

Clause 7 in Report No. 12 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on September 21, 2017.

7

Installation of Pedestrian Crossing Signal
on Mulock Drive at Newmarket High School

Committee of the Whole recommends adoption of the following recommendations contained in the report dated August 10, 2017 from the Commissioner of Transportation Services:

1. A pedestrian crossing signal be installed on Mulock Drive (Y.R. 74) near the east limit of Newmarket High School, in the Town of Newmarket.
2. The Regional Clerk forward this report to the Clerk of the Town of Newmarket.

Report dated August 10, 2017 from the Commissioner of Transportation Services now follows:

1. Recommendations

It is recommended that:

1. A pedestrian crossing signal be installed on Mulock Drive (Y.R. 74) near the east limit of Newmarket High School, in the Town of Newmarket.
2. The Regional Clerk forward this report to the Clerk of the Town of Newmarket.

2. Purpose

This report seeks Council authorization to install a pedestrian crossing signal on Mulock Drive near the east limit of Newmarket High School, in the Town of Newmarket.

Installation of Pedestrian Crossing
Signal on Mulock Drive
at Newmarket High School

3. Background

The Region was requested to review pedestrian improvements on Mulock Drive near Newmarket High School

York Regional Police, York Region Public Health and Newmarket High School officials recently requested a review of this road section to investigate eligibility of a pedestrian crossing signal at this location.

The Region's Traffic Signal Policy is consistent with Ministry of Transportation of Ontario criteria

In June 2015, Council adopted the updated Traffic Signal Policy, including pedestrian signals, which directly references the Ontario Traffic Manual Book 12, entitled Traffic Signals. Ontario Traffic Manual Book 12 identifies criteria for installation of traffic and pedestrian signals based on traffic volume and delay, pedestrian volume and collision history.

Ministry of Transportation of Ontario criteria supports traffic and pedestrian signals when addressing visibility concerns

Under the Region's policy, Council retains the option to approve any new traffic and pedestrian signal when the location does not satisfy criteria identified in the Ontario Traffic Manual Book 12. Traffic and pedestrian crossing signals should be considered when visibility or operating characteristics are inadequate for safe and efficient operation in its unsignalized state.

Newmarket High School is located on Mulock Drive west of Highway 404 and across from a recreational and residential area

Newmarket High School is located on Mulock Drive, a four-lane urban road 1.5 kilometres from Highway 404, and has a posted speed limit of 60 km/hr. There is a recreation area across from Newmarket High School that includes the Heritage Farm and Community Garden site and Fernbank Soccer Fields. The area is highlighted in Attachments 1 and 2.

The existing grade of Mulock Drive in the vicinity of the highschool limits visibility of crossing pedestrians

The recreational area now has a paved walkway encouraging students to cross Mulock Drive by the high school. Students crossing at this location may be

Installation of Pedestrian Crossing
Signal on Mulock Drive
at Newmarket High School

challenging for approaching motorists to see due to a significant incline in both directions of the roadway. Increased traffic volumes further create challenges for pedestrians to find safe gaps in traffic to cross the street. Attachment 3 shows the slope of Mulock Drive in the area.

4. Analysis and Implications

Previous studies identified limited pedestrian crossing activity on Mulock Drive in front of Newmarket High School

Staff conducted pedestrian studies in 2014 and identified approximately 20 pedestrians per day crossing Mulock Drive in front of Newmarket High School with minimal delay due to gaps in traffic.

Since the previous study, the Town of Newmarket has formalized a paved walkway entrance to the Heritage Farm and Community Garden site from the south side of Mulock Drive. A sidewalk connection has also been installed on the south side of Mulock Drive between this new entrance and Leslie Street. Traffic and pedestrian volumes have increased in this area resulting in limited safe gaps to cross.

Traffic and pedestrian volumes have increased on Mulock Drive across from Newmarket High School

The most recent pedestrian study in May 2017, surveyed five key locations in the area across from the school to determine existing travel patterns and pedestrian behaviour. Based on travel patterns observed, it was determined that approximately 40 students per day may benefit from crossing near the east side of the school property. This is almost twice as many students as previously recorded in 2014.

The current traffic volume on Mulock Drive is approximately 35,000 vehicles per day and has been growing at a rate of two per cent per year. This growth can be attributed in part to new residential development. Currently, students are taking risks crossing the street as there are limited gaps in traffic, visibility of pedestrians for motorists is limited and there are no pedestrian signals to stop traffic.

Installation of Pedestrian Crossing
Signal on Mulock Drive
at Newmarket High School

Ongoing development will likely result in more students walking to Newmarket High school

Since 2009, residential communities have continued to grow, adding more than 1,000 additional homes within the southeast section of the school's catchment area. Ongoing development in the area of Newmarket High School will likely attract more students who would benefit from a pedestrian crossing signal. A pedestrian crossing signal on Mulock Drive near the east side of the school property would also benefit pedestrians destined to the trails and surrounding community.

A pedestrian signal is recommended to assist students and all other pedestrians crossing Mulock Drive to areas of interest

Staff recently reviewed all locations where pedestrian signals were requested within the past two years. The locations were prioritized based on number of pedestrian crossings, traffic volumes, number of lanes, road geometry and pedestrian generators close to the location, such as schools and recreation centres. Mulock Drive, in front of Newmarket High School, is the most critical location identified, as it experiences the highest combination of traffic and pedestrian volumes.

The pedestrian crossing signal could be installed in the summer of 2018 in preparation for commencement of the 2018/19 school year, pending Council approval.

Proposed pedestrian crossing signal will have minimal impact to traffic

Synchronizing the pedestrian crossing signal with existing traffic signals along Mulock Drive will minimize impact on traffic along this corridor. The pedestrian crossing signal will only be activated when pedestrians wish to cross Mulock Drive in this area. The pedestrian crossing will signal green for east/west traffic along Mulock Drive at all other times.

Promoting safety on the Regional road network supports Vision 2051

This report supports Vision 2051 by responding to the needs of our residents and promoting safety on York Region roads through effective policing, education and sensitive design.

Installation of Pedestrian Crossing
Signal on Mulock Drive
at Newmarket High School

5. Financial Considerations

The cost to install a pedestrian crossing signal is approximately \$60,000. Annual operating costs are approximately \$7,000.

Funding for the installation of a pedestrian crossing signal will be included in the 2018 Capital Budget. Annual operating costs will be included in the 2018 Roads and Traffic Operations Operating Budget.

6. Local Municipal Impact

Local municipal staff has been engaged and are supportive of the recommended pedestrian crossing signal installation outlined in this report.

7. Conclusion

Staff has undertaken a review of pedestrian activity on Mulock Drive near Newmarket High School. As the area continues to develop, pedestrian and traffic volumes are growing. This makes it challenging for pedestrians to cross Mulock Drive, including students destined to Newmarket High School.

Staff recommend installing a pedestrian crossing signal at this location to protect pedestrians destined to The Heritage Farm and Community Garden site, Fernbank Soccer field, Newmarket High School and residential communities.

For more information on this report, please contact Joseph Petrungaro, Director, Roads and Traffic Operations, at 1-877-464-9675 extension 75220.

