

**Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works –
September 16, 2020**

REPORTS

**Item No. 20 Road Construction Working Group Report Recommendations – One
Year Progress**

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

That this report be received as information.

**Agenda – Standing Policy Committee on Infrastructure Renewal and Public Works –
September 16, 2020**

DECISION MAKING HISTORY:

COUNCIL DECISION:

On September 26, 2019, Council concurred in the recommendation of the Executive Policy Committee and adopted the following:

1. That the Winnipeg Public Service be directed to:
 - A. Implement the recommendations of the Road Construction Working Group Report, attached as Appendix A.
 - B. Incorporate the recommendation of the Report numbered B.2, “That the City of Winnipeg award consulting assignments for road work – where applicable – the year prior to the following year’s construction projects” into its 2020 multi-year budget submission.
 - C. Incorporate recommendation B.3, “That the City of Winnipeg tender 70% to 80% of the following year’s road work from November to January, and the balance from January to March” into its 2020 multi-year budget submission.
 - D. Report back to the appropriate committee of Council within one year on the progress of the implementation of these recommendations.
2. That the Proper Officers of the City do all things necessary to implement the intent of the foregoing.

ADMINISTRATIVE REPORT

Title: Road Construction Working Group Report Recommendations – One Year Progress

Critical Path: Standing Policy Committee on Infrastructure Renewal and Public Works

AUTHORIZATION

Author	Department Head	CFO	CAO
B Kibbins, P.Eng.	J. Berezowsky	N/A	M. Ruta, Interim CAO

EXECUTIVE SUMMARY

The Road Construction Working Group (the “Working Group”), report provided recommendations for improving communication with residents and businesses impacted by road construction, improving the overall procurement process for road construction, and facilitating 24/7 construction in a cost-effective way to accelerate project construction. The Public Service was directed by Council to report back on progress with the recommendations after one year.

The Public Service has improved the public communications process. In addition, the Public Service is working towards advancing consulting engineering assignments approximately 18 months ahead of construction so that advertising of construction contracts can be advanced.

Accelerated construction methods are considered on all Regional and Industrial street renewal projects and are incorporated into projects, where practical, when the benefits outweigh the disadvantages or costs.

RECOMMENDATIONS

That this report be received as information.

REASON FOR THE REPORT

At its September 26, 2019 meeting, Council concurred in the recommendation of the Executive Policy Committee and adopted the following:

1. That the Winnipeg Public Service be directed to:
 - A. Implement the recommendations of the Road Construction Working Group Report.
 - B. Incorporate the recommendation of the Report numbered B.2, “That the City of Winnipeg award consulting assignments for road work – where applicable – the year prior to the following year’s construction projects” into its 2020 multi-year budget submission.
 - C. Incorporate recommendation B.3, “That the City of Winnipeg tender 70% to 80% of the following year’s road work from November to January, and the balance from January to March” into its 2020 multi-year budget submission.

D. Report back to the appropriate committee of Council within one year on the progress of the implementation of these recommendations.

IMPLICATIONS OF THE RECOMMENDATIONS

There are no implications to receiving this report as information.

HISTORY/DISCUSSION

The Road Construction Working Group (the “Working Group”) was formed in May 2019 to provide advice and recommendations for improving communication with residents and businesses impacted by road construction, improving the overall procurement, design, and road construction process, as well as facilitating 24/7 construction in a cost-effective way to accelerate project construction. The Working Group met several times between May 2019 and July 2019, and issued a report with these recommendations in August 2019 (attached as Appendix A).

The recommendations contained in the Working Group’s report were in three main categories which are discussed below. Appendix B includes a table with additional information on each recommendation.

A. Improved Communication with Affected Residents and Businesses

Street renewal projects require varying levels of communication depending on the project complexity. The scope of the project and the nature of the surrounding area (residential, mixed use, commercial, or industrial) will dictate the level of communication or engagement required. Important considerations include traffic management, pedestrian/cycling accommodation, accessibility, access to business/residences and any planned functional changes to the road.

