



April 26, 2019

Reference No. 11191832

Mr. Kyle Nielissen, P. Eng.
Project Manager
Forefront Engineering Inc.
1329 Gardiners Road, Suite 210
Kingston, Ontario K7P 0L8

Dear Mr. Nielissen:

**Re: Traffic Impact Study for Adolphus Reach Resort
County Road 7, Prince Edward County**

The Adolphus Reach development is located in Prince Edward County at 1315, 1329, and 1357 County Road 7. The project is a resort and will include a club house, a variation of accommodations (tent villas, cabins, tree top houses), and an art gallery.

1. Existing Traffic Conditions

Traffic data from 2018 was available along County Road 7 from Prince Edward County. A location near the proposed development at 170 metres (m) east of Kellers Cross Road was selected as the most representative of the traffic at the driveway location. The peak hour volume in 2018 was 93 vehicles/hour, calculated from the AADT.

2. Access Locations

The proposed development has three access driveways which connect to County Road 7. The multiple access locations on County Road 7 will distribute the traffic created by the development and lessen the point of impact of any one driveway location. One access is at an existing driveway location while the other two are new entrances.

3. Trip Generation

The ITE Trip Generation Manual was consulted for trip generation rates for the development. The peak hour trips were based on the land use of a Resort Hotel (Land use code 330). Rooms were used as the independent variable. The peak a.m. trip generation was calculated to be 35 trips and the peak p.m. trip generation was calculated to be 45 trips.

Based on check-in and check-out times and a normal distribution of trips, the trips generated by the development are expected to be as shown in the following figure and table. The trip generation distribution was based on average check-in and check-out times of resort and hotel establishments, with the peak check-in time as 5:00 p.m. and the peak check-out time as 10:00 a.m.

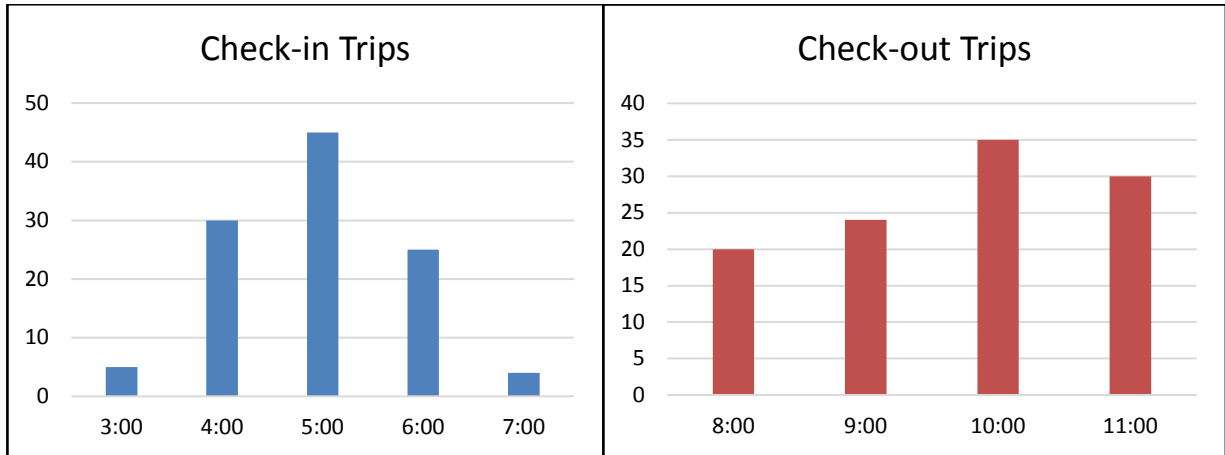


Table 3.1 Hourly Trip Generation

Check-in time	Trips	Check-out time	Trips
8:00	20	15:00	5
9:00	24	16:00	30
10:00	35	17:00	45
11:00	30	18:00	25
		19:00	4

4. Left-turn Lane Warrants

The requirement for a left-turn lane was verified using the MTO design supplement Appendix 9A to the TAC Geometric Design Guide, June 2017. A design speed of 80 kilometre/hour (km/hr) was assumed. If, in worst-case scenario, all vehicles use the main entrance, with existing traffic volumes and a design speed of 80 km/hr, a left-turn lane is not warranted.

5. Conclusion

The proposed Adolphus Reach development to be located at 1315, 1329, and 1357 County Road 7 will generate vehicular trips throughout the day but will have negligible impact on the road capacity. An eastbound left-turn lane is not needed based on the site configuration, the trips generated and the existing traffic volumes.

Sincerely,

GHD

Vanessa Skelton, P. Eng.

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