



MEMORANDUM

Date: December 3, 2018

To: Town of Vienna

From: WRA

Subject: Review of Multi-Modal Transportation Impact Analysis and Parking Assessment

Work Order Number: 18554-001

P.O. Number: 20190333-00

Project: 100/102/112 Maple Avenue East

As requested by the Town of Vienna, WRA has performed a review of the 100/102/112 Maple Avenue East Multi-Modal Transportation Impact Analysis and Parking Assessment. Sunrise Senior Living proposes to redevelop the existing partially vacant office buildings totaling approximately 10,980 gross square feet (GSF) with a mixed-use building comprised of 85 assisted living units (105 beds) and 8,400 GSF of ground floor retail uses. This memorandum contains the findings of this review.

SUMMARY OF FINDINGS

Transportation Impact Analysis

Comments based on the submitted TIA are as follows:

- The TIA appears to have been developed consistent with the Pre-Scope of Work Meeting Form provided in the appendix.
- Truck percentages for individual movements were not field collected nor applied to the operational analysis. VDOT historical count data indicates 2% heavy trucks along Maple Avenue, and a standard value of 2% was applied for all movements at all study intersections. It should be noted that a value of 1% heavy trucks along Maple Avenue was documented in the Pre-Scope of Work Meeting Form.
- The TIA indicates existing traffic signal timings from the Town were utilized; however, Synchro files prepared as part of the TIA were not provided in the supplied appendices for verification. We request that the Synchro files be provided for verification.
- The TIA appears to be in general accordance with the regulations set forth by the Virginia Department of Transportation (VDOT) in 24 VAC 30-155-60.

Parking Assessment

Comments based on the submitted Parking Assessment are as follows:

- A parking demand rate of 0.40 spaces per unit was used for the Assisted Living portion of the facility. This value was calculated based on a combination of ITE's Parking Generation, 4th Edition and a survey of four other assisted living communities. The Parking Generation manual provides a value of 0.41 vehicles per dwelling unit for the "Average Peak Period Parking Demand" and a value of 0.54 vehicles per dwelling unit for the "85th Percentile" demand. The Parking Generation manual also

provides a range of 0.22 to 0.76 vehicles per dwelling unit and a 95th % confidence interval of 0.37 to 0.46 vehicles per dwelling unit.

- The following are comments on the survey of four other assisted living communities:
 - The size of the assisted living facilities surveyed ranges from 75 to 100 units and is comparable to the 85 unit proposed facility.
 - Table 3 (page 9) presents the detailed results of the survey. The maximum number of occupied spaces per unit ranges from 0.25 to 0.49 based on the counts of occupied parking spaces performed between 6 AM and 8 PM.
 - The facility with a rate of 0.25 occupied parking spaces per unit is located along Connecticut Avenue in Washington, D.C. and may not be similar in character to the proposed facility in the Town of Vienna. The other three facilities are located in Oakton, Springfield, and Alexandria appear to be in areas with similar character. We suggest removing the Washington, D.C. location from calculation of the average peak demand for the evaluated sites.
 - At all four locations, the peak parking occupancy rate during the data collection periods was 96% or greater indicating that parking demand may exceed available capacity. At two of the survey locations (Oakton and Springfield), the parking lots were at 100% capacity during one or more hours during the survey periods indicating that the actual demand for parking may not be reflected in the survey results.
 - Since the surveyed parking lots that are operating at full (or nearly full capacity), we suggest the consultant contact operators of the four survey locations to determine whether there is a shortage of parking or whether their parking needs are met.
 - In summary, use of the average (rather than the 85th percentile) parking demand rate from Parking Generation manual combined with calculated rates from the survey results may result in lower than the ultimate demand for parking at the assisted living facility. It should be noted that although permitted by the MAC zoning designation, the incentive factor associated with provide parking within a structure (1.25 reduction in required parking) further reduces the required parking spaces for the site.

In summary, the overall methodology used for developing the Transportation Impact Analysis appears to be technically sound and in conformance with VDOT and Town requirements and regulations. The impacts to the adjacent transportation network for the proposed redevelopment of 100/102/112 Maple Avenue East appear to be minimal based on the relative low number of additional peak hour trips anticipated to be generated. However, it appears that the proposed parking supply may not be sufficient to meet the demands of the proposed development. Additionally, as noted in the recommendations section of the report, improvements to promote pedestrian and bicycle-friendly transportation solutions as well as a Transportation Demand Management (TDM) program should be incorporated into the proposed development to mitigate impacts to the transportation network in accordance with the Maple Avenue Commercial (MAC) Zone and should be coordinated with the future Maple Avenue Corridor Transportation Study.



If there are any questions regarding the findings compiled in this memorandum, please do not hesitate to contact us.