For all roadway projects, preliminary construction notices are distributed to affected residents and businesses a minimum of one month prior to planned construction, providing a description of the project, contact information, and a rough schedule. The preliminary notice offers the opportunity to discuss and resolve any access needs a resident or business may have during construction.

An imminent construction notice is distributed approximately one week prior to construction to provide a reminder of the construction with a more detailed construction schedule as well as contact information of the contractor and contract administrator.

An expanded engagement process is often required for regional streets, industrial streets, school zones and where there is a significant change to the existing facility, such as addition of active transportation. Stakeholders are identified and are engaged early to ensure that any issues are identified and accommodated to the greatest extent possible while minimizing impact.

The Department has employed standardized messaging wherever possible for all construction notices to ensure consistency of information. All notices must be reviewed by the Department prior to release.

B. Alignment of Road Construction Tendering Process with City Budget Process

The key to early road construction tendering is to procure consulting engineering services well in advance of tendering and construction. Capital Budget authorization must be in place to

procure consulting engineering services in order to start the planning and design process. A well-planned construction contract that minimizes disruption to the public requires planning and design to begin a minimum of one year in advance.

As consulting engineering staff work on current construction projects throughout the summer, planning and design work for the following year needs to be advanced to the winter/spring approximately 18 months ahead of construction in order to achieve tendering by the fall.

The 2020 Capital Budget identified regional street renewal locations to 2023 with budget amounts for consulting engineering services identified at least one year prior. For local street renewals the 2020 Capital Budget identified local street renewal locations to 2021, which is the first-time local streets were programmed beyond the current budget year.

In order to achieve the goal of 70% to 80% of work tendered by January of any given year, a minimum three-year program needs to be identified for regional and local street renewal locations so that consulting engineering services can be procured well in advance of tendering and construction. Budget amounts for engineering would be identified a minimum of one year ahead of the construction.

Tendering for the 2020 construction season achieved approximately the following tendered amounts based on project budget value:

- 15% by the end of January
- 50% by the end of March
- 85% by the end of April
- 95% by the end of May

For the 2021 construction season it is expected that 50% of the work will be tendered by the end of January 2021. It is expected that the 70% to 80% tendering goal will be achieved for the 2022 construction season.

C. 24/7 Construction

The Department requires completion of a Project Delivery Brief for every regional and industrial street project to ensure all options for improving project delivery have been explored. These can range from options to speed up construction (allowing more extensive lane closures), to contract incentives, to traffic restrictions to minimize impact to surrounding areas during construction (peak hour restrictions on lane closures). Designers are mandated to conduct a thorough traffic management plan for the approval of the Traffic Management Engineer prior to advertising their contract.

The City reviews all Regional and Industrial street renewal projects to determine the pros and cons of accelerated construction methods including construction staging, traffic management, critical milestones, penalty/bonus incentives, weekend working days, and overnight construction, where there is a specific benefit to the City and the public.

Running a construction operation on a 24/7 basis is complex as there are several challenges in undertaking 24/7 construction including:

- The safety of workers and the travelling public is reduced for operations after dark;
- Noise complaints - even if residential areas are not directly beside the construction area, construction noise travels far;
- Availability of work crews - running a 24-hour operation requires two to three separate crews;

- Having such requirements on a contract, contractors are likely to respond (bid) with a cost premium to cover their risk for night and/or extended working hours.

Where there is a specific benefit to the City and public, the City does require/permit a contractor to run a construction operation through the night. These are usually for a task that needs to be done in succession, very rapidly, and for a short period (for example: one or two days at a high-traffic intersection). The benefit must outweigh the risks and costs discussed above.

Our programs and their associated lane closures are planned with overall traffic management in mind, with the goal of minimizing (to the extent possible) the impact to the public, and the understanding that these infrastructure investments are essential to our transportation system. Certain high-priority contracts will specify Saturdays as a Working Day to help speed up work.

