Milton Says No
c/o 456 Scott Blvd.
Milton, ON L9T 0T5

July 29, 2018

Lesley Griffiths Panel Chair
c/o Canadian Environmental Assessment Agency
160 Elgin Street
Ottawa ON K1A 0H3

Dear Ms. Griffiths et al,

Please find enclosed our Milton Says No response (which represents our community as a collective) to the proponent's responses to packages 4.1, 4.2 and 5. To begin, while it seems that CN has not come right out and formally claimed exemption(s), they seem to be treating the EA like an audit. As such, CN continues to take a very conservative position and not offer any information which does not further their cause.

We at Milton Says No have been tasked by our community members to represent them in our collective opposition to this proposed location. We look to the CEAA to question CN and push back on their claims. When the CEAA does ask a question, CN seems to parrot its original answer and/or water down community concerns with statements like "impact will be small and not expected to result in a measurable change in xyz." This is unacceptable to us.

We respectfully request that CN's responses be required to be thorough and complete. In our opinion, CN are not being open nor are they acting in good faith. This is particularly of concern in regard to the information that is regularly propagated by CN—by the reporting of "benefits" to our community (which in reality are conditions which are in fact beneficial in some regards related to the nation on the whole and which would, in fact, be at the expense of our local infrastructure, our local economy, our local health and environment). This misleading propaganda has been one of the most difficult means of disinformation to combat in this situation.

CN continues to host what seem like equally dishonest "community benefits roundtables" during which in the context of mitigation measures, CN lobbies community organizations and offers sponsorship; sponsorship, which at times, seems to morph into endorsements for the project from said organizations. We believe this to be a serious conflict of interest and a further indication that CN is not acting in good faith. We are deeply concerned that CN is exploiting the lack of knowledge the average citizen could possibly have about the short- and long-term effects of a massive, heavy industrial rail facility such as that which is proposed, particularly in such proximity to neighbourhoods and greenspace.

We conclude with the additional outstanding concerns where we feel CN has not adequately responded in regard to the following sections, and we have included their inadequate responses

for reference. We respectfully request that thorough, complete responses be required in regard to the sections outlined below.

Sincerely,

Stacey Newman
Director of Research and Communications
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Lack of Consideration for Effects on Indigenous Cultural Heritage

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' CEAR #632:

CEAA Request: Neither CN's cultural heritage assessment nor its archaeological assessment described effects on Indigenous cultural heritage including, but not limited to, the effects on cultural value, place or the importance of the continued existence of archaeological resources in their cultural heritage landscape instead of being removed and preserved through documentation of findings and cataloging of artifacts.

CN Response: Comments received from the Aboriginal communities identified in the EIS Guidelines confirmed an interest in the archaeological resources in the area and a desire to participate in subsequent archaeological assessments (EIS Section 5.6).

Carcinogenic Benzo(a)pyrene Above Target Benchmark by 2021

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #632 - Conditions in the Year 2021:

ERs greater than the applicable target benchmark of 1.0 were predicted for one or more of the 98 PORs for benzo(a)pyrene for the Baseline, Project Alone, Project Alone + Offsite Traffic, Future Traffic, and Cumulative Effect cases (the maximum ERs across all PORs for these cases are shown in Table 4 and the maximum ER at each POR is shown in Appendix A). Similar exceedances of the applicable benzo(a)pyrene air quality standard were reported for the baseline and project alone scenarios in the original initial Air Quality and HHRA TDRs. This indicates that a more detailed assessment of the potential health effects of benzo(a)pyrene for the assessed cases and scenarios is appropriate. Given that benzo(a)pyrene has a carcinogenic mode of action, potential chronic risks (annual) from exposure to this COPC can be assessed using Health Canada (2010) toxicity reference values (TRVs), specifically inhalation unit risks (Table 5). This approach was also applied in the original HHRA TDR.

Although ERs greater than 1.0 were also predicted for the 24-hour averaging period for benzo(a)pyrene (Table 4), the 24-hour AAQC of 0.00005 µg/m3 for benzo(a)pyrene (Table 3) is not based on toxicologically relevant acute exposure data, but rather was derived using a factor of 5 to convert the annual AAQC of 0.00001 µg/m3 (which is protective of chronic effects) to a 24 hour criterion. The factor of 5 is based on empirical monitoring data, ratios of concentrations observed for different averaging times, and meteorological considerations. Given that potential carcinogenic health risks from the Project and Project-related truck traffic due to long-term (annual) exposure to benzo(a)pyrene in 2021 have been demonstrated to be negligible, these exceedances of the 24-hour criterion are not indicative of potential health effects.

ER = Exposure Ratio
POR = Point of Reception
HHRA = Human Health Risk Assessment
TDR = Technical Data Report
COPC = Chemicals of Potential Concern
AAQC = Ambient Air Quality Criteria

http://ceaa.gc.ca/050/documents/p80100/122057E.pdf

Water Quality Already Low in the Proposed Location

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #632 – 2016 Water Quality Sampling Data:

CEAA Request: In subsection 9.4.4 of the EIS, CN indicated that the collection of supplemental water quality data would be complete in November 2015. The results of that sampling have not been submitted to the Review Panel.

CN Response: Water quality parameter concentrations were found to be generally below relevant provincial and federal criteria in the supplemental October 2015 to June 2016 results, as was observed in prior to October 2015 monitoring data discussed in the Surface Water TDR (EIS Appendix E.15).

As described by Conservation Halton (2002), the Indian Creek subwatershed has historically had water quality concerns and Conservation Halton considers the water quality of this section of Indian Creek to be impaired, with the main causes considered to be erosion, agricultural activities, and livestock access.

As stated in Attachment 2 to the response to IR1.2, the October 2015 to June 2016 water quality results do not substantively change the observed conclusions in EIS Appendix E.15 regarding the existing water quality conditions in Indian Creek and Tributary A.

http://ceaa.gc.ca/050/documents/p80100/122057E.pdf

Degraded Quality of Sky

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #646 – Predictive light effects modelling

While there is some degradation, based on the measured values of current sky quality documented, the known changes already underway to the lighting in the area without the Project, the changes associated with the Project, and the expected changes estimated to the year 2031, and referring to Figure 1 in the Sky Brightness Nomograph (**Attachment IR4.2-1**), it will still be possible to continue viewing approximately 500 stars on nights with good viewing conditions.

http://ceaa.gc.ca/050/documents/p80100/122751E.pdf

Lighting Impact on Surrounding Homes & Migratory Birds

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #646 – Project construction and operation lighting

CEAA Request: In Appendix G of the EIS, CN noted that lighting would be reduced in areas that are not being used for construction or operational activities, using a centralized lighting control system that is able to selectively turn off lighting when it is not required. However, CN does not provide any details of where, how, and to what extent lighting would be reduced at times or locations of inactivity within the Milton Logistics Hub during operation. Further, CN did not describe the effects of lights being turned off and on at various times during the night.

