REPORT OF THE

STANDING POLICY COMMITTEE ON PUBLIC WORKS

DATED SEPTEMBER 5, 2000

On motion of Councillor Angus, the rule was suspended and the Report of the Standing Policy Committee on Public Works, dated September 5, 2000, was considered.

Provencher Bridge Project Preliminary Design File SB-13 (Vol. 5)

828 - 1. At its reconvened meeting held on December 16, 1999, Council approved in principle the recommended "New Paired Bridges Alternative" Conceptual Plan for implementation. The recommended replacement option, the New Paired Bridges Alternative, features a new vehicular bridge and a separate pedestrian bridge linking St. Boniface to The Forks, which best met the goals of the Project Advisory Committee (PAC) and the project objectives.

At that time, Council also authorized the commencement of the Preliminary Engineering Design Process with respect to the approved Conceptual Plan. The cost to date of the related public consultation, conceptual engineering, initial environmental review and preliminary engineering design is approximately $1.8 million.

At its meeting held on July 19, 2000, Council considered the recommended Preliminary Design for the Provencher Bridge, including a replacement vehicular bridge and a separate pedestrian bridge facility, as follows:

A. *Vehicular Bridge component:*
Two through lanes per direction, a partial length eastbound right-turn lane onto Taché Avenue and a 3.0 metre wide pedestrian sidewalk on the north side of the bridge**.**

B. *Pedestrian Bridge component:*
A single tower cable-stayed structure supporting a 5.0 metre wide multi-use pathway and plaza area, executed in partnership with the CentreVenture Development Corporation and that, as requested, the Corporation be granted an extension to September 30, 2000, to confirm their funding.

C. *Roadworks component:*
Interim connection to existing west approach roadway network and modifications to the Taché Avenue/Provencher Boulevard intersection.

D. *Utilities component:*
Replacement of wastewater forcemain on the existing Provencher Bridge and renewal of all utilities under the new roadway pavement.

together with the proposed amendment by the Executive Policy Committee to approve the recommended design without an eastbound right-turn lane onto Taché Avenue.

Following deliberations, the recommendation of the Executive Policy Committee was not adopted (lost due to a tie vote) and the recommendation of the Standing Policy Committee on Public Works to approve the Provencher Bridge Project Preliminary Design, as set out above, was not adopted (lost due to a tie vote). Accordingly, Council did not pursue commencement of the Detailed Engineering Design and Environmental Impact Assessment.

Since 1988, annual ongoing maintenance, inspections and monitoring, and design and implementation of repair works have been undertaken, recognizing that the Provencher Bridge is currently scheduled for major capital expenditure and the existing bridge rehabilitated/replaced by 2002. The financial history summarizing the capital expenditures for the Provencher Bridge Project in the approximate total amount of $8.6 million to date, is outlined in Appendix "A" hereto.

As previously reported, the engineering consultant for the Provencher Bridge Project has advised that major maintenance works are required to maintain the structure in a safe and reliable state beyond 2002. The major maintenance works would involve: concrete jacketing of piers; replacement of bridge bearings; reconstruction of abutment back wall; repositioning of the superstructure steel; floor beam crack repairs; and continuity of the main

bascule span girders. These repairs are estimated to cost $15 million and need to be completed by the end of 2002 to ensure the safe and reliable operation of the bridge. Thereafter, it is expected the structure would continue to need $300,000.00 in annual maintenance and that further major maintenance work will again be required in ten years or so. These repairs would involve significant and ongoing public disruption to implement.

Inasmuch as Council did not approve the New Paired Bridges Alternative on July 19, 2000, the Administration will commence scheduling the major maintenance works, in order to ensure the safe and reliable operation of the bridge. The cash flow for the major maintenance works is to be funded over a three year period and will be identified in the Public Works Department Capital Estimates submission for approval by Council as follows:

2000 – $2.5 million (remaining project budget)
2001 – $7.0 million
2002 – $5.5 million

The $15 million repair estimate is in addition to costs expended to date and, as a result of not proceeding with the New Paired Bridges Alternative, the repair estimate does not include a contribution toward a pedestrian bridge.