When weather conditions permit, construction crews typically work a 12-hour day during the construction season.

FINANCIAL IMPACT

Financial Impact Statement Date: July 28, 2020

Project Name:

Road Construction Working Group Report Recommendations – One Year Progress

COMMENTS:

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

"Original signed by J. Peters, CPA, CGA"

J. Peters, CPA, CGA
Acting Manager of Finance & Administration

CONSULTATION

This Report has been prepared in consultation with: N/A

OURWINNIPEG POLICY ALIGNMENT

01-3 Prosperity Direction 1: Provide efficient and focused civic administration and governance. This report supports demonstration of accountability through service performance measurement and reporting.

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

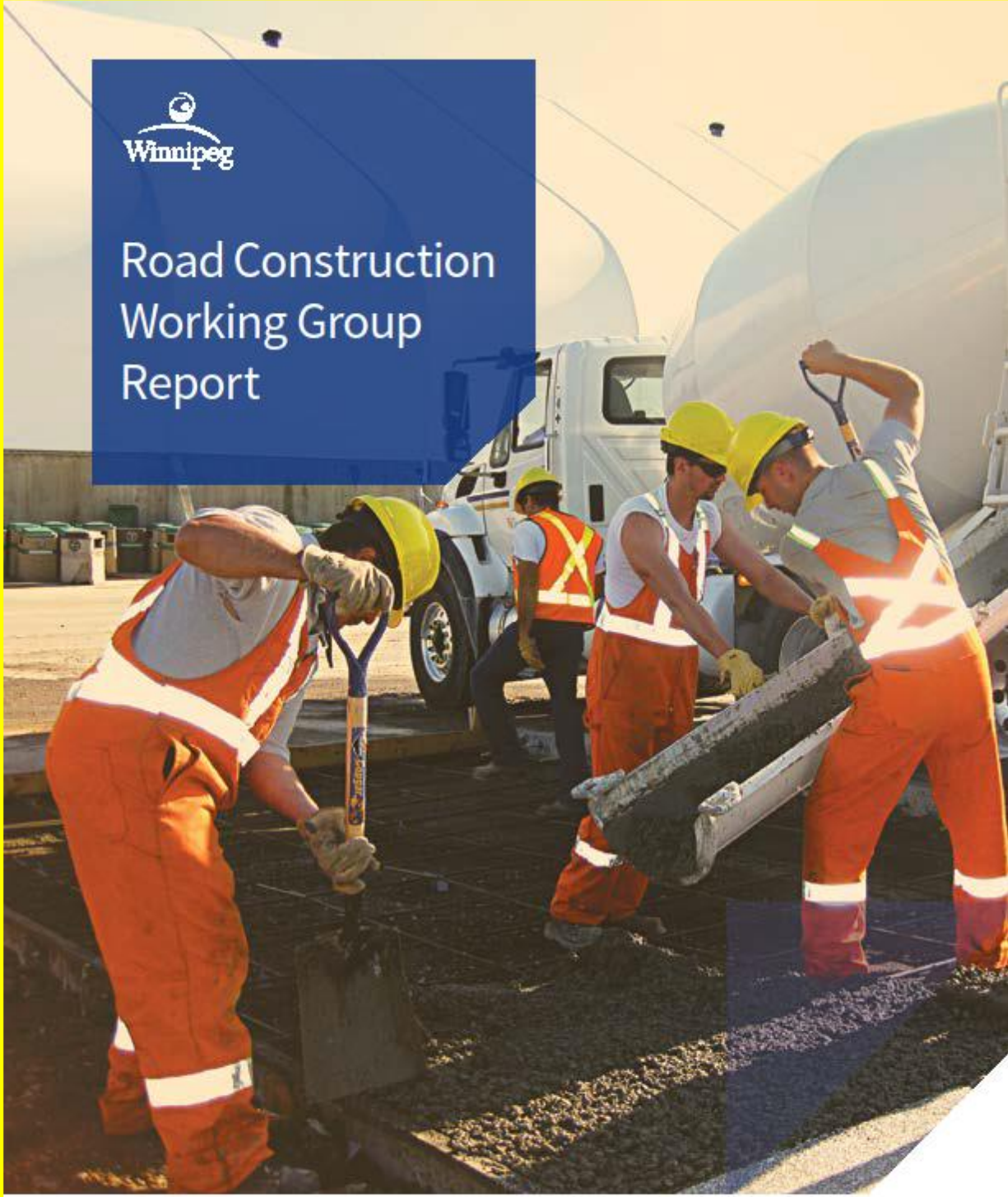
N/A

SUBMITTED BY

Department: Public Works
Division: Engineering
Prepared by: M.N. Stainton, P.Eng.
Date: August 4, 2020
File No: N/A

Attachments:
APPENDIX A: Road Construction Working Group Report
APPENDIX B: Progress on Recommendations

APPENDIX A – DETAILED PROGRESS ON RECOMMENDATIONS




Winnipeg
Road Construction
Working Group
Report

July 2019

Background

During the 2018 municipal election, Mayor Brian Bowman committed to establish a working group to provide concrete and practical recommendations on ways to improve the overall road construction process. Specifically, the Mayor committed to examine ways to improve communication with affected residents and businesses; extend the successful early tendering process for regional roads to include local roads; and utilize 24/7 construction where cost effective along with other options to accelerate project construction, including a review of working hours and days.

On May 27, 2019, the Mayor announced the formation of the Road Construction Working Group (the "Working Group"). The Working Group would report back, through the Working Group Chair, Councillor Matt Allard, with recommendations within 60 days of its inaugural meeting.

Working group membership & meeting dates

Membership of the Working Group included:

- Councillor Matt Allard, Chair, Standing Policy Committee on Infrastructure Renewal and Public Works, City of Winnipeg
- Jim Berezowsky, Director, Public Works, City of Winnipeg
- Felicia Wiltshire, Director, Customer Service & Communications, City of Winnipeg
- Chris Lorenc, President, Manitoba Heavy Construction Association