CN Response:
For nearby residences, the effect of having lights on all night during operation was assessed in the Light TDR (EIS Appendix E.8), and summarized in response to IR2.29 (CEAR #592), which concluded that once operational, the Terminal will add additional background light to the area, but the additional light is estimated to be well below (less than 10%) of the allowable standard at nearby residences (EIS Section 6.4.1.3, page 163).

For migratory birds, the effect of Project lighting during operation was assessed in the EIS (Section 6.5.2.9), and further discussed in response to CEAA IR25 (page 30-31, CEAR #375). The assessment concluded the Project could result in sensory disturbance to migrating birds through attraction to Project lighting; however, with implementation of lighting mitigation measures (*i.e.,* efficient Terminal lighting, downward facing lighting), this change is anticipated to be minimized, whereby the residual effects of the Project on migratory birds were predicted to be not significant (EIS Section 6.5.2.9; see also response to CEAA IR25, page 30-31, CEAR #375

http://ceaa.gc.ca/050/documents/p80100/122751E.pdf

Proposed Location not included in Town of Milton Official Plan

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #656 – Clarification of Town of Milton Official Plan and status of amendments

CEAA Request: In Section 3.3 of Appendix E.11, CN stated that the Town of Milton Official Plan, as amended by the Growth Plan conformity amendment Official Plan Amendment 31, was adopted in 2010 and is still pending approval by the Halton Region. CN concluded that this represents the most current policies for the Town. In its submission to the Review Panel on the sufficiency of the EIS (CEAR# 556), the Government of Ontario noted that the Official Plan Amendment 31 has not yet been approved by Halton Region and, as such, is not in effect. It is unclear whether any of the information that CN relied on for its EIS was information that has not yet been approved by the Halton Region.

CN Response:
The most relevant difference between the 1997 Official Plan and OPA 31 as it would relate to EIS Appendices E.11, E.12 and E.17 is that, according to the 1997 Official Plan, the CN lands are not located within the urban settlement boundary of Milton; instead, that plan designates the CN lands as "Agricultural Area" (371 ha, 95%) and "Greenlands A" Area (19 ha, 5%). The Agricultural Area designations would permit agricultural and associated uses, as well as transportation and utility facilities. The policies of the 1997 Official Plan provide that non-farm uses be directed to Urban Areas. In contrast, ROPA 38 and OPA 31, which are compliant with the Growth Plan and the *Planning Act*, designate a portion of the CN.

With respect to planned surrounding land uses, the primary difference between the two plans would be that, under the 1997 Milton Official Plan, the land use designations to the west would be Agricultural, as opposed to Employment Area land uses as set out in OPA 31. There would be no other differences between the 1997 Milton Official Plan and OPA 31 in relation to planned land uses to the south, north or east, except that the lands to the east are shown as Future Strategic Employment uses in OPA 31.

http://ceaa-acee.gc.ca/050/documents/p80100/122963E.pdf

Insufficient Density of Jobs

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #656 – Greenfield density targets

CEAA Request: Clarify whether the Agricultural Areas depicted in Figures 5 and 6 in Appendix E.12 are designated as Prime Agricultural Areas within the Halton Region and Milton Official Plans.

CN Response: The “Agricultural Areas” identified on Figures 5 and 6 in EIS, Appendix E.12 reflect the applicable land use designations from the corresponding official plans. With the exception of a narrow strip of land along the south side of Britannia Road, all Agricultural Areas within the PDA are considered “Prime Agricultural Areas” by the Region of Halton.

http://ceaa-acee.gc.ca/050/documents/p80100/122963E.pdf

Impact on Surrounding Property Value Ignored by CN

From ‘CN Response to Package 4.1: Biological environment and socio-economic matters’ - CEAR #656 – Effects of the Project on property value

CN does not have any data regarding the effects of its other terminals on property value of residential areas surrounding Intermodal locations.

The multitude of parameters affecting property values, and the interplay between them, varies over time and by area. As a consequence, it is not feasible to draw meaningful conclusions about the likely impact (positive or negative) of any one variable. Having said that, in our experience, the introduction of an intermodal facility like the one in Milton is a net positive for the business prospects of the surrounding area, which would reasonably be expected to contribute to local prosperity and indirectly improve local land values. We do not, therefore, see a rationale for property value reduction mitigation measures.

http://ceaa-acee.gc.ca/050/documents/p80100/122963E.pdf

Carcinogenic Benzo(a)pyrene Cumulative Effects Above Safe Target Benchmark in 100% of Sampling Receptor Locations by 2021

From ‘CN Response to Package 4.1: Biological environment and socio-economic matters’ - CEAR #632 - Conditions in the Year 2021:

In 2021, the only COPC that had ERs that exceeded the applicable benchmark was benzo(a)pyrene. As shown in **Appendix A**, ERs exceeded 1.0 for benzo(a)pyrene in 2021 at the following locations for the following cases and averaging periods:
- all 98 receptors for the Baseline and Cumulative Effects cases for both the 24-Hour and Annual averaging periods (**Figure IR 4.29-B1**).
- 21 receptors for Project Alone (No Offsite Traffic) and Project Alone + Project-Related Offsite Truck Traffic for the 24-Hour averaging period (**Figure IR 4.29-B2**)
- 15 receptors for Project Alone (No Offsite Traffic) for the Annual averaging period (**Figure IR 4.29-B3**)
- 16 receptors for Project Alone + Project-Related Offsite Truck Traffic for the Annual averaging period (**Figure IR 4.29-B4**)
- 2 receptors for Future Traffic for both the 24-Hour and Annual averaging periods (**Figure**

IR 4.29-B5)

http://ceaa.gc.ca/050/documents/p80100/122057E.pdf

Proposed site is on designated Agricultural Lands

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #656 – Identification of designated agricultural lands

The "Agricultural Areas" identified on Figures 5 and 6 in EIS, Appendix E.12 reflect the applicable land use designations from the corresponding official plans. With the exception of a narrow strip of land along the south side of Britannia Road, all Agricultural Areas within the PDA are considered "Prime Agricultural Areas" by the Region of Halton

http://ceaa-acee.gc.ca/050/documents/p80100/122963E.pdf

THREE LEVELS OF GOVERNMENT

Proposed Site is on Agricultural Land that cannot be re-zoned without approval by 3 levels of Government: Town of Milton, Region of Halton, Province of Ontario

From 'CN Response to Package 4.1: Biological environment and socio-economic matters' - CEAR #656 – Mitigation options for effects on agriculture

CEAA: Describe any plans CN has to create on- or off-site compensation for agricultural areas to mitigate the conversion of 30 hectares of designated agricultural area

