Earl Armstrong Extension EA, TIAs (Boundary Rd/Mitch Owens) and Manotick

References: A. CRRRC TIA Technical Support Document # 9 D 02-02-17-0097 Dec 2014

- B. Transportation Facility D-07-12-18-0056 Dec 19, 2018
- C. Boundary Road Distribution Centre TIA Addendum #1 DO 712 18 0056 April 18, 2018
- D. The Ontario Environment Assessment Act Part 1 (1) c INTERPRETATION AND APPLICATION

Introduction

1. The current Earl Armstrong Extension Environmental Assessment (EA) ends at Hawthorne Road. The limited scope of this EA and the narrowly focused Traffic Impact Assessments (TIAs) for the approved and proposed projects situated on Boundary Rd and Hwy 417 are of great concern to the Manotick Village Community Association (MVCA) . This piecemeal approach to traffic masks the larger picture of the effect of increased traffic downstream from any these proposed projects. The limited mandate of the Earl Armstrong EA fails to takes into account the effect of increased traffic upon the social, economic and cultural conditions that influence the life of humans or a community (i.e. Manotick) contrary to the Environmental Assessment Act of Ontario.

Purpose

2. To assess the scope of the current Earl Armstrong Extension Environment Assessment (EA) and review the completed Traffic Impact Assessments (TIA) of the new and proposed facilities on Boundary Rd and Mitch Owens in order to determine the total impact of the increased traffic through Manotick.

Background

- 3. Earl Armstrong is being proposed to be extended to Hawthorne Rd. There is no EA planned for any extension of Earl Armstrong to Hwy 417. It was stated on March 20 at a public consultation meeting that any future extension of Earl Armstrong, if at all, would in all likelihood be north and west of Boundary Road to Hwy 417. Mitch Owens would therefore be the main truck route for vehicles travelling west from these proposed facilities at Boundary Road and Mitch Owens.
- 4. In addition, there have been three TIAs (See Refs A-C) with respect to three proposed facilities at Boundary Rd and Mitch Owens.

Discussion

Capital Region Resource Recovery Centre (CRRRC)

- 5. Ref A is the Traffic Impact Assessment (TIA) for the proposed CRRRC site at Boundary Rd and Hwy 417 which is anticipated to be operational in 2026. The TIA states that the maximum daily number of trucks per day is 271 trucks entering and exiting the site. We were unable to find how many employees would be employed thus there is no information on trip generation for employees.
- 6. To estimate the total number of daily truck generated trips, the TIA used the peaking factor of 1.45 to account for random arrivals. The CRRRC would therefore generate 392.9 truck trips per day (271x1.45) or

approximately 40 trips per hour entering and exiting the facility between Monday and Saturday resulting in 400 trips per 10 hr day or 2400 (400x6) trips Monday to Saturday.

- 7. Truck traffic expected west along Mitch Owens Road is estimated to be 7 % of the approximately 2400 trips per week for a total of **168** trucks trips per week on Mitch Owens.
- 8. Ref A states "The distribution of Site generated trips was assigned to the adjacent roads by examination of the **most convenient and efficient route(s)** to and from major developed and populated areas." Therefore we can assume that trucks heading west on Mitch Owens will travel through Manotick as it is "the most convenient and efficient route(s)" to Highway 416.
- 9. Ref A also states that 83 % of the 40 trucks per hour or 33 trucks per hr would use Hwy 417 travelling west. However Ref A fails to account for the congestion on Hwy 417 (Queensway) during rush hours. But as Ref A states, even the employees would avoid the peak hours. Traffic congestion is in reality 7-9 am and 4-6 pm for a total of 4 hours. During rush hours Monday to Friday there could be 132 (33x4) extra trucks per day for a total of 660 trucks from Monday to Friday using Mitch Owens to travel through Manotick to and from Hwy 416 and ultimately Hwy 417 west. (see para 8 above)
- 10. Therefore, there is potentially a total of **828** (660+168) trucks per week travelling west on Mitch Owens and ultimately through Manotick.

