

Traffic Control Signals - York Mills Road and Valley Woods Road/Sandover Drive, York Mills Road and Deerlick Court/Clayland Drive

Date: December 10, 2021
To: North York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 16 - Don Valley East

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on York Mills Road, City Council approval of this report is required.

Transportation Services is requesting approval to install traffic control signals at the intersections of York Mills Road and Valley Woods Road/Sandover Drive and York Mills Road and Deerlick Court/Clayland Drive. The installation of the signals is contingent on the approval to remove the existing midblock traffic signals on York Mills Road between these intersections. The proposed traffic control signals will provide enhanced safety for all road users and are justified based on the assessment undertaken.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services recommends that:

1. City Council authorize the installation of traffic control signals at York Mills Road and Valley Woods Road/Sandover Drive, in conjunction with the removal of the existing traffic control signals on York Mills Road and a point 60 metres east of Sandover Drive.
2. City Council authorize the installation of traffic control signals at York Mills Road and Deerlick Court/Clayland Drive, in conjunction with the removal of the existing traffic control signals on York Mills Road and a point 60 metres east of Sandover Drive.

FINANCIAL IMPACT

The estimated cost for installing traffic control signals at the intersection of York Mills Road and Valley Woods Road/Sandover Drive is \$180,000. Funding would be subject

to availability and competing priorities within the Transportation Services 2022 Capital Budget.

There are no financial implications associated with the adoption of recommendation 2 of this report as funding has been secured for the traffic control signals from the proponent of the development at 35 to 53 and 101 to 113 Valley Woods Road and 1213 to 1229 York Mills Road (Plan of Subdivision Application No. 10 119479 NNY 34 SB). These funds were secured through Zoning By-law Amendment Application No. 992-2012.

DECISION HISTORY

On September 21, 2011 City Council adopted item NY9.46 entitled "35-53 and 101-113 Valley Woods Road and 1213-1229 York Mills Road, Official Plan, Rezoning, Draft Plan of Subdivision and Rental Housing Demolition Applications – Final Report"
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.NY9.46>

COMMENTS

Transportation Services was requested by a local resident to investigate the feasibility of installing traffic control signals at the intersection of York Mills Road and Valley Woods Road/Sandover Drive. Coincidentally, a condition of the site plan agreement for 1213-1229 York Mills Road, was the installation of traffic control signals at the adjacent intersection of York Mills Road and Deerlick Court/Clayland Drive.

Existing Conditions

York Mills Road is characterized by the following conditions:

- It is a four-lane, east/west, major arterial roadway
- It operates two-way traffic on a pavement width of approximately 12 metres
- The daily two-way traffic volume is approximately 28,000 vehicles
- The speed limit is 50 km/h
- TTC service is provided by the 95 and 395 York Mills bus, 144 Don Valley Parkway express bus and 995 York Mills express bus
- There are sidewalks on both sides of the street

Valley Woods Road and Sandover Drive are characterized by the following conditions:

- They are two-lane, north/south collector roadways that are stop-controlled at the intersection with York Mills Road
- Valley Woods Road runs south from York Mills Road and Sandover Drive runs north
- They operate with two-way traffic on a pavement width of approximately 8.5 metres
- The daily two-way traffic volume on these streets is approximately 3,000 vehicles
- The speed limit is 40 km/h on both roadways
- Heavy trucks are prohibited at all times on both roadways
- There is no TTC service on either roadway
- There are sidewalks on the east side of Valley Woods Road and on both sides of Sandover Drive

Clayland Drive and Deerlick Court are characterized by the following conditions:

- Clayland Drive is a two-lane, 8.5 metre wide north/south local roadway that is stop-controlled at its intersection on the north side of York Mills Road
- Deerlick Court is an unassumed but dedicated, 8.5 metre wide local roadway that will operate two-way when it opens in May/June 2022, running south from the intersection and then turning west to come to a dead-end
- The speed limit is 50 km/h on both roadways
- Heavy trucks are prohibited at all times on Clayland Drive
- There is no TTC service on either roadway
- There are sidewalks on both sides of Clayland Drive and Deerlick Court

The intersection of York Mills Road and Valley Woods Road/Sandover Drive is approximately 165 metres west of the intersection of York Mills Road and Clayland Drive and Deerlick Court. There are midblock pedestrian traffic control signals on York Mills Road, between the subject intersections, 60 metres east of Valley Woods Road. There are TTC stops at the midblock signals. There are also existing traffic control signals on York Mills Road at the Don Valley Parkway northbound off-ramp, approximately 100 metres west of Valley Woods Road/Sandover Drive.

The land use in this area is a mix of low and high rise residential. The development at 35-53 and 101-113 Valley Woods Road and 1213-1229 York Mills Road is located on the south side of York Mills Road between the subject intersections. The development consists of north and south sites.

The north development site (1213-1229 York Mills Road) is located in the southeast quadrant of the York Mills Road and Valley Woods Road intersection with access via Deerlick Court. This site includes 1,196 residential units (1,056 condominium units and 140 rental units). Construction of one market building with 312 units and an apartment building with 140 units on the north development site is currently on-going. The apartment building is scheduled to be completed in June 2022 and the market building in October 2022. Construction has yet to start on the balance of the units.