CN Response: CN does not plan to provide compensation for the conversion of land within the PDA. CN owns the land within the PDA and leases these lands to farmers under contract for agricultural purposes. The conversion of these lands away from an agricultural use to urban, commercial and industrial development (*i.e.,* Employment Lands or Future Strategic Employment Lands) is planned by the Region of Halton (Halton ROP), Town of Milton (OPA 31) and the Province of Ontario (Places to Growth: Growth Plan for the Greater Golden Horseshoe (MMAH 2017)) for growth through urbanization independent of the CN project.

http://ceaa-acee.gc.ca/050/documents/p80100/122963E.pdf

INTERMODAL TRANSPORT OPERATIONS HAVE SIGNIFICANT ADVERSE IMPACTS ON THE QUALITY OF LIFE FOR PEOPLE LIVING & WORKING NEARBY

From Paper presented by Sönke Behrends (Chalmers University of Technology, Department of Technology Management and Economics, Gothenburg, Sweden) entitled 'The urban context of intermodal road-rail transport – Threat or opportunity for modal shift?' at the The Seventh International Conference on City Logistics

Transport operations have significant adverse impacts on the quality of life for people living and working in cities. Urban areas constitute the living environment of the vast majority of the population in
Europe and the demands on a high quality of life increase [20]. Though freight transport operations in
cities represent only 20% to 30% of road traffic, it accounts for up to 50% of the emission of air pollutants (depending on the pollutant considered) by transport activities in a city [8]. These impacts reduce the quality of the urban environment, including a weakened sense of public space, neighbourhood and community, with negative long-term effects for the image and attractiveness of congested and polluted urban areas. Consequently, citizens perceive freight traffic as a disturbing factor for local sustainability. The main impacts that should be underlined in an EU context are [21]:

- Noise: 100 million urban citizens are exposed to traffic noise above 55dB(A), 40 million over 65 dB(A).
- 97% of urban citizens are exposed to levels of PM10 exceeding EU limits (44% for ozone).
- Health and safety: Premature deaths and higher levels of illness through poor air quality and sedentary lifestyles.
- Exposure to higher safety risks as one fatal accident in two occurs within urban areas.
- Substantial economic costs of congestion and accessibility bottlenecks, accounting for 0.5% of GDP

Solution: Generally, by a geographical separation of logistics and residential land-use a mixing of freight and passenger traffic can be avoided, making access to the terminals easier and standstill periods in urban traffic shorter. Furthermore, noise, congestion and air pollution impacts are minimised since they avoid sensitive urban areas.

https://www.sciencedirect.com/science/article/pii/S1877042812005897

Poorly Located Intermodal Hubs Severely Reduce Environmental Benefits

From Paper presented by Sönke Behrends (Chalmers University of Technology, Department of Technology Management and Economics, Gothenburg, Sweden) entitled 'The significance of the urban context for the sustainability performance of intermodal road-rail transport' at the 15th meeting of the EURO Working Group on Transportation

Research in the field of sustainable freight transport often assumes that a modal shift is a suitable measure for reducing the environmental impacts of the freight sector, which are often limited to CO2 emissions and climate impact. A few papers discuss the traffic and air pollution impacts of IRRT (intermodal road-rail transport) and highlight the importance of the contextual conditions but without providing any quantitative evaluation. This paper provides actual

external cost values of a modal shift for these impacts and puts them into relation to the CO2 savings. Although external cost valuation is a complex issue and quantifying the impacts is far from easy and straight forward, this paper concludes that the sustainability performance of intermodal transport has a significant urban dimension. The sustainability performance of IRRT depends on the relative location of the intermodal terminal and shipper and receiver in the urban spatial structure. In case of unfavourable geographical conditions of terminal and shipper and receiver in the urban setting, a modal shift can reduce the climate and air pollution impacts, which are, however, achieved on the costs of higher traffic impacts. A modal shift is then mainly beneficial for intercity-regions, while the externalities in the origin and destination cities can increase significantly.

A careful integration of the intermodal terminal in the urban spatial structure is therefore a necessity if IRRT is to contribute to the sustainable development of the freight sector. If PPH (pre- and post haulage) distances in urban areas are kept short, a modal shift can also be beneficial for short distance transports. Consequently, this article shows that research on the sustainability potential of IRRT needs to include the integration of the intermodal terminal and the shippers' and receivers' location in the urban spatial structure. Local authorities, which are responsible for land-use and transport planning, therefore have an important role to play if a sustainable modal shift is to be achieved.

https://www.sciencedirect.com/science/article/pii/S187704281204219X

Two species of turtle impacted including a species at risk

From 'CN Response to the Review Panel's Information Request 1' - CEAR #574 – Basking Turtles

CEAA Request: Two species of turtle were observed within the local assessment area and project development area including Snapping Turtle, which is listed as Special Concern on Schedule 1 of the Species at Risk Act.

CN Response: As assessed in EIS Section 6.5.3.9.2 (page 213-214), Snapping Turtle injury or mortality is a potential risk during in water works associated with watercourse crossings and realignments, construction of stormwater management facilities, as a result of vehicular traffic during both construction and operation. Further, approximately 3.7 ha of wetland used by Snapping Turtles will be altered to accommodate the Project and/or temporarily disturbed by human activity during construction (EIS Section 6.5.3.9.3, page 215), which may include habitat loss or alteration resulting in changes to water levels or water quality that may affect the overwintering or summer life cycles of this species.

http://www.ceaa-acee.gc.ca/050/documents/p80100/119314E.pdf

Eastern Milksnake is species at risk

From 'CN Response to the Review Panel's Information Request 1' - CEAR #574 – Eastern Milksnake

CEAA Request: *Provide additional information on the number of Eastern Milksnake that may be present in the project area. If this information is not available, conduct additional snake surveys during the spring and fall using an appropriate methodology that addresses Environment and Climate Change Canada's concerns. Update the assessment for Eastern Milksnake based on the results, as necessary.*

CN Response: During these surveys, one Eastern Milksnake was observed in the RAA, in meadow / woodland edge habitat to the south of the Project (Area J in **Figure 1, Attachment 4**).

http://www.ceaa-acee.gc.ca/050/documents/p80100/119314E.pdf

CN does not recognize Provincial or Municipal laws

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Core activities of CN and non-federal laws

It is CN's view that all aspects of the construction and operation of an interprovincial railway (which includes any terminal integrated with that railway) fall within the exclusive power of the federal government and, as such, any valid provincial (or municipal) law that might otherwise apply to the Milton Logistics Hub project is rendered constitutionally inapplicable under the doctrine of interjurisdictional immunity.

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

Intermodal Hub can be accommodated at multiple sites within the GTA

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Site selection process Principle 2

The Brampton North and South Milton sites were further identified as being technically and economically feasible alternatives, with South Milton being identified as the preferred location for the Project (see response to CEAA IR2.6, dated September 30, 2017).
At the South Milton site, although the terminal tracks could be laid out perpendicular (or nonparallel) to the mainline (specifically, running along the south side of Britannia Road from the
mainline east to Regional Road 25), there is insufficient land available to accommodate a loop track that would be necessary to enable train movements through the terminal (explained in CN's response to IR2.18).

