

# APPENDIX B

## TRAFFIC IMPACT STATEMENT



October 19, 2022

Kris Martin

**RE: Traffic Impact Statement  
21 Oceanview School Road, Eastern Passage, Nova Scotia**

Dear Kris Martin:

A non-substantive development agreement amendment application was submitted to the Halifax Regional Municipality (HRM) for 21 Oceanview School Road (See Figure 1) to allow for additional permitted uses to the existing Development Agreement (DA). As part of HRM's response to the application, HRM commented that an assessment of traffic impacts would be required to determine the "worst case scenario" for trip generation for the request to be reviewed by HRM engineering staff. To fulfil this requirement, this Traffic Impact Statement has been prepared to assess "worst case scenarios" relating to traffic impacts of the requested permitted uses within the non-substantive DA amendment application.



Figure 1: Study Area



## SITE DESCRIPTION AND ACCESS

The existing site (PID 00373258) is occupied by two buildings and is accessed via a driveway onto Oceanview School Road at the eastern corner of the property. There is a rectangular building adjacent to the northeast boundary of the property with a gross floor area of ~5,800 ft<sup>2</sup>, and an L-shaped building in the southern corner of the property with a gross floor area of ~5,200 ft<sup>2</sup>.

## DESCRIPTIONS OF MAJOR ROADWAYS AND INTERSECTIONS

**Oceanview School Road** is a local street that extends west from Caldwell Road for approximately 350m and ends as a cul-de-sac. The road has a posted speed limit of 50km/hr (30 km/h when children are present) and facilitates two-way traffic. A sidewalk is provided on the northern-most side, which connects to an off-road walkway network connecting to adjacent recreational facilities, schools, and residential neighbourhoods.

**Caldwell Road** is a roadway that predominantly runs north-south between Cole Harbour Road and Shore Road. Within the project study area, it is classified as a minor collector and has a posted speed limit of 50km/hr, except within school zones. A sidewalk is provided on the western-most side of the road, providing access to the transit stops serviced by Roue 6B.

**Oceanview School Road at Caldwell Road** is a 3-leg intersection with STOP control on the Oceanview School Road approach and free flow on Caldwell Road. All approaches consist of one lane and there is a marked crosswalk on the Oceanview School Road approach.

## TRIP GENERATION

When using the published trip generation rates in the *Trip Generation Manual, 11<sup>th</sup> Edition* (Institute of Transportation Engineers, Washington, 2021), the transportation engineer's objective should be to provide a realistic estimate of the number of trips that will be generated by the proposed land uses of a site.

Existing uses on the site produce few trips; therefore, no trip credit was applied. This provides a conservative approach in determining a "worst case scenario."

The non-substantive DA amendment application requested that the following additional land-uses be permitted:

- Any manufacturing, processing, assembly or warehouse operation which is not obnoxious, and which is conducted and wholly contained within a building
- Any activity related to the automotive trade except a salvage yard
- Auto repair and body shops / automotive repair outlet
- Equipment sale and rental outlets
- Services industries
- Service shops
- Welding, plumbing and heating, electrical, carpentry and other special trade contracting services and shops

Upon receiving comments from HRM regarding the application, the applicant was supportive of removing 'equipment sale and rental outlet' as well as 'any activity related to the automotive trade except a salvage yard' from the list of requested permitted uses.

Upon review of the above requested land uses, the following land use codes from the *Trip Generation Manual* have been considered: Manufacturing (LU 140), Warehouse (LU 150), Specialty Trade Contractor (LU 180), Tire Store (LU 848), and Automotive Parts and Service Center (LU 943). To assess the "worst case scenario," the combined gross floor area (~11,000 ft<sup>2</sup>) of all the existing site buildings was utilized to estimate weekday AM and PM peak hour trip generation for each of these land uses (See Table 1).