The south development site (35-53 and 101-113 Valley Woods Road) is located on the east side of Valley Woods Road, approximately 350 metres south of York Mills Road. This site includes 684 residential units (554 condominium units and 130 rental townhouse units). Construction of the rental townhouses is complete. Construction of the condominium units is expected to advance in the next 1 to 2 years.

A map of the area is included in Attachment 1.

Traffic Control Signals

York Mills Road and Valley Woods Road/Sandover Drive

To determine the need for traffic control signals at the intersection of York Mills Road and Valley Woods Road/Sandover Drive, staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes

factors such as volume of vehicles and pedestrians, delay to cross traffic, and collision history. In addition to these technical justifications, staff consider an environmental checklist which includes consideration of road width, posted speed limit, operating speeds, adjacent land uses, pedestrian desire lines and demographics, presence of a transit stop, sight lines, and distance between existing crossing opportunities.

As part of the investigation, staff conducted vehicle and pedestrian counts on October 27, 2020 at the subject intersection. The results of the counts and collision hazard are summarized in Table 1. The "Collision hazard" criterion is based on the number of collisions potentially preventable by the installation of traffic control signals. Collision history provided by the Toronto Police Service for the three-year period ending December 31, 2020 disclosed 15 collisions at the subject intersection that were potentially preventable by the installation of traffic control signals.

Table 1: Warrant Compliance - York Mills Road and Valley Woods Road/Sandover Drive

Justification	Compliance level
Minimum vehicular volume	89%
Delay to cross traffic (pedestrians and vehicles)	86%
Collision hazard	100%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or the Minimum vehicle volume and Delay to cross traffic justifications must be at least 80 percent satisfied. Based on the results in Table 1, the installation of traffic control signals is justified at the intersection of York Mills Road and Valley Woods Road/Sandover Drive.

In regards to the environmental checklist, staff noted the following environmental factors:

- the presence of transit stops in both directions on York Mills Road that attract pedestrians to cross the street; and
- the four lane cross-section on York Mills Road, as well as the speed and volume of traffic using this street.

In considering the above warrant results and environmental factors, Transportation Services recommends the installation of traffic control signals at the intersection of York Mills Road and Valley Woods Road/Sandover Drive. Traffic control signals will provide enhanced safety for all road users. The proposed traffic control signals will be hardwire interconnected to the existing signals on York Mills Road at the Don Valley Parkway northbound off-ramp due to their 100 metre spacing. Under this operation both signals Traffic Control Signals - York Mills Road and Valley Woods Road/Sandover Drive and Deerlick Court/Clayland Drive

will display the same signal indications so as not to confuse drivers. The approval of these proposed signals is contingent upon the removal of the existing pedestrian midblock signals on York Mills Road, 60 metres east of Valley Woods Road.

York Mills Road and Deerlick Court/Clayland Drive

BA Group Consulting Limited completed a traffic operations assessment on August 14, 2017 for the development at 1213 to 1229 York Mills Road. The assessment included an evaluation of the need for traffic control signals at the intersection of York Mills Road and Clayland Drive/Deerlick Court. The evaluation concluded that traffic signals are justified based on the future total traffic volumes at the intersection (estimated background and site generated) and the current pedestrian crossing volume at the midblock pedestrian signals located approximately 100 metres to the west. This justification assumes the removal of the pedestrian signals. The results of the evaluation and collision hazard are summarized in Table 2.

Collision history provided by the Toronto Police Service for the three-year period ending December 31, 2020 disclosed that there were no collisions at the subject intersection that were potentially preventable by the installation of traffic control signals.

Table 2: Warrant Compliance - York Mills Road and Clayland Drive/Deerlick Court

Justification	Compliance level
Minimum vehicular volume	73%
Delay to cross traffic (pedestrians and vehicles)	100%
Collision hazard	0%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or the Minimum vehicle volume and Delay to cross traffic justifications must be at least 80 percent satisfied. Based on the results in Table 2, the installation of traffic control signals is justified at the intersection of York Mills Road and Clayland Drive/Deerlick Court.

Transportation Services concurs with BA Group Consulting Ltd.'s evaluation and recommends the installation of traffic control signals at the intersection, contingent on the removal of the pedestrian signals located 100 metres to the west. Traffic control signals will provide enhanced safety for all road users.

We have asked the TTC to review the location of the transit stops at the existing pedestrian signals in consideration of the proposed new signals. We have not received comments at the time of writing this report.

Staff recommend the installation of traffic control signals at the intersections of York Mills Road and Valley Woods Road/Sandover Drive and York Mills Road and Deerlick Court/Clayland Drive based on the technical and environmental criteria. The installation of the signals is contingent upon the approval of the existing midblock traffic signals between these intersections.

Other Considerations

It should be noted that the installation of traffic control signals will have the following additional impacts:

- There is potential for increased delays to transit service on York Mills Road
- There is the potential for increased traffic on Valley Woods Road, Sandover Drive and Clayland Drive.

