David M. Sanders, M.A., LL.B.
907-885 Wilkes Avenue
Winnipeg MB R3P 1J3

June 18, 2014

Chair and Members
Executive Policy Committee
The City of Winnipeg
510 Main Street
Winnipeg MB

Re: Executive Policy Committee – 9:00 a.m. Wednesday, June 18, 2014

Committee Reports:
Standing Policy Committee on Infrastructure Renewal and Public Works – June 3, 2014
1. Capital Integration Project – Southwest Transitway (Stage 2) and Pembina Highway Underpass

I am appearing as a private citizen to speak in opposition to all of the recommendations of the Winnipeg Public Service, which would have the effect of delegating to the senior administrators all civic authority to negotiate and approve this $1 billion scheme for Stage 2 of the Southwest Rapid Transit Corridor (SRTC).

In my opinion, if Council approves these recommendations, it will be in complete dereliction of its duties to oversee the administration of our civic planning authority and the management of this community's present and future financial resources.

You have before you a Report on the "Public Meeting" held by the Standing Policy Committee on Infrastructure Renewal and Public Works on June 3rd.

Your copy of the Report on the "Public Meeting" makes no mention of the contents of the proceedings, and the City Clerk has neglected to attach the following documents which were integral parts of the Administrative Report:

Exhibit "1" Notification of Public Hearing dated May 20, 2014, as required by the provincial *Public-Private Partnerships Transparency and Accountability Act.*

Appendix 1 – Revisions to the 2014 Capital Budget and Forecast

Appendix 2 – Proposed Changes to Debt Strategy

Appendix 3 – Project Benefits – Capital Integration

Appendix 4 – P3 Model and Benefits

Appendix 5 – Funding Sources

Appendix 6 – Proposed Staffing Plan

City of Winnipeg Stage 2 – Southwest Rapid Transit Corridor Project P3 – Business Case Summary, Deloitte and Touche LLP, April 4, 2014.

All EPC has been given is the statement that:

"On June 3, 2014, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council."

I am therefore attaching copies of the documents which have been omitted from your agenda, plus the following:

a) The Minutes of the June 3 IRPW Meeting, showing that Councillor Vandal was absent, Councillor Swandel voted against the recommendations, but Councillors Gerbasi and Sharma cast the two votes in favour.
b) The list of delegations received on June 3rd, one in favour, 19 opposed, and three to provide information.
c) Copy of my 14-page submission. I was able to read only four pages during the 10 minutes allotted to me.
d) Copy of Ed Innes' "Bus Rapid Transit Analysis Technical Critique," which I submitted on his behalf.

As noted on page 3 of my June 3rd submission, on May 22 and 29 I submitted official applications for Access to Information for a number of key documents regarding the design, costs, benefits and Value for Money assessment for this project. So far I have received no response.

I urge each and every Councillor to demand the production of these documents so that they might read them before deciding to vote to approve this scheme.

Do you all know that the City administration has apparently submitted this project for federal funding from the P3 Canada Fund already? Before it is approved by Council?

Once the official report on the IRPW "Public Meeting" is published, by July 15, 2014, I intend to advise the provincial Minister responsible that in my opinion the City has failed to comply with the requirements of Section 5 of *The Public-Private Partnership Transparency and Accountability Act.*

Do you know that the City requires a Manitoba Environment Act licence prior to construction and operation of any part of Stage 2, including the proposed relocation of Manitoba Hydro, MTS and other utility services?

Since the City has never mentioned it publicly, you might be forgiven for not knowing that the City's consultants prepared a seriously flawed "Environmental Review and Assessment Report," and submitted it to the Province on your behalf – or rather, on **our** behalf. The deadline for submission of public comments was June 9th. I am enclosing a copy of my submission on that date, requesting that the Province reject that report as incomplete and inadequate.

Since I didn't have the time to present this on June 3rd, I would like to say it now:

What's wrong with this Project?

a. The City has failed to produce credible evidence and analysis which would enable the citizens, Council, and provincial and federal government authorities to evaluate the viability, risks, costs and benefits of the Revised SRTC Project, or the P3 procurement method proposed.

b. No cost-benefit analysis has been produced to justify the reported cost-benefit ratio of 1.37 for Stage 2 of the Southwest Transitway. If the cost of Stage 2 is $407.8 million as reported, then the consultant is saying there must be **benefits of $559 million**. What are those benefits, and who all will receive them? When? How has the City measured the benefits of "improved travel times, reduced delay, reduced pollution and Green House Gas (GHG) emissions, health benefits, increased tax base, etc."

c. If the cost-benefit ratio is only 0.71 to widen the Pembina Underpass by just one lane in the northern direction, requiring the demolition of the CN mainline rail bridge over Pembina Highway and the construction of a new CN rail bridge and a new transitway bridge over Pembina, at a cost of $72.5 million, the consultant is saying that the benefits which someone will receive will be worth only $51 million. **If so, why would we do that?**

d. **Without providing any supporting traffic and ridership data, the City suggests that ridership on the completed Southwest Rapid Transit Corridor will increase by 12-15%, and that travel times between Downtown and the University of Manitoba will be improved by a total of 9 to 16 minutes, depending on the time of day. At an estimated additional cost of more than $1 billion.** Isn't it time to publish the ridership statistics for Stage 1 of the Southwest Rapid Transit Corridor?

e. The SRTC project is being sold as a catalyst for "Transit-Oriented Development," although the benefits have not been quantified publicly.

   i. On July 13, 2009, City Council approved a land swap with GEM Equities, whereby that company obtained 58.7 acres of unserviced City land north of Parker Avenue in exchange for 8.95 acres of serviced land in the Fort Rouge Yards, required for Stage 1 of the Southwest Rapid Transit Corridor. To facilitate "transit-oriented development" in Fort Rouge, the Federation of Canadian Municipalities has offered GEM Equities $15.7 million in financial assistance, including $10 million in loans guaranteed by the City, but it appears that **nothing has been built in The Yards at Fort Rouge as yet, five years later.**

   ii. On September 30, 2011, long before Council officially chose the Stage 2 Route Alignment, the City awarded Dillon Consulting Limited a contract for $797,233 to conduct a preliminary engineering study for the upgrade of the Pembina Highway Underpass. The Consultant was directed to consider the implications of the Underpass project for the Cockburn and Calrossie Combined Sewer Relief Works, and was specifically directed to provide for the future extension of the Southwest Rapid Transit Corridor **"via the Parker lands."** (RFP 545-2011, p. 3).

   iii. Early in 2012, after already being directed to assume the Parker lands route, Dillon was engaged to study and recommend a preferred alignment option for Stage 2 of the Southwest Transitway. The seriously flawed report recommended the Parker Lands/Manitoba Hydro dog leg alignment. Again, see my March 6, 2013 presentation to Executive Policy Committee posted on the City's website.

iv. On March 20, 2013, City Council was very ill-advised to agree to amend the Transportation Master Plan to divert the Stage 2 Transitway route from the long standing direct Letellier rail line route along Pembina Highway, off on the curious dog leg west through the Parker wetlands and south along the Manitoba Hydro right-of-way, where there are no transit riders. Note that before Council amended it, the Transportation Master Plan had indicated that the dog leg route "would serve the emerging communities on the Parker and Taylor lands," to be developed by GEM Equities and Shindico, respectively.

v. The City rushed to submit an application for federal funding from the P3 Canada Fund by the Round Five deadline in June of 2013, but apparently the application did not meet the screening requirements.

vi. Then, on September 10, 2013, the City awarded a contract to Dillon for $1,894,000 for the preparation of the required capital cost estimate, environmental impact statement and cost-benefit analysis by February 14, 2914, and the required P3 Business Case and Value for Money Analysis by February 28, 2014.

vii. The environmental impact statement was not published until May 10th, and only a summary of the draft P3 Business Case and VFM Analysis has just been published on May 20th. The complete draft with detailed calculations is not public.

viii. Here is the present state of the TOD sites which have been associated with the SRTC Project:

1. The Yards at Fort Rouge – planned residential units have not been constructed as yet.
2. Streetside Development Corp. - at Fort Rouge RT Station – multi-family residential development planned
3. Stradbrook at Harkness RT Station – high rise apartment planned but the land is now for sale again for the third time
4. Parker lands – nothing planned as yet
5. Osborne near Osborne RT Station – multi-storey commercial building planned but still not constructed
6. Bishop Grandin Crossing (Sugar Beet lands) – Area Master Plan recently approved without arranging for any access to the SRTC Stage 2 RT Station.
7. Southlands (Southwoods Golf Course) Lands – planning still
8. Taylor Lands (Grant Park Pavilions) – construction has begun, without any connection to the SRTC.

To sum up, nothing has been built yet because of the presence of Stage 1 or the plan for Stage 2 of the SRTC.

What about LRT?

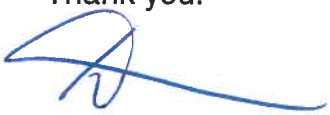
Please see the insightful BRT Analysis Technical Critique submitted on June 3rd on behalf of Ed Innes, MSc (EE), Past President of the Manitoba Electric Vehicle Association (MEVA).

Mr. Innes argues that an LRT system is preferable to BRT, and should be located in the middle of existing urban development and not in inconvenient and inefficient dog-legs like Parker.

I respectfully request that this Committee and the City Council just say no to these recommendations at this time.

Surely a newly elected Council and a new senior administration can do better than this.

Thank you.



David M. Sanders MA LLB
River Heights-Fort Garry

DMS/bm

Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works – June 3, 2014

Applicant: The City of Winnipeg
(Director of Transit)

Subject:

Winnipeg

The City of Winnipeg's proposed Major Capital Integration Project, which includes the construction of Stage 2 of the Southwest Transitway and the widening of the Pembina Highway Underpass at Jubilee, will be presented to the citizens of Winnipeg at a meeting of City Council's Standing Policy Committee on Infrastructure Renewal & Public Works at 9 am on June 3, 2014.

In order to fulfill the requirements of the Province of Manitoba's Public-Private Partnerships Transparency & Accountability Act, the citizens of Winnipeg are invited to ask questions and provide comment on the viability, risks, costs and benefits of the proposed public-private partnership (P3) design-build-finance-maintain (DBFM) procurement method being proposed for this project. A summary of the P3 Business Case and Value for Money (VFM) assessment is being posted at winnipegtransit.com under Southwest Transitway – Stage 2 (http://winnipegtransit.com/en/southwest-transitway/stage-2---southwest-transitway/) on May 20, 2014. A hardcopy of this document is also available for viewing at 421 Osborne Street.

A report on the proceedings of this public meeting will be available for viewing at 421 Osborne Street, and will be posted at www.winnipegtransit.com, by July 15, 2014.

Meeting of the Standing Policy Committee on Infrastructure Renewal & Public Works
Tuesday, June 3, 2014 at 9 am
North Committee Room
Council Building – 510 Main Street

Exhibits Filed:

1. Notification of Public Hearing dated May 20, 2014
2. Report from the Winnipeg Public Service dated May 9, 2014

TRANSIT - TRANSIT SYSTEM FUND

Appendix 1

Project Name: **Southwest Transitway - (Stage 2) and Pembina Highway Underpass**

Dept ID: 420755
Department: Transit
Project: 4230010514

Capital Priority Rating: 3 - 4
Service: Public Transit
OurWinnipeg: Environment

AUTHORIZATION	Previous Budgets	2014 Estimate	FORECAST 2015	2016	2017	2018	2019	2020	2021	2022	Eight-Year Forecast Total	Nine-Year Total
Project Costs ($000's)	-	590,000	-	-	-	-	-	-	-	-	-	590,000
Financed by:												
SW Rapid Transit Stage 2 Reserve		4,200									-	4,200
P3 Canada		140,000									-	140,000
Provincial Grant		218,650									-	218,650
2010 Provincial Grant for Roads*		6,350									-	6,350
Public Private Partnership** (City)		220,800									-	220,800
Rapid Transit Stage 2 Reserve								22,050	22,150	22,265	66,465	66,465
P3 Annual Service / Financing Payments*** (Prov)								(2,300)	(2,345)	(2,390)	(7,035)	(7,035)
P3 Annual Service / Financing Payments*** (City)								(19,750)	(19,805)	(19,875)	(59,430)	(59,430)

CASH FLOW	2014	2015	2016	2017	2018	2019	2020	2021	2022	Beyond 2022	Total
Project Costs ($000's)	2,000	19,550	16,250	-	82,900	248,500	22,050	22,150	22,265	653,109	1,088,774
Financed by:											
Rapid Transit Stage 2 Reserve (Note 1)	1,000	3,200					22,050	22,150	22,265	653,109	723,774
P3 Canada						140,000				-	140,000
Provincial Grant****	1,000	16,350	16,250		82,900	108,500				-	225,000

NET OPERATING IMPACT ($000's)	2014	2015	2016	2017	2018	2019	2020	2021	2022
Operating costs									
External debt and finance charges									
Transfer to Rapid Transit Stage 2 Reserve (Note 1)							19,750	19,805	19,875
Total Direct Costs	-	-	-	-	-	-	19,750	19,805	19,875
Less: Incremental Revenue/Recovery							19,750	19,805	19,875
Net Cost/(Benefit)	-	-	-	-	-	-	-	-	-

Note 1: The source of funding for these amounts are to be identified in the 2015 budget process and could include the allocation of cash to capital funding, property tax increase, transit fare increase or a combination of the above options.

This project is combining two projects and having them procured as a single P3 project arrangement. The Southwest Transitway (Stage 2) will increase the length of the Transitway by an additional 7.6km – Jubilee Avenue south to the University of Manitoba. It will serve various residential, commercial, industrial, recreational and educational centres in southwest Winnipeg. The project will include the construction of several grade separations, multiple Transitway stations, and an extension to the existing active transportation path built as part of the Stage 1 Transitway project. Combined with the construction of the Transitway extension is the widening of Pembina Highway Underpass by one northbound lane, rehabilitation of the underpass and also include active transportation components.

Upon completion of Stage 2, rapid transit service will operate the full length of the 11.2 km corridor between downtown and all destinations in the southwest part of the city, including the University of Manitoba and the new Stadium. The completion of the corridor will provide significant opportunities for transit-oriented development in lands adjacent to the rapid transit stations.

The urban travel demand in southwest Winnipeg is expected to substantially increase as approved and new developments are built in southwest Winnipeg. As specified in the adopted Transportation Master Plan, rapid transit is required in this sector of the city to enable the overall urban transportation system to accommodate the growth in travel. This project will significantly improve the competitiveness of public transit by allowing transit vehicles to bypass traffic congestion in the Pembina Highway corridor, improving the speed, reliability, and comfort of the many transit routes that serve southwest Winnipeg.

Overall Project Funding (using Class 3 Cost Estimate)

City	225,000	38%
Province	225,000	38%
Federal	140,000	24%
	590,000	

Budget includes the following assumptions/provisions:

- 4 year project construction period, early 2016 to end of 2019
- Upfront Costs includes land, procurement costs, City contract administration (temporary staff), external advisors, and engineers, etc.
- Southwest Rapid Transit Stage 2 Reserve will be utilized to interim finance upfront costs as required.
- Province will agree to include upfront costs as eligible project costs.

* The 2010 Provincial Grant for Roads was previously allocated to the Pembina Highway Underpass project.

** P3 Cost paid for by City (100%) over 30 years

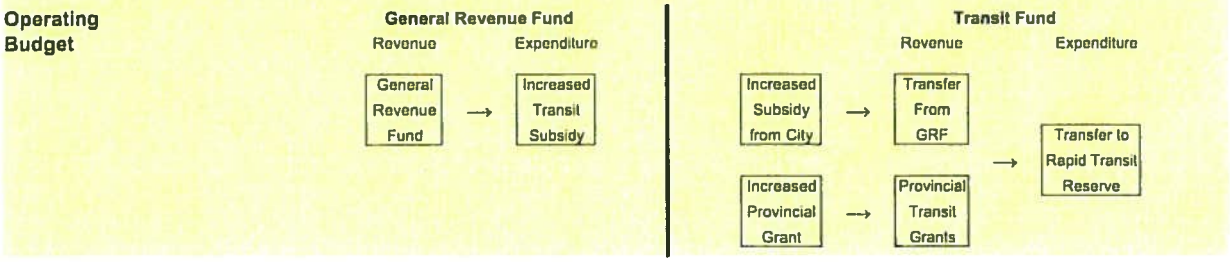
*** P3 Annual Service / Financing Payment is comprised of both P3 Construction Cost repayment and Maintenance costs both over 30 years. Transit related maintenance costs are paid for by City 50% and Province 50%

**** Provincial Grant cash flow includes contributions towards progress payments of $82.9 million each in Quarter 1 2018, and Quarter 1 2019. Remaining balance will be paid at Substantial Completion in Quarter 4 2019.

***** Previous Budgets for related projects include: $1.3 million from the Pembina Highway Underpass project, $1 million from P3 Consulting and Project Development, and a portion of $4.2 million approved for Rapid Transit Planning and Design.

- As this is a Utility project, it will not impact the tax supported P3 cap.
- Cash flow makes assumption on timing of Provincial funding which has not been confirmed.
- Increased operating costs related to bus operations would not commence until 2020 and are not presented. These costs would follow the Transit Funding Agreement with the Province of Manitoba for 50/50 cost sharing.

Operating Budget



Appendix 2

Proposed Changes to Debt Strategy

On June 22, 2011, Council adopted a Debt Strategy report for tax supported, utilities and total City borrowing. Increasing the City's long term debt obligations via a P3 model will impact the Council-approved Debt Strategy. This project will entail a P3 debt obligation in the amount of approximately $221 million, which will increase the City's forecasted long-term debt position.

Transit is not wholly dependent on tax-supported revenue (the tax supported grant represents approximately 28% of Transit's 2014 budget). As a result, this report is recommending that Transit be moved from the Tax-supported category to a Utilities & Other category in the Debt Strategy.

The impact of this debt financing requires an amendment to the debt per capita thresholds as noted in the table below. The debt strategy is currently under review and a further report is being prepared to revise the debt strategy for the next 5 to 6 years.

