects of SWT2 is the alignment. As part of the public engagement process undertaken during the functional design for the Project, affected property owners were made aware of the City's land and land interest requirements. The three property owners impacted most (Manitoba Hydro, CN, and University of Manitoba) were consulted at length to identify: 1) a mutually acceptable route for the transitway; and 2) construction limitations and restrictions. Based on the parameters ascertained during this process, the functional design established the property purchases necessary to construct Stage 2 and determined the following infrastructure elements were required:

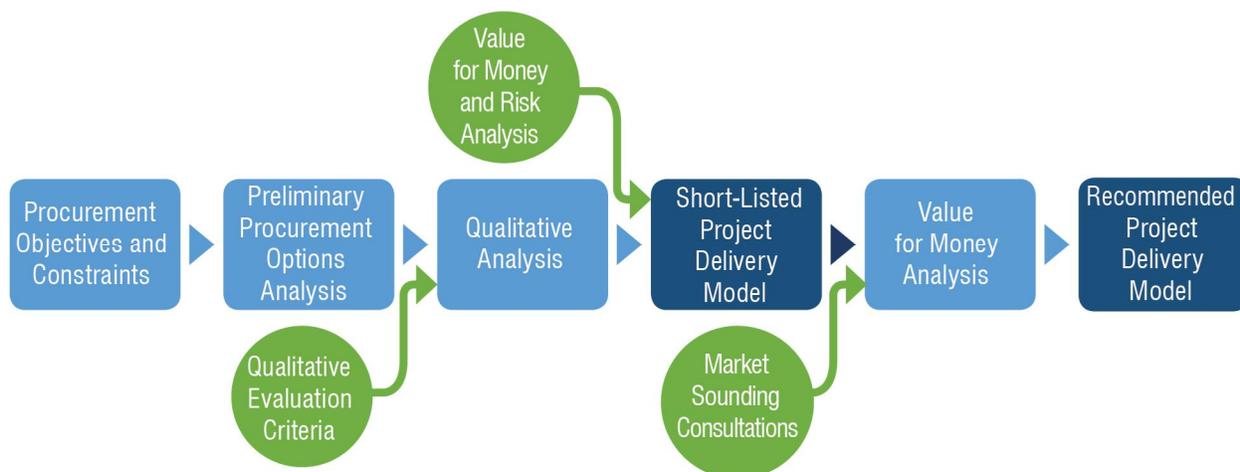
- Approximately 7.6 km of runningway to extend the transitway from the Stage 1 termination point to Markham Road and to the University of Manitoba, including roadway connections between the transitway and the street system;
- Eight modern transit stations including a new, special-purpose event day transit station at Investors Group Field to accommodate buses serving major events at the stadium;
- Two new stops and upgrades to existing stops within the University of Manitoba;
- Widening of Pembina Highway through the Jubilee Underpass including an upgraded land drainage system;
- Construction of six new transitway and three new rail structures;
- Construction of new park-and-ride facilities in close proximity to two of the transit stations;
- Transit signal priority system;
- A new active transportation path along the transitway with full integration of cycling facilities at the stations; and
- Integration of public art.

## 2.0 BUSINESS CASE

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Given the City's future strategic direction for transit and transportation projects, a P3 approach was considered to provide the City with cost and schedule certainty realized in part through the transfer of design, construction, and maintenance risks while appealing to those private sector partners with the experience and expertise to undertake a project of this size and scope. In order to determine if a P3 approach was viable, a Business Case was required. Below is a schematic representation of the Business Case process.

Figure 2: Project Delivery Option Assessment Process



A transaction / financial advisor developed a Business Case on the City's behalf to submit to PPP Canada to identify the feasible P3 options (i.e. procurement and project delivery method) eligible for PPP Canada funding support and determine the P3 option that broadly met the City's key objectives and constraints while providing the highest value for money (VFM).

Based on the qualitative analysis and the information gathered through market consultations, a DBFM model was selected as the short-listed project delivery method for the Project. Under the DBFM model, the private partner will take responsibility for the design, construction, and maintenance of the infrastructure for a 30-year term. During construction, no payments are made until substantial completion of the project, requiring the private partner to obtain financing for construction costs. At substantial completion, 60% of the payment is made to the private partner. Following substantial completion, the remaining 40% of the funds are then paid to the private partner over the 30-year maintenance period as part of an annual fee (i.e. the "F" within the DBFM).

The final step in the Business Case assessment process was to demonstrate feasibility of using the short-listed P3 option (referred to in the industry as the shadow bid, i.e. DBFM model) as opposed to a "traditional" procurement method (referred to in the industry as the public sector comparator, i.e. Design-Bid-Build (DBB)). Dillon aided in the VFM analysis by identifying risks and estimating the construction, operating and lifecycle cost inputs over the 30-year term.

The VFM analysis compared the Net Present Value (NPV) of the risk-adjusted costs of the DBFM against that of a DBB. The premise is that by including the cost of all risks to the City, a fulsome risk-adjusted cost comparison of the DBFM and DBB can be completed. The purpose of the VFM analysis is therefore to quantify the estimated amount, if any, by which the NPV of the risk-adjusted costs of the Project when delivered as a DBFM is lower than delivery under a DBB.

