Agenda – Council – October 25, 2017

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – October 4, 2017

Item No. 2 Update on Major Infrastructure Project Studies

STANDING COMMITTEE RECOMMENDATION:

On October 11, 2017, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the following to Council:

1. That this report be received as information.

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – October 4, 2017

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On October 11, 2017, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On October 4, 2017, 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.

COUNCIL DECISION:

On September 27, 2017, Council concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and adopted the following:

1. That the Winnipeg Public Service be directed to report back to Council within 30 days, with a report on the progress with respect to the design and estimated budgets for each of the following projects (listed in no particular order):

    A. Marion Street Widening/Grade Separation and improvements from Archibald Street to Lagimodiere Boulevard

    B. Chief Peguis Trail extension from Main Street to Route 90

    C. Louise Bridge Replacement

    D. William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue

    E. Widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue

    F. Arlington Bridge Replacement

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

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – October 4, 2017

DECISION MAKING HISTORY (continued):

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On September 20, 2017, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On September 11, 2017, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the Council motion of July 19, 2017, with the following amendment:

- Delete "60 days" and replace with "30 days"

and submitted the matter to Executive Policy Committee and Council.

COUNCIL DECISION:

On July 19, 2017, Council ruled automatic referral of the following motion to the Standing Policy Committee on Infrastructure Renewal and Public Works:

Moved by Councillor Morantz,
Seconded by Councillor Sharma,

WHEREAS the Council adopted Transportation Master Plan identified a number of new strategic road and bridge priorities that must be addressed in order to ensure the future efficient movement of both goods and services across our city;

AND WHEREAS on June 25, 2014, Winnipeg City Council identified the Waverley Street Underpass, Marion Street Widening/Grade Separation and improvements from Archibald Street to Lagimodiere Boulevard, Chief Peguis Trail extension from Main Street to Route 90, Louise Bridge Replacement, William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue and the widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue, as priorities under the Building Canada Fund (Major Projects component);

Report – Standing Policy Committee on Infrastructure Renewal and Public Works – October 4, 2017

DECISION MAKING HISTORY (continued):

COUNCIL DECISION (continued):

AND WHEREAS on March 25, 2015, Winnipeg City Council identified Waverley Street Underpass, Marion Street Widening/Grade Separation and improvements from Archibald Street

to Lagimodiere Boulevard, Chief Peguis Trail extension from Main Street to Route 90, and the Kenaston Boulevard Widening as priorities under the Building Canada Fund;

AND WHEREAS the Arlington Bridge has also been identified as a potential infrastructure project for the bridges' replacement and consultation is currently underway;

AND WHEREAS all of the aforementioned projects are at various stages of design and development;

AND WHEREAS the Public Service has made significant progress in implementing asset management standards to guide future infrastructure investment;

THEREFORE BE IT RESOLVED that the Public Service report back to Council within 60 days, with a report on the progress with respect to the design and estimated budgets for each of the following projects (listed in no particular order):

- Marion Street Widening/Grade Separation and improvements from Archibald Street to Lagimodiere Boulevard
- Chief Peguis Trail extension from Main Street to Route 90
- Louise Bridge Replacement
- William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue
- Widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue
- Arlington Bridge Replacement

ADMINISTRATIVE REPORT

Title: Update on Major Infrastructure Project Studies

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Work – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P. Eng.	J. Berezowsky Acting Director of Public Works	M. Ruta	D. McNeil

EXECUTIVE SUMMARY

This report presents a summary of the current status of engineering studies for six infrastructure projects:

A. Marion Street Widening/Grade Separation and improvements from Archibald Street to Lagimodiere Boulevard;
B. Chief Peguis Trail extension from Main Street to Route 90;
C. Louise Bridge Replacement;
D. William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue;
E. Widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue;
F. Arlington Bridge Replacement.

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

The Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the Council motion of July 19, 2017, as amended, and recommended to Council:

1. That the Winnipeg Public Service be directed to report back to Council within 60 days, with a report on the progress with respect to the design and estimated budgets for each of the following projects (listed in no particular order):

    A. Marion Street Widening/Grade Separation and improvements from Archibald Street to Lagimodiere Boulevard;
    B. Chief Peguis Trail extension from Main Street to Route 90;
    C. Louise Bridge Replacement;
    D. William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue;
    E. Widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue;

F. Arlington Bridge Replacement.

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

IMPLICATIONS OF THE RECOMMENDATIONS

This report is to be received as information. There are no implications associated with the recommendations.