	Existing Thresholds		Proposed Thresholds		Forecasted Peak	
Debt Strategy Ratios	Self-supporting Utilities	Total City	Utilities & Other	Total City	Utilities & Other	Total City
Net debt as a % of revenue	220%	85%	No change		138.4%	76.9%
Debt servicing as a % of revenue	20%	11%	No change		12.4%	7.0%
Debt per capita	$ 950	$ 2,050	$ 1,300	$ 2,400	$1,085	$ 2,047
Note: The forecasted peak includes the P3 obligation associated with the Southwest Transitway - (Stage 2) and Pembina Highway Underpass Project.						

No Changes to P3 Cap

On December 15, 2009, Council adopted the following recommendation: "That annual lease/service payments and debt servicing costs for tax supported public private partnerships be funded annually up to a maximum of 30% of the cash to capital contribution and the federal gas tax." This cap relates to "tax supported" P3s, and as a result, does not apply to this project.

Appendix 3

Project Benefits - Capital Integration

Reduction in Traffic Congestion

According to the TMP, a 50% increase in traffic during the morning rush hour is anticipated by 2031. This will result in "choke points" where travel demand will significantly exceed capacity. By having the Southwest Transitway provide an attractive alternative to driving, a resulting decrease in the growth of traffic volumes along the route can significantly reduce future congestion levels. Improvements to travel times are expected to accrue to both drivers and rapid transit users as transit vehicles will operate on a dedicated route separated from the major arterial road.

Increased Transit Ridership

Stage 2 will increase the length of the transitway from 3.6 kilometres to 11.2 kilometres and permit buses to bypass significant traffic congestion on Pembina Highway, as well as into and out of the University of Manitoba. With the improvements in speed and reliability for the existing rapid transit routes, combined with population growth, ridership along existing rapid transit routes is expected to grow by an additional 12% to 15% over the initial years following construction.

Increased transit ridership (modal split) is supportive of the Key Direction within the Transportation Master Plan which states that "Expansion of Winnipeg's transit network and services will enhance transit as a mode choice if it provides good coverage and a basic level of service to all areas of the City and an effective network of rapid transit."

Improved Transit Travel Times

The 2005 Rapid Transit Task Force's "Made in Winnipeg" report cites reductions in travel of time of 16% in Vancouver and 29% in Los Angeles following the implementation of rapid transit routes, primarily attributable to higher travel speeds, on-street transit priority measures, dedicated busways, and fewer stops.

The Stage 1 of the Southwest Transitway yielded travel time savings of 4-8 minutes on trips between the centre of Downtown and the University of Manitoba, with greater time savings being realized during peak periods. Given the greater length of Stage 2, it is expected that 5-8 minutes of time savings will result from the construction of Stage 2, depending on the time of day.

Although difficult to quantify, substantial time savings will be realized for events at Investors Group Field (IGF). Under the current arrangement, buses departing must contend with fans leaving the stadium, as well as the significant amount of game-day traffic on the regular street system. The proposed design of Stage 2 would completely separate transit passengers and transit buses from the rest of the system, resulting in significant improvements in travel times. Buses would depart from IGF on a bus-only transitway through the Southwood Lands to connect with Pembina Highway and the rest of the Southwest Transitway.

Improved Transit Service and Schedule Reliability

Public workshop discussions conducted in January and February 2005 as part of the development of the "Made in Winnipeg" report revealed that the key weaknesses of Winnipeg's transit service related to the frequency of buses, comfort of stops, and timing of buses.

In response to the report, a Transit Improvement Program implemented several initiatives to improve the speed, reliability, comfort, accessibility and convenience of on-street transit service in the Quality Corridors. However, the "Made in Winnipeg" report also identified that dedicated transitways provide the greatest opportunity for transit vehicles to achieve faster travel times and meet posted schedules, resulting from the limitation/removal of interference by other traffic. This results in the highest degree of service reliability within these corridors, especially when coupled with automatic vehicle location and real-time passenger information at stations.

The Stage 1 of the Southwest Transitway provides all these features, including high speeds, high reliability, attractive and comfortable stations, state-of-the-art buses, and real-time passenger information. High frequency service is provided throughout the day on all days of the week, ranging from 45 buses per hour per direction during weekday peak periods, and 7 to 8 buses per hour per direction during evenings. Due to the high operating speeds on a fully built-out transitway, increased frequencies can be operated with only a modest increase in fleet size to carry the additional ridership that is expected after the Stage 2 Project is completed.

With the extension of the transitway to Investors Group Field (IGF), event-day service will improve substantially as buses would no longer share the roadway with other traffic. Currently, over 30% of people who attend events at IGF use transit to travel to and from the stadium.

Transit-Oriented Development

The development of BRT corridors presents an opportunity for Transit-Oriented Development (TOD), which is consistent with OurWinnipeg. Winnipeg's TOD Handbook, which guides and facilitates mixed-use, pedestrian-oriented infill development along rapid transit corridors and high-frequency transit corridors, defines TOD as follows: "Moderate to higher density compact mixed-use development, located within an easy five to ten minute (approximately 400m to 800m) walk of a major transit stop. TOD involves high quality urban development with a mix of residential, employment and shopping opportunities, designed in a pedestrian oriented manner without excluding the automobile. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate the use of convenient and sustainable modes of transportation, including public transit and Active Transportation."

Forecasts of population and employment growth based on current development trends show that there will be continued pressure to grow outward. This will result in travel flows becoming more dispersed in the future, adding stresses to an already overburdened transportation system. Major employment developments and continued expansion of industrial areas in the outer areas will shift travel from traditional destinations such as Downtown. OurWinnipeg highlights a key goal of the City to be "[accommodating] a greater proportion of the City's future growth within the existing built boundary. This would be accomplished through redevelopment and intensification in the City's transit-supportive land use areas. Increasing transportation choice to and from these areas will be essential to encourage growth." Creating infrastructure that supports TOD is therefore not only a key strategic priority of the City, but also represents a

significant opportunity to shape the City's growth over the future and to limit urban sprawl by encouraging compact urban development that is more easily serviced by transit.

Along the Stage 2 alignment, there are three areas identified in OurWinnipeg as major development sites, for which TOD plans are currently being developed: the Parker Lands, the Sugarbeet Lands, and the Southwood Lands. TOD development has already begun along Stage 1, with the Yards at Fort Rouge (under construction) and the Winter Club land opposite Harkness Station (proposed).

Revitalisation of Downtown

Winnipeg's downtown area has seen significant revitalisation in recent years through developments including the Graham Transit Mall, MTS Centre, Manitoba Hydro Place, and Centrepoint. In addition, existing parking lots within the developing "Sports, Hospitality and Entertainment District" (SHED) are being converted into higher-value uses, such as SoPo Square, SkyCity Centre, and the expansion of the RBC Convention Centre.

In revitalising the downtown landscape, these developments result in a reduction to the availability of parking spaces in the area. A reliable rapid transit service operating via the Graham Transit Mall into the heart of Winnipeg's downtown area will provide a viable and less expensive alternative to commuters while enhancing citizens' access to the revitalised downtown area. The revitalisation of Winnipeg's downtown area is consistent with Key Strategic Goal One within the within the Transportation Master Plan, which envisions "a transportation system that is dynamically integrated with land use."

Reduction in Greenhouse Gas Emissions

According to the Institute for Transportation & Development Policy, vehicle emissions are the fastest growing source of greenhouse gas emissions worldwide, and currently represent 24% of greenhouse gas emissions from fossil sources. The implementation of a rapid transit system offers significant opportunities for reductions in greenhouse gas emissions as users shift from high-consumption private automobiles to public transit and active transportation travel modes. Operating efficiencies within a BRT system resulting from higher operating speeds can also allow fewer buses to serve a greater number of passengers.

Reductions in greenhouse gas emissions are consistent with Key Strategic Goal Six within the Transportation Master Plan, which envisions "a transportation system that reduces its greenhouse gas emissions footprint and meets or surpasses climate change and emissions reduction goals set by the City and the Province."

Local Economic Impacts

In addition to the transit-oriented development opportunities described above, the development of the Project would have numerous favourable effects to the local Winnipeg economy resulting from local materials and equipment purchases, construction/contractor involvement, and other spin-off activity stemming from the development. It is estimated that the construction of Stage 2 of the Southwest Transitway could result in up to 3100 person-years of employment, with an additional 800 person-years during the 30 year maintenance period.

Lastly, the facilitation of downtown accessibility and revitalization, improved travel times and schedule reliability, and improved traffic flow through a major arterial roadway, each contribute toward further growth and productivity within the City.

Appendix 4

P3 Model and Benefits

As defined by PPP Canada, a P3 is a long-term performance-based approach to procuring public infrastructure where the private sector assumes a major share of the risks in terms of financing and construction and ensuring effective performance of the infrastructure, from design and planning, to long-term maintenance.

In practical terms, this means that:

- Governments do not pay for the asset until it is built, or at least until major construction milestones are reached;
- A substantial portion of the cost is paid over the life of the asset and only if it is properly maintained and performs according to specifications; and
- The costs are known upfront and span the life-cycle of the asset, meaning that taxpayers are not on the financial hook for cost overruns, delays or any performance issues over the asset's life.

There are several different models of P3, depending on the amount of private sector involvement. These include:

- Design-Build (DB) - where the private sector designs and builds the project for a set cost, but is not involved in any other aspect of the project. In this case, milestone payments are made as the project progresses through the design and construction phases. Full and final payment is made when construction is complete.
- Design-Build-Finance (DBF) – where the private sector designs and builds the project for a set cost, and also finances the design and construction of the project. Payments are generally only made once the project is complete, and possibly during a set period after construction.
- Design-Build-Finance-Maintain (DBFM) – where the private sector designs and builds the project at a set cost, and also finances the design and construction. The private sector also agrees to maintain the infrastructure over a set concession period (generally 20-30 years), and then turn the infrastructure back over the city in as-new condition when the concession period ends.
- Design-Build-Finance-Operate-Maintain (DBFOM) – where the private sector designs and builds the project at a set cost, finances the design and construction, and then operates the asset. The private sector agrees to both operate and maintain the infrastructure over a set concession period (generally 20-30 years), and then turn the infrastructure back over the city in as-new condition when the concession period ends.

The model being considered for this project is a DBFM. According to PPP Canada's funding model, only DBFM and DBFOM offer the necessary transfer of risk to the private sector for the project to be eligible for funding.

P3s can have several advantages over conventional procurement models, including:

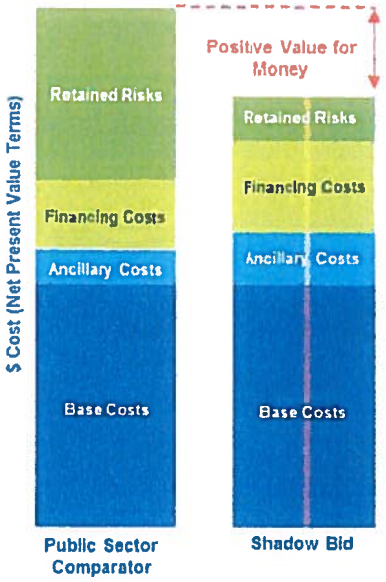
- the lifecycle of the infrastructure is considered (under a DBFM), ensuring the asset is maintained in top condition
- private sector capital is at risk throughout the project, ensuring the most efficient and cost-effective methods of project planning, construction, financing and maintenance

- innovative construction techniques

A key component of a P3 is the Value for Money (VFM) analysis. This analysis compares the P3 model to a conventional public sector procurement model to show the expected cost savings of using a P3. The VFM for this Project compared the following costs for both a P3 DBFM model, and a standard public sector comparator design-bid-build (PSC DBB) model:

- Ancillary Costs
- Risk Premium
- Financing Costs
- Retained Risk

Below is a graph showing the typical breakdown of costs and savings that provide value for money in a P3 project:



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

Ancillary Costs are costs associated with planning and delivery of a project that could vary depending on the project delivery method, e.g. project management costs, transaction costs, and procurement costs. These costs are typically higher under a P3 but may vary depending upon each project.

Financing Costs are typically greater under a P3 than the PSC since the private sector will borrow at private financing rates to pay for the project costs until repaid by the public sector.

Base Costs are comprised of the design and construction costs. The base costs under the PSC and P3 are assumed to be the same.

The model being recommended for this project is the DBFM. A DBFM offers the necessary risk transfer required for PPP Canada funding, but it excludes the operation of transit service by the private partner, something that was not considered a viable option for the City.

FUNDING SOURCES

Southwest Transitway (Stage 2) and Pembina Highway Underpass

Costs Estimates are in $ millions	already received & committed	2016	2017	2018	2019	Cash Component Total	Annual Payments 2020
Federal Government (all Cash)							
- PPP Canada, Completion Payment					$140.0	**$140.0**	
Province of Manitoba (all Cash)						**$225.0**	
- Progress Payments (first quarter)				$82.9	$82.9		
- Upfront Cost & Completion Payment	$11.0	$16.3			$25.6		
- 2010 Provincial Grant for Roads	$6.3						
- 50% of P3 Op. & Maint. (30 years)							$2.3
City of Winnipeg (Annual Payments)							
- Cash to Project		$4.2				**$4.2**	
- P3 Lease Payments (Construction)							$16.5
- 50% of P3 Op. & Maint. (30 years)							$3.2

City of Winnipeg total P3 Lease Payment for 2020 is estimated to be $19.3 million

Operation and Maintenance P3 Payment increase with inflation.

Province expected to cost share Transit relatedOperation and Maintenance P3 Payments: 50% City, 50% Province

P3 Lease Payments are for 30 Years

Project's Construction Financing	
PPP Canada (Cash)	$140.0
Province of Manitoba (Cash)	$225.0
City of Winnipeg (Cash)	$4.2
P3 Private Sector Debt (City)	$220.8
Total P3 Construction Cost	**$590.0**

Appendix 6 - Proposed Staffing Plan

In order to properly execute the project, a complement of project staff is needed.

Temporary Positions at Winnipeg Transit

	Complement Inclusion Dates						
Position	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Project Manager	√	√	√	√	√	√	√
Project Engineer	√	√	√	√	√	√	√
Lawyer	√	√	√				
Project Accountant	√	√	√	√	√	√	√
Transit Planner	√	√	√	√	√	√	√
Transit Scheduler				√	√	√	

All Temporary positions to be funded by the capital project.
Although the position of "Lawyer" is shown as being part of the project team at Winnipeg Transit, the actual position will reside within Legal Services.

Permanent Positions at Corporate Finance

P3 Coordinator	Commencing in 2014

This one permanent position will be funded through contributions from various P3 projects under its administrative oversight.

Deloitte.

City of Winnipeg

Stage 2 – Southwest Rapid Transit Corridor Project P3

Business Case Summary



April 4, 2014

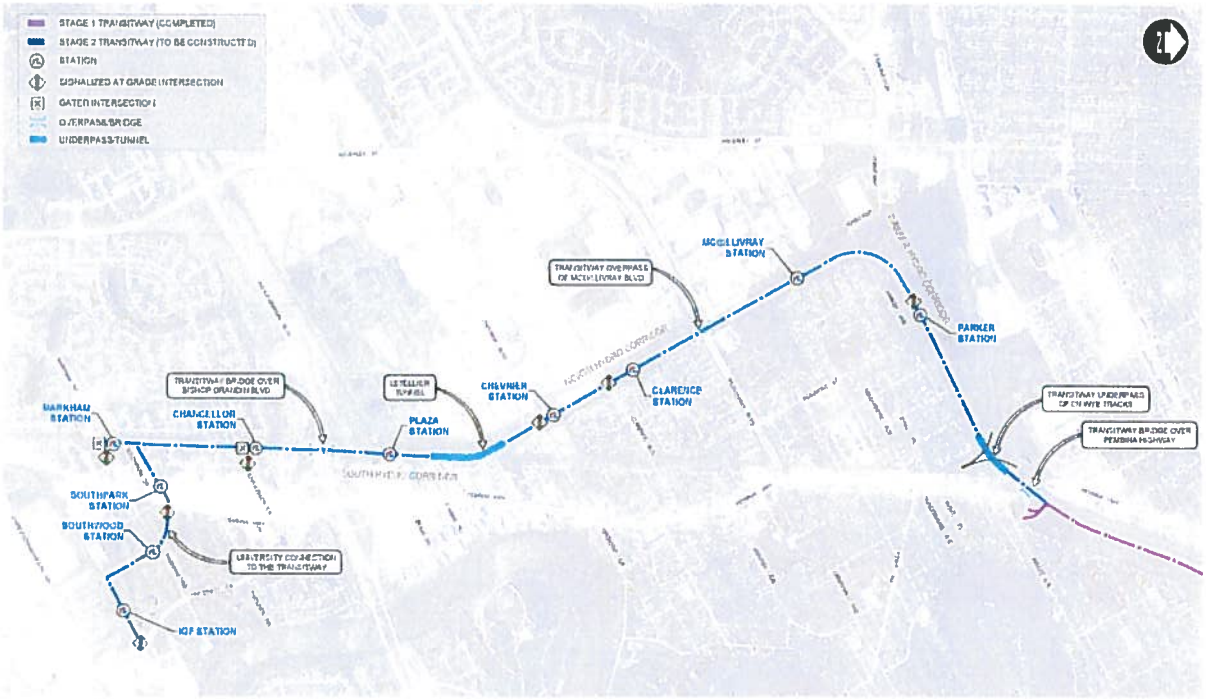
Project Need and Benefits

Since the 1970's, the City of Winnipeg (the "**City**") has identified the need for a 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 ("**TMP**"). The benefits delivered by the rapid transit system are becoming increasingly important as the City plans for the growth of its population to approximately one million residents by 2031. Based on this expected growth in population and corresponding congestion levels, the City's highest priority rapid transit 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 ("**Southwest Transitway**" or "**Transitway**"), 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 Bus Rapid Transit ("**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 transfer for passengers travelling between the southwest part of the City and downtown.