The Ward Councillor has been advised of the recommendation in this report.

CONTACT

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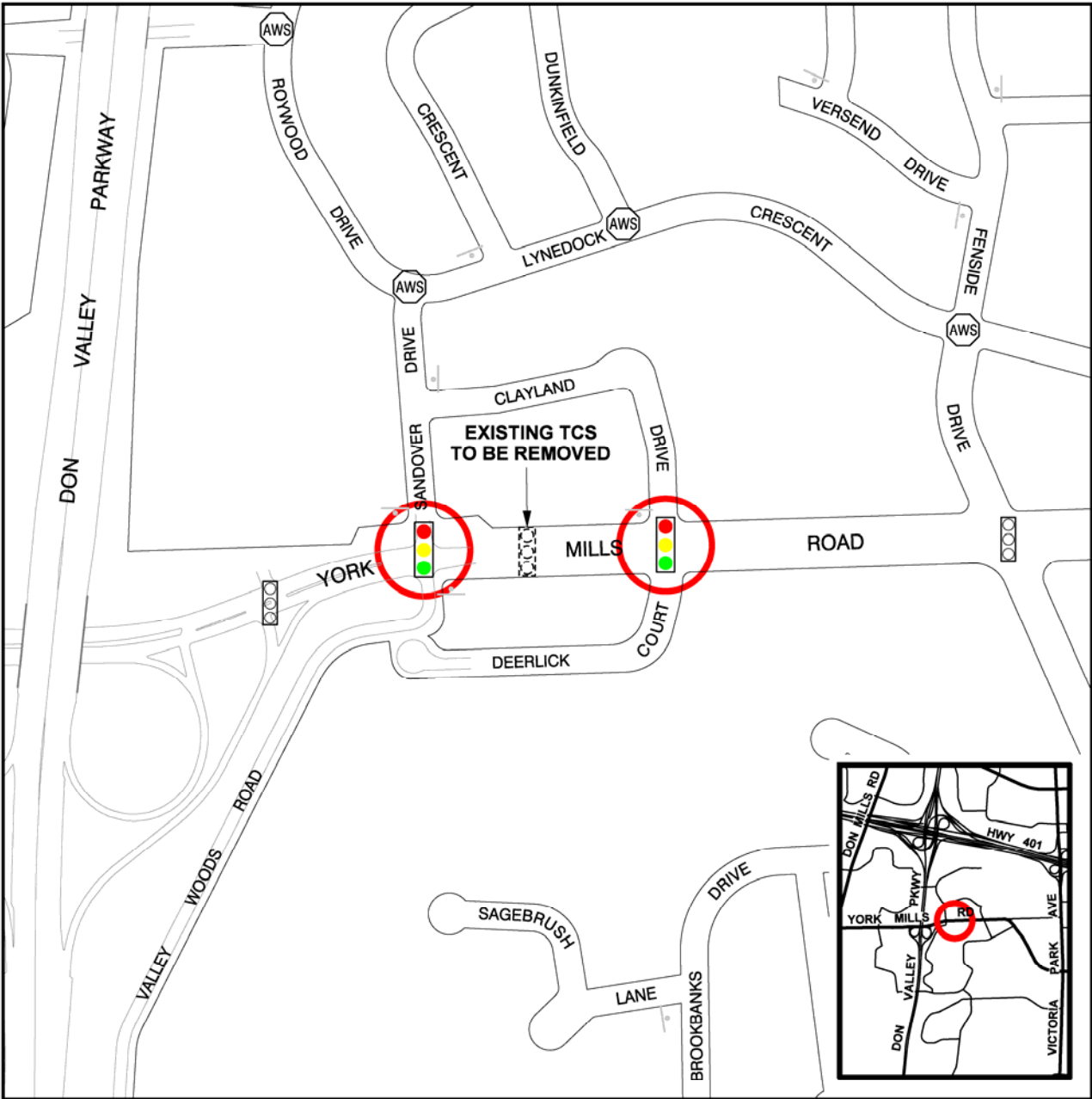
SIGNATURE

Roger Browne, M.A.Sc., P. Eng.
Acting Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Traffic Control Signals - York Mills Road and Valley Woods Road/Sandover Drive and York Mills Road and Deerlick Court/Clayland Drive

Attachment 1: Map - Traffic Control Signals - York Mills Road and Valley Woods Road/Sandover Drive and York Mills Road and Deerlick Court/Clayland Drive



	PROPOSED TRAFFIC CONTROL SIGNAL		EXISTING STOP SIGN
	EXISTING TRAFFIC CONTROL SIGNAL		
	EXISTING ALL-WAY STOP CONTROL		



TRAFFIC CONTROL SIGNALS
YORK MILLS ROAD and VALLEY WOODS ROAD / SANDOVER DRIVE,
YORK MILLS ROAD and DEERLICK COURT / CLAYLAND DRIVE

FILE NO. NYRD21 - 0029	SCALE : N. T. S.	DRAWN BY : A. A.	DATE : NOV. 2021
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