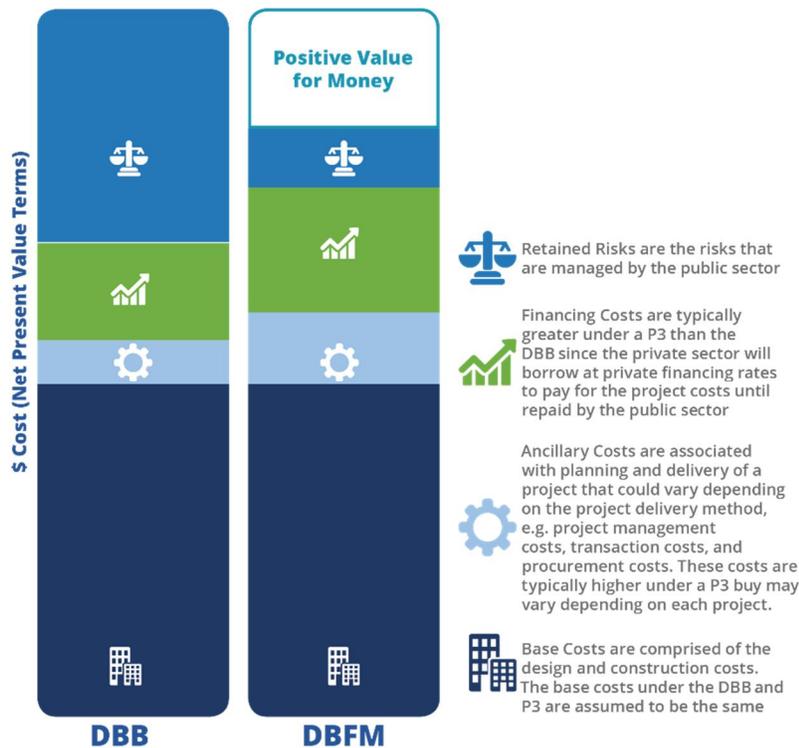
The financial model utilized common assumptions of the construction, maintenance and lifecycle base costs for the DBFM and the DBB models. The costing inputs were provided by Dillon and were completed within +/- 15% in accordance with PPP Canada's Schematic Estimate Guide. At the time, PPP Canada had recently introduced their Schematic Estimate Guide, which utilizes the UNIFORMATT II classification system for cost estimating and cost-benefit analysis. UNIFORMATT II is a format for classifying building elements and related site work. The purpose of UNIFORMATT II is to ensure

consistency in the economic evaluation of building projects over time and from project to project, and to enhance project management and reporting at all stages of the building life cycle.

PPP Canada’s Schematic Estimate Guide was not directly applicable to SWT2, a linear rather than vertical infrastructure project, so Dillon developed a modification to the UNIFORMAT II format in order to apply it to the Project. The City also contracted an independent third party to complete a cost-benefit analysis based on traditional industry accepted methodology utilizing software called TransDEC, a transit investment decision-support tool adopted by Transport Canada, to verify the UNIFORMAT II results. The independent third party cost-benefit analysis results provided additional assurances regarding the accuracies of the modified UNIFORMAT II cost-benefit analysis completed by Dillon.

The VFM analysis confirmed that a DBFM project delivery model would provide positive value for money, achieved through an appropriate transfer of risk from the City to the private partner throughout the Project lifecycle.

Figure 3: VFM - Comparison between DBB and DBFM Delivery Model



Prior to issuing the RFQ, the P3 procurement model was altered to include operational aspects of the infrastructure, thus changing to a DBF(O)M. This included regular summer and winter maintenance of: 1) the new SWT2 infrastructure, 2) existing Southwest Transitway Stage 1 infrastructure, and 3) the Pembina Highway roadworks. For clarity, SWT2 does not include any operations or maintenance of the Winnipeg Transit bus fleet and the City retained responsibility for periodic major and lifecycle maintenance for the Southwest Transitway Stage 1 works.

### 3.0 PROCUREMENT

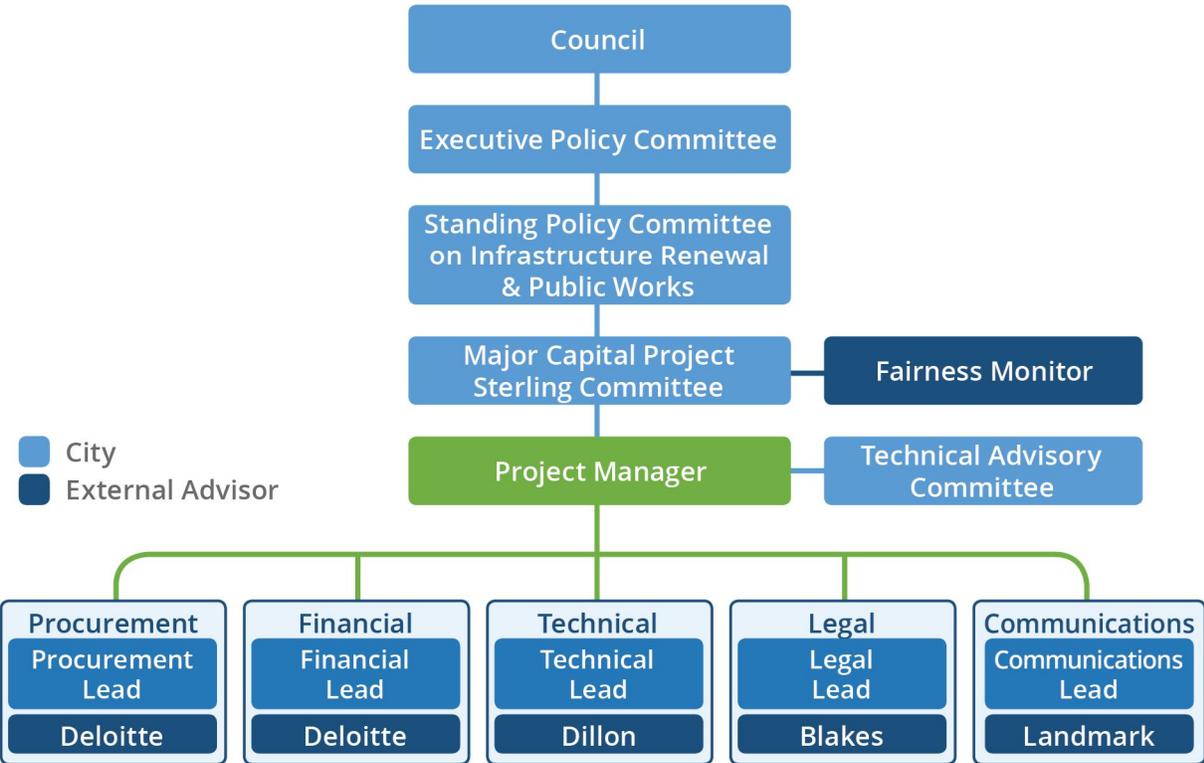
#### 3.1 Project Governance

A governance model was deployed by the City to manage procurement, undertake appropriate due diligence, and execute decisions. A set of external advisors with expertise in P3 projects was also engaged to support the City through the procurement process. There were three essential types of advisors required to support the delivery of the Project: 1) transaction / financial; 2) legal; and 3) technical. Each of these advisors played an important role in supporting the development and execution of the procurement process (RFQ and RFP) and supporting the City in negotiating the final project agreement with the selected Proponent.

