

MEMORANDUM

Ref: 1483A

To: Michael J. Sievert, P.E.
MJS Engineering, PC

From: Stephen G. Pernaw, P.E., PTOE

Subject: Harmony Homes
Durham, New Hampshire

Date: November 10, 2015

As requested, our office has conducted a trip generation analysis for the Harmony Homes project on Arthur Grant Circle in Durham, New Hampshire. This analysis is based on the standard trip generation rates published by the Institute of Transportation Engineers (ITE)¹ for Senior Adult Housing and Assisted Living facilities. These projections are based on 136 beds in the assisted living buildings and one detached age-restricted unit (possible duplex). These projections reflect full occupancy of each building. Table 1 summarizes the results (see Attachment).

Table 1		Trip Generation Summary		
		Assisted Living Units (136 Residents) ¹	Age-Restricted (1 Duplex = 2 Units) ²	Total
Weekday Total				
	Entering	187 veh	8 veh	195 veh
	Exiting	<u>187 veh</u>	<u>8 veh</u>	<u>195 veh</u>
	Total	374 trips	16 trips	390 trips
Weekday AM Peak Hour				
	Entering	16 veh	0 veh	16 veh
	Exiting	<u>8 veh</u>	<u>1 veh</u>	<u>9 veh</u>
	Total	24 trips	1 trips	25 trips
Weekday PM Peak Hour				
	Entering	20 veh	1 veh	21 veh
	Exiting	<u>19 veh</u>	<u>0 veh</u>	<u>19 veh</u>
	Total	39 trips	1 trips	40 trips

¹ITE Land Use Code 254 - Assisted Living

²ITE Land Use Code 251- Senior Adult Housing - Detached

¹ Institute of Transportation Engineers, *Trip Generation*, 9th edition (Washington, D.C., 2012).

Trip Generation Summary

Alternative: Phase 1 & Phase 2

Phase:

Open Date: 11/4/2015

Project: Harmony Homes

Analysis Date: 11/4/2015

ITE	Land Use	Weekday Average Daily Trips			Weekday AM Peak Hour of Adjacent Street Traffic			Weekday PM Peak Hour of Adjacent Street Traffic		
		* Enter	Exit	Total	* Enter	Exit	Total	* Enter	Exit	Total
251	SENIORDETACHED 1 2 Dwelling Units	8	7	15	0	0	0	1	0	1
254	ASSISTLIVE 1 136 Occupied Beds	187	186	373	16	8	24	20	19	39
	Unadjusted Volume	195	193	388	16	8	24	21	19	40
	Internal Capture Trips	0	0	0	0	0	0	0	0	0
	Pass-By Trips	0	0	0	0	0	0	0	0	0
	Volume Added to Adjacent Streets	195	193	388	16	8	24	21	19	40

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.