

MEMORANDUM

To: Shari Frisbie, Lake Elmo Independent Living, LLC

From: John A. Davis, P.E., PTOE, Ayres Associates

Date: August 30, 2019

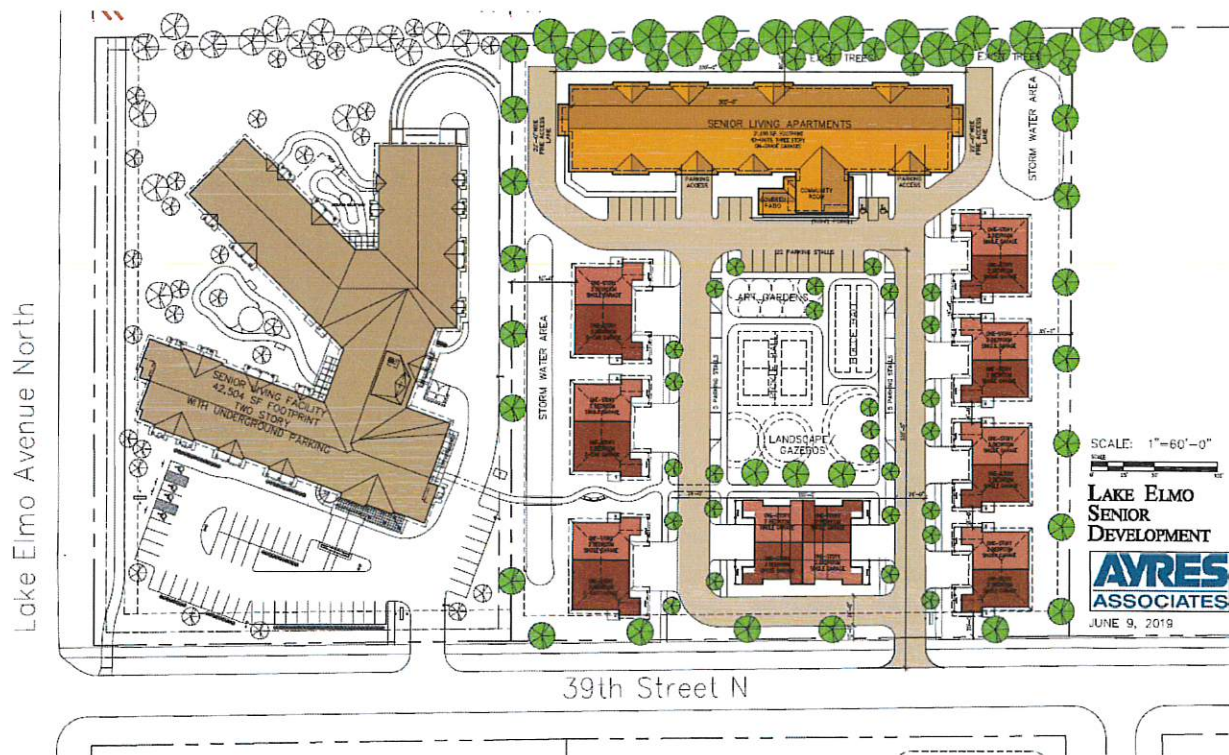
Project No.: 08-1893.00

Re: Senior Living Facility Traffic Impact Review
- 39th Street N – Lake Elmo, MN

As shown in the site plan in Figure 1, the Senior Living Facility proposed for the northeast quadrant of the Lake Elmo Avenue North and 39th Street North intersection is expected to consist of the following two land uses and sizes:

- Independent Living Component - Attached with 42 units and 42 beds
- Independent Living Component - Detached with 18 dwelling units

Figure 1: Site Plan



Using the *ITE Trip Generation Manual, 10th Edition*, the proposed development is expected to generate 230 trips per day. During the peak hours of the adjacent street, there is estimated to be 15 morning peak hour trips and 15 evening peak hour trips, as shown in Table 1 during the peak hours of traffic on the adjacent street. Of the 15 morning peak hour trips, it is expected that 5 trips will enter the facility and 10 trips will exit the facility. Of the 15 evening peak hour trips, it is expected that 10 trips will enter the facility and 5 trips will exit the facility. The Annual Average Daily Traffic (AADT) volumes on the nearby streets is shown in Figure 2.