In addition, a “Fairness Monitor” was retained to perform fairness monitoring services and provide independent assurance to the City as to the fairness and appropriateness of specific project management activities related to the P3 procurement process.

The figure below identifies the key parties comprising the governance structure.

Figure 4: Project Governance Structure



#### 3.2 The Procurement Process

The City adopted a two-stage procurement strategy comprising a RFQ phase to short-list three qualified consortia followed by a RFP to select the Preferred Proponent that offered best value to the City. This two-stage approach is considered to be the market standard in the Canadian P3 market for DBF(O)M transactions and the City followed the Province of Manitoba’s *Public-Private Partnerships Transparency and Accountability Act* to ensure an accessible, fair and competitive environment was in place governing

both these procurements. The figure below shows the work flow of the procurement process:

Figure 5: Stages of the P3 Procurement Process



## 4.0 REQUEST FOR QUALIFICATION

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The RFQ was issued in the early stage of the procurement process to pre-qualify bidders based on their experience in design, construction, operations and maintenance of similar projects, as well as their capacity to finance and undertake the Project. The Project objectives identified by the City in the RFQ included the following:

- (a) Conduct a fair, competitive selection process for award of a DBF(O)M Agreement which appropriately allocates risks and rewards between the City and the successful Proponent;
- (b) Complete construction of the Project in the most efficient time frame with the least possible disruption to affected businesses, the travelling public and residents;
- (c) Obtain financial terms from the successful Proponent that provide the best value possible for public money to be invested in the Project;
- (d) Ensure that the Project is designed, built, (operated), and maintained in a sustainable manner that complies with all regulatory requirements, ensures the safety and the convenience of motorists, transit users, cyclists and pedestrians alike; and
- (e) Ensure that the assets are handed back to the City at the end of the maintenance term in accordance with the hand back requirements set out in the DBF(O)M Agreement.

We worked collaboratively with the City to develop the RFQ and provide general procurement advice as subject matter experts including:

- Providing a baseline of technical requirements to ensure that bidders had the qualifications to undertake the Project; and
- Developing criteria with an appropriate weighting of technical criteria in line with the City's objectives for the Project and preparing an evaluation framework to guide the scoring of the RFQ responses.

The Fairness Monitor received, reviewed and approved from a fairness perspective, copies of the draft and final RFQ prior to their release. A Proponents' conference was held shortly after the release of the RFQ to present an overview of the Project and to respond to questions and comments regarding the RFQ and the Project. The information presented and responses to Proponent questions provided by the City during the Proponents' Conference were also posted on the City's website. Following the conference, Proponents were instructed to submit all requests for information (RFIs) to the City's Contract Administrator; a total of 28 RFIs were received and all RFIs and the associated responses

(without identifying the Proponent that submitted the RFI) were posted on the City's website. All RFI responses were reviewed and approved by the Fairness Monitor prior to being issued.

Proponents were directed to organize their RFQ submission by team component – Proponent, Design, Construction, Maintenance, and Financing – and provide additional information related to team composition and structure; approach; experience; key individuals; and financial capacity. A total of five RFQ submissions were received and were evaluated in a five step process:

- Step 1: Confirmation that submissions were substantially complete;
- Step 2: Evaluation, scoring and ranking by the technical and financial teams in accordance with the evaluation categories;
- Step 3: At the City's sole discretion, interviewing of any or all Proponents to provide clarification information in relation to one or more submissions;
- Step 4: Presentation of the evaluations and ranking results from Steps 1 to 3 to the Standing Policy Committee on Infrastructure Renewal and Public Works and Major Capital Project Steering Committee; and
- Step 5: Contacting all Proponents to inform them whether or not they were prequalified for the RFP.

All RFQ evaluation participants attended evaluator orientation training sessions prior to participating in the evaluation process, which the Fairness Monitor also attended. Originally scheduled for 3.5 months, the prequalification stage took approximately 5 months from the time the RFQ was issued to qualify three bidders to advance to the RFP process. The schedule delay was due to ensuring that internal City procedural requirements, including fairness monitoring, were fully achieved.