The City is now progressing with its plans to develop Stage 2 of the Southwest Transitway ("**Stage 2**" or the "**Project**"), which is the subject of this business case summary ("**Business Case Summary**")[1]. The Project 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. Figure 1 below illustrates the preferred alignment as determined by Dillon Consulting Limited ("**Dillon**") in the Alignment Study approved by Council.

Figure 1: Proposed Transitway Alignment and Approximate Station Locations for the Project



Source: Dillon Consulting Limited (2014)

[1] The City is in the process of preparing and submitting the Business Case to support its funding application to PPP Canada. This funding process is expected to culminate with a review of the Business Case by PPP Canada's Board of Directors in June 2014. This Business Case Summary report provides a summary of the key components of the Business Case. The Business Case is currently in draft form, the results of which may change depending on PPP Canada's input.

The implementation of the $590 million[2] capital investment associated with Stage 2 is expected to give rise to numerous benefits which meet the key strategic goals outlined within the City's Sustainable Transportation Strategy, as well as specific rapid transit-oriented strategic goals and objectives in the Transportation Master Plan. These benefits include the following:

- **Increased transit ridership** – the improvements in speed, reliability and convenience which can be achieved by a rapid transit system provide an attractive alternative to the private automobile. Due to these factors, combined with population growth, ridership for the existing rapid transit routes is expected to grow an additional 12% to 15% in the initial years following construction.

- **Reduction in traffic congestion and travel times** – the high levels of growth within the City are expected to contribute to an increase of 50% in vehicle-kilometres traveled in the morning peak hour, resulting in "choke points" where travel demand will significantly exceed capacity[3]. By increasing ridership by "discretionary riders" who would otherwise use an automobile[4], as well as providing park-and-ride facilities, the number of vehicles along the route can be significantly reduced and travel times will improve. The Stage 1 section of the Southwest Transitway yielded travel time savings of 4-8 minutes on trips between the centre of Downtown and the University of Manitoba, with greater time savings being realized during peak periods. Given the greater length of Stage 2, it is expected that 5-8 minutes of time savings will result from the construction of Stage 2, depending on the time of day.

- **Improved transit service and schedule reliability** – despite speed, reliability, and frequency of service being identified as the most important transit service attributes to users[5], high levels of congestion along Pembina Highway have impacted the ability of the City to maintain a reliable Transit service. A dedicated transitway would provide the greatest opportunity for transit vehicles to achieve faster travel times and meet posted schedules, resulting from the limitation/removal of interference by other traffic. This results in the highest degree of service reliability within these corridors, especially when coupled with automatic vehicle location and real-time passenger information at stations. Further, due to the high operating speeds on a fully built-out transitway, increased frequencies can be operated with only a modest increase in fleet size to carry the additional ridership that is expected after Stage 2 is completed.

- **Transit-oriented development ("TOD")** – development along the rapid transit corridor presents an opportunity for moderate to higher density compact mixed-use and pedestrian-oriented development located within proximity of major transit stops and in the adjacent designated TOD sites (Fort Rouge Yards, Southwood Golf Course lands, former Sugar Beet lands and Parker lands). By increasing transportation choice to and from these areas, the City would be able to accommodate a greater proportion of its future population growth within the existing built boundary[6]. Dillon's 2012 Alignment Study identified a land area of 2.2 million m^2 for potential TOD within a 400 metre radius of the proposed stations[7], which was estimated to provide opportunity for the potential development of more than 16,000 residential units which could accommodate close to 30,000 new residents, as well as approximately 73,000 m^2 of commercial development.

  Recent development announcements since the opening of the Stage 1 corridor, and in anticipation of the Stage 2 development, have indicated a strong interest by developers in TOD projects along the Southwest Transitway:

  - October 2012 - GEM Equities announced The Yards at Fort Rouge project, a 900-unit infill housing project, the first TOD in the City.

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[2] Based on the current draft Business Case, the results of which may vary once approved by PPP Canada.
[3] "Winnipeg Transportation Master Plan." City of Winnipeg, 1 Nov. 2011. Web.
[4] Baker, Christopher. "Testing the Benefits of On-street and Off-street Rapid Transit Alignments: Implications for Winnipeg's Southwest Rapid Transit Corridor." University of Manitoba, 2010. Web. 6 Dec. 2013.
[5] "Made in Winnipeg: Rapid Transit Solution." Rapid Transit Task Force, Sept. 2005. Web. 3 Dec. 2013.
[6] "Winnipeg Transportation Master Plan." City of Winnipeg, 1 Nov. 2011. Web.
[7] Krahn, Dave, P.Eng. "Southwest Rapid Transit Corridor Stage 2 Alignment Study." Dillon Consulting Limited, 3 Jan. 2013. Web.

- December 2013 – the planned development of a 19-storey high rise with an expected cost between $35 and $40 million adjacent to the Stage 1 Harkness station on Stradbrook Avenue was announced.
- Spring 2013 – the City granted approvals for a five story mixed-use commercial and office building at the southwest corner of Osborne Street & Corydon, adjacent to the Osborne Station on the Southwest Transitway.
- Streetside Development Corporation is planning a multi-family development (apartment building and townhouses) immediately adjacent to the Fort Rouge Station on the Southwest Transitway.

- **Local economic impacts –** numerous favourable effects to the Winnipeg economy would result from local materials and equipment purchases, construction/contractor involvement, and other spin-off activity associated with the development of the Project. In addition, the Project presents a significant opportunity for job creation, both during construction and throughout the Maintenance Period:

    - A high-level approximation of the job creation provided by the Project, suggests that the construction phase would create approximately 3,692 person years of employment and the maintenance phase of the Project would create approximately 923 person years of employment[8].

- **Revitalization of downtown area** - Winnipeg's downtown area has seen significant revitalization in recent years through developments including the Graham Transit Mall, MTS Centre, Manitoba Hydro Place, and Centrepoint, as well as the SHED district. These developments result in a reduction to the availability of parking spaces in the area. A reliable rapid transit service operating via the Graham Transit Mall into the heart of Winnipeg's downtown area will provide a viable and less expensive alternative to commuters while enhancing citizens' access to the revitalised downtown area.

- **Environmental sustainability** – an improvement in modal split presents an opportunity for significant environmental benefits as users shift from high-fuel consumption private automobiles to public transit and active transportation travel modes. Through improved modal split, as well as operating efficiencies resulting from an ability to service more customers with fewer buses[9], a rapid transit system provides the opportunity for a significant reduction in fossil fuel consumption and greenhouse gas emissions from the City's urban transportation system.

Project Scope

As determined by the alignment study completed by Dillon, the preferred alignment for the transitway runs through the Parker/Manitoba Hydro Lands paralleling Parker Avenue and then shifts to locate within the Manitoba Hydro right-of way until it intersects the existing CN track, north of Bishop Grandin and then continues south along the east side of the CN rail line to Markham Road.[10] This route 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.

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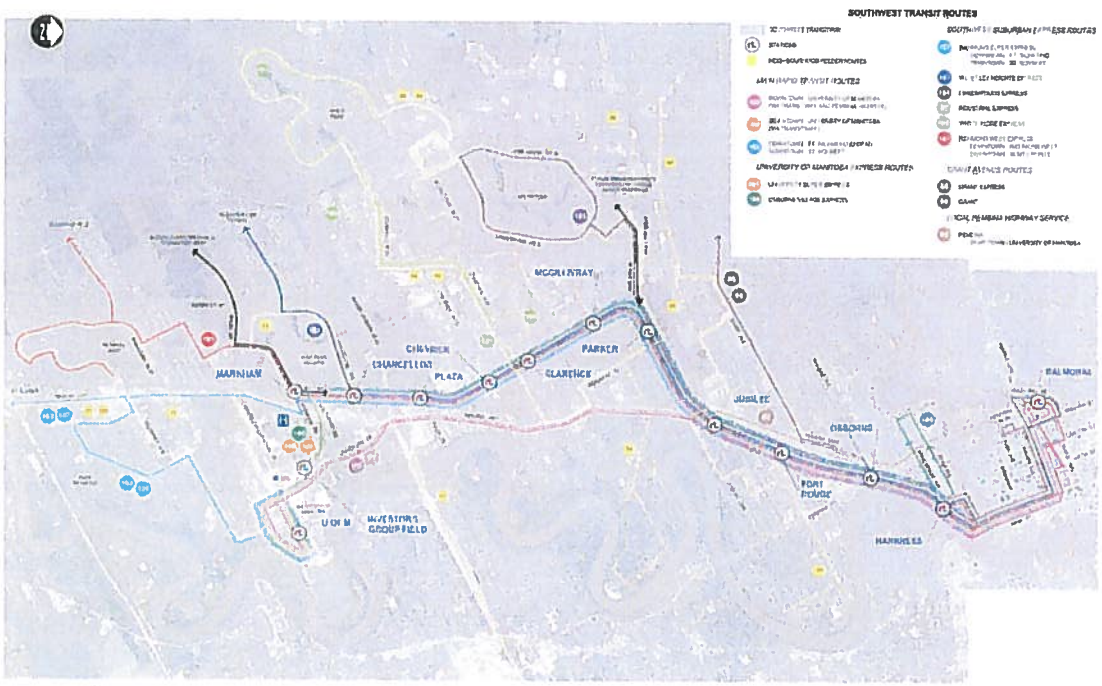
[8] The estimate of jobs created from construction is based on the approximate capital value of the Project ($600 million), a high-level assumption of labour being 40% of total construction costs. The estimate of jobs created from O&M is based on the estimate of maintenance costs (approximately $100 million in nominal dollars over 30 years) and a high-level assumption of labour representing 60% of such costs. Average salaries of $65,000 per year are assumed for both construction and O&M, approximated from average weekly construction earnings of $1,036.77 taken from Statistics Canada (December 2013), plus 15% overhead costs.

[9] "Made in Winnipeg: Rapid Transit Solution." Rapid Transit Task Force, Sept. 2005. Web. 3 Dec. 2013.

[10] Krahn, Dave, P.Eng. "Southwest Rapid Transit Corridor Stage 2 Alignment Study." Dillon Consulting Limited, 3 Jan. 2013. Web.

Figure 2: Conceptual Route Network for the Southwest Transitway



Source: Dillon Consulting Limited (2014)

Based on previous studies conducted[11], and with consideration to important service and productivity advantages, a BRT system is considered to provide the optimal transit technology solution for this Project.

The Project involves the construction of the following infrastructure elements[12]:

- Approximately 7.6 km of runningway to extend the Transitway from Pembina Highway & Jubilee Avenue to Markham Road and to the University of Manitoba, including roadway connections between the Transitway and the street system;
- Nine modern transit stations:
- Two new stops on the connection to the University of Manitoba;
- A new, special-purpose event day transit station at Investors Group Field to accommodate buses serving major events at the stadium;
- Widening of Pembina Highway by one lane through the Jubilee Underpass;
- Construction of a new Transitway bridge and CN rail bridge over Pembina Highway, and demolition of the existing CN rail bridge structure;
- Construction of a new Transitway underpass of CN wye tracks at the CN Portage Junction;
- Construction of a Transitway overpass of McGillivray Boulevard;
- Construction of a Transitway tunnel beneath the CN Letellier rail line (Letellier Tunnel);
- Construction of a new Transitway bridge and CN Letellier rail bridge over Bishop Grandin Boulevard;
- Construction of new park-and-ride facilities in close proximity to the Clarence and McGillivray stations;
- Upgrades to existing stops on the Fort Garry campus of the University of Manitoba;
- Transit signal priority technology, which will enable buses to communicate with the traffic signal controllers to provide priority to rapid transit service; and

[11] "Made in Winnipeg: Rapid Transit Solution." Rapid Transit Task Force, Sept. 2005. Web. 3 Dec. 2013.
[12] Information provided by Dillon Consulting Limited, Feb. 2014.

- A new Active Transportation path along the Transitway with full integration of cycling facilities at the stations.

Figure 3: Illustrative Photo of Station Design (existing Fort Rouge Station)



Source: Dillon Consulting Limited (2014)

Public-Private Partnership Approach

The City is planning to undertake a public-private partnership ("**P3**") approach for the delivery of the Project given the alignment of its objectives with the expected benefits that a P3 model brings. The City is a municipal leader in Canada in using the P3 model for procuring major capital infrastructure and has previously procured three transportation projects using P3 models, including the Disraeli Bridges and Chief Peguis Trail Extension projects in recent years.

Based on the City's assessment of the range of project delivery models relative to its objectives, a Design Build Finance Maintain ("**DBFM**") is recommended as the preferred P3 procurement and contract approach for the Project. The key characteristics of the DBFM contract structure are:

- **Bundled Design, Construction and Maintenance (including Lifecycle):** One private sector entity ("**Private Partner**") is responsible for design, construction, maintenance and long-term rehabilitation (lifecycle) of the Project. This provides strong incentives for design and construction work which is cost efficient, integrated (reduces design coordination issues), and results in an infrastructure which is economical to maintain over the long term as measured against performance standards that will not change.

- **Risk Transfer:** Design, construction, and maintenance risks are transferred to the Private Partner which would have the right experience and expertise to carry out these roles. The market consultations conducted for this Project indicate strong interest among private sector entities to participate in this Project under a DBFM model.

- **Cost and Schedule Certainty:** Given the City's future strategic direction for transit and transportation in the City, a P3 approach would provide the City with more certainty on completion of the Project within their timelines. In addition, annual and long-term maintenance costs will be fixed (subject to annual inflation adjustments) which will enable the City to plan for program costs over the long-term.

- **Payment on Performance:** The DBFM model involves the withholding of payment to the Private Partner until construction is completed to the specifications and requirements of the City (commissioning is achieved) as well as if the maintenance performance is not up to the requirements and/or standards of the City. The Private Partner would be penalized for failure of performance over the course of the long-term Maintenance Period.

- **Private Capital at Risk:** The DBFM model involves investment of private capital, which adds a high degree of Project due diligence, third-party oversight, and strong incentives for timely completion during the construction period. The DBFM model also includes long-term private capital, required to fund the portion of construction payments which have been withheld and are paid out over the maintenance term, providing the same discipline, oversight, and strong incentives for performance throughout the maintenance term. In addition, this private capital is at risk if the performance standards are not met.

The assignment of roles and responsibilities under a DBFM structure for the Project can be summarized as follows:

Table 1: Roles & Responsibilities under DBFM structure

Role	City of Winnipeg	Private Partner
Approvals		
• Environmental Assessment (EA) approvals	✓	
• Manitoba Hydro approvals	✓	✓
• CN approvals	✓	✓
• Other approvals	✓	
Design		
• Develop Functional Design	Technical Advisor	
• Develop Detailed Design		✓
Design and Construction Co-ordination		✓
Construction		✓
Maintenance		
• Maintain the Project over the long-term, including routine maintenance of civil infrastructure and summer/winter operations (Stage 1 and Stage 2)		✓
• Comply with performance specifications / requirements		✓
• Meet and exceed all environmental and health & safety requirements		✓
• Comply with hand-back requirements		✓
Long-term lifecycle maintenance – Stage 1 (major capital refurbishment of civil infrastructure, including pavement and structures)	✓	
Long-term lifecycle maintenance – Stage 2 (major capital refurbishment of civil infrastructure, including pavement and structures)		✓
Short-Term Private Financing (During Construction)		✓
Long-Term Private Financing (During Maintenance Period)		✓
Long-Term Public Financing (for Substantial Completion Payment)	✓	
Annual Payments for Maintenance and Lifecycle	✓	
Ownership of the Project (Maintenance Period and End of Term)	✓	

The Project's significant capital size, complex construction coordination and related risks make it well suited to a P3 model under an appropriate risk allocation structure. Some potential challenges of the Project include construction staging area limitations; traffic management requirements; railway infrastructure and utility realignment; and related third party interface along the Project corridor. Therefore, there is potentially significant benefit in combining the design and construction for the Project with a single entity responsible for the coordination and interface of all such Project activities. For example, any construction delays or increased costs caused by schedule acceleration, lack of resources (equipment, materials, labour), inefficient coordination with subcontractors, or final design not conforming to the City's performance and service specifications, will be accounted by the Private Partner under the DBFM model.

A series of consultations (**"Market Consultations"**) were conducted by Deloitte on behalf of the City to gain further insight from a range of P3 industry participants into the various components of the Project. The participants consisted of various developers, contractors, engineering firms, lenders, and debt arrangers that would be expected to bid on the Project to ensure that feedback on all key aspects of the Project was obtained. Each of the 23 firms which agreed to participate has strong expertise as well as experience on past projects with similar size and scope. The Market Consultations indicated that there is a significant level of interest from potential market participants, with specific reference to the Project's size and scope as a P3. The feedback obtained during the Market Consultations with respect to design and construction, maintenance, and financing issues were used to support the P3 financing assumptions utilized in the Business Case.

In order to achieve additional efficiencies on certain annual maintenance items (summer and winter maintenance), the Private Partner will assume the annual maintenance of the Stage 1 section. The City will however, continue to retain the obligations for periodic major lifecycle maintenance.

Value for Money Assessment

Overview

A Value for Money (**"VFM"**) assessment is a comparison of the costs of delivering an infrastructure project using a P3 approach (in this case as a DBFM), as opposed to a "traditional" procurement method such as Design-Bid-Build (**"DBB"**). The objective of VFM analysis is to ensure that the City is using the procurement and project delivery method which provides taxpayers with the best overall value solution.

The VFM assessment[13] compares the estimated total costs to the City of two potential methods of executing the Project:

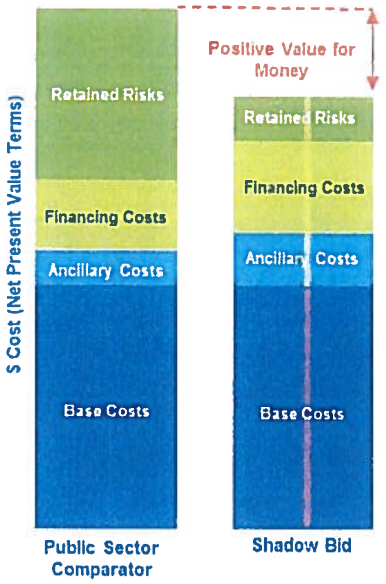
1. **Public-Private Partnership (DBFM) / Shadow Bid**: These are the total costs to the City of delivering the Project based on the DBFM model. These costs are based on the City's future payments to the Private Partner, and also include an adjustment for risks retained by the City under this model.
2. **A Public Sector Comparator ("PSC"):** The PSC is an estimate of the total costs to the City of delivering the Project, based on the City's traditional DBB method of delivering public infrastructure projects and also includes an adjustment for risks retained by the City under this model. Under this approach, the City is assumed to finance the Project's capital costs.