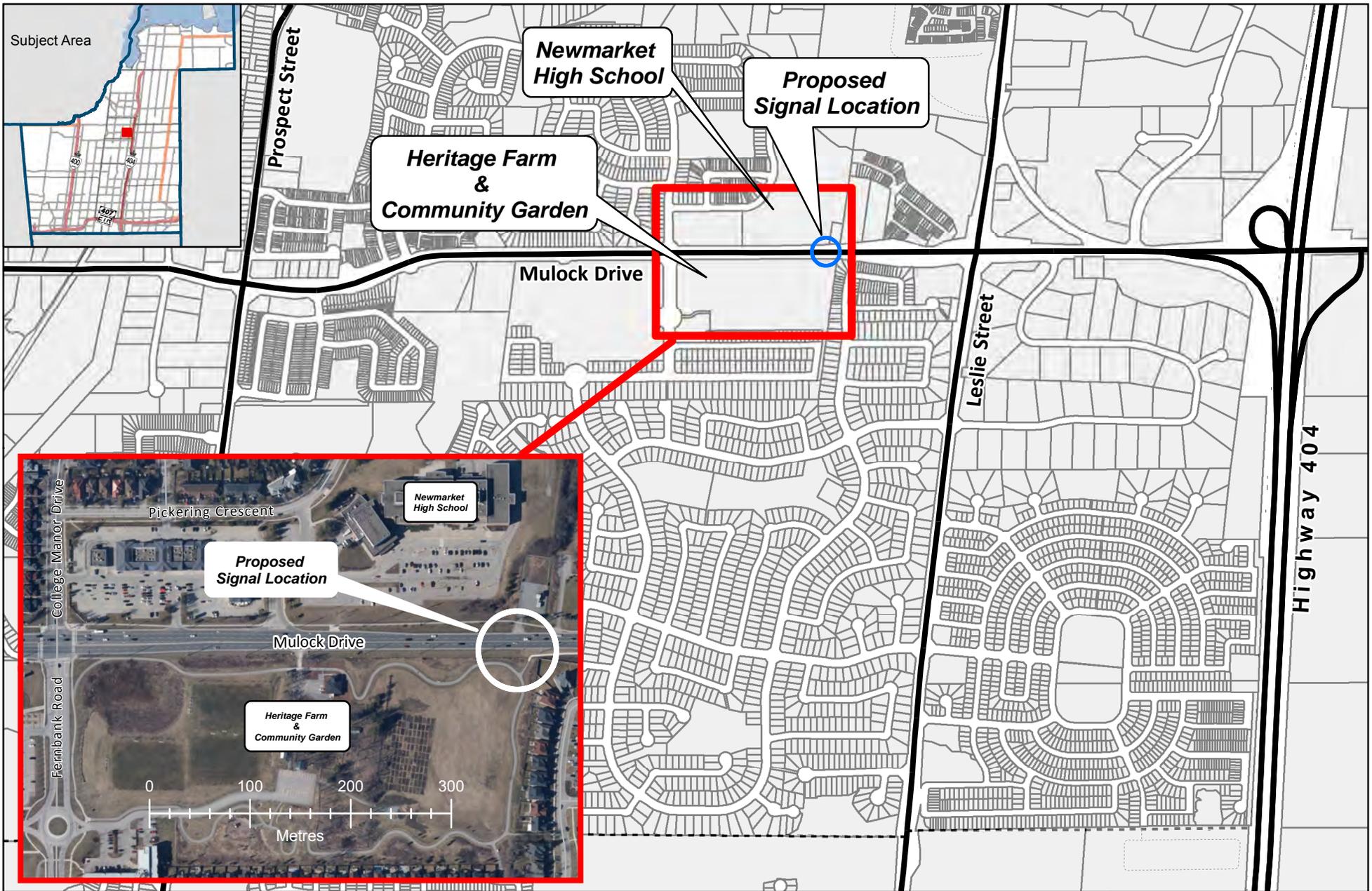
The Senior Management Group has reviewed this report.

August 10, 2017

Attachments (3)

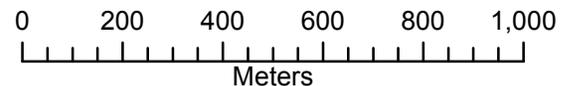
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Accessible formats or communication supports are available upon request



