The Regional Municipality of York

Committee of the Whole Transportation Services May 4, 2023

Report of the Commissioner of Public Works

Request for Traffic Signals Keele Street at North Maple Regional Park City of Vaughan

1. Recommendations

- 1. Traffic signals be installed on Keele Street at the entrance to North Maple Regional Park in the City of Vaughan, subject to the capital and 10-year maintenance costs being fully funded by the City of Vaughan.
- 2. The Regional Clerk forward this report to the Clerk of the City of Vaughan and the Chief of York Regional Police.

2. Summary

This report responds to a resolution received from the City of Vaughan requesting installation of unwarranted traffic signals on Keele Street at the entrance to North Maple Regional Park, subject to being fully funded by the requestor.

Key Points:

- Vaughan is requesting unwarranted traffic signals to improve safety and provide ease of access onto Keele Street from North Maple Regional Park
- North Maple Regional Park will likely satisfy traffic volume criteria for a traffic signal on weekends in 2025
- Proposed development of Block 27 lands is forecasted to satisfy the Traffic and Pedestrian Signal Policy by 2031
- Staff recommend accelerating traffic signal installation based on safety, connectivity and no operational concerns
- Council previously approved traffic signals that do not satisfy the Region's Traffic and Pedestrian Signal Policy criteria conditional on costs being fully funded by the requesting party

3. Background

June 2015, Council adopted the updated Traffic and Pedestrian Signal Policy

The Region's Traffic and Pedestrian Signal Policy (Policy) is consistent with Ministry of Transportation of Ontario (MTO) traffic signal warrant criteria and directly references Ontario Traffic Manual Book 12 – Traffic Signals. This publication provides a consistent approach across the province to determine appropriate installation of traffic signals.

MTO has retained an independent consultant to review Ontario Traffic Manual Book 12 – Traffic Signals, which may result in an update to traffic and pedestrian signal criteria. This review is expected to be completed in late 2023. In parallel, staff are reviewing the broader context of the Policy to advance traffic and pedestrian signals. Once these reviews are completed, staff will provide an update to Council on the Policy.

Vaughan is requesting approval of unwarranted traffic signals on Keele Street at the entrance to North Maple Regional Park

In January 2023, the Regional Clerk received a <u>resolution</u> from the City of Vaughan requesting installation of unwarranted traffic signals on Keele Street at the entrance to North Maple Regional Park to improve safety and provide ease of access onto Keele Street.

The Vaughan resolution requests that the Region reimburse the City for installation and operating costs.

Past installations of traffic signals not satisfying Policy criteria have been fully funded by requesting party

Traffic signals not meeting Policy criteria are considered unwarranted. When requested, Council's practice has been to approve installation of unwarranted signals on Regional roads, conditional on costs being fully funded (installation, operating and maintenance) from the requesting party. All costs have been non-refundable regardless of when Policy criteria are satisfied.

Vaughan is advancing Phase 2 Enabling Works of North Maple Regional Park project

In 2016, the City of Vaughan initiated design of a 900-acre park. North Maple Regional Park (Park) is envisioned to become a city-wide cultural and recreational destination that will honour the surrounding natural environment, celebrate the return of nature from former landfill areas and feature year-round uses for all ages and abilities.

Phase 1 of this park project was completed in 2018, including construction of two soccer fields, a five-kilometre hiking trail, service building, parking lot and existing unsignalized site access from Keele Street. Phase 2 of the project is now underway to service 130 acres of the Park for future development of recreational facilities and park amenities, including two additional sports fields and two parking lots. Anticipated completion is 2025.

4. Analysis

North Maple Regional Park is forecasted to satisfy traffic volume criteria for a traffic signal on weekends in 2025

Based on the Traffic Impact Study prepared by the developer's consultant, traffic signals on Keele Street at the entrance to the Park will satisfy traffic volume criteria on weekends. However, weekends are considered atypical operating conditions. The Policy for evaluating traffic signal warrants, as per provincial guidelines, is based on weekday (Tuesday, Wednesday or Thursday) volumes as these days are more representative of typical operating conditions.

Development of proposed Block 27 lands will satisfy the Traffic and Pedestrian Signal Policy by 2031

In addition to expansion of the Park, there is a proposed mixed-use development, known as Block 27, located across from the Park on the west side of Keele Street. A proposed street connection between Block 27 development and Keele Street will form the west leg of the requested signalized intersection. This proposed development, bounded by Kirby Road, Keele Street, Teston Road and Jane Street, will consist of over 7,000 residential units, office and retail space, institutional facilities (i.e., parks and schools), a community hub, and a transit hub adjacent to the future Kirby GO station. This development is anticipated to be fully built by 2031. Side street traffic volumes are expected to increase at the intersection, which will likely satisfy the Policy by that time. Subject to Council approval, accelerating installation of traffic signals at this intersection will service the Park exclusively until the Block 27 development is established.

A location map showing proposed development sites and the requested traffic signals is included as Appendix A.

Staff recommend accelerating traffic signal installation based on safety and projected growth

A Traffic Impact Study, prepared by the developer's consultant for the Park, indicates traffic signals could safely operate at this intersection without creating operational concerns. A green signal indication would rest on Keele Street and only change to red when a vehicle or pedestrian is detected at the access to the Park. Installing traffic signals will significantly reduce side street delays during rush hours, with minimal added delay to traffic on the main road.

In future, the Park and Block 27 are expected to attract a higher number of pedestrian and cyclist trips. Installation of traffic signals would provide a more direct and safer crossing opportunity for pedestrians and cyclists. The next closest pedestrian crossing is located at the intersection of Keele Street and Peak Point Boulevard, approximately 580 metres to the north.

Advancing traffic signal installation will help provide safe traffic control for park events, manage orderly movement of traffic as growth continues in the surrounding community and provide future connections to trails and developments.

5. Financial

The cost to install traffic signals at a typical intersection is about \$250,000, subject to final design. Annual operating costs are about \$7,800. Should the unwarranted signals be approved, as per Council-approved policy, the requesting party would be responsible to fully fund the installation (\$250,000) and a one-time, 10-year operating and maintenance fee (\$78,000). All costs for traffic signals not satisfying Policy criteria are fully funded by the requesting party and are non-refundable.

6. Local Impact

Traffic and pedestrian signals balance alternating rights-of-way between all road users and facilitate access to local communities and private properties. The City of Vaughan endorses the proposed unwarranted traffic signal.

Based on a Traffic Impact Study prepared by the developer's consultant, the proposed traffic signal would operate safely at the intersection and would not create operational concerns.

7. Conclusion

Vaughan is requesting traffic signals on Keele Street at the entrance to North Maple Regional Park to improve safety and provide the community with ease of access onto Keele Street.

The requested traffic signal does not currently satisfy the Region's Traffic and Pedestrian Signal Policy. Proposed Block 27 development will likely satisfy the Policy by 2031. Staff recommend accelerating traffic signal installation based on safety, projected growth and have no operational concerns, subject to being fully funded by the City of Vaughan.

For more information on this report, please contact Joseph Petrungaro at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by: Erin Mahoney, M. Eng.

Commissioner of Public Works

Approved for Submission: Bruce Macgregor

Chief Administrative Officer

April 13, 2023 14730655

Appendix A - Location Map