Note: The CRRRC will generate landfill leachate that will require treatment, with the preferred option being off-Site treatment at the City of Ottawa Robert O Pickard Environmental Centre (ROPEC). These truck trips were not included in this study as the ROPEC is in Gloucester which is east of the CRRRC thus these trucks would not use Mitch Owens.

Boundary Road Distribution Centre (Amazon)

- 11. Ref C is the TIA for the Boundary Road Distribution Centre . It states that all truck traffic will use Hwy 417. During the peak season, 1100 employees will be entering and exiting the facility daily .
- 12. With respect to the employees it states "Trip distribution assumptions are based on origin/destination data provided by the owner as well population of surrounding communities (Statistic Canada), logical routing assumptions, and potential for future growth. The trip distribution assumptions are based on populations of nearby communities and takes the high growth areas of Greely, Russell and Embrun into consideration. "
- 13. Ref C states that, 35% of these employees will be travelling south via Boundary Rd which works out to be **385** trips per day (35%x 1100) or **2695** trips Monday to Sunday. (It is not clear from the TIA whether this facility will operate 7 days a week but judging how Amazon delivers packages one can safely conclude that there will be traffic every day thus the 2695 employees trips is the figure we'll use.)
- 14. These employees would either travel further south on Boundary Rd or travel west on Mitch Owens. Since there is very little population further south on Boundary Rd and using the logic of Ref C most if not all of these employees will travel west on Mitch Owens to populated areas. The TIA also concludes that **none** of these employees would live in the southern part of Riverside South or west of the Rideau River. Unless we can find data that would support this assumption we believe that some of these employees

would actually live in or west of Manotick and places like Barrhaven. We will therefore use an arbitrary percentage that 20% of the 385 vehicle trips per day or 2695 per 7 day week heading west on Mitch Owens would live further west of the census areas which are assumed in this TIA, which works out to **77** per day; or **539** per 7 day week.

Note: Ref C states that all trucks would use 400 series highways however there is no mention whether smaller trucks would use Boundary Rd and Mitch Owens to service west of this site. Therefore, the traffic numbers could be higher than arrived at in this study.

TRANSPORTATION FACILITY 9460 MITCH OWENS ROAD

- 15. Reference B is the Traffic Impact Assessment for this project. The self- reported estimates at Table 3.1 are that **56** trucks per day or **280** (56x5) per week will be exiting this facility Monday to Friday. The owner anticipates that there may be 10 employees per shift (site will operate 24 hrs per day) which means **60** trips (30 x 2) per day or **300** per week. All employees will be arriving and departing outside the peak hours of the adjacent roads.
- 16. The distribution of site generated trips arriving and departing the facility to and from the site is estimated to be 95% north along Boundary Rd to Hwy 417 and 5 % west along Mitch Owens. This would mean that **3** (5% X 56) truck trips per day or **15 per week** travelling west along Mitch Owens .
- 17. Currently, River Rd north from Manotick is not designated a Rural Truck Route. The only alternative for trucks heading west on Mitch Owens would be through Manotick or south on River Rd to Snake Island Rd/ Roger Stevens Drive to Hwy 416. Unless we have compelling information to the contrary, we can assume that these trucks would go through Manotick to Hwy 416, this being the shortest route. (See para 8 above)
- 18. Table 3.2 of Ref B estimates that there would be 6 trips each in the am and pm during peak hours for a total of 12. As indicated previously, it is unlikely trucks will use Hwy 417 during rush hours. It is unknown whether trucks would be heading west or east on Hwy 417. If we assume that at least half of these trips would be heading west on Hwy 417, this would mean that at least 6 trucks per day / 12 per week could use Mitch Owens and through Manotick during peak hours in order to avoid rush hour traffic.
- 19. Therefore, **27** (15+12) truck trips per week would likely travel west along Mitch Owens and most likely through Manotick.
- 20. Ref B is silent on the travel of the employee trips. Using the logic of the TIA for the Amazon facility at Ref C, whereby it is anticipated that 35 % of the employee trips or 105 trips per week (300x35%) would be drawn west along Mitch Owens and using the arbitrary percentage of 20% as per para 14 above, 21 (105x20 %) employee trips could be from west of the Rideau and thus through Manotick.