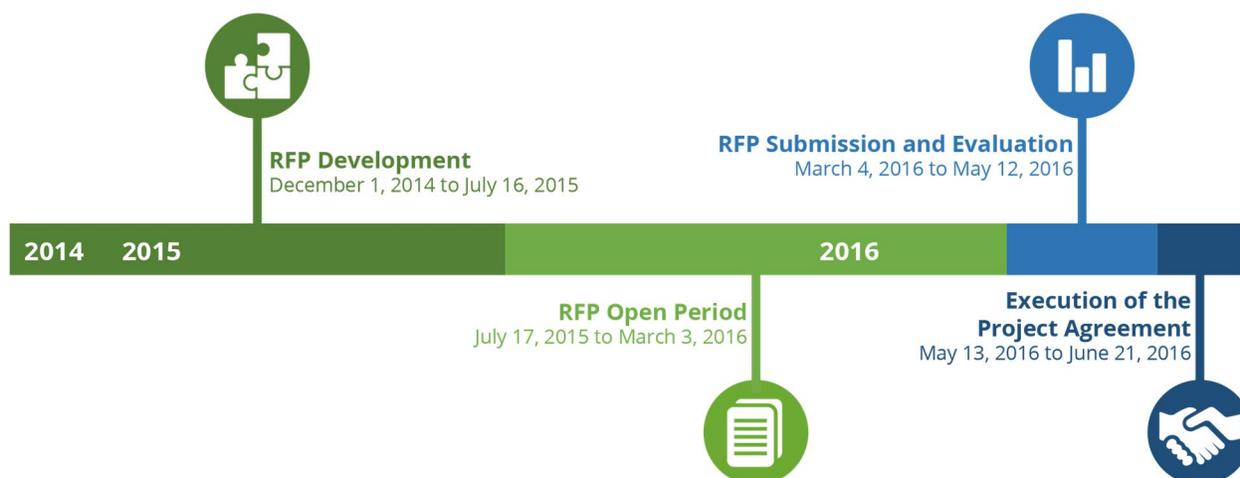
## 5.0 REQUEST FOR PROPOSAL

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The RFP development was a significantly more detailed process than the RFQ and took approximately 6 months to draft and issue the first version, which required a concerted effort by all Project Governance Team members to achieve. During the "RFP Open Period", Proponents clarified RFP/PA requirements through RFIs and commercial confidential meetings, and sought feedback on the development of their designs at various stages. The RFP required the three short-listed Proponents to submit a Proposal on how they would deliver the Project to the specifications described in the procurement documents. The Proponents were also required to submit a financial model that demonstrated their financing plan was well developed and robust with sufficient support from lenders and equity investors to satisfy the City.

The RFP was separated into two main parts: 1) the RFP (bidding instructions); and 2) the Project Agreement (project contract) which detailed the terms of the project delivery. Proposal submissions were scored and ranked in an RFP evaluation framework established by the external financial advisors. Once a "Preferred Proponent" was identified, the terms of the contract were finalized and signed. The figure below illustrates the timeline from RFP Development to execution of the Project Agreement (PA).

Figure 6: RFP Timeline



## 5.1 RFP Development

As the external technical advisors, our role in the development of the RFP/PA included:

- Providing input to the City's Project Manager and legal advisor in the approach and structuring of the PA. Note that various advisors led responsibility on specific sections of the PA, with the legal advisor being the lead responsible party along with the City's legal team in the overall development of the PA;
- Providing input in the development of the RFP Data Sheet providing background information on the Project, processes and timeframes;
- Providing advice on identifying an affordability cap and development of a de-scope ladder;
- Writing the Technical Requirements to address management (quality, safety, construction, commissioning, etc.), design and construction, performance, maintenance, and handback requirements, which also involved:
  - Extensive consultation with internal City departments and stakeholders to confirm technical requirements to be included in the PA; and
  - For areas or components of the Project that were not included within the scope of the functional design, required additional clarification, or from discussions with key stakeholders, furthering the design to allow Proponents to adequately assess and include within their bid.
- Providing advice on the RFP development and issues related to submission requirements and evaluation criteria based on best practices in P3 procurement from other jurisdictions (e.g., mix of technical versus financial criteria weights); and
- Documentation of lands available for construction and 30-year maintenance period as well as access restrictions.

The figure below illustrates the RFP and PA structure. The Schedules and documents developed by Dillon specifically for the RFP/PA are noted in dark blue. The documents that required our involvement for their preparation are noted in light blue.

Figure 7: Outline of RFP and PA Documents



The majority of our efforts during the RFP development process was the development of the Technical Requirements (Schedule 18 of the PA). When we began developing the Technical Requirements, it was assumed a template would be utilized that was similar to past P3 projects undertaken by the City. The external legal advisors reviewed the City's existing RFP and PA templates; conducted a national survey of what documents and forms of agreement were being utilized for RFP's and DBF(O)M's in recent P3 projects; and recommended changes to the City's RFP template and DBF(O)M template to maximize business efficiencies for the Project and to bring each document in line with best practices. Ultimately this meant significant portions of the new RFP and PA template had to be developed. The most significant changes were the Technical Requirements and were drafted by Dillon.

The primary challenge during the development of the Technical Requirements was to avoid being too prescriptive, which could limit innovation by the Proponents. The benefit of performance based requirements is that Proponents are able to leverage their private sector experience to provide more efficient designs and construction methods. However, this needed to be balanced with minimum technical criteria for the Project components. By the very nature of P3's, Proponents are expected to find efficiencies; if there is a technical requirement for the Project, it is important that it is formalized within the PA, otherwise Proponents cannot be expected to include the requirement within their bid as it would affect their competitiveness.

Another key challenge revolved around what was considered minimum technical criteria. Many of the key stakeholders (primarily the City Departments) had a number of design and construction standards, manuals, and guidelines as well as numerous best practices that had not been codified. From a fairness perspective, it was important to ensure that all Proponents had the same information. Not all Proponents or their members within their consortiums are based in the Winnipeg market and cannot be expected to know the unwritten requirements of various stakeholders. Similarly, Proponents with local presence could not be penalized for being aware of these expectations. Therefore it was critical that if a stakeholder wanted a Proponent held to a given requirement, it was adequately reflected within the PA.

Through ongoing discussions with these City Departments, Dillon was responsible to include the key requirements with respect to safety, functionality/serviceability, durability/maintainability, accessibility design, and aesthetics, while at the same time assessing if the PA was excessively prescriptive for that specific component. The external legal advisor also regularly provided guidance on the performance/prescriptive direction of the PA based on their experience in other recent P3's. This continued to be a challenge throughout the RFP development but in many instances led to a stakeholder having to justify their requirements and "this is the way it has always been done" was not accepted. Ultimately, this process led to a more refined PA with potentially unnecessary requirements eliminated from the Proponents' bids.

In the development of the Technical Requirements, there was an inherent bias in the PA to the configurations selected in the functional design. It was assumed there was limited ability for innovation, with respect to the major structural and transit components, due to the limited land available to site these components without unduly affecting the adjacent stakeholders (primarily Manitoba Hydro and CN) and their long term operations. This was further complicated by rigid technical requirements from the adjacent stakeholders. Significant property acquisitions were required to facilitate construction of the Project and due to the time required to execute these land agreements, there was limited ability to obtain additional lands for the Project. Given these requirements, the PA was written as "open" as possible to permit whatever innovations would be possible within the limited lands and rigid technical requirements of adjacent stakeholders.