Preliminary design of the repair works would commence in early 2001 following Council approval of the 2001 Capital Estimates. The preliminary design details will be reported to Council in Spring 2001 and, if approved by Council, detailed design and environmental approval would commence. It is expected that construction will be undertaken in two construction contracts. River work would be carried out during the Winter of 2001/2002, and the balance of work would commence in Summer 2002 and be completed by the end of 2002.

If Council prefers to reconsider the replacement of the bridge then the following should be noted:

- The delay in approving a preliminary design and authorizing the commencement of detailed design and environmental assessment jeopardizes the Administration's ability to undertake the replacement project within previously identified costs and time frames.

- As previously reported, detailed engineering design of the vehicular bridge component of the New Paired Bridges Alternative was to commence in early September 2000. The delay in preliminary design approval makes it necessary that a direct engineering assignment be made to Wardrop Engineering Inc. to immediately commence the design work, instead of going through a (minimum six week) request for proposal process in accordance with Council's Assignment of Consulting Policy (C333). It is deemed to be most expeditious that the same firm carry out the detailed design as a continuation of their previous work on the project.

- If a preliminary design is approved but the immediate commencement of detailed design does not begin by early September 2000, the construction period would be extended by approximately one year. This extension will increase the total project cost by approximately $1.5 million. The estimated $1.5 million increase can be accommodated within the current project budget of the Public Works Department. In addition to the cost increase, there will be increased risk to the public utilizing the existing bridge for an additional year. Potential bridge failures could occur causing unscheduled temporary or permanent closure of the bridge with risk of increased *(throw away)* maintenance costs, and economic implications from loss of use of the bridge for users and neighbouring businesses.

- The Environmental Impact Assessment process was to begin by August 1, 2000. The delay in commencing the process increases the risk that the environmental license authorizing construction will not be obtained prior to the scheduled tendering of the vehicular bridge, resulting in a shortened time frame for construction and associated cost increases to accelerate the construction work.

- In addition, other regulatory approvals, including The Navigable Waters Protection Act approval are required and necessitate lengthy approval processes. Further delay in commencement of detailed engineering design could also negatively impact these processes.

The Public Works Department recommends the preliminary design, as previously outlined in Clause 4 of the Report of the Standing Policy Committee on Public Works dated July 4, 2000, hereinbefore provided, on the basis that it best achieves the goals of the Project Advisory Committee (PAC) and the project objectives, namely: technically sound; reflects the needs of the community and City in general; cost-effective; environmentally responsible; and generally understood and accepted by most of those affected, taking into consideration the results of the Public Consultation Process Final Report documenting the public consultation process, public opinion and providing a

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recommended conceptual bridge alternative; the results of the Comparative Review of Selected Environmental Issues Report documenting the relative potential impacts of the alternatives considered by the public; the results of the Risk Assessment Report documenting the risks of each alternative and approach adopted to managing the risks associated with the project; and the results of the Financial Review Report documenting the financial impact on the City for each alternative.

If Council wishes to also reconsider the eastbound right-turn lane at the Taché Avenue/Provencher Boulevard intersection, the following should be noted:

- Through the public consultation and the Project Advisory Committee's (PAC) deliberations and analysis, all new bridge alternatives, including the recommended alternative, included two through lanes per direction and an eastbound right-turn lane onto Taché Avenue. The recommended alternative was reached through consensus by the 15 stakeholder groups represented on the PAC.

- The right-turn lane serves to: (1) improve safety between pedestrians/cyclists and vehicles at the Taché Avenue intersection; (2) improve the operation of the intersection without increasing through traffic volumes; (3) improve transit operations by allowing buses to get around the queued traffic on the bridge by using the turning lane; and, (4) allows better access to the St. Boniface Hospital.

- The design of the right-turn lane meets design warrants and criteria for the existing traffic utilizing the Provencher Bridge.

- The right-turn lane will allow traffic wanting to turn right to slow down and get out of the through lane, thus reducing the possibility of rear-end collisions. In addition, by slowing down and not being concerned about through traffic from behind, the right-turning traffic can concentrate on pedestrians in the crosswalk, thus reducing the potential for pedestrian collisions.

For further information regarding the eastbound right-turn lane, four right-turn options are presented below:

- OPTION ONE – The recommended preliminary design (which was not approved by Council - to be used for comparison purposes) consisting of a 180 metre right-turn lane with a standard sized pedestrian refuge island, as illustrated on Figure One, identified as Appendix "B" hereto.