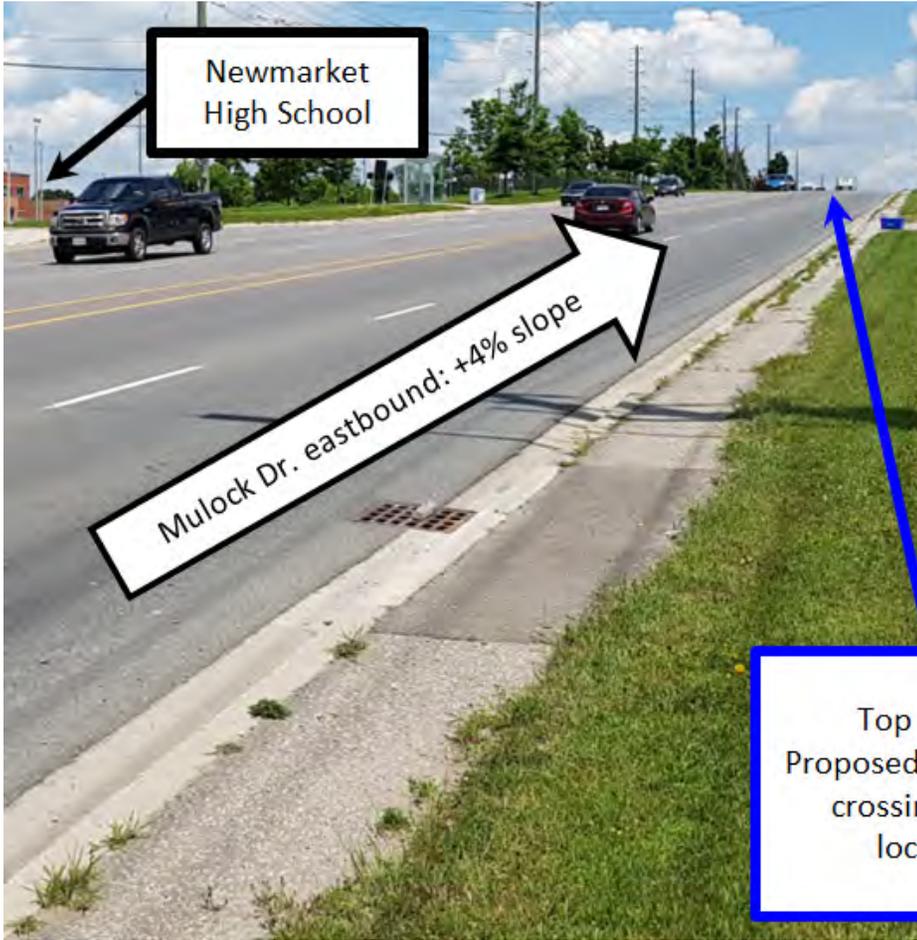
Area Around Newmarket High School

Installation of Pedestrian Crossing Signal
at Newmarket High School
September 7, 2017