- Ron Hambley, President, Winnipeg Construction Association
- Brad Cook, President, Association of Consulting Engineering Companies – Manitoba
- Jonathan Alward, Director, Provincial Affairs, Canadian Federation of Independent Business – Manitoba

The Working Group met on May 29, June 10, July 3, and July 4, 2019. The Working Group concurred ongoing collaboration between the City of Winnipeg and industry following submission of the final report to the Mayor would be beneficial.

Working Group meetings were focused on three major topics:

- a) improved communication with affected residents and businesses;
- b) alignment of the road construction tendering process with the City's budget process; and
- c) 24/7 road construction.

Working group commentary

The Working Group concurred earlier planning leads to more effective two-way communication with affected residents and businesses. Clear and proactive communication with affected residents and businesses helps improve the overall road construction process. Currently, there exists a communication gap between the time projects are approved to proceed, the time of tender award, the issuance of public notices, and project start dates. It was suggested communications should commence at the preliminary design stage to allow for discovery, and the consultant play a larger role in this process.

Communication methods and timeframes between the City of Winnipeg (City), contractors, and affected residents and businesses should be standardized, and business groups could assist in notifications for large road projects. The City should continue developing templates to assist contractors in communicating projects to affected residents and businesses.

With respect to the alignment of processes, the Working Group agreed earlier tendering and timelier contract award would yield significant efficiencies and cost savings. Earlier tendering creates a more competitive bidding environment and a more streamlined road construction process. Multi-year road construction programs, aligned with the forthcoming a multi-year budgeting approach adopted by Council, would also lead to better planning, provide greater certainty to industry, and maximize value to taxpayers. Furthermore, the Working Group agreed more flexible contract administration and construction start dates, including the introduction of a more balanced approach to performance related penalties and bonuses in road contracts, would improve productivity.

