



October 10, 2014

Via: Email (kwingrove@get.on.ca)

Ms. Kim Wingrove
Chief Administrative Officer
Township of Guelph/Eramosa
8348 Wellington Road 124
P.O. Box 700
Rockwood ON N0B 2K0

Dear Ms. Wingrove:

**Re: Haul Route Study - Terms of Reference
Proposed "Hidden Quarry" - James Dick Construction Ltd.
Project No.: 300032475.0000**

This letter provides a Terms of Reference (TOR) for the above noted project, located on the west half of Lot 1, Concession 6 in the Township of Eramosa. This TOR is in response to comments received from staff at the Region of Halton, the Town of Milton and the Town of Halton Hills, requesting that a Haul Route Study be prepared by the applicant as part of the proposed Zoning By-Law Amendment application. A draft of this TOR was reviewed with representatives of the Township and the adjacent municipalities, at a meeting on September 9, 2014. This TOR has been revised in response to those discussions.

We acknowledge that the following TOR has been based on a TOR that has been used in previous haul route studies in the Region of Halton, as originally developed by Dillon Consulting Limited.

1.0 Introduction

James Dick Construction Ltd is proposing to develop a quarry on a site approximately 39.4 hectares (97.4 acres) in size, located in the northeast quadrant of Highway 7 and 6th Line. Approximately 24.8 hectares (61.3 acres) of the site is proposed to be used for extraction of aggregate material. The proposed quarry would extract up to 700,000 tonnes of aggregate material annually. The material will be shipped off-site via 6th Line and Highway 7, with an estimated 95 percent of the product travelling east on Highway 7 (according to the applicant's Traffic Impact Study).

The purpose of this TOR is to outline the requirements for a Haul Route Study for the subject development, to be reviewed by the Township of Guelph/Eramosa, the Region of Halton, the Town of Halton Hills and the Town of Milton. The Ministry of Transportation (MTO) has not requested this study; however, it would be expected that they will also be circulated for comment, considering the potential for impacts to Highway 7.

Figure 1 shows the location of the proposed quarry and the recommended study area for the haul route evaluation.

The primary concern associated with the project is the potential for significant heavy truck traffic beyond that already on any identified haul route(s) that would be generated by the quarry and the impact of that additional traffic movement on road operational concerns and traffic safety, and social features along the haul route(s).

2.0 Define Study Parameter Assumptions

Key assumptions regarding the project that are to be defined based on available information include:

- Assumed in-service data;
- Sizes of the trucks to be used;
- Volume of truck traffic to be generated;
- Location of truck queuing area(s);
- The distribution of truck traffic volumes among the potential haul routes (if more than 1 haul route is to be utilized);
- A description as to how truck volumes and truck tonnages might vary over the life of the project and by hours of the day, days of the week, and time of the year;
- Destinations of the material;
- Trucking base origins;
- Hours of facility operations, etc.;
- How the use of routes would be regulated/enforced;
- Horizon year and intervals required for analysis (20 years in 10 year intervals).

3.0 Identification of a Haul Route(s) With The Study Area

The intention is to establish a haul route or routes which minimize travel through Acton and Georgetown. A reasonable route or routes to be considered are to be identified and described by the applicant based on input from the Town of Halton Hills, Town of Milton and Region of Halton, as well as the Township of Guelph/Eramosa.

4.0 Assessment of Truck Traffic Volumes

An assessment of the volumes of additional truck traffic on the route or routes will be carried out and reviewed by the Township in consultation with the Region of Halton, Town of Halton Hills, and Town of Milton. If the additional truck traffic on the route or routes would be so low throughout the entire life of the facility so as to not result in any appreciable negative effects, as determined by the Township, then the route or routes or portions of the route or routes in those directions would not need to be further assessed and the work identified in Sections 5 to 8 would not need to be carried out. Should that occur, the study would conclude with the preparation of the draft and final reports and their review as set out in Sections 10 and 11.

5.0 Describe Baseline Conditions

If the truck volumes are deemed by the Township to be sufficient to require further assessment, a description of baseline conditions for the route or routes is to be provided, including:

- Existing and proposed land uses;
- Identification of the locations of other existing, or proposed quarries, pits or other large truck generating land uses;
- Land use plans and designations including municipal official plans, the Greenbelt Plan; the Niagara Escarpment Plan; the Region of Halton Official Plan Amendment 38 and the Aggregate Resources Reference Manual (Halton Region);
- Relevant planning studies (Transportation Master Plans, Active Transportation Plans, Capital Planning studies);
- Social environment (residences, community features, recreational facilities, community function and character, schools and school bus routes, emergency vehicle access, etc.);
- Available information regarding air quality conditions;
- Available information about noise levels;
- Economic environment (location and type of business enterprises);
- General nature of Agriculture;
- Recreation uses (trail crossings, cycling uses, walking etc.);
- Cultural resources (built heritage, cultural landscape, archaeology);
- Road characterization (road classification, right-of-way widths, level of service (current and projected), weight restrictions, number of lanes, pavement structure, intersection configuration, road alignment (vertical and horizontal), reduced load designations, posted speed, truck route designation, watercourse crossings, culvert types, rail crossings, steep grades, visibility, etc.);
- Traffic volumes;
- Five year vehicle collision history by link/intersection including wildlife.

The description of the baseline conditions will be used as the basis from which to assess the potential for change as a result of the use and possible improvement to the route or alternative routes where being considered.

6.0 Develop the Evaluation Approach

A Technical Advisory Committee (TAC) will be set up with representatives of Town of Halton Hills, Town of Milton, and Region of Halton, as well as the Township of Guelph/Eramosa to provide input on the evaluation approach. The County of Wellington will also be invited to attend.

If alternative routes are to be considered, the evaluation of the identified alternative routes is to be conducted in a systematic, comprehensive and traceable manner, based on a set of evaluation criteria and indicators. Similarly, if only one route is being evaluated with respect to impacts, it should also be evaluated in a systematic, comprehensive and traceable manner based on a set of evaluation criteria and indicators.

Typical criteria, where applicable, may include:

- Potential for disruption to sensitive land uses;
- Conformity with applicable plans and policies;
- Potential for impacts to residents;
- Potential for disruption to users of recreation facilities, community features and institutions;
- Potential property impacts;
- Potential for impact to business enterprises;
- Potential for impact to agricultural operations;
- Potential for impact to property values;
- Potential for disturbance to built heritage features or archaeological resources;
- Potential for impact to transportation facilities (i.e. change in service level, change in road safety, impact on alternative transportation modes).

The monetary costs for mitigation work, to address haul route impacts, will be estimated for the alternative routes considered.

Both quantitative and qualitative data should be collected for the criteria noted where available. The criteria, and their relative importance, are to be confirmed through agency consultation prior to their application. It is expected that a meeting will be held with the TAC to achieve this confirmation and to generally confirm the results of the identification of baseline conditions.

The assessment of effects is to consider the potential increase in truck volumes, as a result of the quarry activity, over the anticipated future background traffic volume. This is to be considered for a proposed route or for each alternative route where applicable. As well, the assessment of the routes is to consider any needed improvements to the routes to support the increase in truck volumes (see next section).

7.0 Assess Road Improvements

Road improvements, if required, are to be identified for each route, to support the forecast traffic (existing plus growth due to other development and due to the quarry development). Improvement requirements, where required, may include road widenings, resurfacing, turning lanes, new crossings/grade separations, paved shoulders, signals, etc. and will be considered in the analysis completed to determine improvements to a proposed route or to compare the route options and impacts where applicable.

The route assessment is to be presented in a matrix format, describing the potential for effect for each indicator/alternative.

8.0 Comparatively Evaluate and Recommend the Preferred Route(s)

Where alternative routes are under consideration, on the basis of the collected data/assessment of effects for each of the alternative routes, the alternatives are to be comparatively evaluated. The preference would be to use a qualitative evaluation method, to be supported by a quantitative evaluation method, if the data type support one. In comparing the alternatives, the relative importance of the criteria is to be considered. The advantages and disadvantages of the alternative routes are to be compared and considered in the rationalization of the preferred route(s).

9.0 Describe Effects and Mitigation for the Preferred Route(s)

For the preferred haul route(s), provide a description of the potential effects that are expected to occur from the anticipated truck traffic volumes. This description of effects is to be based on the evaluation criteria, plus other more detailed criteria, if appropriate. Assess the overall acceptability of the route and the effects of increased truck traffic on the quality of life for the affected individuals/communities. The proponent is to demonstrate that the effects of the preferred alternative (with the proposed truck volumes) can be considered as being "reasonable" and "acceptable".

Any property requirements to support the preferred haul route(s) are to be described.

Mitigation measures to avoid or minimize effects shall be described. The method, to regulate/enforce the use of the prescribed route(s) by all trucks associated with the quarry, is to be described.

It is expected that a meeting will be held with the TAC to confirm the results of the haul route evaluation, identification of mitigation works and preliminary preferred route(s).

10.0 Prepare Draft and Final Evaluation Reports

A table of contents of the report is to be prepared and circulated to the Township of Guelph/Eramosa, Town of Milton, Town of Halton Hills, and the Region of Halton, prior to its completion. It will also be provided to Ministry of Transportation for their information.

A draft report is to be prepared, that describes the evaluation process, and circulated to the agencies noted above for comment.

The report is to be finalized, considering the comments received on the draft report.

The number of copies of the report will be set through the consultation process. Sufficient copies of the draft report and final report shall be provided to satisfy the circulation requirements of the agencies. Reports will be required in both hard copy and digital formats.

11.0 Public and Agency Consultation

The haul route study is being prepared as a support document to the rezoning process for the subject lands. It is expected that this document will be presented, and considered, as part of the ongoing public consultations and agency consultation that are part of the rezoning process.

The Township of Guelph/Eramosa, as the municipality leading this process, will direct the proponent as to the need for, and timing, for any additional formal public and/or agency consultations/meetings that may be required as this study is completed. It is requested that written acknowledgement be obtained from these agencies regarding their interest and/or concerns with this project and provided to the Township to the attention of Ms. Kelsey Lang, Planning Associate. All consultation related materials, including meeting minutes and comments received and responses are to be provided throughout the study process.