As shown on the first page of **Attachment IR2.10-1**, a terminal at the Brampton North site (including the level terminal pad and access track) would be located between approximately

Mile 19.2 and Mile 21.2 (between Mississauga Road at the east end of the terminal and Winston Churchill Boulevard at the west end of the terminal). The elevation of the level terminal track at the east end of the level terminal would be the same as the elevation of the mainline track. At a design grade of 0.6%, the access track at the west end of the level terminal would extend 1,640 feet (500 metres) to match the elevation of the mainline track at Winston Churchill Boulevard. Locating a terminal at this location was determined to be feasible with respect to achievement of acceptable within-terminal and access track grades on the potentially available land.

As shown in the response to part (a) above, to achieve the design within-terminal and access track grades at the North Milton and Halton Hills alternative sites would require excessive access track length and excavation.

The Brampton North and the South Milton alternative sites are both served well by proximity to regional arterial roads that provide connection to 400 series highways at comparable distance. They are both located in areas where the regional road network is under improvement to four or six lanes with current standards of design and operation, including facilities for cyclists and pedestrians. None of the improved regional arterial roads would be unsuitable for use by heavy trucks. In summary, there is no apparent difference between the two sites with respect to the potential effects of terminal-generated truck traffic.

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

CN purchased land prior to choosing the best location

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Economic feasibility of alternative sites

CEAA: *In Table 2.2 of the EIS entitled Summary of alternative means of carrying out the Project, CN identified the South Milton site as being economically feasible because the company owns the property. CN also identified the Brampton North site as being economically feasible, but notes that land ownership would have to be secured.*

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

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16 species at risk will be impacted by the project

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Consideration of potential species at risk at the South Milton site

CEAA: *In its EIS and supporting materials, CN reported differing numbers of species at risk that have potential to occur at the South Milton site. Table 4.4 of Appendix F of the EIS identifies five potential species at risk at the South Milton site while Table 5.1 of Appendix E.16 of the EIS (Technical Data Report - Terrestrial), identifies 16 potential species at risk as having habitat in the*
Local Assessment Area.

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

Trucks routes will travel through significant amounts of residential areas

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Distance of alternative sites to 400-series highway

Several potential routes (on heavy-truck capable roads and/or designated truck routes) for the South Milton site are identified in Figure 5 of EIS Appendix E.17, with the most direct routes being
1) west along Britannia Road and north along Tremaine Road to Highway 401 and 2) east along Britannia Road to Highway 407 (page 19, Section 6.3, Appendix E.17). These two routes have the following characteristics:
• West along Britannia Road to Tremaine Road and north along Tremaine Road to the planned new interchange on Highway 401: This route is along two Halton Region arterial roads currently being (and planned to be) improved to 4 or 6 lane regional arterial road standards by 2021 and is approximately 10 km in length. The route is bordered by existing or planned residential areas north of Britannia Road and east of Tremaine Road between Britannia Road and Steeles Avenue (approximately 6.2 km) and both east and west of Tremaine Road between the CP rail corridor and Highway 401 (approximately 1.5 km). The area west of Tremaine Road between Britannia Road and Derry Road is designated for employment and is planned to be brought within the Urban Boundary following 2021. The area west of Tremaine Road and north of Derry Road to the CP rail corridor is in the Niagara Escarpment Protection area currently outside the urban boundary of the Town of Milton and no development is planned, as indicated in Map 1C of the Halton Regional Official Plan.
• East along Britannia Road to Highway 407ETR: This route is along a Halton Region arterial road which is planned to be improved to a 6 lane regional arterial road standards by 2021 and is approximately 11.2 km long. The route is bordered on the north by existing or planned residential areas between the proposed truck entrance and James Snow Parkway (approximately 5.2 km). The area north of Britannia Road east of James Snow Parkway and south of Britannia Road east of 16 Mile Creek to a point west of 8th Line is designated for residential development and is planned to be brought within the urban boundary following 2021.

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

Truck route crosses 18 intersections and bike lanes, sidewalks, and a multi-use pathway for pedestrians and cyclists

From 'CN Response to the Review Panel's Information Request 2' - CEAR #592 – Consideration of traffic criteria for all alternatives sites

West along Britannia Road to Tremaine Road and north along Tremaine Road to the planned new interchange on Highway 401

Potential for collisions along the route: Although plans for development are not yet complete, there are likely to be approximately 18 existing or planned future signalized (or otherwise significant) intersections along the route. There are no apparent deficiencies in planned road alignment, design, or operating conditions that would render the route unusually prone to incidents of collision. Although collision hazard is always a factor in traffic operation, there is nothing to indicate that the identified route would be unsuitable for heavy truck movements.

Potential for interactions with pedestrians and cyclists: As Britannia Road and Tremaine Road are improved, the implemented design (established through respective environmental assessment
studies) will include bike lanes, sidewalks, and a multi-use pathway for pedestrians and cyclists.

Impacts associated with roundabouts: There are four existing roundabouts on the route along Tremaine Road at Britannia Road, Louis St. Laurent Boulevard, Main Street, and Steeles Avenue. The roundabouts are designed to Halton Region standards for a regional arterial road intended to accommodate the movement of heavy trucks. Pedestrian and cyclist crossings at the roundabouts occur at designated and marked locations.

http://www.ceaa-acee.gc.ca/050/documents/p80100/120744E.pdf

Increased human health risks

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Project site ambient air quality monitoring results

CEAA Request: It is unclear whether the results of the ambient air quality monitoring confirm the accuracy of the predictions made in the EIS and whether there are any increased human health risks.

CN Response: Since there are some exceedances predicted, further assessment is needed. The emissions inventory, the nature of the activities at or near the Project site, the geographical nature of the predicted values and the contributions from Project must be considered before it can be confirmed that changes to the conclusions of the Air Quality TDR are not warranted.

Updated ER were calculated for CO (1-hour and 8-hour), PM10 (24-hour), PM2.5 (24-hour and annual), and 1,3-butadiene (24-hour and annual) using the measured on-site existing concentrations. Exposure ratios were calculated by dividing the predicted MGLC (1-hour, 24-hour, or annual average) by the applicable air quality criterion. For the assessment of health risks due to short- and long-term inhalation of COPCs, a target benchmark of 1.0 was used for comparison against calculated ERs (Health Canada 2012; Alberta Health and Wellness 2011). When predicted ERs do not exceed the target benchmark (*i.e.*, ER ≤ 1 .0), human health risks are considered acceptable (Health Canada 2012) and modelled concentrations are lower than or equal to the exposure-duration specific ambient air quality metric for the COPC. If predicted ERs are higher than the target benchmark (ER > 1.0), it does not necessarily indicate an adverse

health effect is expected, but rather triggers a more in- depth review of the assumptions used in the assessment to make conclusions about possible human health effects (Health Canada 2012; Alberta Health and Wellness 2011).

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Human health risk from dust emissions

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Project Effects - Dust

CEAA Request:
In several sections of Appendix E.1, as well as in Table 7.1 of the EIS, CN identified fugitive dust emissions from road traffic as having a potential effect on human health. Several mitigation measures were identified to limit the amount of dust generated by vehicles during the various phases of the project. These measures included paving roads and chemical stabilization for semi-permanent or long-term unpaved roads or parking lots. CN also plans to monitor PM2.5 levels at selected off-site locations during the construction phase, to confirm the modeling and the effectiveness of the mitigation measures.

Appendix E.1 presented estimated dust emissions for trucks travelling on paved roads within the future logistics hub (Appendix C2), and from construction phase activities (Appendix C3). Emissions assessed included contaminants from tailpipe emissions of locomotives and on-road and off-road vehicles, and contained in resuspended dust particulates from trucks travelling on paved roads at the Project.

In Appendix C4 of Appendix E.1, the traffic air quality impact assessment considered the baseline information as well as modelling results showing predicted maximum concentrations of various contaminants at special receptor sites on local roads, due to terminal-generated truck traffic alone, and combined with future increased traffic and new development scenarios. In this case, the information presented did not differentiate between tailpipe emissions and resuspended dust particulates or indicate whether resuspended particles were considered at all.

Attachment C of Attachment IR13-2 in CN's Response to the Canadian Environmental Assessment Agency Additional Information Requirement (September 20, 2016) (CEAR#375) provided data related to potential cumulative effects to air quality, including data on PM, PM2.5 and PM10. It was unclear, in this case as well, how the predicted truck emissions values were calculated and if the predictions included both tailpipe emissions and resuspended dust particulates.

If applicable, in developing the response to this information request, consider responses to other information requests in package 2, namely information requests 2.32 (Terminal-generated truck traffic data sources) and 2.30 (maximum number of trucks and containers).

CN Response: Both tailpipe emissions and resuspended dust particles from road traffic were incorporated in the various modelled scenarios in these assessments.

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Incremental increase in lifetime cancer risk resulting from diesel exhaust exposure

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Project Effects - Diesel Particulate Matter

CEAA Request: *Quantify the incremental increase in lifetime cancer risk resulting from diesel exhaust exposure due to the Project. In preparing this response, work with Health Canada to identify and use appropriate methods to prepare this information. If appropriate, CN may wish to respond to this information request in its response to the Review Panel's Information Request package 4.*

CN Response: In brief, while there appears to be consensus within the scientific community that diesel exhaust should be considered as a human carcinogen, the quantitative assessment of carcinogenic risk from exposure to diesel exhaust is uncertain. Indeed, based on current scientific understanding, the California Office of Health Hazard Assessment inhalation unit risk appears outdated, no longer valid, and unsupported by the current scientific evidence of the effects of diesel exhaust.
After careful consideration, CN believes that use of the California Office of Health Hazard Assessment inhalation unit risk for the derivation of ILCRs will misrepresent potential health effects associated with the proposed Project. Given that diesel exhaust is made up of many constituents (e.g., PM2.5, DPM, organic compounds), CN believes that the approach followed in the EIS remains appropriate regarding the assessment of cancer risk from exposure to diesel exhaust; namely, the (1) quantification of potential cancer risks from the proposed Project by the assessment of key constituents of diesel exhaust with carcinogenic modes of action against applicable healthbased guidelines (EIS, Appendix E.7) and (2) the subsequent calculation of ILCRs for those chemicals where appropriate (EIS, Appendix E.7; **IR3.11**)). This approach is consistent with Health Canada's 2016 publication on the assessment of DE.

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Do we trust CN that changes to air quality is not likely to cause a substantive change in risk to health?

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Project Effects - Secondary Particulate Matter

CEAA Request: *Assess the effect of secondary particulate matter on human health and the environment.*

CN Response: For these reasons, it is concluded that secondary particulate formation due to the Project is likely to be small, whereby these changes are not likely to cause an air quality standard to be exceeded, nor is the Project-related secondary particulate formation likely to cause a substantive change in risk to health.

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Truck Statistics

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – On-Site Truck Traffic

- 24 hour 7 day per week operation
- 450,000 containers annually
- 1,233 containers per day
- 51 containers per hour
- 1600 truck trips per day
- Peak AM hour traffic of 84 trucks/hour
- 120 trucks waiting at the gate during peak hour
- 20 trucks idling at the entry gates on a continuing basis for 24 hours per day

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Risk of Flooding on Indian Creek & Fourteen Mile Creek

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Source water protection areas

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

How many members of a species need to perish in order to garner our attention?

From 'CN Response to the Review Panel's Information Request 3' - CEAR #613 – Environmental Effects on Monarch Butterfly

Residual effects of the Project on Monarch due to mortality would be characterized as adverse, low in magnitude, restricted to the PDA, an irregular event, permanent in duration, and reversible
(based on characterizations in EIS, Table 6.24). While mortality of a few individuals (as larvae, caterpillars, or adults) may occur during construction and operation, the residual effect is considered for the species population, not on individuals. While mortality of a few individuals

would be considered permanent, the loss of a few individuals (although unlikely) would not adversely affect the population of this species

http://www.ceaa-acee.gc.ca/050/documents/p80100/121475E.pdf

Impact on new Milton Education Village not assessed

From 'CN Response to the Review Panel's Information Request 5' - CEAR #647 – Milton Education Village

At the time of preparing the EIS, the Milton Education Village (MEV) was not considered in the assessment of cumulative
effects because the MEV was not considered a "certain and reasonably foreseeable" project based on the criteria provided in the OPS.

As noted in EIS Section 6.6.1.4.1, a potential cumulative effect may occur if a residual effect of the proposed Project is likely to act cumulatively with the effects of other physical activities. As the Project is predicted to have a negligible effect on human health, the Project is not likely to interact cumulatively with other physical activities. Therefore, a cumulative effects assessment was not undertaken.

Incorporation of the MEV into the assessment of cumulative effects of the Project in combination
with past, present, and certain and reasonably foreseeable future projects does not alter the conclusions of the cumulative effects assessment presented in the EIS or subsequent responses to information requests (CEAA IR25-2, IR3.16 or IR4.29).

http://www.ceaa-acee.gc.ca/050/documents/p80100/122752E.pdf

Bird Mortality

From 'CN Response to the Review Panel's Information Request 5' - CEAR #647 – Migratory birds

Bird mortality resulting from a spill is expected to be rare, if it were to occur at all. In the event it occurred, mortality could occur to a small number of individuals.

Based on a literature review, mortality rates from collision with low-rise commercial buildings, such as the Project's administration building and maintenance garage, was estimated at 0.4 to 55 migratory bird mortalities per year.