The VFM analysis is conducted by comparing the Net Present Value (**"NPV"**) of the risk-adjusted costs of the DBFM against that of the PSC. The premise is that by including the cost of all risks to the City, a fulsome risk-adjusted cost comparison of the DBFM and the PSC can be completed. It should be noted that a VFM is a comparative assessment and, as such, any quantification of risk should only be viewed within this context and not interpreted on an absolute basis. The impact to the City of an actual risk event occurring may or may not be similar to the results generated through the VFM risk quantification assessment.

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 P3 (DBFM) are lower than delivery under the PSC (DBB).

[13] The VFM methodology applied by Deloitte within the Business Case uses a risk assessment tool that is proprietary to Deloitte, but follows industry best practices as defined by Infrastructure Ontario and other procurement agencies in Canada and worldwide.

Figure 4: VFM - Comparison between PSC and Shadow Bid



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

Ancillary Costs are costs associated with planning and delivery of a project that could vary depending on the project delivery method, e.g. project management costs, transaction costs, and procurement costs. These costs are typically higher under a P3 but may vary depending upon each project.

Financing Costs are typically greater under a P3 than the PSC since the private sector will borrow at private financing rates to pay for the project costs until repaid by the public sector.

Base Costs are comprised of the design and construction costs. The base costs under the PSC and P3 are assumed to be the same.

Risk Assessment

The VFM assessment involves a comprehensive risk assessment process that quantifies the City's risk based on a methodology which is considered as best practice in Canadian P3 transactions. This methodology estimates the probability and cost impact of a range of risks associated with the Project. To estimate the probabilities and impacts of the various risks, the City's Project team (consisting of representatives from various City departments) and advisors convened two risk workshops facilitated by Deloitte, which involved the examination of a total of 67 discrete risks across all Project phases. Each risk was quantified under both a DBB and DBFM model in terms of the applicable cost base, probability of occurrence, expected impact, and risk allocation between the Private Partner and the City.

The transfer of construction risks as well as long-term maintenance and lifecycle risks to the Private Partner through the DBFM model is recognized as a significant advantage to the City for this Project while also providing the City with sufficient security against construction or Maintenance Period performance. Based on risk assessment findings for the Project, the DBFM model is expected to provide robust value for money to the City described below.

Preliminary VFM Assessment[14]

The base cost inputs and financial assumptions developed for the Project are used as the basis for the financial model for the Project. Results from the financial model and the risk assessment are integrated to produce the VFM assessment of the Project.

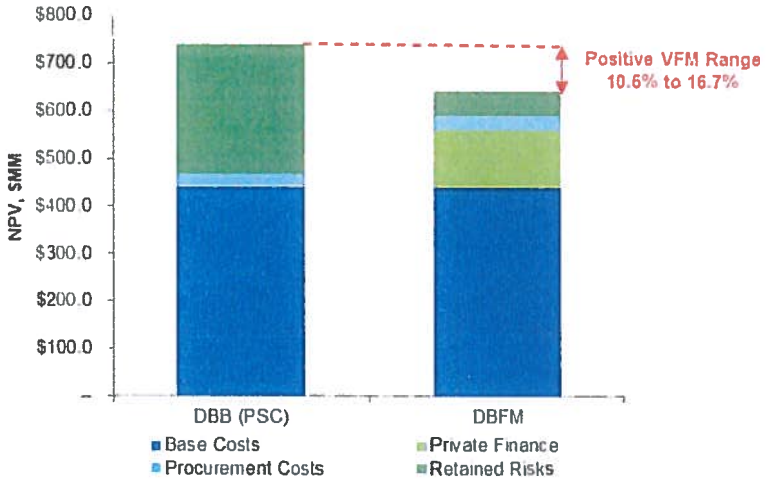
The DBFM model provides robust VFM due to risk transfer primarily during the construction and maintenance phases of the Project. Although the design and development of the Southwest Transitway is technically complex, the key risks associated with the Project are generally risks that can be controlled and mitigated by the private sector. Therefore, the transfer of these risks to a Private Partner that has experience and expertise in construction and maintenance of roadways is expected to result in VFM savings. A range of VFM results has been generated through conducting sensitivity and scenario analyses (using a combination of sensitivity parameters) to determine impact on VFM from a potential change in future market conditions based on the following parameters:

[14] Based on the current draft Business Case, the results of which may vary once approved by PPP Canada.

1. **City Discount Rate:** + / - 25 bps;
2. **Construction Costs Inflation Rate:** 2.5% to 4.5%; and
3. **Private Financing Long-Term Credit Spread:** 170 bps to 230 bps.

Conducting various sensitivity and scenario analyses illustrates that the DBFM with a 30 year term generates expected VFM savings within a range of 10.5% to 16.7% relative to the City's PSC, as illustrated in Figure 5.

Figure 5: VFM Comparison Between DBB (PSC) and DBFM (P3)



Discount Rate and Borrowing Rate Sensitivity[15]

The VFM assessment has assumed the following interest rates for the analysis:

- **Long-Term Private Debt All-in Rate:** A long-term private debt all-in rate of 5.50% based on the Government of Canada ("**GOC**") long-term borrowing rate as at February 18, 2014 (3.05%) ("**Base Rate**") plus an additional 45 bps to reflect possible future increase in interest rates up to Financial Close (Q4 2015), and an assumed spread of 200 bps based on recent market observations and Market Consultations.
- **Discount Rate and City Borrowing Rate:** An all-in cost of borrowing for the City of 4.35%. This represents a best estimate of the City's current long-term borrowing rate based on the Base Rate and a City financing credit spread of 130 bps. This estimate was developed in consultation with the City's finance department. The VFM assessment assumes a Discount Rate equal to the City's borrowing rate.

Although assumptions regarding the City's long-term borrowing rate do affect the VFM, as Table 2 below demonstrates, the Project provides robust value to taxpayers under a range of City financing assumptions.

[15] Based on the current draft Business Case, the results of which may vary once approved by PPP Canada.

Table 2: VFM Sensitivity to Changes in Interest Rates

Assumed All-In City Borrowing Rate	VFM Savings through P3 transaction
4.10%	12.0%
4.35% (Base Case)	13.3%
4.65%	14.6%
5.00%	16.5%

Project Funding

Historically, the biggest barrier to the Project's development is the inability for capital funding to be secured from all three levels of government. At this time, the City and Province of Manitoba have committed significant funding to the Project as summarized below, with the balance of funds requested from the federal government through PPP Canada, as supported by the Business Case. The Province has outlined a capital funding commitment of $225 million which will be matched by the City, and PPP Canada's commitment would be 25% of the Project's eligible capital costs and will be subject to the approval of the Business Case. Specific terms, conditions and timing of the contributions from the Province and PPP Canada are expected to be finalized in the spring / early summer of 2014.

The proposed project funding plan will require City funding of approximately $19.7 million annually beginning in 2020. There are several funding options that could be applied, including the allocation of cash-to-capital funding, a property tax increase, a transit fare increase, or a combination of these options. The specific source of funding for the $19.7 million annually will need to be addressed and identified during the City's 2015 budget process.

The DBFM funding structure considered for the Project assumes that the Private Partner will issue a bond for its long-term debt requirements and also commit the necessary amount of equity at the beginning of the construction term. After the funds raised through a bond are fully drawn, the consortium will shift to draw against a short term bank loan facility and subsequently its committed equity to fund the construction period costs. The short term bank loan will be paid off by the funds from the Substantial Completion Payment (**"SCP"**) at the end of construction. Both the long-term bond and equity will be serviced by the consortium during the Maintenance Period through the capital payments due from the City.

Key assumptions underpinning the funding plan during the construction phase under the DBFM structure are noted below:

- **Private Partner:** As per the proposed funding structure, the Private Partner raises long-term financing in respect of 40% of the Project's estimated capital costs that shall constitute the scope of work under the DBFM Project Agreement (i.e., total contract capital costs).

- **PPP Canada:** Assuming appropriate approvals are received, PPP Canada will provide funding that shall cover up to 25% of Eligible Project Capital Costs.

- **Province of Manitoba:** The Province's capital funding share will be made during the construction period. As a result, the Province will provide funding for the Substantial Completion Payment that will be due to the Private Partner at the end of the construction phase (less the PPP Canada funding share of this amount). For **all** other costs incurred by the City during the procurement and construction periods (which is equal to the City's construction costs (Land and Utilities) and the City ancillary costs during construction), the Province will provide funding such that its total amount will be equal to the City and not exceed $225 million.

- **City of Winnipeg:** The City will cost-share capital costs during the procurement and construction phase with the Province such that its share and that of the Province will be equal and will not exceed $225 million. The proposed project funding plan will require City funding of approximately $19.7 million annually beginning in 2020. There are several funding options that could be applied,

including the allocation of cash-to-capital funding, a property tax increase, a transit fare increase, or a combination of these options. The specific source of funding for the $19.7 million annually will need to be addressed and identified during the City's 2015 budget process.

Project Status

Given the City's past experience with P3 procurements, it has in place a proven governance model that will be deployed for this Project. The City has developed a clear organization and governance structure to manage the Project, undertake appropriate due diligence and execute decisions. The City has established its internal project team, the Technical Advisory Committee (**"TAC"**) led by Project Manager Bjorn Radstrom (Manager of Service Development – Winnipeg Transit) during the design and Business Case phase of the Project. The Project team is centered around a Project Champion and Project Manager, supported by internal procurement, financial, technical/operations, legal, and communications resources. To support the delivery of the Project, the City will be leveraging a set of external advisors (transaction / financial, legal, and technical) with expertise in P3 projects.

In parallel with the Business Case, the City is also engaged in several other tasks to move the Project forward. These include:

- **Completing the functional design work for the Project**;
  - Design work, including confirmation of the alignment of the Project, is being undertaken by Dillon and is expected to be completed by August 2014. Cost estimates developed to date as part of the scope of the Functional Design Study provide a level of cost accuracy of +/- 15%.

- **Concluding negotiations with the Province and PPP Canada on funding contributions**;
  - The Province has confirmed its capital commitment to the Project in an amount up to $225 million; specific terms and conditions of this contribution are currently being negotiated, with an agreement anticipated to be reached by April 2014.
  - PPP Canada is expected to review the Business Case at its June 2014 Board meeting, subsequent to which the City will await a funding decision.

- **Progressing with land acquisitions processes**;
  - The City of Winnipeg's Real Estate Division will need to acquire land or land interests from eight different property owners to facilitate the development of the Project. Three of the property owners (Manitoba Hydro, CN and University of Manitoba) are considered Crown/Provincial Corporations, while the remaining five properties are all privately owned. All affected property owners have been made aware of the City's land and land interest requirements, and based on preliminary discussions the City anticipates that it is likely it will be able to acquire needed lands and land interests through the negotiation process, and that expropriation will likely not be required. However, if it is determined that negotiations cannot be finalized in time to meet the Project's scheduled Fall 2015 construction start date, the City is prepared to initiate expropriation proceedings.

- **Progressing with environmental assessment processes**;
  - An Environmental Assessment Proposal (**"EAP"**) is being prepared for submission to Manitoba Conservation and Water Stewardship. From the activities completed at this time, no significant issues of concern have been identified.

- **Reviewing information requirements contained in the Province's P3 legislation**;
  - Based on the City's review of the requirements contained in The Public-Private Partnerships Transparency and Accountability Act, it is anticipated that the contents of the Business Case are in compliance with the applicable requirements. It is also understood that as part of these regulations, the City is required to conduct a public meeting with respect to the P3 procurement approach. The City will conduct the public consultation prior to the release of the RFQ, as required by the Province.

- **Preparing a stakeholder engagement and communications strategy**;

- The City has prepared a Public Engagement and Communications Strategy to guide key communication protocols and messaging in relation to the development of the Project. The Strategy covers the various distinct phases of public engagement during the Project, from Functional Design (October to February 2014) through to Pre-opening (November 2019 to April 2020).
- During the development of the functional design for the Project, two rounds of public engagement were undertaken to communicate the general alignment of the transitway; outline the scope of the Project; understand expectations of stakeholders and the public; gather feedback for consideration by the design team; as well as refine the functional design and respond to stakeholder questions following the preparation of a draft functional design for the Project.

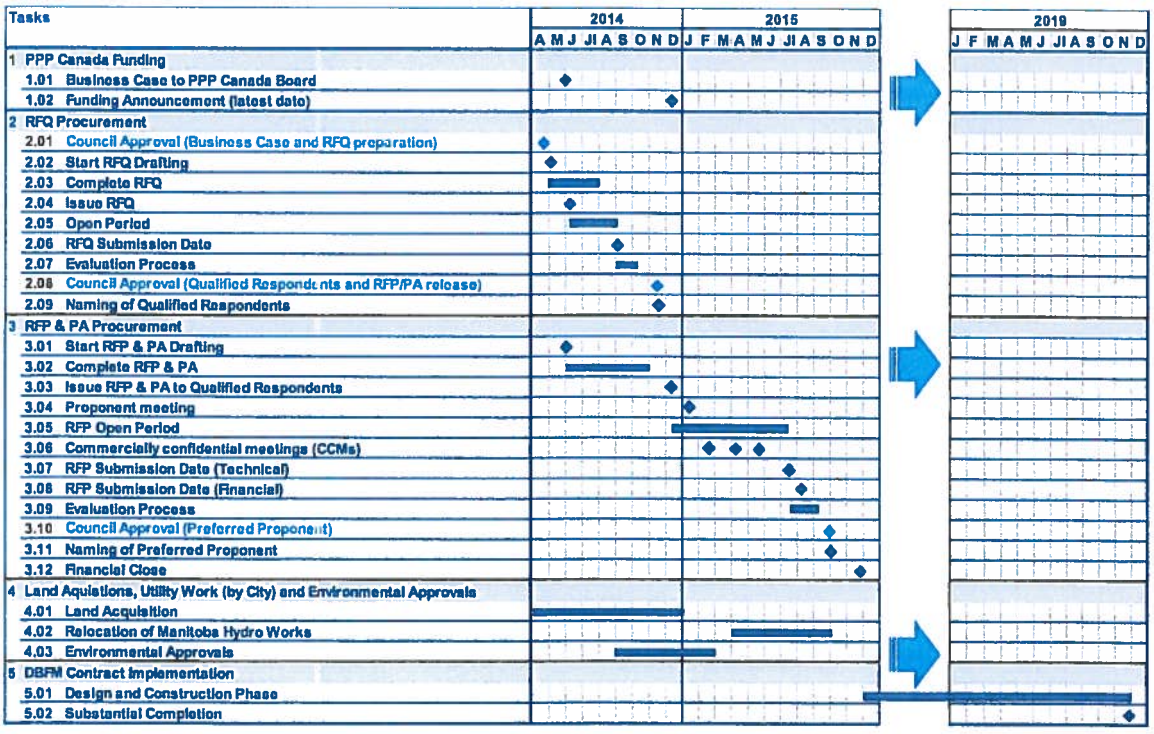
- **Confirming operating protocols with third-parties (Manitoba Hydro and CN).**
  - The City and Manitoba Hydro have identified a mutually acceptable route for the Transitway through the hydro corridor and further discussions concerning the acquisition of land for the Transitway and a cost sharing schedule for the relocation of hydro transmission towers are on-going.
  - Discussions between the City and CN are currently on-going to assess further details of the Project and confirm roles and responsibilities; a letter has been provided to CN to outline a proposed approach and the next step shall be to receive feedback and acknowledgement from CN.

Next Steps

As a next step for Council, the City will consider the submission of the Business Case, scheduled to be presented for approval at an upcoming meeting. Approval of the Business Case will allow City staff to proceed with formal preparations for the launch of the P3 procurement process that shall commence with release of the Request for Qualifications ("**RFQ**") to the market in the second quarter of 2014. The RFQ process shall conclude with the City short-listing up to three (3) qualified consortia followed by a Request for Proposal ("**RFP**") to select the preferred proponent that offers best value to the City.

The high level procurement timeline for the Project is provided in Figure 6 below:

Figure 6: High Level Project Timeline



The main drivers of the proposed procurement schedule are: 1) the City's target construction completion date by end of 2019; and 2) providing the Private Partner with a 4-year construction schedule. In order to facilitate this construction window, Financial Close is required by the end of 2015, which will in turn drive the balance of the RFQ/RFP schedule.

On this basis, the City expects to commence the procurement process with the issuance of the RFQ to the market in July 2014, with applicant team submissions due in October 2014. Assuming a funding announcement from PPP Canada with respect to its participation in the Project is made by late-2014, the City would then proceed with the release of the RFP to the qualified respondents in December 2014, and allow for an open period of eight (8) months with bid submissions due in July 2015.

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Appendix A: Glossary

Term	Definition
Base Rate	Based on the Government of Canada long-term bond rate plus additional spread to reflect possible future increase in interest rates up to Financial Close.
Business Case	Refers to the Stage 2 – Southwest Rapid Transit Corridor Project P3 Business Case, which assesses a range of infrastructure Project Delivery Models and recommends an optimal model that provides demonstrable public benefits and Value for Money, and will support the City's funding application to PPP Canada. The Business Case is in draft form, the results of which may change depending on PPP Canada's input.
Business Case Summary	Refers to a summary of the Stage 2 – Southwest Transitway Business Case document.
BRT	Refers to Bus Rapid Transit.
Market Consultations	Refers to market sounding consultations - confidential interactive sessions conducted with potential P3 partners to gain further insight from a range of P3 industry participants into the various components of the Project.
Contract Term	The duration of the PA from Commercial Close to end of contract encompassing both the Construction Phase and Maintenance Period.
City / Winnipeg	Refers to the City of Winnipeg.
Design-Bid-Build or DBB	Means a Project Delivery Model where the public sector procures a design through consulting engineers, and tenders that design for construction via general contractor. The contractor is paid via progress payments and no private financing is needed for construction of the infrastructure. Following completion the public sector assumes responsibility for operations and maintenance of the infrastructure, either through its own staff or via short-term O&M / maintenance only contracts with private firms.
Design-Build-Finance-Maintain or DBFM	Means a Project Delivery Model where a Private Partner is selected to take responsibility for the design, construction, and maintenance of infrastructure, typically for a set term. During construction, a significant portion of payment is held back, requiring the Private Partner to obtain financing for construction costs. Following completion, the held back funds are then paid to the private sector over the Maintenance Period as part of an annual service fee.
Dillon	Refers to Dillon Consulting Limited, the City's technical advisor on the Project.
Discount Rate	A discount rate is the rate at which cash flows are discounted back to a common date.
EAP	Refers to Environmental Assessment Proposal.
Eligible Project Capital Costs	Refers to the capital costs of the Project that are eligible for funding from PPP Canada. The eligible capital costs are comprised of: direct construction costs; interest during construction and financing fees; SPV costs; technical / financial / P3 advisory fees.
Financial Close	The moment in the procurement process when all approvals have been obtained, financing is secured and capital is ready to flow, and the Project receives the Notice to Proceed.
Market Consultations	Refers to a series of consultations conducted by Deloitte on behalf of the City to gain further insight from a range of P3 industry participants into the various components of the Project.
Maintenance Period	Refers to the portion of the Contract Term from substantial completion to end of contract (the 30 year maintenance term of the asset).
Notice to Proceed	Letter received by the Project Co to begin work on the Project.
NPV	The difference between the present value (the current worth of a future sum of money or stream of cash flows given a specified rate of return) of cash inflows and the present value of cash outflows. NPV provides an indication of the profitability of an investment.
PA	Refers to the Project Agreement.
PPP Canada	The federal agency that provides funding to eligible PPP projects.

Term	Definition
Private Partner	The private sector counterparty to a PA. Also referred to as Project Co.
Project or Stage 2	Means the Stage 2 of the Southwest Rapid Transit Corridor (also referred to as "Southwest Transitway").
Project Co	Generic term used to refer to the City's Private Partner under any type of PPP structure. Also referred to as the Project Co.
Project Delivery Model	Means a particular allocation of roles, responsibilities, and risks between the public sector and the private sector, in relation to an infrastructure Project. Examples of Project Delivery Models include Design-Bid-Build (DBB), Design-Build-Finance (DBf), Design-Build-finance-Maintain (DBfM), Design-Build-Operate-Maintain (DBfOM), Design-Build-Finance-Maintain (DBFM), and Design-Build-Finance-Operate-Maintain (DBFOM).
Project Team	Refers to the City staff assisted by its advisors retained for the purpose of developing the Business Case, including Deloitte and Dillon.
Public Private Partnership or PPP or P3	Refers generally to an approach for procurement of public infrastructure where the private sector assumes a significant share of the responsibility for the delivery and the performance of the infrastructure, typically characterized by performance based payment, a long concession term, and a requirement for private financing of at least a portion of the capital costs. The DBf, DBfM, DBfOM, DBFM, and DBFOM Project Delivery Models are commonly considered as types of PPP.
Public Sector Comparator or PSC	The traditional Project Delivery Model used as the basis to compare the costs and benefits of a PPP in a VFM analysis.
Reserve	The funds that the City will generate from the annual tax increase that will be placed into the Southwest Rapid Transit – Stage 2 Reserve.
RFP	Refers to the Request for Proposals typically issued to solicit binding proposals under a PPP procurement approach.
RFQ	Refers to the Request for Qualifications typically issued to pre-qualify a short-list of bidders under a PPP procurement approach.
Southwest Transitway / Transitway	Refers to the existing Stage 1 (opened in April 2012) and Stage 2 of the Southwest Rapid Transit Corridor in Winnipeg.
SPV	Refers to a Special Purpose Vehicle, a company set up by the Private Partner for purposes of submitting a proposal to undertake and manage the Project.
Substantial Completion	Means the date at which the Project is sufficiently complete to go into operations.
Substantial Completion Payment or SCP	Means a specified lump sum payment defined in the Project Agreement provided to the Project Co upon certification of substantial completion.
TAC	Means the Technical Advisory Committee comprised of individuals from the City's Project Team.
TMP	Refers to the City's Transportation Master Plan.
TOD	Refers to Transit-Oriented Development.
Value for Money or VFM	Refers to the risk-adjusted cost-benefit analysis.

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Council Building
510 Main Street
June 3, 2014

A Meeting of the Standing Policy Committee on Infrastructure Renewal and Public Works was held this day at 9:05 a.m.

Members of
the Committee: Councillor Swandel, Chairperson
Councillor Gerbasi
Councillor Sharma

Winnipeg Public Service: Mrs. V. Hutter, Senior Committee Clerk
Mr. B. Sacher, Director of Public Works
Mr. D. Wardrop, Director of Transit
Mr. G. Patton, Acting Director of Water and Waste
Mr. L. Deane, Manager of Engineering, Public Works Department
Mr. D. Domke, Manager of Parks and Open Space,
Public Works Department
Mr. L. Escobar, Manager of Transportation,
Public Works Department

MOTIONS

Moved by Councillor Sharma,
That Councillor Vandal be granted a leave of absence from today's meeting due to City-related business.

Carried

Moved by Councillor Gerbasi,
That the minutes of the meeting held on May 6, 2014, and on May 20, 2014, be taken as read and confirmed.

Carried

Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – June 3, 2014

DECISION MAKING HISTORY:

Moved by Councillor Gerbasi,

That the report of the Winnipeg Public Service be concurred in and forwarded to the Executive Policy Committee and Council.

Carried

Councillor Swandel asked to be recorded as having voted against the above motion, in accordance with Rule 47(7) of The Procedure By-law No. 50/2007.

Jeremy Hull, Co-Chair, Bike Winnipeg, submitted documentations in support of the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass.

David Sanders, submitted a presentation dated June 3, 2014, in opposition to the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass.

As well, David Sanders submitted documentation dated June 3, 2014, on behalf of Ed Innes, in opposition to the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass.

Minutes – Standing Policy Committee on Infrastructure Renewal and Public Works – June 3, 2014

DELEGATIONS

Minute No. 128
The following persons were heard in support of the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass:

- Jeremy Hull, Bike Winnipeg and submitted documentation

Minute No. 129
The following persons were heard in opposition to the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass:

- Councillor Havixbeck, Charleswood – Tuxedo Ward
- Councillor Orlikow, River Heights – Fort Garry Ward
- Tonya Abrams
- Susan Belmonte
- Cal Dueck
- Theresa Feakes
- Zoe Green
- Kristy Greening
- Lynn Hordy
- Ed Innes and submitted documentation
- Jordan Lobe
- Pam Lucenkiw and submitted documentation
- Lois Melville
- Laura Pearson
- David Sanders and submitted documentation
- Mark Scott
- Jennifer Still
- Lisa Waldner
- Jessics Woolford

Minute No. 130
The following persons were heard with respect to the Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass:

- Dave Dulko
- Peter Washchyshyn
- Geoff Zywina

(See Minute No. 127)

David M. Sanders, M.A., LL.B.

June 3, 2014

Chair and Members
Standing Policy Committee on Infrastructure Renewal and Public Works
The City of Winnipeg
510 Main Street
Winnipeg, MB

Re: SPC Infrastructure Renewal and Public Works Committee
Public Hearing - 9:00 a.m., Tuesday, June 3, 2014

Capital Integration Project - Southwest Transitway (Stage 2) and Pembina Highway Underpass (SRTC)

My name is David Sanders, and I am appearing as a private citizen **in opposition** to the recommendations of the Winnipeg Public Service to proceed immediately with a revised Southwest Rapid Transit Corridor (SRTC) Public-Private Partnership (P3) Project, now estimated to cost in excess of $1 billion during the next 35 years. (See Appendix 1.)

I have followed and participated in the debate over this public policy issue for almost 40 years, reporting on the Metropolitan Winnipeg Area Transportation Study and the Metro-CN Land Exchange Agreement in the late 1960's; recommending and administering the original Provincial 50% public transit cost-sharing formula, and overseeing the Winnipeg Railway Relocation Study in the 1970's, negotiating the original federal-provincial-municipal funding for the redevelopment of the CN East Yard as The Forks site in the 1980's; and teaching a generation of City planners into the 1990's. For the last 20 years I have provided real estate and property assessment consulting services to most major commercial and institutional property owners in Winnipeg.

This is my home, and I care about it. A lot.

- ✓ I have always been a strong supporter of the development of a well-designed, efficient and affordable public transit system, to ensure that all people have easy access to all destinations and services in our community.

- ✓ I have always supported the selection of the Downtown to University of Manitoba route as the first and most logical priority for the development of rapid transit service in Winnipeg. Long ago, as President of the University of Manitoba Students' Union, I first coined the phrase describing the Fort Garry campus as

"Manitoba's third largest city." Now, in 2014, almost 30,000 students and 9,000 academic and support staff travel to and from the University every weekday. And an event at the new Investors Group Field can bring another 34,000 people to the site at one time.

- ✓ The main financial justification for improving the frequency and reliability of public transit, and reducing total trip travel times, has been to increase transit ridership and decrease the need for ever wider and longer urban roads, bridges, and railway grade separations (overpasses, underpasses and tunnels), all of which are very, very expensive.

- ✓ Reducing fossil fuel consumption and the emission of greenhouse gases is an additional benefit from increased transit ridership. Accommodating safe active transportation routes is also a desirable objective.

- ✓ Until recently, rapid transit was considered as a means to provide better accessibility to existing developments and major destinations like our universities. Rapid transit was not considered as a public subsidy to be used to enable the development of previously undeveloped lands, as governments have often done by extending arterial roads and sewer and water mains to suburban greenfields. However, the City of Winnipeg has adopted a Transit-Oriented Development (TOD) policy, and apparently the City has now turned the policy on its head, to pursue a Development-Oriented Transit (DOT) system instead. The primary benefit and justification now advanced for the revised SRTC project is the increased opportunity for private development and commercial exploitation of the presently vacant lands which will be served by the publicly-financed rapid transit route currently proposed, taking a dogleg west through the Parker lands and south along the Manitoba Hydro transmission right-of-way.

- ✓ I have been speaking up in opposition to the present scheme and route since last spring, when I discovered how this important and longstanding public initiative is apparently being sidetracked to serve other interests instead of the interests of the general public. See my March 6, 2013 presentation to Executive Policy Committee posted on the City's website at: http://www.winnipeg.ca/CLKDMIS/ViewDoc.asp?DocId=12532&SectionId=&InitUrl=

- ✓ I have prepared a detailed written presentation for today's hearing, in the hope that it will be read and considered by the Standing Policy Committee, included in the Committee's report on this public hearing, and considered carefully by City Council and the federal and provincial governments should the City persist in putting this particular SRTC scheme forward for funding now.

A. Recommendations for Committee Consideration

Once the Committee has heard all those making representations this morning, I recommend that the Committee do the following:

a. **Direct the Winnipeg Public Service to provide the SPC with copies of the following documents, and to immediately publish them on the City's website:**

i. Application for Access to Information – May 22, 2014
   1. Copy of the "current draft" of **the complete P3 Business Case and Value for Money (VFM) Assessment** for City of Winnipeg Stage 2 – Southwest Rapid Transit Corridor Project P3, prepared by Deloitte and Touche LLP, as referred to in the Business Case Summary dated April 4, 2014 and published on May 20, 2014. It appears that t**his draft P3 Business Case has already been submitted to PPP Canada for Round Six consideration, even though City Council has neither seen nor approved it.**
   2. Copy of the Cockburn and Calrossie Combined Sewer Relief Works (CCCSR) Conceptual Design Report, May 2010.
   3. Copy of the Final Report of Dillon Consulting Limited for RFP No. 545-2011 – Preliminary Engineering Design for Upgrading the Pembina Highway Underpass, 2012.
   4. Copy of the previous P3 Canada Fund Round Five Application submitted by the City of Winnipeg before June 13, 2013, for the Southwest Rapid Transit Corridor (SRTC) Project P3.

ii. Application for Access to Information – May 29, 2014
   1. Copy of the complete report submitted to the City of Winnipeg by the engineering consulting firm of HDR Inc. with respect to the proposed Stage 2 of the Southwest Transitway, including the **benefit-cost analysis** produced, plus the data used, including cost inputs from the functional design study (Dillon), the P3 Business Case (Deloitte) and various inputs provided by the City of Winnipeg: traffic volumes, transit passenger volumes, bus volumes, growth rates, surrounding land-use information, etc.

iii. Copy of the City of Winnipeg Southwest Rapid Transit Corridor – Stage 2 **Environmental Review and Assessment**, Dillon Consulting Limited, April 17, 2014

b. **Then adjourn the public hearing**, consider the presentations received today and the additional documentation requested, and then reconvene on Tuesday, **June 10** to consider approving a complete report on the public hearing and to determine the Committee's recommendations to EPC and Council.

c. Recommend that the City take the time to consider and approve this project properly, in a deliberate and rational manner, since it appears that the City will **not** be ready to submit a complete application for Round Six P3 Canada funding by the June 13, 2014 deadline anyway.

d. Reject all of the recommendations from the Winnipeg Public Service regarding the SRTC project at this time.

e. **Recommend rejection of the Notice of Motion filed by Councillors Browaty and Fielding, calling for the City to hold a non-binding plebiscite/referendum on the proposed revised SRTC Project during the October 22, 2014 civic election.**

f. Direct the Interim Acting Chief Administrative Officer to establish a Major Project Steering Committee for the existing 2014 SRTC Capital Project #4230010514 now, and provide a first Quarterly Financial Status Report to SPC Finance on June 26, 2014, summarizing the money spent and work completed to date.

g. Direct the SRTC Major Project Steering Committee (MPSC) to reconsider the original alignment of the Stage 2 route from Jubilee to the University on a direct line south, immediately east of the **CN Letellier Subdivision**, without relocating the railway closer to residential areas, and to prepare a functional design and cost-benefit analysis indicating whether such a project can be justified now.

h. Direct the SRTC MPSC to investigate and advise whether and how the Bus Rapid Transit (BRT) Corridor might be converted to Light Rail Transit (LRT), either now or in the future.

i. Confirm that City Council expects the Winnipeg Public Service to comply with the established limitations on the delegation of financial authority, and not to seek approval to exceed those limitations except in unusual and extenuating circumstances.

B. The Revised Southwest Rapid Transit Corridor Project (SRTC)

It is not yet clear exactly what is included in the revised "Capital Integration Project" which the City administration wants this Committee and the City Council to approve.

The May 9, 2014 Administration Report says the revised Project combines the Pembina Highway Underpass widening project, the Southwest Rapid Transit Corridor – Stage 2 project, and associated Land Drainage infrastructure, which is apparently different from the Cockburn-Calrossie Combined Sewer Relief (CCCSR) project, which is nevertheless proceeding now so as to accommodate the SRTC project.

None of the key documents, such as the Functional Design Study, the Cost-Benefit Analysis, the Value for Money assessment, or the full P3 Business Case, has been published, except for the Administration Report dated May 9, 2014, and the Deloitte P3 Business Case Summary, April 4, 2014.

These documents indicate that the SRTC Project will include the following major works:

a. Pembina Highway Underpass
    i. Widening of Pembina Highway by **one lane** in the northbound direction through the underpass at Jubilee, allowing for three lanes in each direction, and improved pedestrian and bicycle facilities on both sides of Pembina through the underpass.
    ii. Construction of a new overpass of Pembina Highway
    iii. Demolition of the existing CN mainline rail bridge structure and construction of a new CN mainline rail bridge over Pembina Highway
    iv. Track relocation on the CN Letellier Subdivision and the CN Rivers Subdivision near Jubilee.

b. Associated Land Drainage Infrastructure
    i. Works so far undefined
    ii. Retention pond and land drainage sewer accommodating the SWRTC and Pembina Underpass, being built as part of the Cockburn-Calrossie Combined Sewer Relief (CCCSR) Project.
    iii. Possibly includes the $2 million Cockburn Lift Station Upgrades to Facilitate Fort Rouge Yards Development, Project #20350005yy.

c. Southwest Bus Transitway
    i. Construction of an additional 7.6 km. dedicated transitway, from the south end of Stage 1 at Jubilee to Markham Road and the University of Manitoba, plus nine new Rapid Transit stations.
    ii. Construction of a transitway underpass of the CN Letellier Subdivision "wye" rail lines near Jubilee
    iii. Construction of a transitway overpass of McGillivray Boulevard

iv. Construction of a transitway tunnel beneath the CN Letelllier Subdivision south of Chevrier Boulevard
v. Construction of a transitway overpass of Bishop Grandin Boulevard
vi. Demolition of the existing CN Letellier rail bridge over Bishop Grandin Boulevard and construction of a new CN rail bridge over Bishop Grandin Boulevard
vii. Reconstruction of the CN Letellier Subdivision track 5.6 meters (18.4 feet) to the west, between Plaza Drive and Markham Avenue.
viii. Reconstruction of the track bed, upgraded rail, ties, and ballast, and construction of a noise attenuation wall on the west side of the CN Letellier Subdivision south of Bishop Grandin.

According to the Administration Report, the estimated construction costs, in 2019 dollars, now total $590 million, including:

Pembina Highway Underpass widening	$ 72.5 million
Southwest Transitway – Stage 2	$407.8 million
Associated Land Drainage Works	$ 39.9 million
Subtotal	$520.2 million
Construction Contingency	$ 69.4 million
Total Construction Cost	**$590 million**

The Administration is hoping that by agreeing to PPP Canada's requirement to put this huge project out for the private sector to bid on as a Public-Private Partnership, with private companies designing, building and maintaining the Corridor, and financing the City's share of the cost for the next 30 years, the federal agency will then make a grant of $140 million or up to 25% of the eligible costs (excluding land acquisition and furnishings costs), upon completion of construction in **2019**.

The Province of Manitoba has provided a letter agreeing to match the City's capital contribution of up to $225 million, resulting in the total of $590 million.

However, while the City will continue to retain the obligations for periodic major lifecycle maintenance, the draft Business Case suggests that the private contractor will assume responsibility for annual maintenance of both Stage 1 and Stage 2. According to Appendix 1, **the City will be required to make annual payments of more than $22 million to the private partner for 30 years**, partly for annual maintenance costs (increasing with inflation per Appendix 5) but mainly to pay principal and interest on the private financing of **$220,800,000**. The City is assuming that the Province will continue to pay 50% of the annual maintenance costs, or $2.3 million per year, and that City Council will find the remaining $19.7 million through **property tax and/or transit fare increases**.

In any event, the total projected construction costs and annual payments are estimated in Appendix 1 at $1,088,774, not including additional buses or increased operating costs.

C. Reason for the Public Hearing and the Committee's July 15th Report

The public hearing this morning is a mandatory requirement of the new Manitoba *Public-Private Partnership Transparency and Accountability Act*, and therefore a mandatory requirement for making an application for federal funding from the P3 Canada Fund.

The City has given citizens the bare minimum notice of 14 days, and has provided only limited public information on the project as now proposed.

a. Notification of the June 3 P3 Public Hearing, May 20, 2014

According to the Notification, the proposed Project "will be presented to the citizens of Winnipeg" this morning.

The citizens who are able to attend this morning are then to be invited to ask questions and provide comment on the viability, risks, costs and benefits of the proposed public-private partnership (P3) design-build-finance-maintain (DBFM) procurement method being proposed for this project.

A summary of the Deloitte Business Case and Value for Money (VFM) assessment was posted on the Transit website on May 20th, and a hard copy of the summary was available for viewing. **But a complete copy of the draft Business Case, which has already been submitted to P3 Canada Inc., is not yet available to the public.**

Neither the HDR Inc. Cost-Benefit Analysis nor the Deloitte Value for Money Assessment have been published.

The Administration Report states that **"A positive benefit-cost ratio is a key driver for this project."** If so, the Consultant's report, and the data supporting it, should be published for review and evaluation by the Councillors and public, before this hearing is completed.

N.B. Unless the City makes the complete P3 Business Case, the Cost-Benefit Analysis with supporting data, and the Value for Money assessment, all publicly available, and provides a reasonable opportunity for members of the public to comment on it, it is my opinion **that the City will have failed to comply with the requirements of Section 5 of *The Public-Private Partnership Transparency and Accountability Act,* and related provisions of Manitoba Regulation 126/2013 regarding the necessary analysis and information.**

b. P3 Canada funding – Round Six Application Procedures – June 13, 2014

i. The 2013 Application for Round Five

Last year the City rushed to have Council select the Stage 2 SRTC route alignment in order to submit an application for P3 Canada funding by the Round Five deadline in June of 2013.

All the Administration Report says now is that the City's 2013 application was "retained for further consideration." What happened? Was the City's application incomplete? Why did last year's submission not meet the screening requirements of PPP Canada Inc,?

ii. Current PPP Canada Round Six requirements and procedure

Completed Round Six applications must be submitted to PPP Canada Inc. **no later than June 13, 2014**. Applications received after that date will **not** be considered this year.

PPP Canada will announce which projects are "screened in" during the fall of 2014, and successful applicants will then submit final P3 Business Cases by March 31, 2015, for evaluation and final review, consideration by the P3 Canada Board, and recommendation for federal ministerial approval **later in 2015,** presumably sometime before the October federal election. To be eligible for federal P3 funding, projects must have meaningful private sector involvement, which in this case means Design-Build-Finance and Maintain (DBFM) responsibilities, at a minimum. The SRTC project will apparently fit within PPP Canada's priorities for wastewater, public transit and local road infrastructure.

c. City of Winnipeg Environmental Impact Statement – June 9, 2014

As far as I can tell, the City has made no public mention of the submission of its **Environmental Review and Assessment Report for the Southwest Rapid Transit Corridor – Stage 2**, on April 17, 2014, seeking approval and licensing under the *Manitoba Environment Act*.

Apparently the Manitoba Environmental Approvals Branch of Conservation and Water Stewardship placed an ad in the May 10th edition of The Winnipeg Free Press, advising that citizens may access the City's Environmental Impact Statement online at http://www.gov.mb.ca/conservation/eal/registries/5709citywpgrapidtransit/index.html , and stating that citizens may make written representations for or against the proposal by **June 9, 2014**, now just two weeks away.

I would have thought that the submission of the Environmental Impact Statement (EIS) and the opportunity for public comment would have been mentioned prominently on the City's website, and particularly the Stage 2 – Southwest Transitway page, but once again it appears that as far as the City administration is concerned, the public's business is none of our business.

Incidentally, I would strongly recommend that interested citizens look up the EIS, because it contains a much clearer description of the current project than appears in the Administrative Report and Deloitte Business Case Summary. Among other things, it contains Dillon's Southwest Transitway Stage 2 **P3 Canada Submission Figures 1-4**, showing the detailed design ending at Markham Road, not Bison Drive.

On the other hand, the environmental assessment was basically a desk study, plus a field survey conducted on October 1, 2013, when the consultant admits that "the majority of migratory wildlife species would have already left the area; the wet meadow and/or wetland areas were dry; and plants that grow and flower in spring or early summer were not present or were in senescence." The late date of the survey may be explained by the fact that the consulting contract was not awarded until September, 2013. I expect that representatives of groups such as the Parker Wetlands Conservation Committee will be submitting some pointed commentary on the EIS and the proposed project.

Why the almost covert attempt to obtain provincial environmental approval? I presume it is because such approval is also a requirement for approval of federal P3 Canada Fund financing. I hope the project proponents are not expecting the Provincial Environmental Approvals Branch to give serious consideration to representations received by June 9th, and then to issue a license without a public hearing almost immediately, before the P3 Round Six deadline on June 13th. As a former Chair of the Province's Interdepartmental Planning Board, I would have never tolerated giving public representations such short shrift.

In my opinion, the scheme is not ready for Council approval either on June 25th, or within the next ten days, and therefore the City has missed making a qualified P3 Canada Fund application by the annual deadline, once again.

And that is a good thing. A year from now we can hope to have a new senior administration and a newly elected Council bring forward a practical and economical proposal for improving public transit services in Winnipeg.

D. What's wrong with this Project?

a. The City has failed to produce credible evidence and analysis which would enable the citizens, Council, and provincial and federal government authorities to evaluate the viability, risks, costs and benefits of the Revised SRTC Project, or the P3 procurement method proposed.

b. No cost-benefit analysis has been produced to justify the reported cost-benefit ratio of 1.37 for Stage 2 of the Southwest Transitway. If the cost of Stage 2 is $407.8 million as reported, then the consultant is saying there must be **benefits of $559 million**. What are those benefits, and who all will receive them? When? How has the City measured the benefits of "improved travel times, reduced delay, reduced pollution and Green House Gas (GHG) emissions, health benefits, increased tax base, etc."

c. If the cost-benefit ratio is only 0.71 to widen the Pembina Underpass by just one lane in the northern direction, requiring the demolition of the CN mainline rail bridge over Pembina Highway and the construction of a new CN rail bridge and a new transitway bridge over Pembina, at a cost of $72.5 million, the consultant is saying that the benefits which someone will receive will be worth only $51 million. **If so, why would we do that?**

d. **Without providing any supporting traffic and ridership data, the City suggests that ridership on the completed Southwest Rapid Transit Corridor will increase by 12-15%, and that travel times between Downtown and the University of Manitoba will be improved by a total of 9 to 16 minutes, depending on the time of day. At an estimated additional cost of more than $1 billion.** Isn't it time to publish the ridership statistics for Stage 1 of the Southwest Rapid Transit Corridor?

e. The SRTC project is being sold as a catalyst for "Transit-Oriented Development," although the benefits have not been quantified publicly.

    i. On July 13, 2009, City Council approved a land swap with GEM Equities, whereby that company obtained 58.7 acres of unserviced City land north of Parker Avenue in exchange for 8.95 acres of serviced land in the Fort Rouge Yards, required for Stage 1 of the Southwest Rapid Transit Corridor. To facilitate "transit-oriented development" in Fort Rouge, the Federation of Canadian Municipalities has offered GEM Equities $15.7 million in financial assistance, including $10 million in loans guaranteed by the City, but it appears that **nothing has been built in The Yards at Fort Rouge as yet, five years later.**

ii. On September 30, 2011, long before Council officially chose the Stage 2 Route Alignment, the City awarded Dillon Consulting Limited a contract for $797,233 to conduct a preliminary engineering study for the upgrade of the Pembina Highway Underpass. The Consultant was directed to consider the implications of the Underpass project for the Cockburn and Calrossie Combined Sewer Relief Works, and was specifically directed to provide for the future extension of the Southwest Rapid Transit Corridor **"via the Parker lands."** (RFP 545-2011, p. 3).

iii. Early in 2012, after already being directed to assume the Parker lands route, Dillon was engaged to study and recommend a preferred alignment option for Stage 2 of the Southwest Transitway. The seriously flawed report recommended the Parker Lands/Manitoba Hydro dog leg alignment. Again, see my March 6, 2013 presentation to Executive Policy Committee posted on the City's website.

iv. On March 20, 2013, City Council was very ill-advised to agree to amend the Transportation Master Plan to divert the Stage 2 Transitway route from the long standing direct Letellier rail line route along Pembina Highway, off on the curious dog leg west through the Parker wetlands and south along the Manitoba Hydro right-of-way, where there are no transit riders. Note that before Council amended it, the Transportation Master Plan had indicated that the dog leg route "would serve the emerging communities on the Parker and Taylor lands," to be developed by GEM Equities and Shindico, respectively.

v. The City rushed to submit an application for federal funding from the P3 Canada Fund by the Round Five deadline in June of 2013, but apparently the application did not meet the screening requirements.

vi. Then, on September 10, 2013, the City awarded a contract to Dillon for $1,894,000 for the preparation of the required capital cost estimate, environmental impact statement and cost-benefit analysis by February 14, 2914, and the required P3 Business Case and Value for Money Analysis by February 28, 2014.

vii. The environmental impact statement was not published until May 10th, and only a summary of the draft P3 Business Case and VFM Analysis has just been published on May 20th. The complete draft with detailed calculations is not public.

viii. Here is the present state of the TOD sites which have been associated with the SRTC Project:

1. The Yards at Fort Rouge – planned residential units not constructed as yet.
2. Streetside Development Corp. at Fort Rouge RT Station – multi-family residential development planned
3. Stradbrook at Harkness RT Station – high rise apartment planned but not built yet
4. Parker lands – nothing planned as yet
5. Osborne near Osborne RT Station – multi-storey commercial building planned but not constructed yet
6. Bishop Grandin Crossing (Sugar Beet lands) – Area Master Plan recently approved without arranging for any access to the SRTC Stage 2 RT Station.
7. Southlands (Southwoods Golf Course) Lands – planning still
8. Taylor Lands (Grant Park Pavilions) – construction has begun, without any connection to the SRTC.

To sum up, nothing has been built yet because of the presence of Stage 1 or the plan for Stage 2 of the SRTC.

E. What about LRT?

Please see the insightful BRT Analysis Technical Critique submitted this morning on behalf of Ed Innes, MSc (EE), Past President of the Manitoba Electric Vehicle Association (MEVA).

Mr. Innes argues that an LRT system is preferable to BRT, and should be located in the middle of existing urban development and not in inconvenient and inefficient dog-legs like Parker.

I respectfully request that this Committee and the City Council just say no to these recommendations:

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

1. That the 2014 Capital Budget be amended by combining the "Pembina Highway Underpass" project, the "Southwest Rapid Transit Corridor - Stage 2" project, and associated Land Drainage infrastructure and that the combined project be renamed and approved as a 2014 capital project as set out in **Appendix 1** in the amount of $590 million, subject to confirmation of Federal and Provincial funding as set forth in this Report.

2. That the Public Service be authorized to proceed with the Southwest Transitway (Stage 2) and Pembina Highway Underpass Project and associated Land Drainage infrastructure (the 'Project') based on a Design-Build-Finance-(Operate)-Maintain (DBF(O)M) Public-Private Partnership delivery model and that the Chief Administrative Officer be authorized to approve, issue and award the Request for Qualifications and the Request for Proposals for the Project.

3. That Council approve P3 annual service / financing payments of $19.7 million commencing in 2020 and the source of funding for these amounts be identified in the 2015 budget process.

4. That changes to the debt strategy be approved as outlined in **Appendix 2**.

5. That this Project be exempt from the application of corporate overhead charges for administration and interest.

6. That 1 permanent FTE be added to the Corporate Finance complement in order to provide P3 contract administration, to be funded by annual payments from all P3 project budgets.
7. That the Director of Planning, Property and Development be authorized to negotiate the acquisition of land required for the Project.

8. That the City enter into funding agreements with the Province of Manitoba and the Government of Canada and/or PPP Canada Inc. ("PPP Canada") with respect to the provincial and federal funding contributions to the Project, and that the Chief Administrative Officer be authorized to negotiate and approve the terms and conditions of such funding agreements in accordance with this report and such other terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

9. That the City enter into such agreements with CN and Manitoba Hydro as determined necessary by the City Solicitor / Director of Legal Services to resolve all outstanding CN and Manitoba Hydro issues with respect to the Project, other than land acquisition matters.

10. That authority be delegated to the Chief Administrative Officer to negotiate and approve the terms and conditions of the agreements with CN and Manitoba Hydro, together with such terms and conditions deemed necessary by the City Solicitor / Director of Legal Services to protect the interests of the City.

11. That approval be delegated to the Chief Financial Officer to negotiate and award a sole source contract up to $4.25 million (included in the project budget) in 2014 with Manitoba Hydro for early works required to prepare the Hydro Corridor before construction of the Transitway begins in 2016.

12. That, in the interest of not prolonging the project timeline, the authority be delegated to the Chief Administrative Officer to authorize Phase III (Procurement) of Bid Opp 685-2013 (Professional Consulting Services for Stage 2 of the Southwest Transitway) to proceed before a formal funding announcement is made by the federal government;

13. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Thank you,

David M. Sanders MA LLB

DMS/bm

June 3, 2014

Chair and Members
Standing Policy Committee on Infrastructure Renewal and Public Works
The City of Winnipeg
510 Main Street
Winnipeg, MB

Re: SPC Infrastructure Renewal and Public Works Committee
Public Hearing - 9:00 a.m., Tuesday, June 3, 2014

Capital Integration Project - Southwest Transitway (Stage 2)
and Pembina Highway Underpass (SRTC)

Please accept the attached document entitled "BRT Analysis Technical Critique," dated June 3, 2014, and prepared by Ed Innes of Winnipeg for submission at this Public Hearing. Mr. Innes is unable to present the report in person this morning.

Ed Innes, MSc(EE), is an energy specialist, with a broad background in energy systems analysis, including transportation systems. Ten years of that experience is in emerging alternative energy systems, including leading-edge electric and hydrogen powered vehicles. It was necessary to study transit system behaviour as part of the energy analysis of those systems. Ed has received requests to speak on these topics from as far away as Europe and Asia. Ed holds two degrees in Electrical Engineering from the University of Manitoba and is the current Past President of the Manitoba Electric Vehicle Association (MEVA). Ed also enjoys reading transportation studies, and is familiar with the jargon and techniques used, and how such studies have evolved over the past several decades from professional engineering documents into public relations exercises (particularly in Winnipeg).

Respectfully submitted
on behalf of Ed Innes:

David Sanders

BRT Analysis Technical Critique

For June 3, 2014

In 1955, the Winnipeg streetcar system was dismantled. Ridership promptly fell from about 75 million in 1954, the last full year of remaining service, to about 60 million only 4 years later, a loss of 15 million or 20%. It then stabilized at 60 million for the next 20 years. In the election following the dismantling, Mayor Sharpe was soundly defeated by an upstart, Stephen Juba, and is still the last incumbent mayor to fall while in office.

While it is not possible to directly link the two events, it is also not possible to dismiss that tens of thousands of inconvenienced riders likely remembered come election day.

But that is not the full impact of dismantling the streetcar system, which began earlier. At its peak, Winnipeg had 195 km of track and 105 million riders. Those who claim that Winnipeg is too small a city to afford or deserve such a system should remember these numbers. Today we have a city that is over twice the size and has only 40% of the ridership. We also have a transit system that can no longer fund itself out of fares, that is more easily shut down by winter storms, that consumes over six times as much energy per km of vehicle travel, and one that emits harmful Group 1 human carcinogens (diesel exhaust), as classified by the World Health Organization.

As John Sansom, the Toronto Transit Commission's director of planning, said in the Sept. 18, 1969 Globe and Mail, "Streetcars can cope with 10,000 passengers an hour on a busy street, and 15,000 to 20,000 an hour if they are coupled into trains and have their own right-of-way." Mr. Sansom said transit experts are starting to wonder whether the conversion to buses by most North American public transit bodies was a good idea after all. "For instance, it looks as if taking the streetcars off Bay Street was a big mistake. The buses aren't carrying a fraction of the number of people."

The modern term for streetcars coupled into trains is Light Rail Transit, or LRT for short.

Today, our civic administration wishes to further perpetuate these disadvantages by pursuing a so-called "Bus Rapid Transit" system -- a vague public relations concept with no consistent physical manifestation. In fact, the majority of such "BRT" systems are virtually indistinguishable from ordinary bus service running on ordinary streets, such as the final 3 km downtown portion of our own system, and can hardly be referred to as "Rapid Transit". "Rapid Transit", while it lacks a formal definition, normally refers to sleek subway trains zooming unimpeded under the congested streets in the hearts of major cities, and certainly not to buses trundling down those very same streets overhead. To avoid confusion, this discussion will use the specific term busway (or bus roadway) to refer to a roadway constructed for the near exclusive use of buses.