In reviewing the City's current procurement processes, the Public Service recognized a number of internal systems associated with project selection and procurement of contractor services needed to be updated and improved. The procurement of consulting engineering services appears to be the area where the greatest productivity gains can be realized. In this vein, the Working Group endorsed the merits of Qualifications Based Selection (QBS) for complicated engineering and design work.

QBS was viewed as a tool the City could utilize to maximize value and efficiency, and minimize administrative and other costs. However, it is acknowledged QBS is more appropriate for complex infrastructure projects rather than standard road reconstruction and rehabilitation.

The City utilizes prequalified contractor lists for certain work. Master Service Agreements (MSA), which involve a contractual relationship between the City and prequalified contractors, were cited by the Working Group as another tool the City could utilize for less complicated road projects. The City could also utilize a similar arrangement to procure consulting assignments for smaller projects.

The Working Group agreed additional measures should be explored to enable faster and more efficient location of underground utilities associated with road construction projects to streamline projects, to minimize or eliminate delays, and to minimize or eliminate the risk of damaging important infrastructure. The Working Group noted any change to this process would require a change in provincial legislation.

Finally, the Working Group wished to see more effective traffic flow and lane closure methods applied to road projects in order to minimize disruptions to motorists, cyclists, pedestrians, residents, and businesses.

In response to the public's desire to see 24/7 construction – particularly overnight work – applied to road projects to speed up schedules, the Working Group cautioned 24/7 construction is not a silver bullet and should be considered on a case-by-case basis and where appropriate. In many cases, 24/7 construction is simply not practical, given noise related concerns and resource availability. Overnight work safety was also flagged as a concern. However, the Working Group acknowledged extended working days and daylight hours for specific projects would be advantageous, especially during the summer. The City already allows 24/7 construction on some projects, such as diamond grinding on Bishop Grandin Boulevard, Pembina Highway, Kenaston Boulevard, and Sterling Lyon Parkway. The Working Group agreed the City should explore further opportunities for 24/7 construction where it makes sense.

Working group recommendations

The following recommendations are presented to the Mayor for consideration:

A. IMPROVED COMMUNICATION WITH AFFECTED RESIDENTS AND BUSINESSES

1. That engineering consultants engage affected residents and businesses at the preliminary design stage – well in advance of project start dates – to better plan and stage road projects and minimize impact;
2. That both affected owners and tenants be notified well in advance of forthcoming road projects;
3. That communication methods and timeframes between the City of Winnipeg, contractors, and affected residents and businesses be standardized to the extent possible; and
4. That organizations, including but not limited to, the Canadian Federation of Independent Business, the Winnipeg Chamber of Commerce, and the Business Improvements Zones, be leveraged in the communication of large road projects.

B. ALIGNMENT OF ROAD CONSTRUCTION TENDERING PROCESS WITH CITY BUDGET PROCESS

1. That the City of Winnipeg adopt multi-year road construction programs, aligned with the forthcoming multi-year budgeting approach adopted by Council, to allow for better planning, provide greater certainty to industry, and maximize value to taxpayers;
2. That the City of Winnipeg award consulting assignments for road work – where applicable – the year prior to the following year's construction projects;
3. That the City of Winnipeg tender 70% to 80% of the following year's road work from November to January, and the balance from January to March;
4. That the City of Winnipeg introduce flexible contract administration and construction start dates to improve productivity;
5. That the City of Winnipeg consider introducing a more balanced approach to performance related penalties and bonuses in road contracts to improve productivity;
6. That the City of Winnipeg extend early tendering and timely contract award practices to local road projects;
7. That the City of Winnipeg consider increasing its use of prequalified contractors and potentially Master Service Agreements (MSA) for road reconstruction and rehabilitation projects and smaller consulting assignments;
8. That the City of Winnipeg utilize Qualifications Based Selection (QBS) for more complex infrastructure projects;
9. That the City of Winnipeg call on the Province of Manitoba to introduce legislation, potentially modelled on Ontario's *Underground Infrastructure Notification System Act 2012*, which requires all owners of buried infrastructure in the public right of way to register that infrastructure under a single registry; and
10. That the City of Winnipeg explore applying more effective traffic flow and lane closure methods to road projects in order to minimize disruptions to motorists, cyclists, and pedestrians.

