

April 17, 2014
Our Ref: TR12-0013

James Dick Construction Ltd.
P.O. Box 470
Bolton, ON L7E 5T4

Attention: Mr. Greg Sweetnam, B.Sc.
Vice President, Resources

Dear Mr. Sweetnam:

Re: Response to April 7, 2014 Comments
Eramosa Quarry
Township of Guelph-Eramosa

James Dick Construction Ltd. (the "Owner") received comments from R.J. Burnside & Associates Limited (R.J. Burnside) dated April 7, 2014 regarding the *Revised Traffic Impact Study Eramosa Quarry, Township of Guelph-Eramosa* prepared by Cole Engineering Group Ltd. (Cole Engineering).

Comment 4 of the R.J. Burnside letter requests that a left turn warrant be undertaken at the 5th Line / Highway 7 intersection for the westbound left turn manoeuvre. Therefore, using the future (2023) total traffic volumes in the *Revised Traffic Impact Study*, the left turn warrant was undertaken. The completed warrant is provided in **Figure 1** for reference.

Based on the warrant, a westbound left turn lane is required for the 5th Line / Highway 7 intersection during both the a.m. and p.m. peak periods in excess of 25 meters. This is due to background development traffic as traffic from the Eramosa Quarry will not be making the westbound left turn onto 5th Line since it is not a designated truck route.

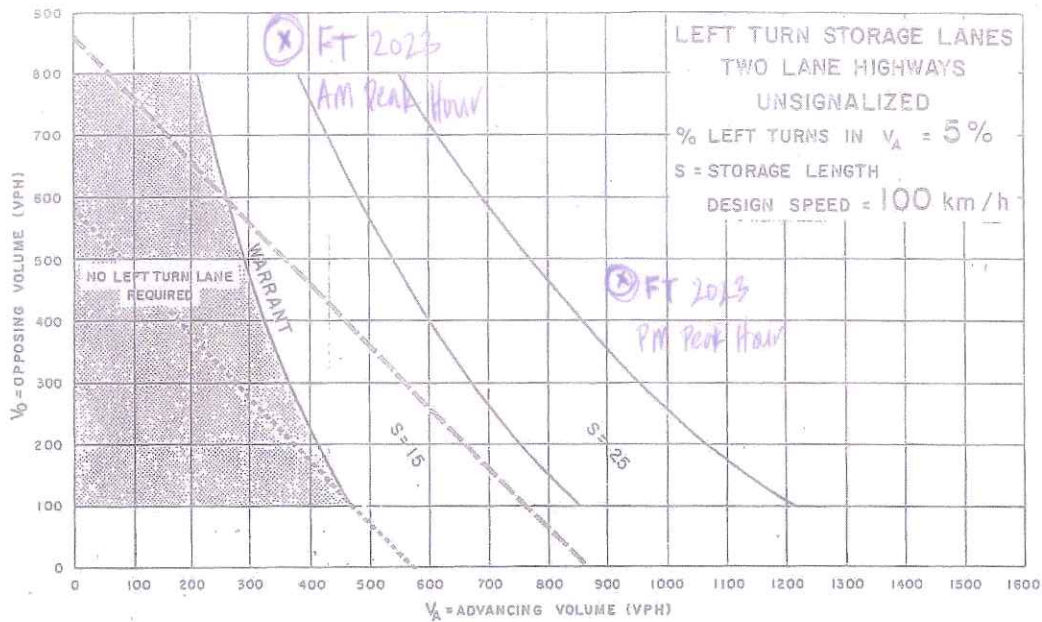


Figure 1 Highway 7 / 5th Line Left Turn Warrant

Using the *Geometric Design Standards for Ontario Highways* published by the Ministry of Transportation of Ontario (MTO), the westbound left turn lane at the 5th Line / Highway 7 intersection requires 160 meters of taper and 70 meters of parallel lane for deceleration, as well as 25 meters of storage. The left turn lane will require a runout lane which is the same length as the deceleration lane requirements. Due to the proximity of the 6th Line / Highway 7 intersection, the runout lanes from each intersection are expected to encroach. As a result, it is recommended that a center lane be maintained to facilitate the runout between each intersection.

We trust that this information is sufficient and if you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

COLE ENGINEERING GROUP LTD.

Joseph E. Gowrie, P.Eng.
 Project Manager
 Traffic



JG: