Environmental Impact Statement Milton Logistics Hub Project Transportation & Municipal Finance



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EllSo Consulting

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Curt Benson, MCIP RPP Manager, Community Planning Halton Region 1151 Bronte Road Oakville, Ontario L6M 3L1

Dear Mr. Benson,

Milton Logistics Hub Project Environmental Impact Statement Transportation & Municipal Finance

EllSo Consulting Inc. is pleased to submit this report presenting our examination of the Canadian Environmental Assessment Agency Guidelines for the Preparation of an Environmental Impact Statement regarding the Milton Logistics Hub Project dated July 2015, the Canadian National Railway Company Milton Logistics Hub Environmental Impact Statement dated December 7, 2015 and related technical appendices as it pertains to Transportation and Municipal Finance.

Sincerely, EllSo Consulting Inc.



Alvaro L. Almuina, P.Eng., M.Eng., PMP, DCE Director

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Acronyms

- CEAA: Canadian Environmental Assessment Act
- **D-1-3:** Ontario, Ministry of the Environment, "D-1-3 Land Use Compatibility: Definitions" (Ontario, Queen's Printer: July 1995), online: MOECC https://www.ontario.ca/page/d-1-3-land-use-compatibility-definitions
- EA: Environmental Assessment
- **EIS:** an "Environmental Impact Statement" that a proponent of a "designated project" under CEAA must prepare EIS Guidelines
- **ET#:** A tracking number for Information Requests related to Employment Lands and Transportation
- **GP:** Ontario, Ministry of Municipal Affairs and Housing, Growth Plan for the Greater Golden Horseshoe, 2006
- **PCE:** Passenger Car Equivalent a unit of measure to equate heavy vehicle traffic (trucks) with automobile traffic
- PPS: Provincial Policy Statement, 2014
- **ROP:** Halton Region's Official Plan, as amended by ROPA 38
- TMP: Halton Region Transportation Master Plan 2031 The Road to Change, October 2011

1. INTRODUCTION

1.1 Summary of Findings

The CN EIS did not undertake an assessment of the Municipal Finance and Transportation impacts on Halton Region in accordance with established Regional Standards.

CN needs to provide more data and analysis to determine the impacts of the proposed development on the Regional and Provincial roadway system and undertake a traffic impact study in accordance with the Region's Traffic Impact Study Guidelines.

1.2 Purpose and Scope of Review

EllSo Consulting Inc. (EllSo) examined the Canadian Environmental Assessment Agency ("CEAA") Guidelines for the Preparation of an Environmental Impact Statement regarding the Milton Logistics Hub Project dated July 2015 ("ElS Guidelines"), the Canadian National Railway Company ("CN") Milton Logistics Hub Environmental Impact Statement dated December 7, 2015 ("CN EIS") and related technical appendices as it pertains to Transportation and Municipal Finance.

EllSo has been asked to provide expert findings, opinions and conclusions regarding:

- 1) Review of the Halton Brief (including appendices);
- 2) Review:
 - i. relevant aspects of the EIS submitted to CEAA by CN,
 - ii. relevant comments of the Federal Agencies on the EIS, and
 - iii. relevant aspects of the CN response to the Federal comments
- 3) Provide a written opinion and comments summarizing the review of the materials;
- 4) Identify any additional information required from CN to adequately assess the significance of adverse environmental effects; and,
- 5) Review CN's application to the Canadian Transport Agency.

1.3 Qualifications

The review was conducted by Alvaro L. Almuina, P.Eng. Alvaro Almuina:

- is a Professional Engineer, licensed to practice in the Province of Ontario;
- is a Designated Consulting Engineer by Professional Engineers Ontario (PEO);
- has a Bachelor of Applied Science and Engineering (Civil) degree from the University of Toronto;
- has a Master's of Engineering degree from the University of Toronto with a specialty in Transportation;

- has been providing transportation planning and engineering services for over 28 years in the areas
 of Strategic and Master Planning, Policy Development, Capital and Operations Programming,
 Economics and Finance (including Development Charges Technical Background Studies) and as an
 Expert Witness at the Ontario Municipal Board and Ontario Civil Court Proceedings on
 transportation matters; and,
- has been a consultant to the Regional Municipality of Halton (the "Region") for more than a decade. Amongst the services provided to the Region, I have been the primary author of the Region's last three Transportation Master Plans and the last four Transportation Development Charges Technical Background Studies.

2. ASSESSMENT OF CN EIS AND TECHNICAL APPENDICES ANALYSIS AND CONCLUSIONS

The review focused on two areas of analysis – Municipal Finance and Transportation Impact.

Municipal Finance

The review considered municipal finance in the context of transportation infrastructure, the costs associated with proposed public infrastructure and the allocation/cost sharing proposed by CN.

Transportation

CN proposes to introduce 800 truck trips per day to the regional road network, specifically along the Britannia Road and Tremaine Road corridors.

Trucks have considerably different size and performance characteristics than passenger cars. Trucks can have a significant impact on traffic operations. Signalized intersections are sensitive to the presence of commercial truck traffic. It is important account for this impact in the traffic operations analyses of proposed developments to define the operational performance of a roadway/network as accurately as possible.

2.1 Municipal Finance (Transportation Infrastructure)

There was no reference to the cost of the road infrastructure projects CN's proposed development requires, the source of the funding and cost allocation sharing of projects, within Halton Region's jurisdiction in any of the material reviewed, nor in the table of contents of the EIS.

The Official Plan Standards pertaining to municipal finance specific for transportation are defined in the Halton Region Transportation Development Charges Background Technical Report (1).

A review of the EIS showed no reference to cost or cost allocation for any Regional transportation infrastructure assumed or required for this development. Section 2.2.3.3 of the EIS does reference that CN would fund the costs for the proposed grade separation at Lower Baseline. There is no reference to cost or cost allocation for any other transportation infrastructure assumed for this development. The question was raised in the consultation process, as presented in Table 4.2 of the EIS – "What further road development/ improvements will be needed to accommodate the increased truck traffic?". CN's response was to refer to Chapter 8 and to Appendix E.17. However, these references did not provide answers to these questions.

There was no methodology and data to review with regards to municipal financing, as none was provided.

Overall, the EIS does not present an infrastructure, staging and costing plan for the proposed development. Accordingly, it was not possible to assess the Significance and Mitigation of Adverse Environmental Effects with regards to Municipal Finance as there was no assessment conducted.

Table 1 presents Information Requests with regards to Municipal Finance for transportation infrastructure.

Table 1 – Information Requests for Municipal Finance (Transportation)

Торіс	Reference to CN EIS and Information Responses	Requested Information	Rationale
Transportation and Municipal Finance EIS Guidelines Part 1 s. 3.2, Part 2, s. 3.2.2, 6.1.10, 6.3.5 and 6.4 Halton Brief Table D.5 Halton Brief Table D.8 ROP sections 77(12) and 210(7)(d)	EIS section 2.2.3.3 and Table 4.2, Appendix E. 17	ET#1 Details about Transportation Infrastructure to support the project Please provide detailed information about the transportation infrastructure required to support CN's development, the cost to implement this infrastructure and the funding source, based on the undertaking of a transportation impact study in accordance with the Region's guidelines.	In accordance with the Region's Traffic Impact Study Guidelines, an analysis of the required road infrastructure to support a proposed development is to be analysed and associated costing to be identified. This was not undertaken by CN.
	EIS section 2.2.3.3 and Table 4.2, Appendix E. 17	ET#2 Significance and Mitigation Effects on Municipal Finance. Please provide an assessment of the significance and mitigation effects on Municipal Finance the CN development will have based on the undertaking of a transportation impact study in accordance with the Region's guidelines, considering Halton's Roads Capital Plan Budget and Development Charges By-Law.	To assess the financial impact on the required infrastructure, the costs of this infrastructure is to be compared against the existing financial plan per the Region's Roads Capital Plan.

2.2 Transportation

The traffic assessment was not undertaken in accordance with standard industry guidelines or in accordance with the Halton Region's Transportation Impact Study Guidelines (2).

Essential to the undertaking of a traffic assessment for the proposed development are:

- number of employees and transportation of employees;
- on-site logistics and traffic plan (on and off-loading rates, site capacity for trucks, anticipated daily volumes);
- anticipated daily, monthly and seasonal schedules for rail transport;
- anticipated quantities of transported materials by type; and
- number of employees, transportation of employees, work schedule, lodging requirement on site and off site.

The above data is specifically required by the EIS Guidelines (Part 2, sections 3.2.1, 3.2.2 and 6.4), but was not provided in the EIS or in relevant Appendices.

There were no standards referenced in Appendix E.17 as it pertained to Municipal Finance and Transportation. In Section 7.0 of Appendix E.17 (Discussion of The Impact of Terminal-Generated Heavy-Truck Traffic), pg. 23, 1st para, it is noted *"it is acknowledged that there are no stipulated or fixed criteria applicable to undertaking the assessment provided in this study. The criteria applied herein are entirely based on the traffic planning experience and judgement of the authors of the study."*

There are industry standards and Regional Guidelines for the assessment of transportation impact study. These standards and guidelines were not used by CN in Appendix E.17 or the EIS.

The Regional Official Plan Standards pertaining to transportation are defined in the Halton Region Transportation Master Plan (2031) – the Road to Change and the Region's Road Capital Projects. A review of the EIS regarding these standards was conducted.

Halton Region Transportation Master Plan ("TMP") (2031) – the Road to Change

There are many references throughout the EIS of the Halton Region Transportation Master Plan (TMP) (2031) (3).

The development proposed by the EIS was not fully considered in the Halton TMP. CN needs to clearly indicate how the TMP accounted for the proposed development and how the current Roads Capital Projects can accommodate CN's transportation needs.

Halton Region Roads Capital Projects

The Region prepares a Roads Capital Budget (4) to ensure funds are available to pay for the construction of future capital projects. The list of projects is reviewed and updated annually to reflect updated project timing. Major updates are also undertaken after the completion of Transportation Master Plans and during the completion of the Development Charges Transportation Technical Report.

There are many instances throughout the EIS and Appendix E.17 where the Region's data/document referenced was misinterpreted. For example, In Section 6.3.9 Socio-Economic Conditions (pg.152, 5th para) the EIS states:

The Halton TMP lays out capital road projects in the LAA, including the widening of Britannia Road, Tremaine Road and Regional Road 25. As part of the Regional Road Improvement Program, the following road improvements are scheduled to be completed by 2016:

- widening of Britannia Road between Tremaine Road and Highway 407, with the creation of a grade separation at the CN rail crossing;
- widening of Tremaine Road between Britannia Road and Campbellville Road, with a grade separation at the CP rail crossing; and,
- widening of Regional Road 25 between Derry Road and Highway 407 (Halton Region n.d. b).

The reference to the Region's capital improvement plan is not consistent with the current plan. CN needs to present the infrastructure needs in the context of CN's proposal, needed transportation capacity and its timing regarding construction and implementation.

CN has not provided a plan to demonstrate if the Region's Capital Plan improvements to 2021 will support CN's proposal.

Key Deficiencies in Report

An assessment of the full impact of traffic generation from the site and the effect of this site on the area roadway networks and intersections was not undertaken by CN in accordance with industry standards or in accordance with Halton Region guidelines for traffic impact studies.

Assumptions

Appendix E.17 made many assumptions. An overview of the assumptions and commentary is provided below:

- "CN has specified that the truck entrance/exit for the Terminal is planned to be located on Britannia Road at a location approximately 250 metres west of First Line at the base of the east slope of the new grade separation over the CN Rail line"
 - There is no supporting analysis by CN that this location conforms to geometric designs standards and that it would operate acceptably and safely.
- "It is anticipated that the Britannia Road intersection with the Terminal truck entrance will be signal controlled, and configured with an auxiliary westbound left turn lane and an eastbound right turn if required."
 - There is no supporting analysis by CN that this location conforms to geometric designs standards and that it would operate acceptably and safely.
- "It is further assumed that the traffic control at the driveway intersection will be operated in an optimal manner to permit sufficient capacity for movements in and out of the entrance and satisfactory traffic operations on Britannia Road."
 - The driveway operation was not assessed in the EIS.

- "Consideration will be given in subsequent work to identifying specific traffic engineering
 operational and design measures to ensure that trucks waiting to turn left from Britannia
 Road and the westbound approach to the Terminal driveway will not exceed the available
 capacity of the queue storage lane."
 - The EIS needs to include this analysis to provide an appropriate description of impacts and requirements in accordance with the terms of reference of the EIS.
- "Detailed design specifications for roads affected by the truck entrance requirements will be provided for the consideration of Halton Region and the Town at a later stage."
 - The EIS needs to include this analysis to provide an appropriate description of impacts and requirements in accordance with the terms of reference of the EIS.

Trip Generation

There is no basis for the derivation of the 800 truck per day trip generation other than that is the number provided to the transportation consultant by CN (based on the Brampton Yard experience). There is no indication if this is a peak condition, an average, an interim or an ultimate trip generation. The trip generation is not supported by any market analysis or business plan, as indicated in the EIS Guidelines.

In a typical traffic operational analysis, heavy trucks are "converted" to Passenger Car Equivalents (PCEs) as the analytical methods in traffic engineering are based on a "passenger car". For heavy trucks the conversion factor is in the range of 2.5 to 3.5 PCEs depending on the truck type (5).

CN has indicated (per Table 1 of Appendix E.17), that 99 trucks will be accessing/egressing the site during the peak PM Peak hour. "For the purpose of this assessment, and consistent with standard transportation impact study methods, the relative impact of the Terminal-generated heavy-truck traffic has been compared with morning and are peak hour traffic conditions when volumes of background traffic on the arterial road network are generally highest."

The forecasted PM Peak period site generation of 99 heavy trucks has a PCE of 297 (99 x 3.0¹). CN did not conduct its analysis based on this PCE.

In addition to the heavy truck traffic, employee traffic would also be generated by the site. This trip generation was not analysed in the EIS. The employee traffic analysis would also contribute traffic to the same intersections to be used by the heavy trucks (thus having a cumulative effect).

Further, there is reference in the EIS to this development providing direct and indirect local jobs. Section 8.3.2 – Regional and Local Benefits, states: "The Project will create more than 1,000 opportunities for employment (including 130 direct jobs and indirect and induced effects) locally during operation." The trips generated by these indirect area jobs would generally be presented as part of the "Other Area Developments" per Chapter 3.4.2 of the Region's Transportation Impact Study Guideline (2) and would contribute to the overall trip generation to be analysed. CN did not provide an analysis of this type of traffic as required by the Region's guidelines.

¹ Assumed a PCE of 3.0; mid-point in the range of 2.5 to 3.5 provided per the Canadian Capacity Guide (5)

Trip Distribution

The proposed truck routes are not justified and the EIS did not undertake an analysis of interchange operations at the points where trucks would access/egress the 400 series highways. The comments from the Ministry of Transportation Ontario (MTO) on their expectations from the EIS are noted in their letter of February 6, 2017 (per CEAA website) in which they state:

"MTO is interested in the following:

- The Operational and safety impacts of the intermodal terminal-generated traffic on any affected provincial highways/interchanges need to be assessed as part of the traffic analysis given that access to/from the proposed terminal will be by 400 series highways.
- Traffic flows to and from the proposed intermodal facility.
- Impacts to affected ramp terminals.

Further, the EIS states in Section 2.2.2 Transportation Corridors (Truck Routes), that:

CN has further indicated that in order to reduce potential impact of project-generated truck traffic on the Town of Milton, it would direct trucks within their care and control (i.e., those operated by CNTL), to utilize Highway 407 when its use would be practical and feasible. According to CN, these trucks are estimated to constitute approximately 20% of the total project-generated truck trips.

However, CN does not provide an explanation about how the non-CNTL² truck routes are going to be enforced or what the impact may be of these trucks, which represent 80% of the truck traffic from the terminal.

Analysis

A standard traffic impact assessment addresses the level of service (LOS) or volume to capacity ratio (v/c) at nearby or select intersections. This type of analysis was not conducted by CN.

The analysis presented by CN with regards to the impact of site traffic is insufficient. Table 8 of Appendix E.17, "Change Arising from The Addition of Terminal-Generated Heavy-Truck Traffic at Key Intersections Within the Planned Road Network with Forecast Year 2020 Background Traffic Volumes (PM Peak Hour)" presents the net change in heavy vehicles on various area intersections but only as a function of truck volume, not from the point of view of level of service (LOS) or volume to capacity ratio (v/c) as is typically undertaken in traffic impact assessments.

The table does not reflect the true change in truck traffic. For example, at the intersection of Britannia Road and Regional Road 25 (RR25) CN notes that the net change in the percentage of heavy vehicles because of the proposed development is 1.10%. However, based on CN's numbers, as presented in this table, the <u>truck only</u> change is 46% (162/111-1).

CN would need to properly assess intersection impact through standard traffic signal operations level of service methodology. Trucks have considerably different size and performance characteristics than passenger cars. Trucks can have a significant impact on traffic operations.

² CNTL is a CN subsidiary. CNTL handles container pickups and deliveries between CN intermodal terminals and customer locations. (www.cntl.com)

Conclusions & Recommendations

CN, without assessment to support its conclusions, noted:

"In both scenarios, on all sections of Britannia Road and Tremaine Road, including those that are anticipated to experience the considerable change, it is anticipated that reasonable and conventional measures can be implemented to mitigate the changes in roadway operating conditions resulting from the addition of Terminal-generated heavy-truck traffic. Such measures may include:

- Adjustment to traffic signal control timing and phasing plans;
- Provision of advisory and/or regulatory signage;
- Adjustments to the lengths of let tum lanes for added vehicular queue storage length;
- Addition of auxiliary right tum lanes or let tum lanes; and
- Provisions to accommodate and address the safety of pedestrians and cyclists"

CN notes that "Consideration was given to meaningfully characterize the impact of Terminal-generated heavy-truck traffic on the road system in the vicinity of the Terminal. Again, it is acknowledged that there are no stipulated or fixed criteria applicable to undertaking the assessment provided in this study. The criteria applied herein are entirely based on the traffic planning experience and judgement of the authors of the study."

There is an industry acceptable methodology for undertaking traffic impact studies as published on the Region's website and widely accepted in the industry.

The EIS and supporting documentation do not provide the sufficient analysis to conclude on significant impact and mitigation of adverse effects.

Table 2 presents Information Requests with regards to Transportation analysis for the project.

Table 2 – Information Requests	– Transportation Analysis
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Торіс	Reference to CN EIS and Information Responses	Requested Information	Rationale
Traffic Assessment EIS Guidelines Part 2, s. 3.2, 3.2.2, 6.1.10, and 6.3.5 Halton Brief Table D.5 (ROP Sections 173(1.1) and 173(22))	Appendix E. 17	 ET#3 Complete Traffic Assessment. Please complete the following: undertake a traffic assessment, for the proposed development, in accordance with Halton Region's Transportation Impact Study Guidelines (2). address the following in its methodology: Non-CN Truck operations. How are Non-CN trucks going to be controlled to follow the operations plan and routing requirements established by CN for its trucks Traffic control and traffic improvements in specific terms Preliminary design to present the proposed measures required to support the proposed development 	Professional judgement was used in lieu of available guidelines. The EIS did not follow the Region's Guidelines for the undertaking of a Traffic Impact Study and there was insufficient analysis conducted to conclude whether there are significant impacts. A traffic impact study needs to be undertaken in accordance with the Region's Traffic Impact Study Guidelines to define the traffic impacts of the proposed development.

Торіс	Reference to CN EIS and Information Responses	Requested Information	Rationale
Data	Final EIS Guidelines 3.2 Project Activities, pg. 15 5th para The EIS will include a schedule including time of year, frequency, and duration for all project activities.	 ET#4 Provide a Schedule for all project activities Please provide, per the EIS Guidelines: Number of employees and transportation of employees On site logistics and traffic plan (on and off loading rates, site capacity for trucks, anticipated daily volumes) Anticipated daily, monthly and seasonal schedules for rail transport Anticipated quantifies of transported materials by type Number of employees, transportation of employees, work schedule, lodging requirement on site and off site 	 This information is fundamental to the undertaking of a traffic impact study. The material reviewed did not have schedules for key traffic impact study data, essential for analysis including: anticipated daily, monthly and seasonal schedules for rail transport; anticipated quantities of transported materials by type; number of employees, transportation of employees, work schedule, lodging requirement on site and off site number of employees and transportation of employees;

3. ASSESSMENT OF STANDARDS

EllSo was asked to list any technical information, within its area of expertise that is necessary to apply the standards in the Halton Brief. Table 3 presents the municipal standards from the Halton Brief. Commentary is limited to the second, third and fourth columns of the table.

The methodology and results of the analysis are insufficient to determine the impacts of the proposed development. CN provided no technical support to the various measures it proposes to validate that these measures will in fact mitigate the traffic impact.

Municipal Standard	Information required to apply the standard	Does CN propose mitigation relevant to this standard?	Does CN propose any follow-up relevant to this standard?
Major Transportation Facilities To adopt a functional plan of <i>major</i> transportation <i>facilities</i> ³ for the purpose of meeting travel demands for year 2021 as well as protecting key components of the future <i>transportation system</i> ⁴ to meet travel demands beyond year 2021 (ROP Reference 173(1)) Halton Brief, Table D.5 Halton Brief, App. B, Part C.3.1 Halton Brief, App. A, fig 23: Major Transportation Facilities	A traffic assessment for the proposed development completed in accordance with the Transportation Impact Study Guidelines. (ET3) Provide a Schedule for all project activities. (ET4)	Yes. However, professional judgement was used in lieu of available guidelines. The EIS did not follow the Region's Guidelines for the undertaking of a Traffic Impact Study and there was insufficient analysis conducted to conclude whether there are significant impacts.	No

³ Major facilities (PPS): Facilities which may require separation from sensitive land uses, including but not limited to airports, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities. Major goods movement facilities and corridors (PPS): Transportation facilities and corridors associated with the inter- and intra-provincial movement of goods. Examples include: intermodal facilities, ports, rail facilities, truck terminals, freight corridors, freight facilities, and haul routes and primary transportation corridors used for the movement of goods. Approaches that are freight-supportive may be recommended in guidelines development by the Province or based on municipal approaches that achieve the same objectives.

⁴ **Transportation system (GP):** A system consisting of corridors and rights-of-way for the movement of people and goods, and associated transportation facilities including transit stops and stations, cycle lanes, bus lanes, high occupancy vehicle lanes, rail facilities, park-and-ride lots, service centres, rest stops, vehicle inspection stations, intermodal terminals, harbours, and associated facilities such as storage and maintenance (Provincial Policy Statement, 2005).

Municipal Standard	Information required to apply the standard	Does CN propose mitigation relevant to this standard?	Does CN propose any follow-up relevant to this standard?
Planned Transportation Corridors To plan for and protect <i>planned</i> <i>corridors</i> ⁵ and rights-of-way for transportation and transport <i>facilities</i> ⁶ to meet current and projected needs (ROP Reference 173(1.1)) Halton Brief, Table D.5 Halton Brief, App. B, Part C.3.2	A traffic assessment for the proposed development completed in accordance with the Transportation Impact Study Guidelines. ET3 Provide a Schedule for all project activities. ET4	No	No

⁵ Planned corridors (ROP): Corridors identified through Provincial Plans, this Plan, or preferred alignment(s) determined through the Environmental Assessment Act process which are required to meet projected needs.

⁶ Facility (D-1-3): A transportation, commercial, industrial, agricultural, intensive recreational or utilities/services building or structure and/or associated lands (e.g. abattoir, airport, railway, manufacturing plant, generation stations, sports/concerts stadium, etc.) which produce(s) one or more 'adverse effect(s)' on a neighbouring property or properties. For specific details on some of these facilities, see Procedure D-1-2.

Municipal Standard	Information required to apply the standard	Does CN propose mitigation relevant to this standard?	Does CN propose any follow-up relevant to this standard?
Municipal Finances Ensure that the <i>development</i> ⁷ <i>industry</i> ⁸ absorbs the cost of providing services to new development or <i>redevelopment</i> ⁹ and that any financial impact be based on a financing plan (ROP Reference 210(6)) Halton Brief, Table D.8 Halton Brief, App. B, Part F.3.5	A traffic assessment for the proposed development completed in accordance with the Transportation Impact Study Guidelines. ET3 An assessment of the Significance and Mitigation Effects on Municipal Finance. ET2	No	No

⁷ **Development (ROP):** The creation of a new lot, a change in land use, or the construction of buildings and structure, any of which requires approval under the Planning Act, or that are subject to the Environmental Assessment Act, but does not include: 226(1) activities that create or maintain infrastructure authorized under an environmental assessment process, 226(2) works subject to the Drainage Act, or 226(3) within the Greenbelt Plan Area, the carrying out of agricultural practices on land that was being used for agricultural uses on the date the Greenbelt Plan 2005 came into effect.

Development (PPS): The creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act, but does not include: a) activities that create or maintain infrastructure authorized under an environmental assessment process; b) works subject to the Drainage Act; or c) for the purposes of policy 2.1.4(a), underground or surface mining of minerals or advanced exploration on mining lands in significant areas of mineral potential in Ecoregion SE, where advanced exploration has the same meaning as under the Mining Act. Instead, those matters shall be subject to policy 2.1.5(a)

⁸ Industry, Industrial Land Use or Industrial Facility (D-1-3): A facility or activity relating to: the assemblage and storage of substances/goods/raw materials; their processing and manufacturing; and/or the packaging and shipping of finished products.