C. 24/7 CONSTRUCTION

1. That the City of Winnipeg allow contractors to work extended days and daylight hours, especially during the summer, to speed up construction schedules; and
2. That 24/7 construction be considered on a case-by-case basis and where appropriate.

D. CONTINUITY

1. That the Working Group be reconvened within one (1) year to review progress on implementation of the above-mentioned recommendations; and
2. That the Working Group be reconvened within two (2) years to evaluate improvements to the overall road construction process resulting from the above-mentioned recommendations.

APPENDIX B – DETAILED PROGRESS ON RECOMMENDATIONS

Recommendation	Progress in 2020	Plans to 2021 and beyond
A. IMPROVED COMMUNICATION WITH AFFECTED RESIDENTS AND BUSINESSES		
<p>1. That engineering consultants engage affected residents and businesses at the preliminary design stage – well in advance of project start dates – to better plan and stage road projects and minimize impact;</p>	<p>Public Works has expanded the engagement process for regional street projects to ensure that any business or resident issues are identified early, and accommodated to the extent possible, with impact minimized.</p>	<p>Monitor and improve the engagement process as required.</p>
<p>2. That both affected owners and tenants be notified well in advance of forthcoming road projects;</p>	<p>Preliminary (one month or more, after Capital Budget is adopted) and imminent (seven-day notice) construction notices are distributed.</p>	<p>Expand access to notices on the construction website.</p>
<p>3. That communication methods and timeframes between the City of Winnipeg, contractors, and affected residents and businesses be standardized to the extent possible; and</p>	<ul style="list-style-type: none"> • The Department has employed standardized messaging wherever possible for all construction notices to ensure consistency of information; • All notices must be reviewed by the Department; notices are drafted in advance with the date inserted when known; • The Department has improved the process followed for distribution of notices, ensuring consistent delivery of information for all. 	<p>Monitor and improve delivery process as required.</p>

Recommendation	Progress in 2020	Plans to 2021 and beyond
<p>4. That organizations, including but not limited to, the Canadian Federation of Independent Business, the Winnipeg Chamber of Commerce, and the Business Improvements Zones, be leveraged in the communication of large road projects.</p>	<p><i>No action.</i></p>	<p><i>Could be considered on a project specific basis.</i></p>
<p>B. ALIGNMENT OF ROAD CONSTRUCTION TENDERING PROCESS WITH CITY BUDGET PROCESS</p>		
<p>1. That the City of Winnipeg adopt multi-year road construction programs, aligned with the forthcoming multi-year budgeting approach adopted by Council, to allow for better planning, provide greater certainty to industry, and maximize value to taxpayers;</p>	<p>The Regional and Local Street Renewal Program of the City's Capital Budget includes four years of planned Regional Street projects and two years of Local Street and Alley projects, allowing for some early pre-planning with utilities and other right-of-way users.</p>	<ul style="list-style-type: none"> • Maintain a minimum of three-year planned regional streets projects; • Expand to three-year local streets and alley project; • Identify budget for consulting engineering services a minimum 1 year ahead of construction.
<p>2. That the City of Winnipeg award consulting assignments for road work – where applicable – the year prior to the following year's construction projects;</p>	<p>As of July 2020, all but two 2021 consulting contracts had been awarded and these are expected to be completed by the end of August.</p> <p>In 2019, the consulting awards for 2020 work was not completed until the end of December.</p> <p>Consulting RFPs for 2022 work will start to be issued in the fall of 2020, but cannot be awarded until the adoption of the 2021 Capital budget (one budget year ahead of the planned work),</p>	<ul style="list-style-type: none"> • All 2022 regional streets projects assigned to design process by end of December 2020; • Future Regionals awarded in the fall, 2 years prior. • 2022 Local Streets packages advertised and awarded by June 1, 2021; • Future Local & Alley packages awarded in the fall, two years prior.

