



August 13, 2020

**Traffic Evaluation**  
**DMCTC, Inc.**  
**7 River Road**

Berkshire Design Group has assessed the traffic impacts of the proposed development of the property at 7 River Road, in order to estimate the change in traffic that would be caused by the proposed project.

**Existing Condition**

The existing site consists of a single-family farmhouse agricultural field. For the purposes of this analysis, the site traffic is assumed to be generated by a single-family home only, which conservatively estimates the actual existing traffic generation.

The Institute of Traffic Engineers (ITE) Trip Generation Manual, 8<sup>th</sup> Edition, was used to estimate trip generation rates from the existing site, utilizing Land Use Code 210: Single Family Detached Residential. Traffic from Single-family residential can be estimated at 10 total trips per day. **A trip equals one arrival or one departure.**

**Proposed Condition**

The proposed site will include a cannabis cultivation facility.

The ITE Trip Generation Manual does not include entries for cannabis facilities, or any specifically agricultural use. The ITE land use code most closely matching container plant production is Code 110 "General Light Industrial", which is described as:

*[...] free-standing facilities devoted to a single use. The facilities have an emphasis on activities other than manufacturing and typically have minimal office space.*

The ITE Trip Generation Manual provides trip generation rates based on trips per employee. Throughout most of the year, the applicant estimates a total workforce of 10-15 people to be on site. For a short periods, including harvest time, the site population will expand to as much as 50-60 people. The ITE Manual trip generation rate per weekday employee in the category of General Light Industrial is 3.04. In our opinion, this trip generation rate is likely to be applicable to the year-round staff; however, seasonal agricultural workers typically arrive as groups in a single vehicle. In our experience working with other agricultural operations, the ratio of personal vehicles to workers is often as high as 4:1. We conservatively estimate that the trip generation associated with the harvest workers may be reduced by half as compared to full time staff.

Proposed frequency of other vehicles is estimated to be 4-6 trips per day of light-duty vehicles (small supplies, mail/package delivery, etc.) and 6-10 trips per month of heavy-duty vehicles (propane, raw materials, etc.). During harvest time, truck traffic will increase; however, the cannabis end product is light weight and is typically shipped in small "sprinter" vans or sport utility vehicles, which would require 2 trips per day, representing 1 pickup of finished product.

The estimated trip generation from the proposed site is summarized below:

*Year-Round*

<u>Vehicle Type</u>	<u>Frequency</u>	<u>Trip Generation Rate</u>	<u>Total Units</u>	<u>Total Trips Per Day</u>
Employees	Daily	3	15	45
Light Truck (Box truck/ Van)	Daily	6	1	6
Heavy Truck (Tractor-Trailer)	Daily	.5	1	0.5
<b>TOTALS</b>				<b>51.5</b>

*Harvest Time Peak*

<u>Vehicle Type</u>	<u>Frequency</u>	<u>Trip Generation Rate</u>	<u>Total Units</u>	<u>Total Trips Per Day</u>
Employees	Daily	3	15	45
Harvest Workers	Daily	1.5	45	67.5
Light Truck (Box truck/ Van)	Daily	7	1	7
Heavy Truck (Tractor-Trailer)	Daily	.5	1	0.5
<b>TOTALS</b>				<b>120</b>

**Conclusion**

Based on the discussion above, it is our opinion that the proposed development at 246 Peru Road will result in an increase in traffic on Peru Road of 52 trips per day during most times of the year, with 26 trips entering and 26 trips exiting. During the brief peak periods each year, total trips would increase up to a total of 120 trips per day, with 60 trips entering and 60 trips exiting.

Sincerely,

**Berkshire Design Group**

Christopher Chamberland, P.E.  
 Principal