⁹ Redevelopment (PPS): The creation of new units, uses or lots on previously developed land in existing communities, including brownfield sites.

4. OTHER STANDARDS

4.1 Transportation Impact Study Guidelines, Halton Region (January 2015)

In addition to the Standards presented in the Halton Brief, and the many requirements under the Official Plan, Halton Region has a set of traffic impact study guidelines (1) prepared "*in order to streamline the approval process and provide a standardized framework for consultants to follow when submitting traffic/ transportation studies for review and should be complemented with appropriate transportation engineering judgement.*"

The guidelines generally require that the analysis of a proposed development consider and address the following:

"Transportation Impact Study Outline"10

3.1	Description of the Development Proposal and the Study Area	3.6	Evaluation of Impacts of Site Generated Traffic
3.1.1	Description of the Development or	3.6.1	Capacity Analysis at Intersections
	Redevelopment Proposal	3.6.2	Safety Analysis
3.1.2	Study Area	3.6.3	Traffic Collision Analysis
3.2	Horizon Year and Time Periods for Analysis	3.7	Sight Access and Circulation
3.2.1 3.2.2	Horizon Year Peak Periods	3.8	Sight Distance Evaluation
		3.9	Transportation System Mitigation
3.3	Existing Traffic Conditions		Measures
		3.9.1	Required Roadway Improvements
3.4	Background Traffic Growth	3.9.2	Required Traffic Signal Improvements
3.4.1	Background Traffic	3.9.3	Preliminary Cost Estimate
3.4.2	Other Area Developments		
3.4.3	Transportation Network Improvements	3.10	Recommendations
3.4.4	Transit Considerations		
3.5	Estimation of Travel Demand.		
3.5.1	Trip Generation		
3.5.2	Trip Distribution		
3.5.3	Trip Assignments		
3.5.4	Summary of Traffic Demand Estimates		

None of these sections of the guideline are appropriately addressed by CN in the EIS.

¹⁰ The chapter numbers refer to the section in the Transportation Impact Study Guidelines, Halton Region (January 2015)

5. CONCLUSIONS

The purpose of the review was to assess whether the conclusions of the EIS could be supported given what is presented in terms of the data, methodology and analyses.

Based on the review conducted, the conclusions of the EIS with regards to Municipal Finance and Transportation cannot be supported. Additional data and analysis is required.

Therefore, the EIS does not meet the requirements of the EIS Guidelines, the Halton Brief and Halton Region related Standards.

REFERENCES

- 1. 2017 Transportation Development Charges Technical Report (Halton Region), September 2016
- 2. Transportation Impact Study Guidelines (Halton Region), January 2015 Regional website under "Halton Region » Living in Halton » Roads & Transportation » Development Impacts"
- Halton Region Transportation Master Plan 2031 The Road to Change, October 2011 Regional website under "Halton Region » Planning & Sustainability » Environmental Assessments (EAs) » EA Studies » Transportation Master Plan"
- 4. Roads Capital Project Map (2016 2031) (Halton Region) Regional website under Halton Region » Planning & Sustainability » Demographics & Maps » Maps » Capital Project Maps
- 5. Canadian Capacity Guide for Signalized Intersections, 2008; Table 3.2

APPENDIX A: LIST OF DOCUMENTS REVIEWED

To fulfil the scope of the assignment, EllSo reviewed the following information:

- Cover Letter from CN (December 7, 2015)
- Environmental Impact Statement Summary
- Environmental Impact Statement (EIS)
- Appendix A (Final EIS Guidelines)
- Appendix B (Figures)
- Appendix C (Renderings)
- Appendix G Mitigation Measures and Commitments
- Appendix E.17 Milton Logistics Hub Technical Data Report Terminal-generated Truck Traffic BA Group
- CEAA Additional Information Requirements (March 15, 2016)
- CN Response to CEAA on Information Requirements (May 18, 2016)

A review was also conducted of the Halton Brief in the context of Halton's requirements for development and future growth and how these were addressed in the EIS.

The Canadian Transport Agency application by CN pursuant to subsection 98(2) was reviewed as well.