Recommendation	Progress in 2020	Plans to 2021 and beyond
<p>3. That the City of Winnipeg tender 70% to 80% of the following year's road work from November to January, and the balance from January to March;</p>	<p>Efforts have been focussed on starting the design process earlier to be able to release contracts earlier in future years.</p> <p>Contracts have been advanced overall by about two months from 2019 to 2020.</p>	<ul style="list-style-type: none"> • Advance consulting assignments to minimum one year ahead of planned construction; • Include requirements for advertisement dates in consulting contracts. • Advertise 50% of construction contracts for 2021 roadwork by January 31, 2021.
<p>4. That the City of Winnipeg introduce flexible contract administration and construction start dates to improve productivity;</p>	<p>The Department requires completion of a Project Delivery Brief for every regional and industrial street project to ensure all options for improving project delivery have been explored. These can range from options to speed up construction, to contract incentives, to traffic restrictions to minimize impact to surrounding areas during construction.</p>	
<p>5. That the City of Winnipeg consider introducing a more balanced approach to performance related penalties and bonuses in road contracts to improve productivity;</p>	<p>See Project Delivery Brief, item #4.</p>	
<p>6. That the City of Winnipeg extend early tendering and timely contract award practices to local road projects;</p>	<p>See item #3.</p>	

Recommendation	Progress in 2020	Plans to 2021 and beyond
7. That the City of Winnipeg consider increasing its use of prequalified contractors and potentially Master Service Agreements (MSA) for road reconstruction and rehabilitation projects and smaller consulting assignments;	<i>No action.</i>	<i>Longer term future consideration.</i>
8. That the City of Winnipeg utilize Qualifications Based Selection (QBS) for more complex infrastructure projects;	The City has a process for typical infrastructure renewal projects that maximizes the value of consultant qualifications in the evaluation process, while still ensuring value for the taxpayer.	Evaluate the effectiveness of QBS for more complex infrastructure projects.
9. That the City of Winnipeg call on the Province of Manitoba to introduce legislation, potentially modelled on Ontario's Underground Infrastructure Notification System Act 2012, which requires all owners of buried infrastructure in the public right of way to register that infrastructure under a single registry; and	<i>No action.</i>	<i>Longer term future consideration.</i>
10. That the City of Winnipeg explore applying more effective traffic flow and lane closure methods to road projects in order to minimize disruptions to motorists, cyclists, and pedestrians.	See Project Delivery Brief, item #4.	

Recommendation	Progress in 2020	Plans to 2021 and beyond
C. 24/7 CONSTRUCTION		
<p>1. That the City of Winnipeg allow contractors to work extended days and daylight hours, especially during the summer, to speed up construction schedules; and</p>	<ul style="list-style-type: none"> • By-laws permit work within the right-of-way • General Conditions permit work between 0700 and 2200 on any Working Day • Contractors typically work 12-hour days • Where applicable and appropriate, contracts have had designated Saturdays as a Working Day. • Project Delivery Brief reviewing accelerated construction is undertaken for all Regional and Industrial street renewal projects. 	<p>No changes required.</p>
<p>2. That 24/7 construction be considered on a case-by-case basis and where appropriate.</p>	<p>Overnight and weekend construction operations are permitted and/or encouraged where permitted.</p>	<p>Continue to observe opportunities for extended-hours work.</p>
D. CONTINUITY		
<p>1. That the Working Group be reconvened within one (1) year to review progress on implementation of the above-mentioned recommendations; and</p>	<p>Discussed herein.</p>	<p>N/A</p>
<p>2. That the Working Group be reconvened within two (2) years to evaluate improvements to the overall road construction process resulting from the above-mentioned recommendations.</p>	<p>N/A</p>	<p>Report in September 2021</p>