

Date: 2023-05-24

Subject: **Active Transportation Implementation – Plan for Painting the Active Transportation Footprint (RM21/2023)**

Contact: Nelson Cadete, Senior Manager (A), Transportation Planning, Planning, Building and Growth Management

Report Number: Planning, Bld & Growth Mgt-2023-471

Recommendations:

1. **THAT** the report from Nelson Cadete, Senior Manager (A), dated May 24, 2023, to the Committee of Council Meeting of June 21, 2023, re: **Active Transportation Implementation – Plan for Painting the Active Transportation Footprint (CW102-2013)** be received.

Overview:

- **Committee of Council directed staff to report back on a plan for painting/colouring the active transportation footprint in the city (RM 21/2023).**
- **One of the key recommendations of the Active Transportation Master Plan (ATMP), under the theme of “Designing for Safety and Comfort” was to adopt the guidance provided by the Ontario Traffic Manual Book (OTM) 18: Bicycle Facilities.**
- **In a recent update (2021), OTM Book 18 introduced guidance relating to the use of green surface treatment as a traffic control device to increase the visibility of a cycling facility, highlight areas of conflict and reinforce priority to people riding bikes in conflict areas.**
- **The City will be introducing green paint along 10.3 km of existing bicycle lanes in the downtown and Bramalea areas that were designed and implemented prior to the OTM Book 18 update in 2021. The estimated cost to retrofit the 10.3 km of bicycle lane with green paint is approximately \$30K.**

Background:

At its March 8, 2023 meeting, Committee of Council directed staff to report back on a plan for painting/colouring the active transportation footprint in the city (RM 21/2023).

One of the key recommendations of the Active Transportation Master Plan (ATMP), under the theme of 'Designing for Safety and Comfort' was to adopt the guidance provided by the Ontario Traffic Manual Book 18: Bicycle Facilities as the best practice for the planning, design and operation of cycling facilities in Ontario.

The Ontario Traffic Manual Book 18: Bicycle Facilities is a province-wide bicycle facilities design manual. Similar to other books in the OTM series of books (i.e. relating to regulatory signs, warning signs, etc.), Book 18 provides municipalities in Ontario with a consistent approach to plan, design, build, regulate and maintain bicycle facilities.

Included within the latest version of the provincial guidelines (2021) is a recommendation that green surface treatment may be used as a traffic control device to increase the visibility of a cycling facility, highlight areas of conflict and reinforce priority to people riding bikes in conflict areas. Green surface treatment may be applied either as a solid colour treatment, or in a dashed pattern (dashed green treatments are typically applied at merge zones or bus stops).

Research has shown that cyclists and motorists both have a positive impression of the effect of the green coloured pavement, with cyclists saying they feel safer when the green coloured pavement is present, and motorists saying that it gives them an increased awareness that cyclists might be present and where cyclists are likely to be positioned within the travelled way.

Green pavement markings are believed to be more effective when used thoughtfully, for example, at locations with higher volumes of conflicts. Practitioners are discouraged from universally applying green surface treatments along a continuous corridor.

Green surface treatment may be considered in the following situations:

- where motor vehicles merge or weave with cyclists on the approach to an intersection or transit stops,
- in bicycle queueing spaces, where there is potential for motor vehicle encroachment,
- at driveways and minor intersections where the cycling movement has the right-of-way, and where is a high volume of motor vehicles are crossing the cycling facility, and

- at signalized intersections where a high volume of turning motor vehicles permissively crosses the path of a cycling movement.

Current Situation:

In response to the recent guidance from the latest version of the Ontario Traffic Manual Book 18: Bicycle Facilities, the city has incorporated the use of more green paint into its bicycle facility designs. The design of East-west Cycling Corridor, which is planned for implementation this year, was completed by the consulting firm that led the development of the recent set of provincial guidelines and includes the latest guidance as it pertains to the use of green surface treatments. The East-west Cycling Corridor design has been used as the basis to inform other (and future) bicycle facility design in the city.

Prior the 2021 update to the bicycle facility guidelines, the city implemented a number of bike lanes that do not meet the current requirements as they relate to the use of green paint. Included with the 2023 ATMP Implementation program, the city will be introducing green paint along 10.3 km of existing bicycle lanes in the downtown and Bramalea areas. This will be a first phase of a bicycle lane retrofit program that will bring consistency to all cycling infrastructure in the city.

A summary of locations which are planned to receive the green paint enhancements this year are provided in **Appendix A: Cost Estimate to apply green pavement marking treatments (Typical Traffic Paint)**.

Corporate Implications:

Financial Implications:

Green surface treatment can be applied with a typical traffic paint and reapplied on an annual basis or can be applied with a more durable product that would not have to be retraced every year - expected life span is 5 to 10 years. The cost to paint the locations identified in the downtown and Bramalea with a typical traffic paint, is approximately \$30K (to apply the same quantity with a durable product is \$570K). The \$30K require to complete the first phase of the green paint retrofit is available in Project 237356-003.

Term of Council Priorities:

This report directly supports the “Active Transportation Action Plan” Term of Council Focused Priority. The proposed design enhancements outlined within this report contribute towards achieving an ultimate broad and well-connected active transportation network making travel by bike and on foot a safe and desirable option for school, work, recreation and other trips while supporting a cycling and walking culture.

Conclusion:

Research has shown that cyclists and motorists both have a positive impression of the effect of the green coloured pavement, with cyclists saying they feel safer when the green coloured pavement is present, and motorists saying that it gives them an increased awareness that cyclists might be present and where cyclists are likely to be positioned within the travelled way. The guidance provided in the OTM Book 18: Bicycle Facilities provides the most recent best practice in bicycle facility design (including the use of green paint) in the province. OTM Book 18 will be use by the city to inform all future bicycle facility designs, as well as, a retrofit program that will introduce green paint into existing cycling facilities.

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Attachments:

Appendix A: Cost Estimate to apply green pavement marking treatments (Typical Traffic Paint)