We had previously undertaken a peer review of the Draft Traffic Impact Study, March 2014, prepared by C.F. Crozier & Associates Inc., for the proposed Tri-County Aggregate extraction pit, and provided comments dated June 5, 2015. We were subsequently advised that this report is out of date, and that reference should be made to the Traffic Analysis prepared for Greenwood Aggregates Limited by Paradigm Transportation Solutions dated Feb. 28, 2014. That report did not address the proposed Tri-County pit, but did assume a total pit license volume of 3 million tonnes. We understand that the current proposals call for 2 million tonnes from Greenwood, and 1 million tonnes from Tri-County for a total of 3 million tonnes.

Following are our review comments on the Paradigm report. We have made comparisons to the Crozier Report where appropriate.

It should be noted that the Paradigm report dealt only with the Greenwood Pit application. Accordingly, it did not address the proposed access from the Tri-County pit to 17th Line. Refer to our June 5, 2015 memo for our comments on that issue.

**Existing Traffic Data**

Existing traffic at the intersection was derived from counts provided by Dufferin County for County Road 3, and derived for 17th Line based on assumed pit operations and residential traffic. The Crozier Report was based on intersection traffic counts. It is difficult to compare the two because Paradigm do not indicate which hour is represented in their Figure 3. The Paradigm report appears to understates the traffic on 17th Line, since actual counts were not taken. However, these volumes are still relatively low in both reports.

**Site Generated Traffic**

Paradigm have used information from the existing pit operation to calculate average daily traffic during the peak month. This does not account for peaks in operation based on normal fluctuations for this this type of activity. A factor of 2.0 to 4.0 is usually applied when analyzing pit operations to better represent peak hourly volumes.

**Future Intersection Operations**

The existing intersection operations are calculated as LOS B. Under future peak conditions (3 million tonnes) the Level of Service is forecast to be LOS C. This is acceptable.

The Report states that there is an existing acceleration lane for trucks on County Road 3. This is not the case. There is a short section of paved shoulder which might be used on occasion, but it is not marked or signed as such, and does not have sufficient length or tapers to be considered an acceleration lane.

An analysis should be done of the distance required for trucks to attain operating speed on the eastbound grade, the differential in operating speeds between the trucks and eastbound through traffic, and whether an acceleration lane is required.
The Report identifies that a westbound left turn lane will be warranted based on the MTO method. The design would need to meet the approval of the County of Dufferin.

**Sight Distance**

The report does not address available or required intersection sight distances on County Road 3 at 17th Line. This should be assessed.