No other major city in Canada today is attempting to make busways the backbone of their transit system. In fact the only other major Canadian city that has such a system is Ottawa, a system that was once regarded as the international paragon of busway design and the inspiration for similar systems around the world, including Winnipeg. Ottawa has begun the arduous process of getting rid of its busways and upgrading to Light Rail Transit. It turns out that the best busway system in the world cannot keep up with Canada's oldest surviving streetcar system in Toronto when it comes to moving passengers.

There are important traffic engineering reasons for choosing a rail system. This is why the Ottawa busway network today, which is similar to the one Winnipeg is planning, is in LOS F or failure. That's engineering jargon for the volume of passengers exceeding the capacity of the system.

The average passenger feels this failure as congestion and delays, yet overall ridership is only 14.7% higher in Ottawa than when the first busway opened in December of 1983. Meanwhile, the population grew by over 60%. In fact, Ottawa-wide ridership fell 25% in the first 12 years after the busway system began operating, and is still down by about 28% adjusted for population. (Calgary ridership is up 139% with LRT, and population is up 72%.) The busways merely shifted the passenger load into an unsustainable concentrated bus pattern. The Ottawa busway system has turned into a planning disaster. Ottawa's urban busways turned out to be disposable white elephants with high operating costs.

The engineering explanation behind the low capacity of bus systems is in the physics of moving lots of 50 passenger buses that naturally interfere with one another, whereas, trains can carry 300 to a 1000 or more passengers relatively unimpeded. A single train can simply glide in unencumbered, engulf and release large crowds in one fell swoop, and glide on. What this means at a stadium Bomber game, for example, with 10,000 transit riders, is that the whole crowd can be efficiently whisked off with as few as 10 trains, in as little as 20 to 30 minutes. The bigger the trains, the faster it all goes. Every added rail passenger lowers the per unit cost of the track.

With buses on the other hand -- with or without a busway -- 200 buses are needed, which immediately causes congestion. The typical desperate solution is at least 2 hours of crush-loading (more than 50 passengers) to reduce the number of buses and cram the passengers through. Every added bus increases the need for more parallel road lanes to restore service quality. A single busway lane cannot handle this type of load without slowing right down to a crawl. Now imagine this happening every day at rush hour.

If the higher concentration of buses coming off the end of a full busway are fed into already congested downtown streets when they reach downtown, the predictable result is Ottawa's gridlock, the very thing that rapid transit is supposed to solve. This is usually the biggest flaw in a busway plan. Because of these inherent weaknesses, busways are the only form of mass transit that is not very capable of transporting masses of people or supporting urban density. They are primarily a suburban option for low-density suburbs with perpetually low ridership to ensure a lower probability of overload.

The problem with Winnipeg's busway proposal is that there is very little evidence to suggest that a proper traffic engineering analysis has been performed. To be clear, such an analysis is easy to identify. Under the Engineering and Geoscientific Professions Act it is required to bear the seal of the Professional Engineer who bears the full responsibility for it. It cannot be the personal opinion of an engineer, nor can it be in the form of an informal memorandum or report. It is a legal document and must be in the proper legal format.

There appears to be no such proper analysis of the passenger flows throughout the city to justify the need for a busway system in the Pembina corridor, nor one which prioritizes the various corridors based on actual ridership exceeding corridor capacity. There appears to be no proper traffic analysis of the various local alignments for the chosen Pembina corridor, merely vague assertions in non-specific reports. There appears to be no proper comparative analysis of the passenger flows and capacities of various corridor route options and technologies.

In short, the city has not presented dependable Professional Engineering evidence that the proposed system will work as planned or even of what that expected performance level is.

For example, the 2005 Made in Winnipeg Rapid Transit Task Force report is referred to as the justification for busway technology in the 2014 Stage 2 Environmental Review and Assessment, and in the 2014 Stage 2 P3 Business Case Summary. This Task Force, composed entirely of non-expert personnel and headed by Councillor Wyatt, erroneously determined on page 29 that the total cost for both Stages 1 and 2 of busway construction would be $84 million, about one eighth the total cost being discussed today. Despite being off by an order of magnitude in this central conclusion, the referring reports have the egregious audacity to refer to it. The remainder of the report is largely populated with other empty busway proponent marketing rhetoric, propaganda, and empty assertions. It lacks a Professional Engineer's seal.

In another example, the 2013 Stage 2 Alignment Study states that, "Over time, it is expected ridership will increase in the range of 15 - 20%", and then immediately contradicts itself with a 2005 July 27 memorandum as a justification for a 40% increase in ridership. 2005 is before the Parker alignment was even considered. The 2014 P3 Business Case Summary adds further confusion by claiming that ridership will only grow 12% to 15%. No actual attempt is made in either of these studies to quantify or determine the ridership for either option, or to determine whether the busway will be capable of handling it. Remember that in Ottawa, the paragon of busway design, ridership fell 25%. The study lacks a Professional Engineer's seal, and in fact such vague self-contradictory analysis is not to be sealed under the Act.

This is shoddy analysis for a half billion dollar extension to a busway that has hardly inspired Winnipeggers in the first place. Imagine if the Winnipeg floodway, a project of similar cost, had been constructed without first figuring out how much water there would be, whether it could handle the water flows, or without figuring out the water-handling capabilities of other options.

But a proper professional functional analysis should go further than just passenger traffic flows. In other Canadian cities it is typical to objectively quantify the effects on property values, urban density, modal split between transit and automobiles, greenhouse gas emissions, air pollutants, and a litany of other environmental features in Environmental Assessments for transit projects. The 2014 Stage 2 Environmental Review and Assessment excludes or glosses over these features, and instead focuses on a natural ecology assessment that was foolishly performed in October when most species have disappeared for the season.

Considering that the entire finished busway route, with its three dog-legs, is 40% longer than the old Pembina bus route it is replacing, and thus requires a 40% average increase in speed just to keep up, there is a very real possibility that fuel consumption will increase significantly. Where greenhouse gases are mentioned, the report fails to quantify them, but quantifying them would depend on first quantifying the traffic and the appropriate number of buses, which as already mentioned is missing. It lacks a Professional Engineer's seal.

Our city is an outlier. Of the 10 largest cities in Canada, Winnipeg is the only city planning to make busways the backbone of its transit system. It is the only city so preoccupied with one technology, that it is fixating on its 3rd and 4th busiest corridors -- Pembina and Nairn -- while ignoring its most natural priorities -- Main and Portage. At least there are historical engineering reports that back up these priorities.

If our city had a proper paper trail of professionally sealed studies, it might be possible to claim that we are taking an innovative approach, but we do not. Instead, the studies we have are full of unprofessional rationalizations, empty rhetoric, marketing propaganda, and self-contradictions. Other major cities that have produced the proper professional paper trail have come to the opposite conclusion, that an LRT system is preferable, that it should be located in the middle of existing urban development, and not in inconvenient and inefficient dog-legs like Parker.

Furthermore, Ottawa's paradoxically severe busway congestion in the face of lost ridership, is a living demonstration of the folly of the approach Winnipeg is taking. The busways failed on both goals simultaneously, proving that such a counterintuitive result is possible, and perhaps to be expected. Every dollar Ottawa spent on busways was completely wasted now that it is upgrading busways to LRT, and the cost of converting is approximately twice that of building a new LRT system from scratch. Building busways first, essentially tripled the cost of LRT. It did not save a single penny.

Winnipeg will eventually build LRT again. That part is certain. The only question is will it build it sensibly or will it build busways first.

In summary, it is time that Winnipeg copied other major Canadian cities and prepared a proper set of professional studies.

Ed Innes

David M. Sanders, M.A., LL.B.
907-885 Wilkes Avenue
Winnipeg MB

June 9, 2014

Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
123 Main Street, Suite 160
Winnipeg MB R3C 1A5

Attention: Elise Dagdick (elise.dagdick@gov.mb.ca)

Re: City of Winnipeg – Southwest Rapid Transit Corridor – Stage 2
File No. 5709.00 – Class 2 Development Environment Act Proposal
Applicant and Proponent: City of Winnipeg
Contact for Environmental Assessment: Dillon Consulting Limited

Dear Ms. Dagdick:

I am writing as a private citizen:

a) To object to the approval of the current Southwest Rapid Transit Corridor (SRTC) – Stage 2 Environment Act Proposal (EAP), as submitted by Dillon Consulting Limited on behalf of the City of Winnipeg on April 17, 2014;

b) To request that the "Environmental Assessment Review and Report" dated April 2014 be rejected as incomplete and/or inadequate as an Environment Act Proposal (EAP) and Environmental Impact Statement (EIS), for the specific reasons enumerated below;

c) To request, pursuant to section 11(9)(c) of the Act, that the Director require the City
    a. To conduct a proper field survey of the flora and fauna of the affected Project Study Area now, at a time of the year when at least some of them are present;
    b. To undertake a Functional Design Study of the original Letellier Subdivision route (recently misnamed as Concept 2);
    c. To produce a complete Cost-Benefit Analysis of the Project with both route options, with full supporting data and assumptions, and a complete Value for Money assessment of the proposed P3 delivery model
    d. Per section 12.0.2 – Climate change considerations, to produce credible information and analysis enabling the director to take into account the amount of greenhouse gases to be generated by the proposed development and the energy efficiency of the proposed development.

e. To undertake a further public consultation process on the basis of these additional studies plus the EAP submitted on April 17, 2014,

d) To request that no SRTC – Stage 2 Proposal be approved and licenced pursuant to *The Environment Act*, without first referring the EAP to the Clean Environment Commission for a public hearing and recommendation;

e) To request that the City of Winnipeg be advised as follows:

a. The City must receive an Environment Act Licence **prior to construction** and operation of any part of the SRTC- Stage 2 Proposal, including the proposed relocation of Manitoba Hydro, MTS and other utility services;
b. The City has failed to comply with the requirements of *The Public-Private Partnership Transparency and Accountability Act*, with regard to the prior publication of the required information and the holding of a proper public hearing on the SRTC-Stage 2 Project; and
c. Neither the Government of Canada nor the Province of Manitoba are permitted to allocate funds to a P3 project which does not comply with the requirements of the provincial Act.

Minimal Public Notice:

At the outset, I wish to state that in my opinion the City of Winnipeg seems determined to proceed with the current design and route of the SRTC-Stage 2, regardless of the wishes of its citizens.

It is only by chance that I learned of the existence of the City's EAP, and the June 9 deadline for public comment, through an online newsletter from my City Councillor, John Orlikow, read by a member of the Parker Wetlands Conservation Committee, and passed along to a few interested citizens such as myself. It appears that the only public notice given was the one published by the Environmental Approvals Branch (EAB) in The Winnipeg Free Press on May 10th, 2014, as required by Section 11(8)(a) of the Act.

For your information, I subscribe to the online edition of The Winnipeg Free Press, which does not contain regular display ads such as the EAB notice.

There has been no mention of either the EAP or the June 9 deadline on the City of Winnipeg website, not even on the Southwest Rapid Transitway webpage, and no mention of the EAP in the June 3, 2014, Administrative Report currently seeking Council approval of the Project. The Deloitte Business Case Summary, April 2014, which was attached to the Administrative Report, does contain the following references:

p. 7 Environmental Assessment (EA) Approvals - City responsibility

p. 12 Progressing with environmental assessment processes
- An Environmental Assessment Proposal ("EAP") is being prepared for submission to Manitoba Conservation and Water Stewardship. From the activities completed at this time, **no significant issues of concern have been identified.** (emphasis mine)

p. 13 Task 4.03 Environmental Approvals Sept./2014 to Feb./2015

The recent "Public Hearing" held by the City's Standing Policy Committee on Infrastructure Renewal and Public Works (IRPW) at 9:00 a.m. on June 3, which was intended to fulfill the requirements for a public hearing on the SRTC P3 Proposal pursuant to *The Public-Private Partnership Transparency and Accountability Act*, was held on the bare minimum notice of 14 days and based on the above two documents.

While the "Notification of Public Hearing" promised that the Project would be "presented to the citizens of Winnipeg," we heard only a very limited and perfunctory oral explanation of the Project from the Director of Transit. Citizens who had registered to appear were allowed to provide comments and ask questions for a maximum of 10 minutes each, but they were told they were not entitled to expect answers to their questions, and in fact they received none.

The report on the proceedings of the IRPW "Public Hearing" is to be published by the City by **July 15, 2014**, and I ask that the director of the EAB, following section 12.01(2) of the Act, require the City to forward a copy for your review in relation to the processing of the present SRTC-Stage 2 EAP, and my request that no such proposal be approved or licensed without it first being referred to the Clean Environment Commission for a proper public hearing and recommendation.

The Environmental Assessment Review and Report is Incomplete and Inadequate

I request that the "Environmental Assessment Review and Report" dated April 2014 be rejected as incomplete and/or inadequate as an Environmental Impact Statement (EIS), for the specific reasons enumerated below, discussed in relation to the specific mandatory requirements set out in Section 1(1) of the *Licensing Procedures Regulation*, Man. Reg 163/88, and highlighted in italics below:

(a) where the location of the proposed development has been determined, a certificate of title showing the legal description, or in the case of highways, rail lines, electrical transmission lines, or pipelines, a map or maps at a scale no less than 1:50,000 showing the location of the proposed development;

Figure 1-1: Project Location, p. 2 is almost illegible and certainly does not show the specific location of the transitways, overpasses, underpasses, tunnels, rapid transit stations, relocated hydro lines, or relocated rail lines. There is no scale shown on the

figure, but it will not be any more than 1:50,000. In any event, there are significant differences in the station locations and south end termini of the transitway which were proposed for City Council approval earlier. Figure 6-1 on page 6, the "Recommended Alignment for Stage 2," is identical to Figure 1-1, and has not yet been approved by City Council.

Figures 1-4, located near the back of the Report in **Appendix A – Project Area Figures**, do provide somewhat larger scale maps, showing the approximate locations of some of the more significant works:

Sheet 1	- The newly proposed southern termini of the Transitway at Markham Road (instead of Bison Drive, as stated on page 7 and previously proposed) and the intersection of Southpark Drive and Pembina Highway.
Sheet 2	- The proposed Transitway tunnel under the Letellier Subdivision and the new CN Letellier Rail bridge and new Transitway bridge over Bishop Grandin Boulevard
Sheet 3	- The new Transitway overpass of McGillvray Boulevard and the western Transitway route through the Parker Wetlands
Sheet 4	- The Transitway route through the eastern portion of the Parker Wetlands, the proposed Parker Lands retention pond, the Transitway tunnel under the CN wye tracks/Letellier Subdivision at the CN Portage Junction , and the new CN mainline rail bridge and Transitway overpass of the widened Pembina Highway

(b) the name of the proponent of the development;

The Environment Act Proposal Form has been signed by Dave Krahn of Dillon Consulting Limited, who is described as the "proponent contact person for purposes of the environment assessment."

In the Act, **"proponent"** means a person who is undertaking, or proposes to undertake a development, or has been designated by a person or group of persons to undertake a development in Manitoba on behalf of that person or group of persons."

Dillon Consulting Limited may have been designated by the City to undertake a Functional Design Study and prepare an Environmental Act Proposal, but it is the City of Winnipeg which proposes to undertake the development of the SRTC-Stage 2.

I therefore submit that Mr. Krahn is neither the proponent, nor a corporate principal of the corporate proponent, and he could not have signed the Environment Act Proposal Form as he did. **The EAP was not signed by the proponent, has not been approved by City Council, and is not valid**.

(c) the name of the owner of the land upon which the development is intended to be constructed;

The owners of the lands proposed include:

- City of Winnipeg
- CN Letellier RoW
- Manitoba Hydro RoW
- Privately-owned land **(names of owners have not been provided, as required)**
- University of Manitoba land

(d) the name of the owner of mineral rights beneath the land if not the same as that of the surface owner;

The status of the mineral rights is not given in the EAP.

(e) a description of the existing land use on the site and on land adjoining the site, as well as a description of changes that will be made in such land use for the purposes of the development;

The source documents, including "Preliminary Engineering Study for Upgrading the Pembina Highway Underpass [CN Sub. Mile 2.65], 2013, and a report on the Functional Design of Stage 2 have not been published.

The Cockburn and Calrossie Combined Sewer Relief Works Conceptual Design Report, May 2010, has not been published.

Furthermore, the City has not yet released the complete HDR Inc. report on the SRTC-Stage 2 Project, including the benefit-cost analysis produced, plus the data used, including cost inputs from the functional design study (Dillon), the P3 Business Case (Deloitte) and various inputs provided by the City of Winnipeg: traffic volumes, transit passenger volumes, bus volumes, growth rates, surrounding land-use information, etc.

(f) the land use designation for the site and adjoining land as identified in a development plan adopted under The Planning Act or The City of Winnipeg Act and the zoning designation as identified in a zoning by-law, if applicable;

There is a general discussion of the variety of communities and zoning designations found along the proposed transitway route, on pages 61-62, but no development plan or detailed zoning maps are provided.

(g) a description of the proposed development and the method of operation including hours of operation;

On page21-22, the report states that the Transitway service and stations will operate 24 hours a day, year round.

(h) the proposed date of commencement of construction, commencement of operation including staging of the development, and termination of operation, if known;

The Proposed Project Construction Schedule described on pages 19-20 suggests that construction will begin on the CN Pembina Overpass/Portage Junction, and Railworks in Q1 2016, and that the final RT Stations within the Parker Lands and the University of Manitoba Stations will be completed by Q3 2019. It appears that operation of the Southwest Transitway would not commence until the end of 2019.

However, the Deloitte Business Case Summary Figure 6 suggests that land acquisition will begin immediately, and the relocation of Manitoba Hydro lines and towers will occur between April and September of 2015. It is not clear when the Parker retention pond and related land drainage sewer will start, although its construction is supposed to precede the start of the SRTC and Pembina Underpass widening projects.