21. Therefore, there could be a total of **48** (27 + 21) vehicle trips travelling west on Mitch Owens and through Manotick weekly.

Conclusions

- 22. Currently, River Rd north from Manotick is not designated a Rural Truck Route. The only alternative for trucks heading west on Mitch Owens would be through Manotick or south on River Rd to Snake Island Rd/ Roger Stevens Drive to Hwy 416. Unless we have compelling information to the contrary, we can assume that these trucks would go through Manotick to Hwy 416, this being the shortest route. (See para 8 above)
- 23. These sites could generate at least **1415** (828 -CRRRC + 48 -Transportation Facility + 539 -Amazon) vehicle trips per week of which **855** (828 +27) are trucks across the two bridges of Manotick , through five traffic lights and by senior/ adult residences , schools and playgrounds.
- 24. The Boundary Rd Facility (Amazon) may generate more truck trips other than on Hwy 417 as the packages have to be delivered somehow to Ottawa with smaller delivery trucks. This needs to be clarified.
- 25. The TIAs depend on self reported estimates. It is not clear that there will be further assessments once these sites are fully operational.
- 26. We assume that in the near future, there will be a number of employees along with spouses and dependents who would move to communities closer to these facilities thus generating more traffic.
- 27. We assume that more facilities will be proposed and developed in the future at Boundary Road and Mitch Owens resulting in increased traffic of commercial and private vehicles .
- 28. We are not aware whether the current or previous EAs takes into account the effect of increased pollution upon residents.
- 29. The current EA only addresses an extension of Earl Armstrong to Hawthorne. It is too narrowly focused as it does not consider any future extension to Earl Armstrong to Hwy 417 particularly the increased commercial activity on Boundary Rd and Mitch Owens.
- 30. These numbers will be higher by the time these projects are completed as the growth rate of traffic in the rural areas is between 1 and 2 % per year. (Ref A para 4.1. Ref C 3.1 calls for 2% growth).
- 31. Any extension of Earl Armstrong to Boundary Road would lessen the pressure of traffic through the village of Manotick
- 32. The current EA is limited and narrow in its mandate as it fails to assess "human life" or "the social, economic and cultural conditions that influence the life of humans or a community" with respect to villages such as Manotick IAW Ref D.
- 33. The TIAs cited are inadequate and too narrowly focused as they do not include the effects of the increased commercial and private traffic upon adjacent communities such as Manotick. The City's own Transportation Impact Guidelines June 2017 under Scoping states that one of the key parameters is the study area itself however the TIAs are solely focused on the sites themselves and did not examine the

downstream effects of this increased traffic on Manotick and other areas. We have three TIAs separated by sites and dates which viewed in totality provide a much different picture of the effect of the increased traffic upon Manotick and other areas than read individually.

Recommendations

- 34. A TIA be commissioned to include Manotick, other areas and the adjacent roads with respect to the increased traffic from these sites.
- 35. These TIAs to be reviewed in 5 years or sooner.
- 34. Population increases in the adjacent communities need to be considered.
- 36. EAs need to address the impact of increased traffic and routes upon the communities e.g. schools, retirement residences, playgrounds and the effect upon the appearance of the community.
- 37. The Earl Armstrong EA to be broadened to include any future extension of Earl Armstrong to Hwy 417 bearing in mind the current and future increased commercial facilities at Boundary Rd and the effect on those communities on and adjacent to Mitch Owens and Manotick. Such EA should consider routes such as Rideau and Thunder Roads to Boundary Rd.
- 38. EAs should address the long term effect of increased traffic through communities which may affect "human life" or "the social, economic and cultural conditions that influence the life of humans or a community" in accordance with the Environmental Assessment Act, R.S.O. 1990, c. E.18

May 15, 2019 John Harrison, Director Traffic Safety, MVCA