**Table 1: Trip Generation Estimates for Requested Permitted Uses**

Land Use <sup>1</sup>	Units <sup>2</sup>	Trip Generation Rates <sup>3</sup>				Trip Generation Estimates <sup>4</sup>			
		AM Peak		PM Peak		AM Peak		PM Peak	
		In	Out	In	Out	In	Out	In	Out
Manufacturing (Land Use 140)	11.00 kGFA	0.52	0.16	0.23	0.51	6	2	3	6
Warehouse (Land Use 150)	11.00 kGFA	0.13	0.04	0.05	0.13	1	0	1	1
Specialty Trade Contractor (Land Use 180)	11.00 kGFA	1.23	0.43	0.62	1.31	14	5	7	14
Tire Store (Land Use 848)	11.00 kGFA	1.67	0.94	1.61	2.14	18	10	18	24
Automotive Parts and Service Center (Land Use 943)	11.00 kGFA	1.38	0.53	0.80	1.26	15	6	9	14

NOTES: 1. Land Use Codes are from *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, Washington, 2021).  
2. 1000 ft<sup>2</sup> Gross Floor Area (kGFA) for Land Use 140, 150, 180, 848 & 943.  
3. Trip generation rates are 'vehicles per hour per unit'.  
4. Trips generated are 'vehicles per hour' for AM and PM peak hours.

The land use that is estimated to generate the most trips is a Tire Shop, which falls under the '*services industry*' land use category. It is estimated to generate:

- 28 two-way trips (18 entering and 10 exiting) during the AM peak hour; and,
- 42 two-way trips (18 entering and 24 exiting) during the PM peak hour.

The land use that is estimated to generate the second most trips is an Automotive Parts and Services Center, which falls under the '*auto repair and body shops / automotive repair outlet*' land use category. It is estimated to generate:

- 21 two-way trips (15 entering and 6 exiting) during the AM peak hour; and,
- 23 two-way trips (9 entering and 14 exiting) during the PM peak hour.

The land use that is estimated to generate the third most trips is a Specialty Trade Contractor, which falls under the '*welding, plumbing and heating, electrical, carpentry and other special trade contracting services and shops*' land use category. It is estimated to generate:

- 19 two-way trips (14 entering and 5 exiting) during the AM peak hour; and,
- 21 two-way trips (7 entering and 14 exiting) during the PM peak hour.

The estimated trips generated for both Manufacturing and Warehouse are minimal in comparison to the other assessed land uses.



## SUMMARY

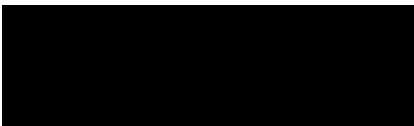
1. A non-substantive DA amendment application was submitted to HRM for 21 Oceanview School Road to allow for additional permitted uses to the existing DA. HRM staff noted that an assessment of traffic impacts would be required to determine the “worst case scenario” for the request to be reviewed by HRM engineering staff.
2. Upon review of the above requested land uses, the following land use codes from the *Trip Generation Manual* have been considered: Manufacturing (LU 140), Warehouse (LU 150), Specialty Trade Contractor (LU 180), Tire Store (LU 848), and Automotive Parts and Service Center (LU 943). To assess the “worst case scenario,” the combined gross floor area (~11,000 ft<sup>2</sup>) of all the existing site buildings was utilized to estimate weekday AM and PM peak hour trip generation for each of these land uses (See Table 1).
3. The land use that is estimated to generate the most trips is a Tire Shop, which falls under the ‘services industry’ land use category. It is estimated to generate:
  - 28 two-way trips (18 entering and 10 exiting) during the AM peak hour; and,
  - 42 two-way trips (18 entering and 24 exiting) during the PM peak hour.
4. The land uses that were estimated to generate the second and third most trips is an Automotive Parts and Services Center and Specialty Trade Contractor, which fall under the ‘auto repair and body shops / automotive repair outlet’ and ‘welding, plumbing and heating, electrical, carpentry and other special trade contracting services and shops’ land use categories, respectively.

## CONCLUSION

5. As the estimated vehicle trips for each of the requested permitted land uses does not exceed 100 peak hour trips in the peak direction, the requested permitted land uses are not expected to have any significant impact to the levels of performance on adjacent streets and intersections or to the regional street system as it currently exists. The site would generate minimal trips (28 two-way trips or fewer) during the AM peak hour and is not expected to impact operations at the nearby Ocean View Elementary School.

If you have any questions or comments, please contact me by email at [patrick.hatton@wsp.com](mailto:patrick.hatton@wsp.com) or by telephone at 902-444-7712.

Sincerely,



Patrick Hatton, P.Eng.  
Senior Transportation Engineer  
WSP Canada Inc.