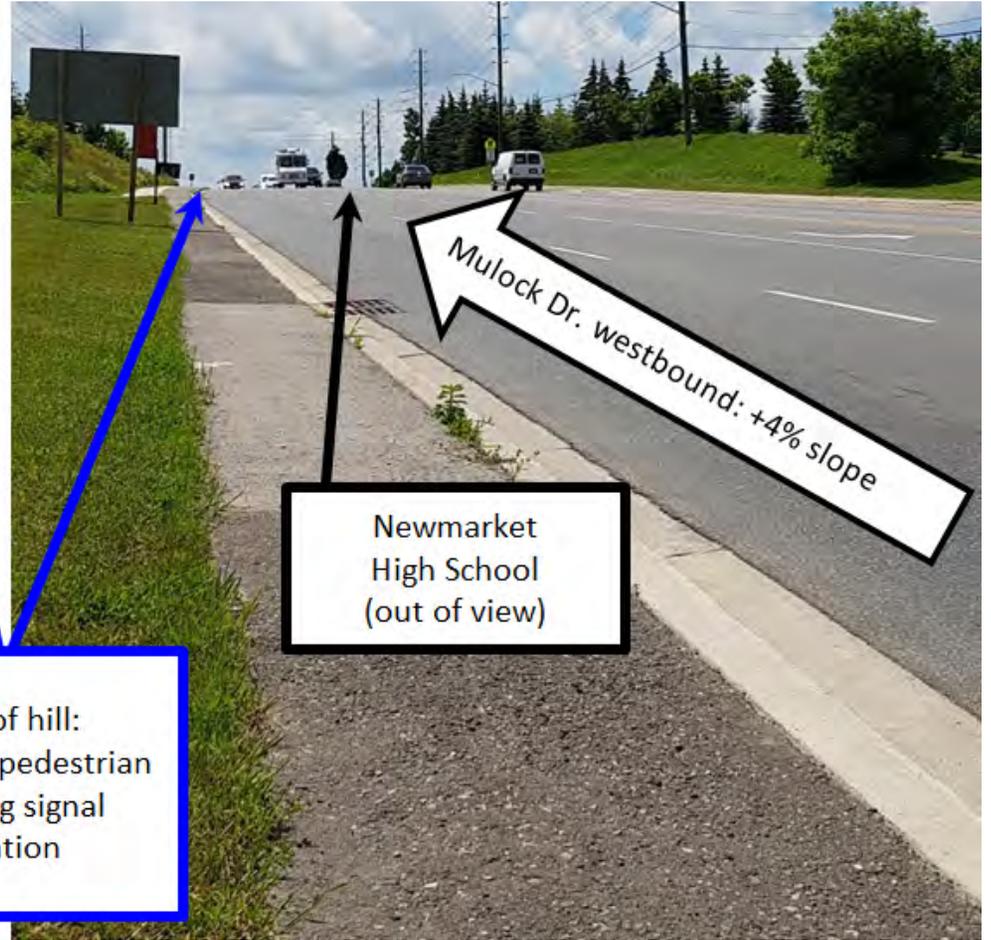


Legend

Municipal Boundary



Mullock Drive west of Newmarket High School



Mullock Drive east of Newmarket High School



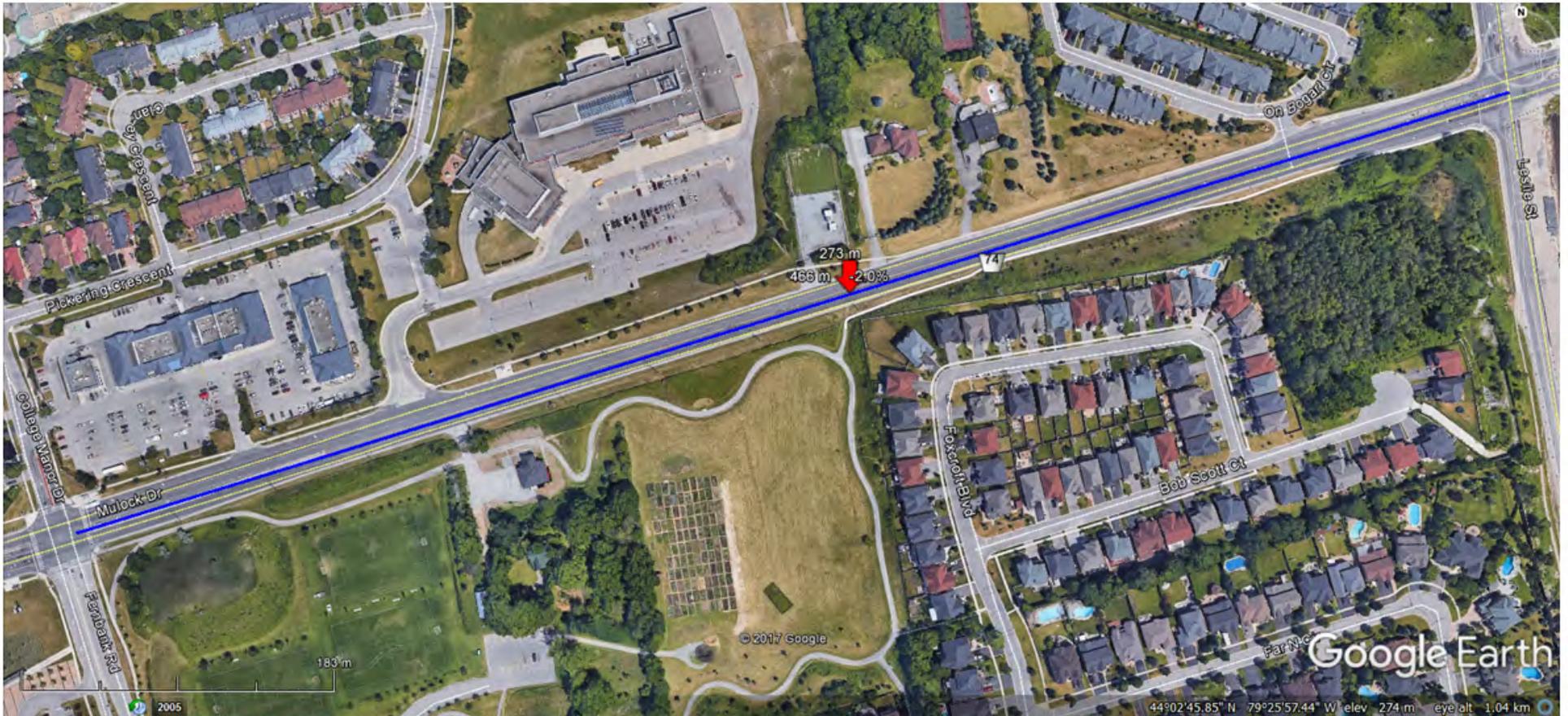
Mullock Drive near Newmarket High School

Produced by:
The Regional Municipality of York
Transportation Services,
Roads and Traffic Operations
June 2017

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Mullock Drive Slope Graph

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