Figure 2: 2017 Annual Average Daily Traffic (MnDOT)

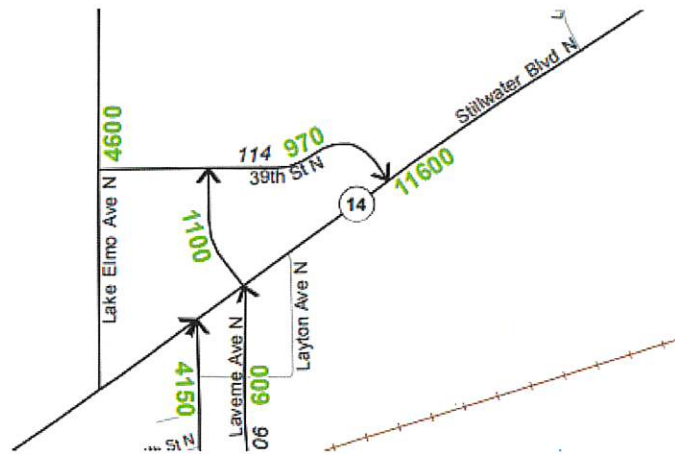
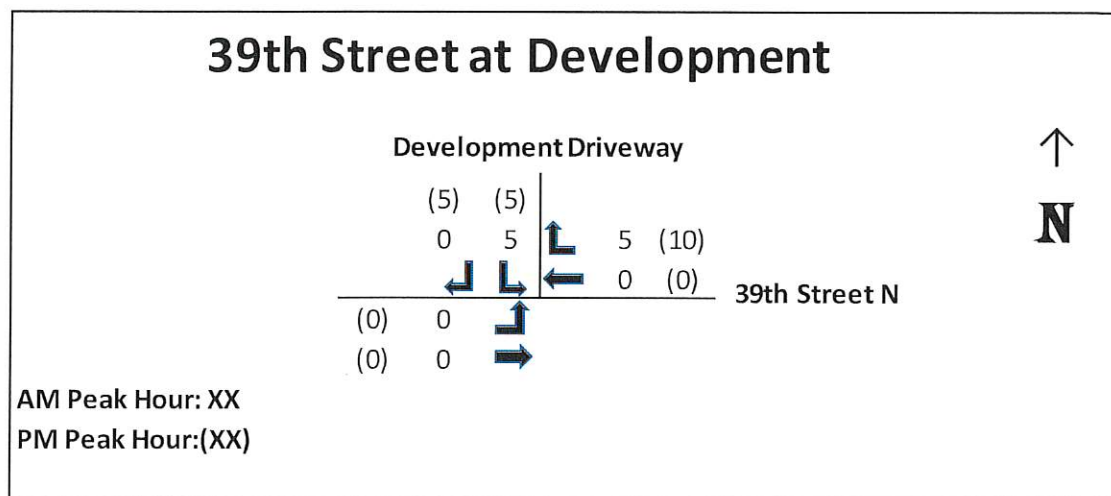


Table 1: Trip Generation for Proposed Site Plan

Senior Living Facility Trip Generation - ITE Trip Generation Manual, 10th Edition												
Land Use	ITE Class	ITE Code	Size (Units)	Units	Ave Daily Rate	Daily	AM Peak			PM Peak		
							In	Out	Total	In	Out	Total
Patio Homes	Senior Adult Housing - Detached	251	18	Dwelling Units	4.27	(Average)	33%	67%	(Average)	61%	39%	(Average)
						75	0	5	5	5	0	5
Apartments	Senior Adult Housing - Attached	252	42	Dwelling Units	3.7	(Average)	35%	65%	(Average)	55%	45%	(Average)
						155	5	5	10	5	5	10
TOTAL						230	5	10	15	10	5	15

According to the proposed site plan in Figure 1, the only access point to the development will be located on 39th Street N, about 700 feet east of Lake Elmo Avenue North. All trips will enter and exit the facility using this access point. Based on existing travel patterns and volumes on the surrounding street network, it is expected that the majority of trips will travel to and from the facility through the intersection of Lake Elmo Avenue North and 39th Street North. Figure 2 shows the expected distribution of new trips from the proposed development on the adjacent street network.

Figure 2: New Trip Distribution on Adjacent Street Network



As a result of this distribution of site trips at the site's driveway, it appears that exclusive turn lanes are not needed. Likewise, the very low number of generated site trips in the peak hours appear not to add enough traffic volume to the adjacent streets to necessitate any additional travel lanes or other roadway improvements.

cc: Project file