- OPTION TWO – A 90 metre right-turn lane with a large pedestrian refuge island, as illustrated on Figure Two, identified as Appendix "C" hereto.

- OPTION THREE – A 90 metre right-turn lane without an island, as illustrated on Figure Three, identified as Appendix "D" hereto.

- OPTION FOUR – No right-turn lane, as illustrated on Figure Four (also not approved by Council – for comparison purposes), identified as Appendix "E" hereto.

Each of the right-turn options are evaluated on the basis of six criteria:

- Safety for motorists (i.e. how well did the option mitigate the existing rear end collision problem)

- Safety for pedestrians (i.e. how safe an environment is provided for east-west pedestrian crossings)

- Vehicle emissions (i.e. how well the level of vehicle emissions is mitigated)

- Vehicle delay (i.e. how well the amount of delay is reduced for eastbound traffic)

- Transit operations (i.e. to what degree does the option positively benefit eastbound transit operations)

- Project cost (i.e. based on the original option, what are the relative project cost implications of each of the other three options)

The results of the evaluation are summarized in Table One, identified as Appendix "F" hereto. In light of the evaluation and in consideration of the fact that both Option One and Option Four were not adopted by Council, Option Two, being a 90 metre right-turn lane with large pedestrian refuge island, ranks as the next best option.

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This Option ranks first in pedestrian safety due to the inclusion of a large pedestrian refuge island, is ranked second along with Option Three in four other categories, and has no net impact on the current estimated cost for the project.

The Standing Policy Committee on Public Works having now considered the Provencher Bridge Project Status Report provided by the Chief Administrative Officer under date of August 30, 2000, now recommends:

I. That the following reports be received as information, namely:

A. "Provencher Bridge Public Consultation Process - New Paired Bridges Preliminary Design (Phase II) – Final Report" dated June 26, 2000, by Susan Freig and Associates, Community Planning and Public Consultation Consultants.

B. "Preliminary Design Provencher Bridge Project 2000 Capital Program" dated June, 2000, by Wardrop Engineering Inc., Engineering Consultants.

II. That the preliminary design including a replacement vehicular bridge and a separate pedestrian bridge facility be approved by Council for implementation as follows:

A. *Vehicular Bridge component:*
Two through lanes per direction, a 90 metre in length eastbound right-turn lane onto Taché Avenue and a 3.0 metre wide pedestrian sidewalk with a large pedestrian refuge island, illustrated on Figure Two and identified as Appendix "C" hereto.

B. *Pedestrian Bridge component:*
A single tower cable-stayed structure supporting a 5.0 metre wide multi-use pathway and plaza area, executed in partnership with the CentreVenture Development Corporation and that, as requested, the Corporation be granted an extension to September 30, 2000, to confirm their funding.

C. *Roadworks component:*
Interim connection to existing west approach roadway network and modifications to the Taché Avenue/Provencher Boulevard intersection.

D. *Utilities component:*
Replacement of wastewater forcemain on the existing Provencher Bridge and renewal of all utilities under the new roadway pavement.

III. That Council approve the waiver of provisions of its Assignment of Consulting Policy (C333) to permit a direct assignment to Wardrop Engineering Inc. for the detailed engineering design of the vehicular bridge, without a requirement to solicit or evaluate competitive proposals.

IV. That the Proper Officers of the City be authorized to do all things necessary to implement the foregoing, including but not limited to the following:

A. Commence Detailed Engineering Design in respect of the approved Preliminary Design.

B. Commence the Environmental Impact Assessment Process, and all necessary environmental licensing in respect of the approved Preliminary Design.

C. Obtain all other Agency approvals, and do all things necessary for the successful tendering of the Detailed Design.

D. Report to Council to obtain authorization for construction following receipt of bids expected in June 2001.

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A copy of the documents referred to in the above clause are on file in the office of the City Clerk.

Moved by Councillor Angus,
Adoption of the clause.

Carried.

Councillor Clement asked to be recorded as having voted against the clause, in accordance with Rule 50.7 of the Procedure By-law.

(See Minute No. 829 for Appendix “C”)