HISTORY/DISCUSSION

The status of engineering studies for the six infrastructure projects is presented below. The most recent project estimated costs are provided for four of the six projects which will be further refined and updated as the preliminary design studies near completion with the objective of identifying a Class 3 estimate (accuracy -20% to +30%) suitable for budgeting purposes. Two of the projects, Marion Street Renewal and Louise Bridge Replacement, have insufficient scope definition at this time to provide a reasonable estimate.

The City's cost estimate classification system defines estimates as Class 1 through Class 5 as follows:

ESTIMATE CLASSIFICATION	PROJECT DEFINITION	ACCURACY OF COST ESTIMATE
Class 1	Detail Design Drawing and Specification Complete, Pre-Tender Estimate	-5% to +10%
Class 2	Design Development in Progress	-10% to +20%
Class 3	Preliminary Design, for Budget Authorization	-20% to +30%
Class 4	Feasibility Study	-30% to +60%
Class 5	Concept Screening, Rough Order of Magnitude Estimate	-50% to +100%

Marion Street Renewal

On November 16, 2016, Council concurred in the recommendation from the Public Service that the results of a functional design study (RFP No. 495-2013) be received as information and that Public Service be directed to investigate and report back on more affordable functional design options to improve transportation deficiencies along Marion Street between Lagimodiere Boulevard and Youville Street that do not include a grade separation or widening. In addition, the more affordable options to be investigated by the Public Service include the use of a public consultation process, improvements to the accommodation of pedestrian and cyclists as well as improvements to safety and operation at key intersections, while minimizing land requirements.

The original functional design was undertaken by MMM Group Ltd. (now WSP Canada Group Limited). It identified a 6 lane option including a grade separation at Marion/Archibald and the CP Emerson Subdivision. It had a Class 4 estimate (accuracy -30% to +60%) of $566 Million.

The City is currently negotiating a sole source contract with WSP Canada Group Limited to undertake the revised scope of work. A proposal from WSP Canada Group Limited has been received that includes a revised technical scope of work and public engagement process. It is expected that a contract will be awarded before the end of October.

The end result of the revised study will include a Class 4 cost estimate that identifies right of way requirements and a functional design that addresses deficiencies associated with pedestrian and cycling facilities as well as mitigating operational deficiencies at the intersection of Marion/Archibald and along Lagimodiere Boulevard between Dugald Road and Marion Street. It is expected that the study will be completed within four to six months after it starts. As the project scope is being redefined there is no current estimated cost.

Chief Peguis Trail extension from Main Street to Route 90

A functional design study (RFP 533-2014) was conducted between 2014 and 2016 for the Chief Peguis Trail (CPT) Extension from Main Street to Route 90. The intent was to gain insight into the use and expectations of an approximately 10 km extension within these limits to support economic development and support completion of the strategic inner ring road.

On December 13, 2016, a preliminary design study (RFP 770-2016) was awarded to MMM Group Limited (now WSP Canada Group Limited). The preliminary design study will recommend a final CPT extension within the identified limits and provide a Class 3 estimate (accuracy -20% to +30%) which will be suitable for budgeting purposes.

Multiple stakeholder meetings have taken place and meetings with impacted landowners will be completed by the end of October 2017. A public information session to present the final recommended design and Class 3 estimate is scheduled for November 7, 2017. A final preliminary design report is expected to be complete by the end of January 2018 followed by an Administrative Report to Council.

The preliminary design report will also look at options to increase affordability, such as an alternative reduced scope from Main Street to McPhillips Street. No estimate is currently available for the reduced scope.

See http://www.winnipeg.ca/publicworks/construction/projects/chiefpeguiswest.stm for additional project details.

The current Class 4 estimate for the project is $400 Million (accuracy -30% to +60%).

Louise Bridge Replacement

On December 22, 2016, the Eastern Corridor Study (RFP 555-2015) was awarded to MMM Group Limited (now WSP Canada Group Limited) to study the eastern leg of rapid transit. A functional design of Louise Bridge is being undertaken as part of that study as potential routes for rapid transit include the Point Douglas area and the Louise Bridge.

Public engagement in the spring of 2017 identified that there was much interest in the Louise Bridge element of the project, especially with respect to walking and cycling. Additional public engagement is planned for the fall of 2017 which will likely attract increased attention as we begin to discuss routing of the transit corridor.

See http://winnipegtransit.com/en/major-projects/rapid-transit/eastern-corridor-study/ for additional project details on the Eastern Corridor Study.

Completion of the study is expected by mid-2018 which will result in a recommended functional plan for the eastern corridor and Louise Bridge as well as a Class 4 estimate.