While the Technical Requirements were primarily technical in nature, the Technical Requirements Schedule also included requirements for the management systems of the Proponents. Requirements for team structure and key roles within the Proponent teams; risk management; construction management; and management of quality, environmental, and safety systems were included. It was anticipated that the majority of the efficiencies realized for this Project would be through effective management and “means and methods” and accordingly the management sections of the PA were written entirely with a performance based approach to assist in realizing these management efficiencies.

Following a rigorous review process by key stakeholders and the Project Team, the Technical Requirements (Schedule 18 of the PA) were compiled along with the other RFP/PA Schedules and issued to the Proponents for development of their Proposals.

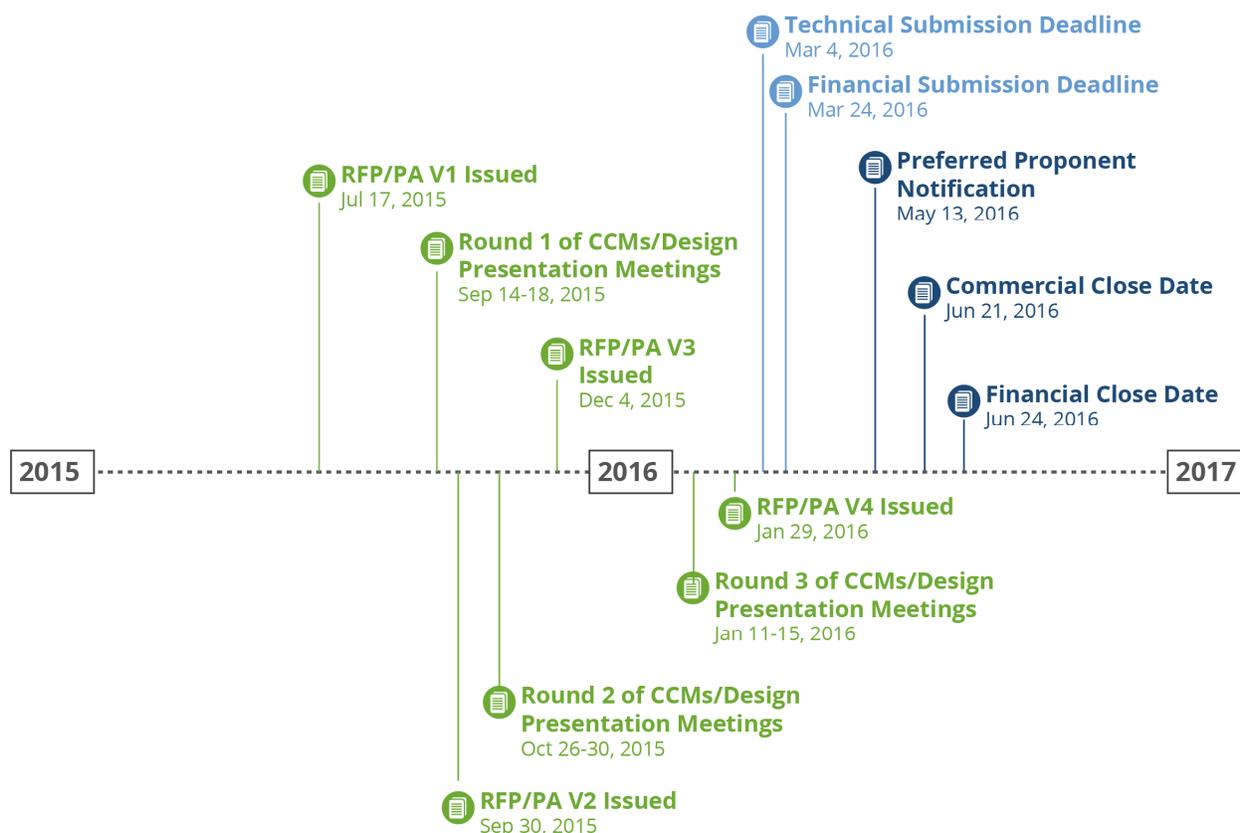
Prior to the release of the RFP/PA documents to the three pre-qualified bidders in July 2015, the Fairness Monitor reviewed and approved the release of the documents from a fairness perspective and PPP Canada reviewed to confirm alignment of the document with their requirements.

## 5.2 RFP Open Period

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The RFP Open Period refers to the time between when the RFP was issued and when the Proponents submitted their Proposals to the City. This time allowed Proponents to review relevant documentation, clarify information, conduct additional investigations, meet with the City to review proposed designs, and develop their Proposal submission. During the RFP Open Period the Project Team answered Proponent questions, conducted CCM meetings, met with stakeholders, provided additional information requested by Proponents, and refined the RFP/PA documents through addenda and by issuing several updated RFP/PA versions. The figure below illustrates the timeline from the initial RFP/PA posting to contract execution with the Preferred Proponent.

Figure 8: Timeline of RFP Open Period

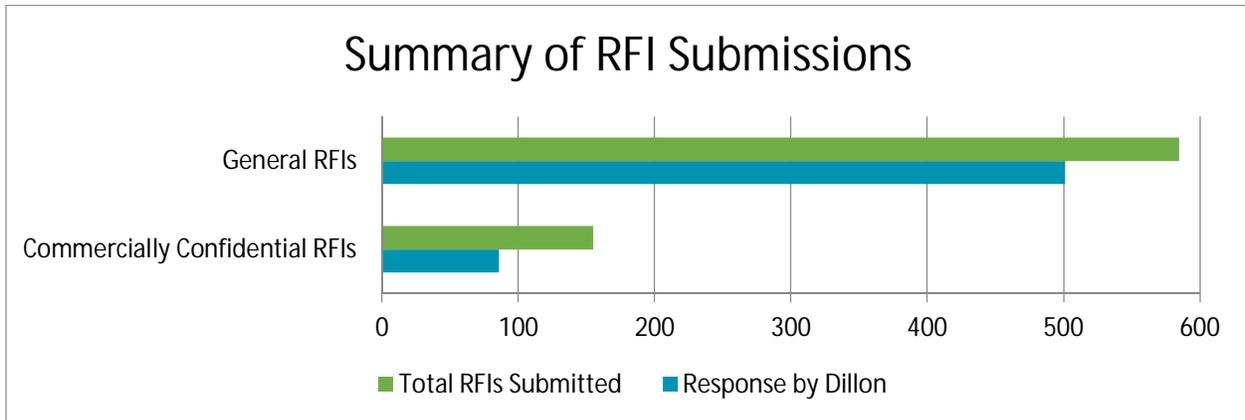


The City implemented a secure electronic Data Room to store the RFP/PA information, accessible to the City's external advisors, and granted access to the three Proponents when the RFP was issued. Aside from the RFP/PA documents, the City also provided extensive background information (geotechnical information, as-built drawings for existing structures, environmental investigations, utility records, survey information, land drainage information, and preliminary cost estimates). The background information was provided for reference and was not a legally binding requirement of the RFP/PA.