With regard to mortality, a quantitative estimate could not be provided because anticipated mortality rates for migratory birds are too small. However, considering each Project effects pathway, mortality is expected to occur to a small number of individuals and is not expected to result in a measurable change to the number of breeding pairs in the RAA.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122752E.pdf

Lack of Follow-up Programs for human health, effects on environment, accidents & malfunctions, truck traffic, etc. by CN

From 'CN Response to the Review Panel's Information Request 5' - CEAR #647 – Follow-up programs

CEAA Request: *Explain why CN did not propose follow-up programs for light, vegetation and soils, wildlife and wildlife habitat, human health, effects of the environment on the project, accidents and malfunctions, waste management and truck traffic. Provide information to support CN's determination that scientific uncertainty did not exist for these areas.*

CN Response: Due to the conservatism built into the air quality and noise assessments on which the Human Health assessment is based, the confidence in the Human Health predictions and proposed mitigation measures is high, and therefore, a follow-up program for Human Health is not warranted.

Mitigation measures, including regular inspection and maintenance programs by CN and inspections following extreme weather, will identify areas of concern or deficiencies to be addressed / rectified. Any noticeable erosion or excess backflow of water during (or following) extreme weather events would result in the implementation of appropriate maintenance and/or remediation to provide necessary changes on an as needed basis. Based on the high confidence in these mitigation measures to effectively address the effects of the environment on the Project, no follow-up program specific to effects of the environment on the Project is proposed.

No follow-up program is proposed for potential effects on the Project from accidents and malfunctions because potential effects are related to extreme and unlikely events occurring. Occurrence of an accident and / or malfunction would be managed through emergency preparedness and response plans.

There are no follow-up programs for traffic beyond the boundaries of the PDA as traffic on public roadways is beyond the care and control of CN. Once the trucks leave the Terminal they will be treated in the same fashion as truck currently circulating on public streets. Traffic on regional and provincial roadways is highly regulated and there is confidence in the effectiveness of those parties to enforce their own regulations.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122752E.pdf

Lack of Coordination & Communication between CN & Halton Region regarding impact of track noise

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #652 – Additional noise sources

CEAA Request: *In its submission to the Review Panel on the sufficiency of the EIS (CEAR #549), Halton Municipalities stated that the addition of 800 trucks daily (full operational scenario) has the potential to increase noise levels along the off-site truck routes. CN did not include noise from off-site truck traffic or noise from tailgate slams during the project construction scenario.*

CN Response: CN's plans for an intermodal facility at the location proposed for the Project was identified in the Halton Region Transportation Master Plan (Dillon Consulting Ltd. et al., 2011). As such, it is assumed that both Class EAs included consideration for anticipated road traffic generated by this site in the future traffic projection components of the corresponding noise assessments on the grounds that CN's plans for rail-serviced employment lands or an intermodal facility at this location was known to the Town / Region at the time that Class EAs were completed, and that development of these lands, including improvements to rail infrastructure, were anticipated in the Halton ROP and Milton OP.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122867E.pdf

CN unilaterally decided what to include in its Environmental Impact Statement. It is up to the Milton Community to find the gaps.

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #652 – Detailed description of the noise sources

As noted in EIS Appendix E.10 (Section 4.3.1.1), train whistles that are blown for safety reasons are a
legal requirement. Though HC does not provide specific guidance on train whistle exclusion for safety
considerations, MOEC NPC-300 excludes auditory warning devices (such as train whistles) required or
authorized by law or in accordance with good safety practices. Therefore, train whistles were excluded from the assessment.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122867E.pdf

CN taking liberties with data analysis & conclusions

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #652 – Effects of Noise on Human Health

CEAA Request: *In subsection 4.2.1 of Appendix E.10 to the EIS, CN stated that residential dwellings located on land owned by CN, which were considered participating receptors, were not assessed for noise compliance with the Federal Transit Administration and Health Canada criteria*
applicable to railway construction and operation. Revise the noise analysis to include all existing and future sensitive receptors within 1 km of the property line that may be occupied by the time the Project would reach full operations in 2031, including houses located on CN land.

CN Response: Subsection 4.2.1 in the Noise Effects Assessment TDR (EIS Appendix E.10) discusses the rationale for grouping noise sensitive receptors in the LAA to be represented by a point of reception for the noise impact assessment. The approach is to identify the closest sensitive receptor within a group of receptors (taken to be the closest to the Project) and define it as the POR for the purpose of the noise impact assessment. This approach then assumes that if predicted noise levels at the closest representative sensitive receptor meet the applicable noise criteria, then noise levels at all other receptors within that group will also meet those noise criteria as they will be impacted by either the same noise level, or a lower noise level, from the Project than the selected point of reception (due to noise attenuation due to noise travelling a greater distance the farther back the noise sensitive receptors are from the POR). By this approach, existing and future receptors, including those located on CN land and those located within 1 km of the PDA have been considered in the noise effects assessment.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122867E.pdf

What will CN do about sleep disturbance?

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #652 – Sleep disturbance

CEAA Request: *In Section 4.1.1 of Appendix E.10 to the EIS, CN described its methodology to assess noise associated with Project construction and operation. Predicted sound levels were compared to assessment criteria to determine compliance. In Table 4.2 of Appendix E.10 to the EIS, CN summarized Health Canada guidance for assessing noise at different phases of the Project. For operation and construction greater than one year, CN identified limits based on sound levels and the change in the percentage of people who would be highly annoyed by Project and baseline noise. CN did not provide limits for temporary and short term construction phases and there was no evaluation of the Project's anticipated effects on sleep disturbance*

CN Response: CN is committed to implementing a construction noise monitoring program, and an acoustic verification program (identified in the Noise Effects TDR, Section 6.1; EIS Section 9.4.2 and response to **IR4.82**) for early operations of the Project. Consistent with Health Canada guidance (2017) CN has been engaging in community consultation (EIS Section 4), including

several community open houses in 2015 and 2017, through the project website, 1-800 line and email as well CN project information center located in Milton (opened in 2015).

http://www.ceaa-acee.gc.ca/050/documents/p80100/122867E.pdf

In its truck route analysis, CN did not take into account # of travel lanes and roads with bicycle lanes was given the lowest weighting factor

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #654 – Routing of truck traffic

Presence of bicycle lanes – The presence of bicycle lanes suggests a higher number of bicyclists on the road (than those without bicycle lanes) creating a higher potential for conflict. This requires a higher level of attention and mental work for drivers who may perceive a decrease in ease of use and comfort making a route less desirable.
This factor was assessed to have a small impact on route attractiveness.

Number of travel lanes – This was assessed to not impact route attractiveness.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122958E.pdf

Lack of a traffic model to illustrate how traffic on local and regional roads between the Project site and 400-series highways would be affected by Project-generated truck movement

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #654 – Traffic volumes and congestion in Halton Region

CN Response: Without employing a regional travel-demand forecasting model, it is not possible to derive a reasonably accurate estimate for the increase in traffic volumes across the regional arterial road network at an intersection-turning-movement level of detail.