Closing Comments

This letter has provided a draft TOR for the completion of a haul route study by the proponent for the "Hidden Quarry" development. If there are any questions pertaining to this assignment please give us a call.

Yours truly,

R.J. Burnside & Associates Limited



Henry Centen, P.Eng.
Senior Transportation Engineer
DMcN:sj

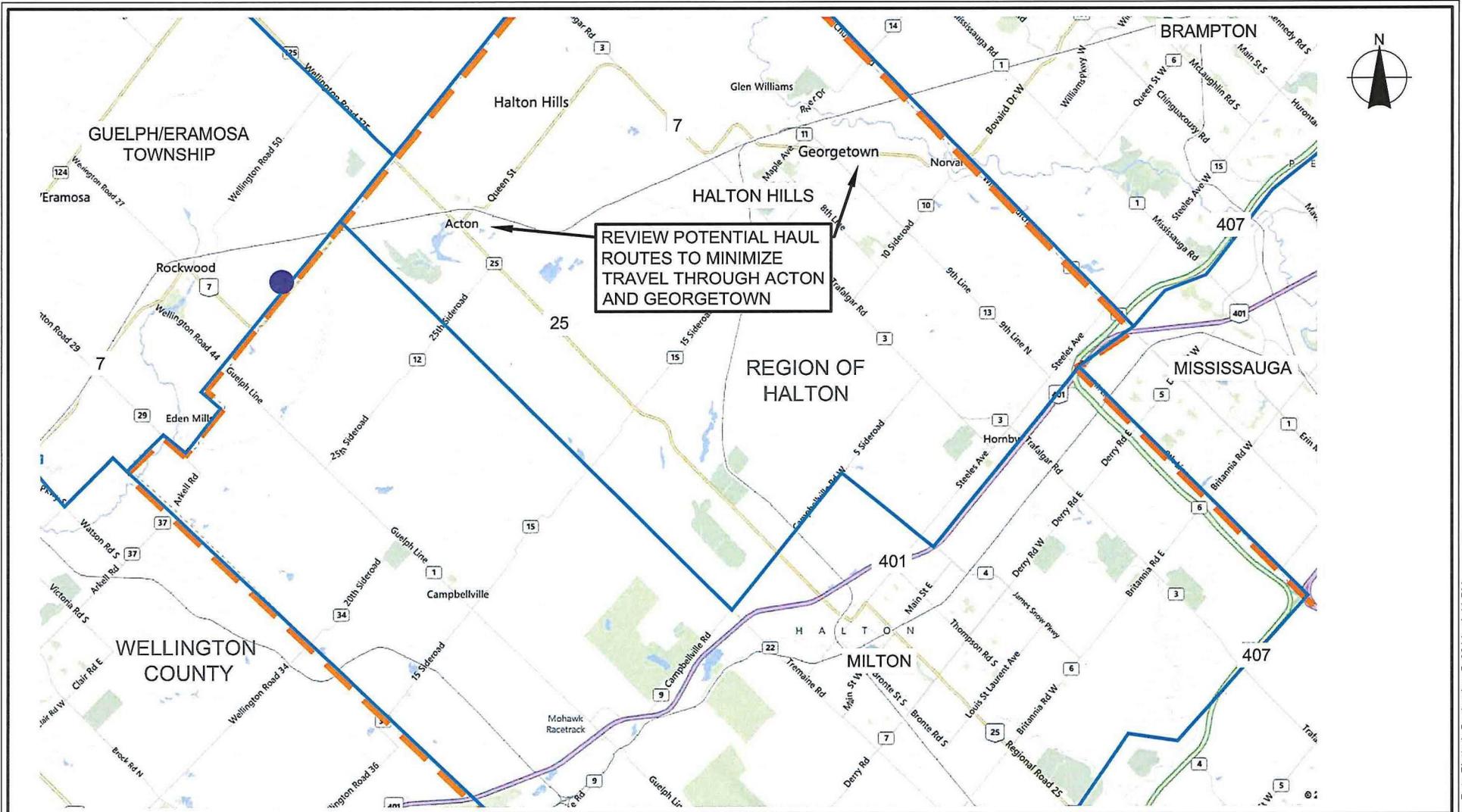


Don McNalty, P.Eng.
Vice President, Public Sector

Enclosure(s) Figure 1 – Study Area

cc: Elizabeth Howson, Macaulay Shiomi Howson Ltd. (Via: Email - howson@mshplan.ca)
 Kelsey Lane, Township of Guelph/Eramosa, (Via: Email - klang@get.on.ca)

141010_TOR_Haul_Route_Study_300032475
21/11/2014 9:23 AM



LEGEND

- SITE LOCATION
- REGION BOUNDARY
- MUNICIPAL BOUNDARY



Figure Title

**HAUL ROUTE EVALUATION
TERMS OF REFERENCE
STUDY AREA**

Client
GUELPH/ERAMOSA TOWNSHIP

Drawn JBL	Checked HC	Date 14/09/05
Scale NTS	Project No. 300032475	

Figure No.
1