Each Proponent was also provided a separate Data Room to send/receive information that was only accessible by City personnel. All questions and other communications regarding the RFP documents and the RFP process had to be submitted via a written RFI through the Proponent's individual Data Room and categorized as either "General" or "Commercially Confidential". To maintain fairness and confidentiality, City personnel then stripped the RFI of all identifiers and issued to the appropriate external advisor (financial, legal, or technical) to prepare a response. General RFI responses were posted in the Data Room for all Proponents to review. If the City agreed that an RFI was Commercially Confidential, the response was issued back to the enquiring Proponent only. The RFI process was a necessary yet onerous task as it gave Proponents an opportunity to clarify the intent of RFP/PA documents, proposed scope of work, and associated bidding requirements. The RFI process worked to the City's advantage as Proponents were able to clarify numerous PA requirements in order to avoid having to include excessive contingencies and these savings were passed to the City.

During the RFP Open Period, Proponents were prohibited from directly contacting key stakeholders including the majority of internal City departments. This insulated these groups from a barrage of requests from multiple sources, provided a consistent message to all Proponents, and ensured any necessary changes to the RFP/PA were made with transparency and accountability. As a result, Dillon fielded all technical RFIs and engaged the key stakeholders as necessary. While some RFIs were of a financial or commercial nature, the majority were technical. The following figure depicts the magnitude of RFIs during the RFP Open Period.

Figure 9: Summary of RFI Submissions



During the RFP Open Period, a design consultation process was undertaken that consisted of a series of Commercially Confidential Meetings (CCMs) focused on assisting Proponents in developing designs that were compliant with the PA. The meetings allowed the Proponent to present their technical submission in its development stage in order to demonstrate its compliance. Proponents had the opportunity to raise questions with regard to the Technical Requirements set out in the PA that were relevant to the development of their technical submission. Formal feedback on compliance with the Technical Requirements of each Proponents proposed design was provided following each of the CCM's.

The design consultation process involved representatives and advisors of the City and other key stakeholders. Given that the RFP prohibited Proponents from contacting many of these key stakeholders, the CCMs provided a valuable opportunity for Proponents to engage these stakeholders directly. Additionally, several ad hoc CCMs were held at the Proponents' request with a number of these key stakeholders to discuss design options and obtain feedback.

As discussed in the RFP development, it was envisioned there was limited options for major innovation due to the relatively small footprint available and rigid technical requirements of the key stakeholders. It was assumed that opportunities for innovation pertained primarily to management efficiencies and "means and methods". Innovation and alternative approaches to balancing construction and lifecycle costs were also anticipated. While these innovations were certainly realized, there were several innovations not anticipated that had significant impacts on reducing the Project's bottom line. Additionally, there were a number of alternate configurations that were assessed and deemed not feasible during the functional design process, primarily due to restrictions placed by key stakeholders, but after further review and negotiations directly between the Proponent and the stakeholder, certain restrictions were relaxed and several innovations were realized.

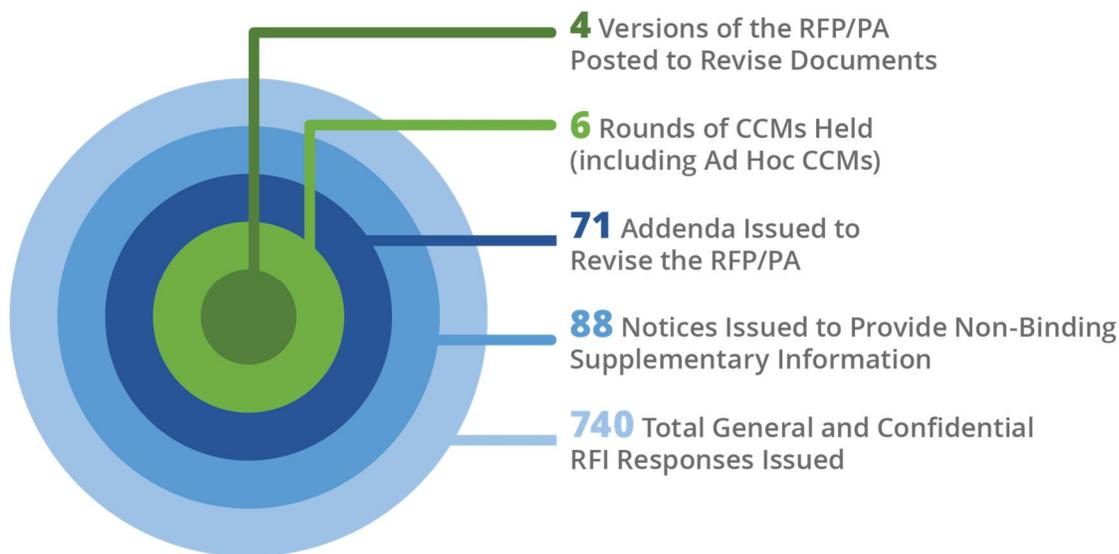
There was clearly a benefit to private sector experience as there were four major configurational changes that resulted in significant savings to the City including:

1. Eliminating the replacement of a major combined sewer line at one of the underpass locations. The clay tile combined sewer was deemed to be in sufficient condition to be permitted to stay in place for future usage. To facilitate leaving the relatively shallow pipe in place, the required clearances for the underpass needed to be achieved through raising of the rail track, which required modifications to ensure the rail design requirements (gradients and associated curvatures) were achieved. The Rail owner was accepting of this design and the changes to the surrounding rail infrastructure;
2. Modifying the structural configuration at a rail crossing from a tunnel to an overpass. During the functional design process, an overpass was not recommended due to the proximity of high voltage overhead power lines. However, during the RFP Open Period Proponents were able to negotiate the commercial terms with the utility agency to facilitate modifications to the towers (existing and future) that would permit an overpass configuration;
3. Eliminating the need to relocate/demolish an existing railway bridge. The transitway and AT path needed to cross over an existing underpass in the vicinity of an existing railway bridge, which required that the existing railway bridge be demolished and a new railway bridge be built in an alternate location. Alternatively, a Proponent designed two separate bridge structures on either side of the existing rail structure (one for transitway, one for AT path) that fit within the available footprint; and
4. Significant reduction of rail track relocations. Approximately 1 km of permanent and 1.5 km of temporary rail relocations were eliminated through the changes noted in Items 2. and 3.

Following the review of the design information submitted at the CCMs, the Technical Requirements had to be amended to allow for the innovations or further clarify the restrictions/requirements if the changes were not permitted. It was critical that changes to the PA were done in such a way that the innovation or other commercially confidential information was not explicitly stated and did not obviously signal a Proponent's strategy. It was not always simple to disguise the innovation. For example, in the case of the tunnel/overpass change as discussed above, references within the Technical Requirements to a "Tunnel" were changed to "Grade Separation". It was a necessary change but for Proponents with an established business and technical savvy, it was clear what the change signalled.

After an intense 8 month RFP Open Period of fielding RFIs, attending CCMs, working through design enquires raised by Proponents, and revising the PA to reflect direction given, Proposals were submitted for evaluation. As illustrated in the following figure, the volume of communications and RFP/PA text changes prepared by the Project Team was substantial.

Figure 10: Summary of Communications and RFP/PA Text Changes



The Fairness Monitor reviewed and approved, from a fairness perspective, all communication to Proponents to ensure alignment with the PA, which meant changes for a number of responses.

### 5.3 RFP Submission and Evaluation

Proponents were asked to submit a Technical Submission that provided sufficient information to reasonably demonstrate to the City that the Proponent could meet the responsibilities and obligations set out in the PA. Generally, this meant developing their designs for each infrastructure component to a 30% state as well as providing sufficient narrative to evaluate each Proponent's project management approach, systems and plans during design, construction, and the 30-year maintenance period. Following submission of the Technical Submission the Proponents were required to prepare a separate Financial Submission.

All RFP evaluation participants attended evaluator orientation training sessions prior to participating in the evaluation process. The Fairness Monitor also attended the sessions to ensure that all Project Team members were provided with briefings on best practices, including the principles and duties of fairness, care and protection of confidential information, avoidance and disclosure of conflict of interest, bias and undue influence, scoring procedures and sign-off on individual scoring sheets, preparation, treatment and retention of evaluation documents.

RFP submissions were evaluated in a five step process as outlined below:

- Step 1: Assessment of the Proposals to determine if they were in compliance with terms and conditions of the RFP Documents;
- Step 2: Review of the Proposal Submission Form to confirm completeness;
- Step 3: Review and scoring of the Technical Submission;
- Step 4: Review and scoring of the Financial Submission; and
- Step 5: Ranking the Proponents.

The RFP evaluation framework was developed by the external financial advisor. The evaluation process was structured to ensure an appropriate separation of roles and responsibilities related to approvals, conflict of interest determination, fairness oversight, due diligence, overall coordination, completeness of Proposals, and scoring of the Proposals. The technical evaluation was completed by five sub-teams, each responsible for reviewing a specific portion of the Proposals in order to confirm substantial compliance with the RFP requirements and evaluate the Technical Submissions against the Evaluation Criteria for each of the relevant portion of the Proposal. Subject matter experts were engaged, as required, to provide technical support including providing responses to specific inquiries, preparing written assessments of the strengths and weaknesses of Proposals, and/or preparing written summaries of certain elements of the Proposals.

Advancement to the subsequent steps was dependent on meeting the “Pass” requirements of the previous step. The table below demonstrates the criteria that had to be met and the “Pass/Fail” thresholds:

Figure 11: Evaluation Categories and Scoring

| EVALUATION CATEGORIES   | MAXIMUM POINTS |
|---|----------------|
| <b>TECHNICAL SUBMISSION</b>   | <b>250</b>     |
| <b>1. Project Approach, Management Systems and Plans</b>            | <b>70</b>      |
| 1.1. Overall Approach and Proponent Team Structure and Organization | 10             |
| 1.2. Quality Management System                                      | 10             |
| 1.3. Environmental Management System                                | 10             |
| 1.4. Design and Construction Schedule                               | 10             |
| 1.5. Safety Plan  | 10             |
| 1.6. Public Communication Plan                                      | 10             |
| 1.7. Risk Management Plan   | 10             |
| <b>2. Design and Construction</b>                                   | <b>140</b>     |
| 2.1. CN Rail Infrastructure Design Report                           | 10             |
| 2.2. City Structures Design Report                                  | 20             |
| 2.3. Transitway and Roadway Infrastructure Design Report            | 20             |
| 2.4. Transitway Stations Design Report                              | 20             |
| 2.5. Traffic Management Plan  | 40             |
| 2.6. Construction Management and Commissioning Plan                 | 10             |
| 2.7. Aesthetics and Landscaping Report                              | 10             |
| 2.8. Utility Infrastructure Report                                  | 10             |
| <b>3. Operations, Maintenance and Rehabilitation</b>                | <b>40</b>      |
| 3.1. OMR Plan   | 30             |
| 3.2. OMR Services Schedule  | 10             |
| <b>FINANCIAL SUBMISSION</b>   | <b>750</b>     |
| Proposal Price (in Price Submission)                                | 750            |
| Financial Summary and Financing Plan                                | Pass/Fail      |
| <b>GRAND TOTAL</b>  | <b>1000</b>    |

Technical submissions were securely located at the City's Materials Management Division office; Materials Management maintained the confidentiality of the documents and evaluators had to adhere to a pre-established document control process. Each member of the technical evaluation team individually reviewed the responses for the Technical Submissions. Following the individual reviews, the technical evaluation team participated in a team consensus meeting to arrive at scores for the Technical Submissions. The evaluation of the Financial Submission followed a similar process. Following evaluation of the submissions, the City compiled the results and ranked each of the Proponents.