The next steps will be dependent on whether Louise Bridge plays an integral role in the future eastern transit corridor or whether it is identified as a separate project. Following completion of the Eastern Corridor Study, a preliminary design study would be required to further define project requirements for the Louise Bridge as well as a Class 3 estimate suitable for budgeting purposes. A preliminary design study would take one year to complete once it was awarded. As the scope of a Louise Bridge replacement project has not been fully developed yet, there is no current cost estimate.

William R. Clement Parkway Extension from Grant Avenue to Wilkes Avenue

On December 16, 2014, a preliminary design study (RFP 732-2014) was awarded to MMM Group Limited (now WSP Canada Group Limited). The scope of the project included a preliminary design of William R. Clement Parkway between Grant Avenue and Wilkes Avenue with associated grade separation of the CN mainline and an extension of Sterling Lyon Parkway. The study also included a functional design of the Parkway between Wilkes Avenue and McGillivray Boulevard.

This study is nearing completion. The remaining stakeholder and landowner meetings will be conducted in early October 2017. A final public information session to present the final recommended design is expected to occur in December 2017. A Class 3 estimate will be identified for the portion between Grant and the Sterling Lyon Parkway extension inclusive, while a Class 4 estimate will be identified for the functional design portion between Wilkes and McGillivray.

See http://www.winnipeg.ca/publicworks/construction/projects/WRCP-Extension.stm for additional project details.

Completion of the final engineering report is expected in January 2018 followed by an Administrative Report to Council.

The current Class 4 estimate for the project is $250 Million (accuracy -30% to +60%) for the portion from Grant Avenue to Sterling Lyon Parkway.

Widening of Kenaston Boulevard (Route 90) from Ness Avenue to Taylor Avenue

A functional design study was completed in 2009. A recommended roadway alignment was developed. See http://www.winnipeg.ca/publicworks/construction/studies/route90.stm website for additional information on that study. The study identified a Class 4 budget estimate of $129 Million (in 2009 dollars). However, the functional design study was limited to developing new widened roadway alignment alternatives. The extensive construction staging requirements to

keep 77,000 vehicles per day of traffic moving over the St. James Bridges was beyond the scope of the functional design study. As a result the concepts originally considered for bridge construction will require extensive modification to ensure adequate traffic staging can be achieved. In addition, the budget was based on 2009 dollars and did not include construction inflation to an expected construction period sometime after 2020.

A preliminary design study (RFP 329-2017) is expected to be awarded by the end of September 2017 to an engineering consultant. The study will include extensive public engagement. The preliminary design study is expected to be complete by end of February 2019.

In addition to developing a preliminary design based on full project scope limits from Ness Avenue to Taylor Avenue, the study will also review the feasibility of phasing the work in case the Canada Lands are not available. A phased approach may include work from Ness Avenue to approximately Tuxedo Boulevard in the first phase including all required reconstruction work in the St. James Bridges and Portage Avenue interchange.

The current estimate of $450 Million for the full project scope is considered Class 5 (accuracy -50% to +100%). The estimate class has been downgraded from Class 4 to Class 5 order of magnitude as a result of the initial study now being out of date with expected extensive changes to the St. James Bridges plans, and resulting construction inflation.

Arlington Bridge Replacement

On July 13, 2016, Council received the report “Functional Design for the CPR Yards Crossing Study” and authorized the Public Service to proceed with preliminary design work to progress from a Class 4 estimate to a Class 3 estimate pursuing the design alternative of a new bridge on a similar alignment as the current Arlington Bridge.

On December 7, 2016, a preliminary design study (RFP 494-2016) was awarded to Stantec Consulting Ltd. The study includes replacement of the Arlington Bridge and associated roadworks from McDermot Avenue to Selkirk Avenue.

A public engagement campaign was launched at the end of August 2017. For additional details see http://www.winnipeg.ca/publicworks/construction/projects/arlingtonBridge.stm .

A final preliminary design report is expected to be complete by the end of January 2018, followed by an Administrative Report to Council.

The current Class 4 estimate for the project is $300 Million (accuracy -30% to +60%).

FINANCIAL IMPACT

Financial Impact Statement **Date:** September 21, 2017

Project Name:

Update on Major Infrastructure Project Studies

COMMENTS:

There is no financial impact associated with the recommendation of this report.

"Original signed by J. Ruby, CPA, CA"
J. Ruby, CPA, CA
Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with:

Chief Asset & Project Management Officer

OURWINNIPEG POLICY ALIGNMENT

N/A

SUBMITTED BY

Department: Public Works
Division: Engineering
Prepared by: B. Neirinck, P. Eng.
Date: September 19, 2017