It is beyond CN's ability to identify which transportation system improvements the Region and MTO may or may not proceed with in the absence of any additional information.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122958E.pdf

Lack of Coordination & Communication between CN & Halton Region regarding truck routes

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #654 – Collision risks of intermodal trucks

CEAA Request: Indicate which if any of the 19 potential routes, if any, the Halton Municipalities identified as being preferred from a safety perspective. Provide a rationale for that preference.

CN Response: Neither the Halton Region nor the Town of Milton have identified a preferred truck route to CN. According to the Transportation Master Plan, "the purpose of a major arterial is to carry truck traffic." Therefore, the truck routes are assessed as part of this major arterial road network.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122958E.pdf

Lack of details on pedestrian & cyclist safety

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #654 – Collision risks of intermodal trucks

CEAA Request: *Discuss what measures, if any, CN could take to minimize potential pedestrian and cyclist safety risks from Project-generated traffic use of roundabouts.*

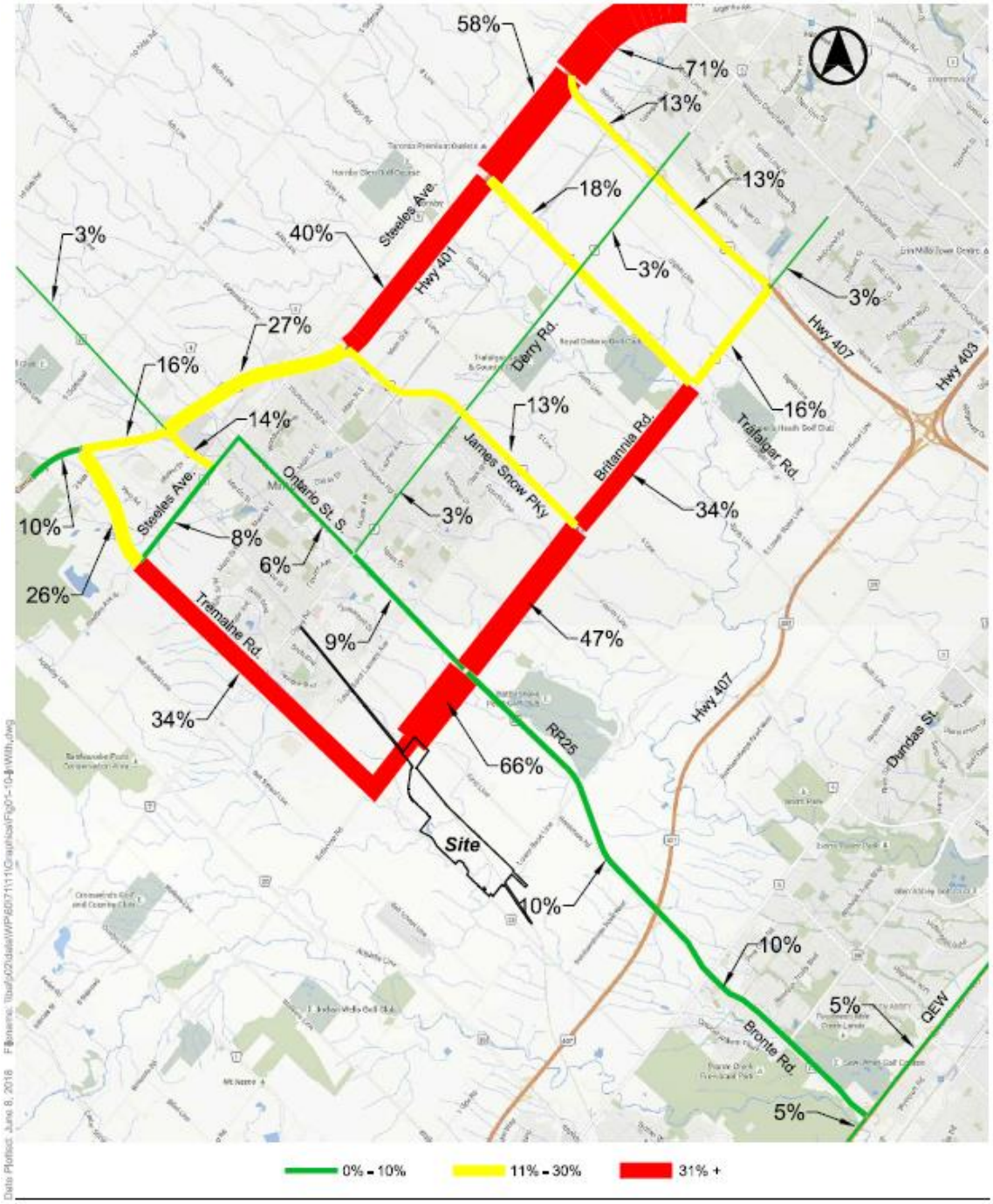
CN Response: CN is committed to reducing potential impacts on other roads users, as much as possible. As discussed in response to IR2.34 (CEAR #592), CN is committed to routing CNTL trucks (*i.e.,* those in CN's care and control) along specific routes to and from the Terminal, when feasible. As discussed in response to IR2.24 (CEAR #592), the preferred route for CNTL trucks would be along Britannia Road, east to Highway 407, which will avoid the use of roundabouts along Tremaine Road.
CN is committed to mitigating the risk of collisions through the safe and efficient design of the entrance to the Terminal onto Britannia Road consistent with industry best practice and for which
a preliminary design is included in the Transportation Considerations Report (see Attachment IR2.33-3, CEAR #592). It is anticipated that the truck traffic generated by the Terminal will be handled in the same fashion and will be subject to the same laws as the truck traffic currently circulating on these routes.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122958E.pdf

Truck congestion through streets of Milton

From 'CN Response to the Review Panel's Information Request 4.2' - CEAR #654 – ATTACHMENT IR4.59-3: TRUCK ROUTING ANALYSIS

