

Ref: 8451

October 20, 2021

Arlington Zoning Board of Appeals
Town of Arlington
730 Grove Street
Arlington, MA 02476

Re: Land Use Code Clarification/Traffic
Thorndike Place, Arlington, MA

Dear Mr. Chairman and Members of the Zoning Board of Appeals:

Vanasse & Associates, Inc. (VAI) has prepared this letter in order to provide additional clarification regarding the traffic aspects of the proposed Thorndike Place development changes (the “Project”). As you may recall, the Town’s peer reviewers BETA Group, Inc. had suggested in their traffic peer review memo of June 28, 2021, that “[i]t is noted that the Applicant’s traffic evaluation conservatively evaluated Land Use Code 252 – Senior Adult Housing – Attached. As per ITE, this land use assumes internal services are not provided with residents typically living a more active independent lifestyle. The discussion presented by the Applicant on June 10, 2021 suggests the facility may function more consistent with LUC 253 – Congregate Care Facility. This land use provides internal services for residents that typically do not drive. As a result, trips are typically generated by employees/staff, visitors, or group transportation. BETA notes that LUC 253 generates fewer trips and less parking demand than Senior Adult Housing – Attached.”

As stated in VAI’s prior response to the BETA peer review, we concurred that VAI’s traffic analysis utilized a conservative LUC classification. We have provided information identifying the conservative nature of the LUC utilized for the analysis. For informational purposes for the Board, we have calculated the daily trip generation totals of LUC 253 (suggested by BETA Group) for comparison with the LUC 252 value (employed by VAI in its August 3, 2021 traffic analysis). This comparison is shown below in Table 1, which for clarity, does not include the daily trips from the townhouses, which would add another 48 daily trips to the totals shown.

Table 1
TRIP-GENERATION COMPARISON:
CONGREGATE CARE AND SENIOR HOUSING-INDEPENDENT LIVING

Time Period/ Directional Distribution	LUC 253 Congregate Care Vehicle Trips ^a	LUC 252 Senior Housing Vehicle Trips ^b	Difference
Weekday Daily	192	364	172

NOTE: Vehicle mode split of 77 percent from August 3, 2021 traffic analysis.

^aBased on ITE LUC 253, *Congregate Care*.

^bBased on ITE LUC 252, *Senior Adult Housing – Attached*.

The data in Table 1 indicates a change of 172 daily trips or approximately 47 percent. Accordingly, if the site generates traffic at a rate similar to a Congregate Care facility or somewhere in between the two uses, the Project will generate substantially fewer vehicle trips than was analyzed.

The traffic to be associated with the independent living with services residence should also be considered in light of the population to whom the Project is being marketed, which is expected to be notably older than the minimum age that would qualify for the development. The Applicant is expecting that the typical age of the residents at Thorndike Place to be over 70 years, retired, and not as physically active as residents at 55+ developments. Similarly, these residents and their visitors and health care providers are expected to have more discretion over their trip making, with less need to travel during commuter peaks. Therefore, these residents are less likely to add to peak-hour traffic congestion in the area.

As VAI has previously provided, the TDM measures identified for the Project include the following:

- Jitney service to eliminate multiple car trips;
- Scheduled deliveries for vendors/trash pick up/etc. outside of peak traffic hours;
- Staffing schedules to and from the facility outside of peak traffic hours;
- Bicycle parking, including interior and exterior racks;
- Potential Zip Car car-share option;
- Transit information welcome package for tenants and staff at the senior living building.

These TDM measures are expected to further reduce trips and may result in the trip generation more consistent with LUC 253.

Aligned with BETA's statement that the services of the development appear more closely aligned to a Congregate Care use code (LUC 253), ITE data indicates that transportation services, such as the jitney service, may be available at Congregate Care facilities, but no such indication is made for Senior Housing use code (LUC 252). Staggering of employee shift schedules and deliveries to occur outside of peak traffic commuting hours will further reduce the traffic impact of the Project on these time periods.

If you have any questions on the conclusions reached herein, VAI is happy to provide further clarification.

Sincerely,

VANASSE & ASSOCIATES, INC.



Scott W. Thornton, P.E.
Principal

cc: File

Attachment: Trip Calculations



Institute of Transportation Engineers (ITE)
Trip Generation, 10th Edition
Land Use Code (LUC) 253 - Congregate Care Facility

Average Vehicle Trips Ends vs: Dwelling Units
Independent Variable (X): 124

AVERAGE WEEKDAY DAILY

$T = 2.02$
 $T = 2.02 * 124$
 $T = 250.48$
 $T = 250$ vehicle trips
with 50% (125 vph) entering and 50% (125 vph) exiting.

Vehicle Trips only
Based on 77% mode split adjustment from August 3, 2021 memo

192

Institute of Transportation Engineers (ITE)
Trip Generation, 10th Edition
Land Use Code (LUC) 252 - Senior Adult Housing - Attached

Average Vehicle Trips Ends vs: Dwelling Units
Independent Variable (X): 124

AVERAGE WEEKDAY DAILY

$T = 4.02 * (X) - 25.37$
 $T = 4.02 * 124 - 25.37$
 $T = 473.11$
 $T = 474$ vehicle trips
with 50% (237 vph) entering and 50% (237 vph) exiting.

364