## 6.0 EXECUTION OF THE PROJECT AGREEMENT

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The City received technically and financially compliant Proposals from all three shortlisted Proponents. Based on the ranking noted in the previous section, a Preferred Proponent was identified that submitted the most economically advantageous tender on the basis of the technical and financial criteria that were specified in the RFP. The Preferred Proponent stage is the final stage between RFP submission and Commercial and Financial Close. In the Preferred Proponent stage, the terms of the contract were finalized and signed and financing benchmarks were set.

For reference, Commercial Close refers to the point of time when both the Preferred Proponent and the City reached an agreement on all the contractual documents, including the PA, in addition to all relevant technical issues. At this point, the PA was final and subject to the Preferred Proponent completing a rate setting protocol to lock in the required financing. Financial Close was the moment in the procurement process when all approvals had been obtained, financing was secured and capital was ready to flow. This occurred within days of Commercial Close.

In finalizing the PA, excerpts from the Preferred Proponent's Proposal submission were included in the PA documents. This included management systems and plans along with the innovations identified in the Preferred Proponent's submission. The PA document related to Project "Lands" was also updated to reflect the status at Commercial Close of consent to enter to construct agreements with impacted land owners. Lastly, all changes previously identified by addenda were revised within the main document to create a consolidated version of the PA for execution.

## 7.0 FINAL THOUGHTS

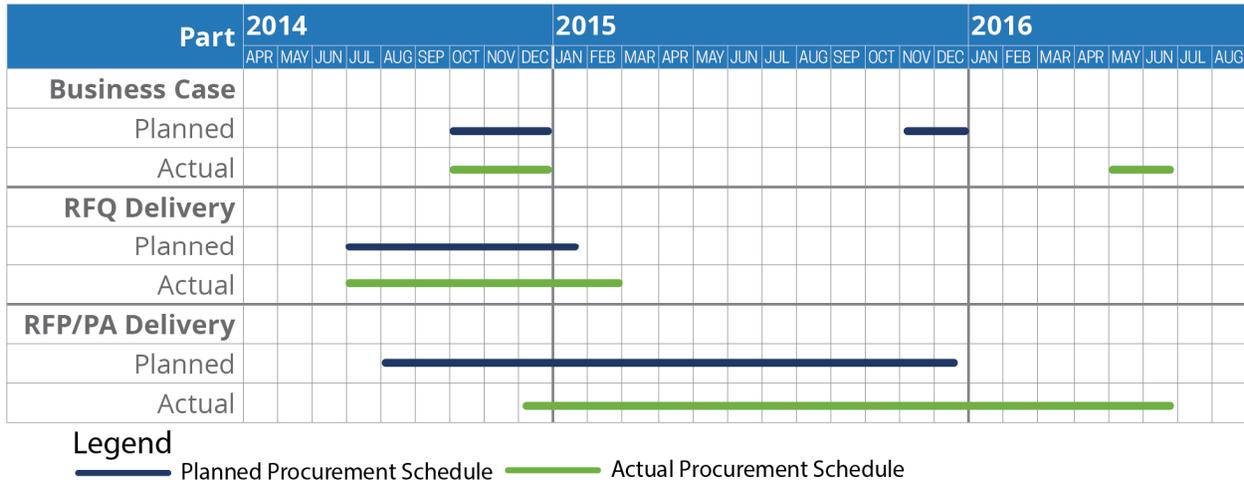
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From the external technical team's perspective, navigating the P3 procurement process was as much about project management as it was about providing engineering expertise. The external legal advisors made it quite clear from the Project outset that the final SWT2 infrastructure would be nothing less, and nothing more, than what was stipulated in the PA. Therefore it was critical the requirements of the PA translated into the Proponent constructing and maintaining SWT2 in alignment with the City's overall vision.

There had to be sufficient time to fully develop the RFP/PA such that Proponents were able to adequately develop their Proposals. However, attention also had to be given to avoid extending the procurement schedule as a portion of the funding was tied to the overall completion of the Project. There were a number of factors that could have affected the Proposal submission deadlines, including continued clarification and design of the Project (for both Proponents as well as the Project Governance Team), ongoing discussions with key stakeholders, and delayed approvals. Therefore it was necessary to monitor the procurement process schedule frequently and adjust wherever possible.

While there was some schedule slippage, primarily due to finalizing project funding and ensuring appropriate oversight/transparency by all levels of the Project Governance Team, the slippage was managed to ensure Project momentum was conserved. The following figure illustrates the planned and actual procurement schedules.

Figure 12: Comparison of Original Procurement Schedule to Actual Schedule



When the Business Case was submitted to PPP Canada in April 2014, conducting various sensitivity and scenario analysis determined that the DBFM with a 30-year term would generate expected VFM savings within a range of 10.5% to 16.7% relative to a DBB. Following Financial Close, the City’s external transaction / financial advisor provided an updated VFM report using the Preferred Proponent’s financial submission. The analysis determined that delivering the SWT2 Project using a P3 approach resulted in VFM savings of 17%, which validates the benefits of engaging a private partner in the delivery of this Project.

The Government of Canada is contributing up to \$91.2 million through the PPP Canada Fund while the Province of Manitoba and City of Winnipeg will contribute the balance of the Project costs. At a cost estimate of \$467.3 million, this is the largest infrastructure investment undertaken by the City to date. Although a learning experience for many, the procurement process has been seen as successful and it is intended that the project management processes and templates developed for SWT2 be used on future Design-Build and P3 projects within the City.