http://www.ceaa-acee.gc.ca/050/documents/p80100/122958E.pdf

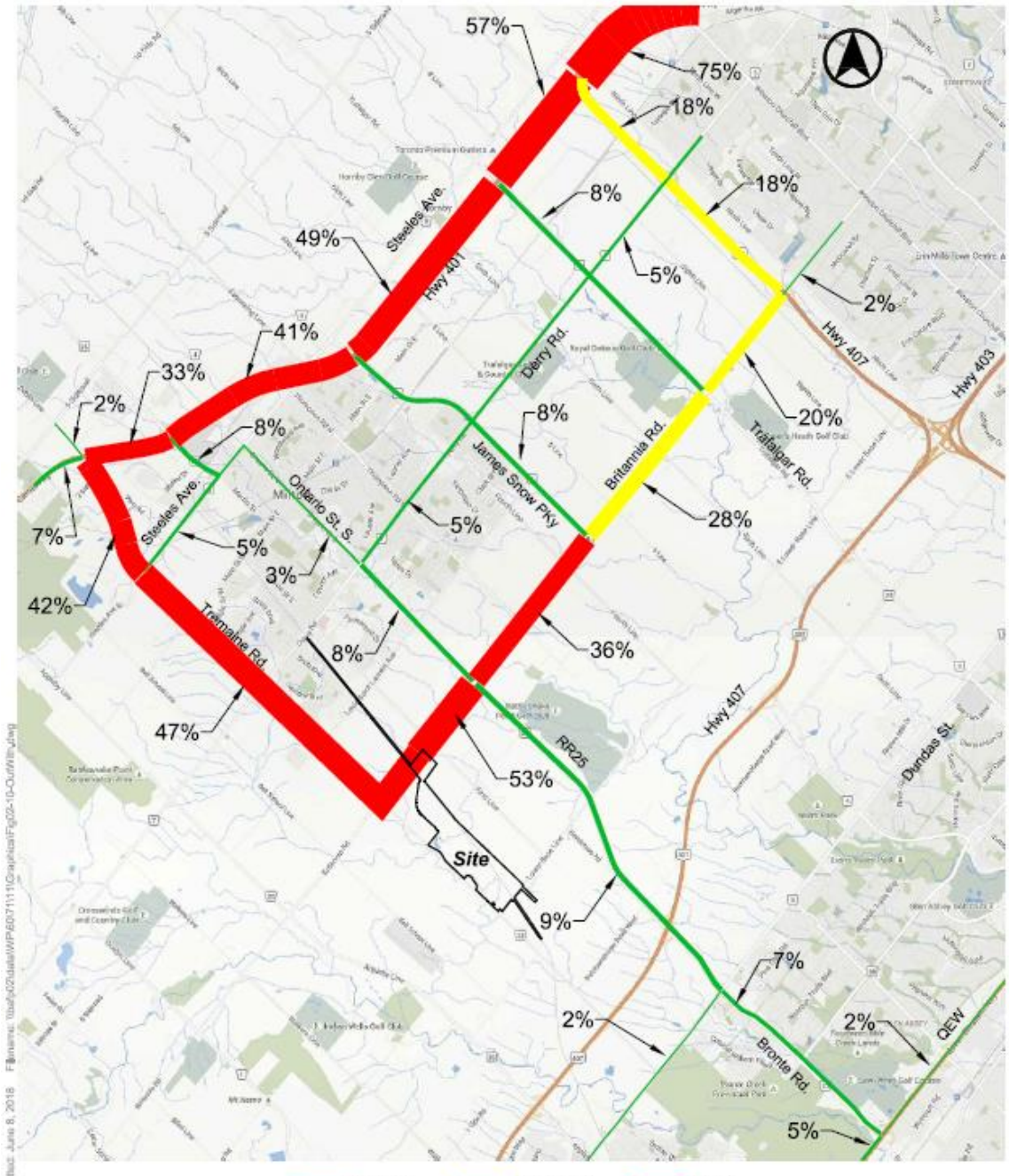


RELATIVE ATTRACTIVENESS OF ROAD SEGMENTS FOR
TERMINAL-GENERATED TRUCK TRAFFIC,
2020 INBOUND - WITH TREMAINE INTERCHANGE
AM AND PM PEAK HOURS

Milton Intermodal Terminal
6071-11 May 2018

BA Group

Figure 1



RELATIVE ATTRACTIVENESS OF ROAD SEGMENTS FOR
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Figure 2

CN did not take into account traffic safety outside of Intermodal terminal

From 'CN Response to the Review Panel's Information Request 5' - CEAR #655 – ACCIDENTS & MALFUNCTIONS

CN Response: Traffic accident scenarios were limited to the entry and exit locations to the Terminal, as the locations of entry/exit and traffic operations within the Terminal are in the care and control of CN. Traffic safety along any road outside of the Terminal is managed through federal, provincial and municipal regulations including speed, vehicle size and roadway controls (e.g., signal lights, turning lanes, etc.).

http://www.ceaa-acee.gc.ca/050/documents/p80100/122961E.pdf

Potential Effects of Fire

From 'CN Response to the Review Panel's Information Request 5' - CEAR #655 – Accidental fire scenario

CEAA Request: *In its submission to the Review Panel on the sufficiency of the EIS, Environment and Climate Change Canada (CEAR #476) noted that the EIS did not consider a scenario involving a container fire on the work pad or in the container storage area, similar to a fire that occurred in Port Metro Vancouver in early 2015.*

CN Response: Fires can affect worker and public health and safety if they occur in the immediate vicinity of workers or the public or if the airborne contaminants come into contact with environmental resources used by the public. Any accident or malfunction incident resulting in fire could result in release of CACs, HAPs or GHGs to the atmospheric environment, potentially affecting worker or public health. The extent of such effects would depend on factors such as the nature of the substance that was ignited, amount of the substance, location of the accident, timing of the accident (e.g., seasonal and time of day), duration and intensity of fire, and environmental
conditions (e.g., rain events).

http://www.ceaa-acee.gc.ca/050/documents/p80100/122961E.pdf

Town of Milton & Truck Owner responsible to clean up container spills

From 'CN Response to the Review Panel's Information Request 5' - CEAR #655 – Trucks transporting dangerous goods scenario

CEAA Request: *Describe a potential worst-case scenario of a spill occurring from a container while it is transiting by truck between the Project entrance/exit and a 400-series highway*

CN Response: In the event of an accident causing sufficient damage to a container such that a portion of its contents were to be spilled, and the individually packaged materials included dangerous goods, the potential exists that a small volume (e.g., partial contents of a single container) could be released.
Effects to the environment based on such an incident would be managed by local emergency responders, the same as they would for other accidents on public roadways. Anticipated mitigation measures would include securing the accident location, maintaining public safety, containing any spilled material and coordinating cleanup activities, as appropriate. Clean up of any resulting spill would be the responsibility of the owner/operator of the trucks involved.

Once a truck leaves the Terminal, it is no longer under the care and control of CN with the exception of CNTL trucks (approximately 20%), with the remaining 80% managed by third parties.

http://www.ceaa-acee.gc.ca/050/documents/p80100/122961E.pdf

Threats to Town of Milton

From 'CN Response to the Review Panel's Information Request 5' - CEAR #655 – Valued components, likelihood of occurrence and multiple incidents

Potential accident and malfunction scenarios:

- Hazardous material spill
- Intermodal container spill
- Traffic accidents at the entry/exit points to the Terminal
- Derailment involving a release of fuel from a locomotive
- Fire

http://www.ceaa-acee.gc.ca/050/documents/p80100/122961E.pdf

According to Experts, 1 truck can equal 3,000 cars

When comparing trucks and cars on Ontario's roads, two impacts can be accurately discussed – traffic flow and impact on the physical road network itself.

Impact on traffic flow: 1 truck = 2 to 7 cars

Impact on the physical road network: 1 truck = up to 3,000 cars

https://www.caledonenterprise.com/news-story/3239225-one-truck-can-equal-3-000-cars-experts/