(i) a description of all previous studies and activities relating to feasibility, exploration, or project siting and prior authorization received from other government agencies;

Since some of these documents may not have been provided to the Environmental Approvals Branch, I am forwarding copies to accompany this submission:

- Made in Winnipeg Rapid Transit Solution Final Report, Rapid Transit Task Force, September 2005

  This report is referenced extensively for the discussion of Bus Rapid Transit (BRT) and Light Rail Transit (LRT) on page 23. But note that It was not prepared by a professional engineer.

- City of Winnipeg RFP No. 545-2011 – Preliminary Engineering Study for Upgrading the Pembina Highway Underpass, Section D.4.1.2(xi), directing that the consultant assume a future extension of the SRTC "via the Parker lands" before August 5, 2011, well before the Stage 2 Alignment Study was submitted. This report has not been published as yet..

- City of Winnipeg Southwest Rapid Transit Corridor Alignment Study Final Report, Dillon Consulting Limited, January 3, 2013.

  This report was seriously flawed. See page 8 below.
  For example, the term "build-out" was used for two entirely different concepts. For project cost estimates, the report stated that "*Build-out refers to the potential for grade separated intersections to accommodate increased and free flowing traffic*"
  However, for a discussion of the benefit of encouraging Transit-Oriented Development (TOD), the report refers more properly to "*the property tax potential of the TOD build-out.*"
  The reader may be forgiven for failing to understand why more costly grade separated intersections appeared to be given a positive rating by the engineers in their Evaluation Summary.

- Council Minutes, March 20, 2013 – Transportation Master Plan Amendment – Southwest Rapid Transit Corridor Stage 2 Alignment Study – Administrative Report.

- City of Winnipeg RFP No. 685-2013 – Stage 2 Southwest Transitway Functional Design - P3 Business Case and VFM Analysis – Procurement – Owner's Advocate – Section D.9 and Appendices

- Southwest Transitway (Stage 2) Public Engagement Report – Final 2014. Prepared by Landmark Planning and Design Inc. for Dillon Consulting Inc. See Issue-Response Table in Section 3.0, pp. 34-39 (not in Appendix A).

- Administrative Report to the Standing Policy Committee on Infrastructure Renewal and Public Works, June 3, 2014, accompanied by the Deloitte Business Case Summary, April 2014.

- My June 3, 2014 written submission to the SPC IRPW for the "Public Hearing" on the Capital Integration Project – Southwest Transitway (Stage 2) and Pembina Highway Underpass (SRTC). It was accompanied by Ed Innes' submission entitled "BRT Analysis Technical Critique," which he is submitting to the EAB now directly.

- My Submission to the Standing Committee on Social and Economic Development, Manitoba Legislative Assembly, June 4, 2014 re Bill 72 and the preservation of the Big Bluestem Grass in the Parker Lands.

- Asking the Right Questions: A guide for municipalities considering P3s, John Loxley, June 2012

- Since the City EAP just casually mentions the **Brenda Leipsic Off Leash Dog Park**, but fails to show it on any of the maps, attached is a City of Winnipeg website location map and air photo showing just how large it is.

(j) a description of the potential impacts of the development on the environment, including, but not necessarily limited to the following:

(i) type, quantity and concentration of pollutants to be released into the air, water
a) or land,
(ii) impact on wildlife,
(iii) impact on fisheries,
(iv) impact on surface water and groundwater,
(v) forestry related impacts,

Existing and future pollutants are estimated and/or described on pages:

30-33 Air Quality and Greenhouse Gas Emissions (measured downtown)
70-71 **There are no quantitative measures of either increased or decreased Greenhouse Gas Emissions resulting from the Project.**

34-36 Noise and Vibration
71-73

38-39 Saline groundwater
39-41 Surface water/storm drainage from the transitway and Pembina Underpass into the proposed Parker Retention Pond, plus releases for aquifer depressurizatiion and industrial spills.
75-76

41 Fish and fish habitat – the project will continue to feed the existing combined sewage and stormwater drainage system, which can cause wet weather overflows of untreated sewage directly into the Red River.
76-77

42-54 Vegetation – the Parker Lands include two sites designated as Natural Areas by the City of Winnipeg, but Figure 16-1 showing the areas is barely legible. The report notes that there may be big bluestem grass (Manitoba's new grass emblem) and remnants of tall grass prairie. However, the consultant did not see it in October.

54-56 Wildlife - Only a few species were observed by the consultant in October.

Attached are two lists of plants and birds found in the Parker Wetlands.

29 The EAP states that "The field survey was conducted on **October 1, 2013**; therefore, the majority of migratory wildlife species would have already left the area; the wet meadow and/or wetland areas were dry; and plants that grow and flower in the spring or early summer were not presence or were in senescence."

Has the required and much more useful "late spring survey" been undertaken, or will the City not be bothered to find out what birds, insects, plants, animals, amphibians and reptiles are actually found in the Parker Lands and the Hydro RoW?

Table 16-7 on page 57 lists 11 species which are endangered, threatened or species of special concern, which are potentially found in the Project Study Area, but would have all migrated by the time of the field survey on October 1, 2013.

In addition, tall grass prairie is considered an endangered ecosystem.

78-81 In order the carry out the proposed mitigation measures in the Parker Lands, exactly what lands will be reacquired from GEM Equities and/or required as park dedication? How will these lands be protected from unauthorized development?

The mitigation measures described on pages 80-81, for species at risk, are entirely speculative. Are any of those species going to be affected, or not? And if so, how realistic are the proposed mitigation measures?

94 **Should the City not find out which species at risk are located in the Project Study Area right now?**

(vi) impact on heritage resources,

(vii) socio-economic implications resulting from the environmental impacts;

The City and its consultants have chosen to ignore the preference of a majority of the citizens consulted, who favoured the original Letellier Subdivision route alignment along Pembina Highway. See City of Winnipeg Southwest Rapid Transit Corridor Alignment Study Final Report, Dillon Consulting Limited, January 3, 2013, pp. 48-54, and p. 64 for the Summary of Evaluation showing the high rating given to the public opinion of Concept 2 (Letellier, which was in fact the first concept), and the lowest possible weighting which the engineers gave to environmental considerations, for which the Letellier route received the highest citizen rating..

During the second series of Open Houses for the Functional Design Study, the consultants attending refused to entertain questions relating to the citizens' preferred Letellier Subdivision route alignment. This is admitted on page 69 of the EAP.

Nevertheless, the public engagement consultant had to report at page 33 of his 2014 Final Report that:

> "Numerous respondents continued to express the opinion that the selected route would be better located along Pembina Highway or the Letellier Rail corridor."

The Project Benefits are stated to be as outlined in Section 5 (pp.4-5) of the EAP:

- Improved transit service
- Increased transit ridership
- Reduction in traffic congestion
- Improved access to Investors Group Field
- Reduction in GHG emissions

However, there are no published Pembina Highway transit ridership and vehicle traffic studies to support any of the statements about the prospective benefits in transit service, ridership, access to IGF, or reduction in traffic congestion.
There is no analysis or quantification of a potential reduction in greenhouse gas emissions.

The presumption that construction of a rapid transitway will serve as a catalyst for immediate development of vacant lands nearby is simply not true, at least in Winnipeg, in this case, at this time.

Plans for a 19-storey high rise building adjacent to the Harkness Rapid Transit Station have fallen through for the third time, and its proposed site on the vacant former Winter Club tennis courts is for sale again. There is still just the prospective developer's sign on the site of the proposed five-storey mixed use commercial and office building just north of the Osborne Rapid Transit Station.

The only things erected so far on the site of GEM Equities' promised 900-unit housing development beside the Fort Rouge Rapid Transit Station are a few boulevard trees. The Parker Lands are also owned by GEM Equities, the developer of the Yards at Fort Rouge, and so we are unlikely to see any development there any time soon. Shindico's Taylor Lands north of the CN mainline are under development now, without any prospect of a connection across the tracks to the Southwest Rapid Transit Corridor near Parker Avenue.

And the City Council has just approved an Area Master Plan for Bishop Grandin Crossing (the former Sugar Beet lands) with no approved pedestrian connection across the CN rail line to the Rapid Transit Station, no crossing at Bishop Grandin, and bus access only by very circuitous routes from Pembina Highway.

The University's plans for the Southwood Golf Course site are not yet finalized, and therefore the Rapid Transit Corridor route is still undecided between the intersection of Southpark Road and Pembina, and University Crescent. It is unclear why the SRTC now ends at Markham, and does not continue to Bison Drive as originally planned.

The prospective benefit of such "Transit-Oriented Development" certainly doesn't justify the $1 billion cost of the present SRTC proposal.

(k) a description of the proposed environmental management practices to be employed to prevent or mitigate adverse implications from the impacts identified in clause (j) having regard to, where applicable: containment, handling, monitoring, storage, treatment and final disposal of pollutants; conservation and protection of natural or heritage resources; environmental restoration and rehabilitation of the site upon protection of environmental health; and

See (j) above.

85-97

The Environmental Effects Summary (Table 20-1) discussed on pages 99-103 does not contain a single number, quantifying any of the Project effects, positive or negative.

Of the environmental factors considered, 22 are negative and only three (really two) are positive.

(l) any other information requested by the director.

Per section 12.0.2 – Climate change considerations, the director must take into account the amount of greenhouse gases to be generated by the proposed development and the energy efficiency of the proposed development.

The City's EAP fails to analyze and forecast or determine either the amount of the emissions or the energy efficiency of the BRT. The director must require the City to produce that information before proceeding further.

Thank you. I look forward to your response.

Yours truly,

David M. Sanders MA LLB

DMS/bm

David M. Sanders, MA LLB
885 Wilkes Avenue
Winnipeg MB

March 6, 2013

His Worship Mayor Sam Katz
and Members of Executive Policy Committee
The City of Winnipeg
510 Main Street
Winnipeg, MB

Dear Mayor Katz and Members of EPC:

Re: **Standing Policy Committee on Infrastructure Renewal and Public Works**
Item No. 1 Transportation Master Plan Amendment – Southwest Rapid Transit Corridor Stage 2 Alignment

I am appearing this morning to **oppose** the IRPW Committee's recommendation with respect to the amendment of the Transportation Master Plan – specifically, the proposed amendments to Map 5 and paragraph 4 on page 54, which are intended to select the South West Rapid Transit Corridor Stage 2 alignment option "passing through the Parker Lands and the Manitoba Hydro Corridor" as the "preferred alignment."

I am appearing today as a private citizen. I now reside at Lindenholm Place at 885 Wilkes Avenue, between Waverley and the start of the Sterling Lyon Parkway, and I frequently use the Parker Avenue route to and from Pembina Highway whenever the Waverley railway grade crossing is closed for train traffic.

I have been following this issue for almost half a century, since the Metropolitan Winnipeg Area Transportation Study (WATS) was published in 1966-68, while I served as Metro Council and City Hall reporter for *The Winnipeg Tribune*, and since the Winnipeg Railway Study was published in 1972 , when I began working for the Provincial Department of Urban Affairs. I served as Deputy Minister of Urban Affairs during the late 70's and early 80's.

I did attend the SRTC consultants' open house last September, and I was one of the **majority** of citizens who indicated a preference for the CNR Letellier subdivision alignment, as originally planned. I have read the Final Report of the Southwest Rapid Transit Corridor Stage 2 Alignment Study, and I do **not** believe this report supports a decision to divert the Transit Corridor west of Pembina Highway.

The Administrative Report to the IRPW Committee gave the following reasons for selecting Alignment Option 1B:

Operational: This highly weighted criterion was defined as "operating speed." Any transit rider, and any competent transit planner, knows that the key criterion is total travel time, not speed. And the report states that **the travel time is the same** for both the Parker Lands and the more direct Letellier Subdivision route. It is outrageous to give the Parker Lands options twice the value assigned to the equally effective Letellier option.

Implementation: The Report suggests that implementation of the Parker Lands option will be simpler and easier, to the extent that it runs through undeveloped lands.

Environmental: The Letellier option was given the highest possible rating, but for some inexplicable but historically common reasons, the engineers give environmental considerations the lowest weight of all the criteria. Those are not my values, and I very much doubt that most Winnipeggers would agree that environmental considerations should be last and least on the list. Our green spaces and gardens are the lungs of our City, and preserving them should be a high priority. Since the Parker Lands route has only negative effects on environmental considerations, I wonder how the engineers can justify giving it a moderately positive rating.

Ridership and Community Impacts: The Report admits that The Letellier route alongside Pembina Highway rated relatively well in terms of Ridership and Community Impacts (4) due to the fact that it would provide direct transit benefit for residents and businesses along Pembina Highway and allow for the densification and redevelopment of the underutilized lands along Pembina Highway. However, the Report states, **incorrectly**, that the Parker Lands route rated higher (3) than Alignment 2 due to the ability to attract more ridership from future TOD development in the Parker Lands and other adjacent lands, as well as the potential for improved route connectivity to Lindenwoods and new commercial development near Kenaston and Sterling Lyon. The suggested ridership from new developments in the Parker Lands and under the Manitoba Hydro high voltage lines is entirely speculative, and the suggested future improved but undefined "connectivity" to the Lindenwoods residential area and the Kenaston/Sterling Lyon commercial developments is neither necessary nor a stated objective of the Southwest Corridor. As far as I know, there has never been any public consultation with respect to the implied future extension of a BRT corridor along Wilkes and the Sterling Lyon Parkway.

Indeed, the fundamental reason for building the Southwest Rapid Transit Corridor has always been to increase transit ridership relative to automobile ridership, especially between the downtown and Manitoba's third largest city, the University of Manitoba. If successful in meeting that objective, the primary benefit would be the avoidance of the otherwise substantial costs of widening Pembina Highway to accommodate the growing automobile traffic. The modal split criterion (transit versus automobile ridership) should have been given high weighting, and the Parker Lands route should have been given a low rating, since it will be unlikely to provide any incremental improvement in the modal split along Pembina Highway.

Land Acquisition Costs: The Parker Lands option is given a much higher rating and a high weighted value, because the costs are anticipated to be much less than for the Letellier route. It is assumed that the Manitoba Hydro Lands will be made available for $1, despite the advice that such a price has not yet been negotiated, with either Manitoba Hydro or the commercial lessees of some of its land, and despite the many potential problems identified by Manitoba Hydro during the preliminary discussions to date.

TOD and TIF Potential: The Parker Lands Route 1B is given the highest rating, notwithstanding the entirely speculative potential for development on the undeveloped lands, and the probability that any development contemplated in the Parker Lands and the Manitoba Hydro Lands would otherwise occur at other residential and commercial sites in the City of Winnipeg. Any Tax Increment Financing, which would redirect the incremental municipal and school taxes on the designated developments to help pay for the Transit Corridor, would simply deprive the City and schools divisions of the revenue they might otherwise receive for up to 25 years.

Capital Costs: This factor is treated in a truly bizarre fashion. The Report indicates that the costs quoted are preliminary only and are "Class D" estimates (+/- 25%)." Plus or minus **25%.** Any competent economic analyst knows that when the base costs range between $291,700,000 for Alignment 1B and $312,900,000 for the Letellier route, the difference of $21,200,000 **or 7% is well within the margin of error of +/- 25%.** The only valid conclusion is that **these cost estimates are <u>not</u> a basis for choosing between the options.**

But consider this. When you add in the estimated costs of the so-called "build-out opportunities," which are the required grade separations for the Parker Lands route, the total capital cost for Option 1B rises to $332,700,000, some $14,100,000 or **5% <u>more</u>** than the total capital cost of the Letellier route. That is why **the report actually gives a <u>higher</u> Capital Cost rating to the <u>lower</u> cost Letellier route.**

Future Build-Out Opportunities: Having already incorporated the higher costs of grade separations in the above Capital Cost evaluation, the Report then makes an additional, separate, and truly perverse rating of the Parker Land route grade separation costs as very highly rated benefits, instead of the costs that they really are. **This separate criterion should be thrown out entirely.**

Public Consultation: The report properly weights the public response highly, and gives the highest rating to the Letellier option chosen by the majority of the respondents. The Report notes that the Letellier option would better serve existing riders in existing built-up areas along Pembina Highway, whereas Alignment 1 would better serve future riders in future developments in the Parker Lands and adjacent to the Manitoba Hydro transmission corridor.

The Report suggests that Stage 2 of the Southwest Corridor will facilitate development of five of the City's designated Major Redevelopment Areas: the Fort Rouge Yards, the Taylor Lands, the Parker Lands, the Sugar Beet Lands, and the Old Southwood Golf Course. Three of those areas, the Fort Rouge Yards, the Sugar Beet Lands, and the Southwood Golf Course will be served by Stage 2 in any case. Only the Parker Lands and the Taylor Lands are potentially benefited by the Parker Lands Option 1B, although apparently the owners of both sites are indifferent (GEM Equities), or prefer the Letellier Option (Shindico).

Given the subject matter and scope of the current Real Estate Management Audit being conducted on behalf of the City Auditor at Council's request, I should think that Council would be wise to await the results of that audit before making any further decisions affecting the value of the development sites in question.

Summary:

In my opinion, the Stage 2 Alignment Study Report actually provides strong support for the adoption of the original route, Alignment 2, the Letellier Subdivision route alongside Pembina Highway,

There are a great many questionable assumptions in this Report, and significant flaws in the analysis. As pointed out by Councillor John Orlikow, the IRPW Committee's recommendation even fails to mention Option 1B, using wording which would leave both Options 1A and 1B open for the next stage of study.

The City Councillors whose wards encompass the potential SWRTC routes, Councillor Orlikow and Councillor Swandel, have both asked that the alignment decision be deferred to allow for further analysis and consultation. It would be highly unusual if Council proceeds with this decision over the objections of the elected representatives of the affected communities.

So what is the rush? Is there some funding deadline which requires a decision now? It is certainly too late to submit a final Business Case Report to PPP Canada Inc. by March 22, 2013.

If there is some other deadline, there is still no good reason for rejecting the Letellier Subdivision route at this time. The consulting engineers are accustomed to developing alternative plans and designs, and if the City Council does not reject the Parker Lands Options now, then both Options 1B and 2 should remain under consideration during the next phase, the functional design study.

Thank you for your attention to this matter.

Yours truly,

David M. Sanders, MA, LLB