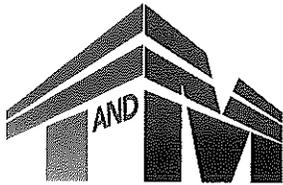


P/2 Rec'd 7/21/20



YOUR GOALS. OUR MISSION.

WTBZ-R0060

July 17, 2020

Ms. Barbara Coleman, Secretary  
Township of Washington  
Zoning Board of Adjustment  
350 Hudson Avenue  
Township of Washington, NJ 07676

**Re: Preliminary and Final Land Development Application  
Proposed Assisted Living Facility  
620 Pascack Road, Block 2202, Lot 1  
Washington Township, Bergen County, New Jersey  
Traffic Review No. 1**

Dear Ms. Coleman:

As requested by the Township, T&M Associates has completed a traffic related review of the Preliminary and Final Land Development Application for the proposed Assisted Living Facility located at 620 Pascack Road, in Washington Township, New Jersey. The following documents were included as part of this review:

- Traffic Engineering Assessment, dated January 15, 2020 – *provided by Shropshire Associates LLC*
- Preliminary/Final Site Plan, dated January 10, 2020 – *provided by Dynamic Engineering*

Based on our review, we offer the following comments for consideration:

**A. Traffic Impact Analysis Review**

1. The Engineer shall review and analyze crash history along Pascack Road at the existing tennis facility driveway and the two adjacent intersections included in the analysis.
2. The Engineer shall further elaborate on existing traffic conditions around the site to include any significant vehicle queues and approach delays observed during the field visit. Specifically, the southbound and eastbound approaches at the intersection of Pascack Road & Washington Avenue.
3. The traffic volumes used in the analysis were compiled from September 19, 2019 data. This existing volume data is considered valid as the volumes were obtained prior to the atypical traffic conditions due to Coronavirus (COVID-19).
4. The Existing traffic volumes were projected with two years of background growth to ultimately produce a 2021 Build-Year. The proposed build-year, growth rates, and calculations are consistent with industry standards and are considered valid for this analysis.



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5. The ITE Land Use category "Assisted Living" (Land-Use Code 254) accurately describes the proposed land-use and establishes an average trip generation for the proposed site. The Engineer shall compare the volumes generated by the proposed land-use to the volumes generated by the previous tennis facility land-use.
6. The traffic report provides ITE trip generation rates for the proposed site during the AM and PM peak hours during a typical weekday. The Engineer shall provide trip generation calculations for a typical Saturday and provide testimony regarding the impact during Saturday peak hours with specific attention to the operation and events at the adjoining catering facility.
7. The Engineer shall provide testimony regarding why the peak hour generation rate for the generator was not used during the PM peak hour. This data would produce a higher trip generation rate for the proposed site. The Engineer shall provide testimony regarding the operation and trip generation of shift changes during the afternoon/evening peak hour. Typically trip generation rates peak during this time of day due to nursing/doctor shift changes, administrative staff shift changes, visitation, specialized doctors, deliveries, etc.
8. Traffic volumes due to other newly proposed developments or redevelopments are not included in the traffic analysis report. The Engineer shall confirm if there are any new developments or redevelopments in the area and include all traffic impacts in the analysis.
9. Vehicle queues are not provided in the analysis output files. Typically, 95<sup>th</sup> percentile queues are assessed to review potential impacts beyond average (50<sup>th</sup> percentile) conditions due to fluctuations in arrival rates and peak traffic demands. The Engineer shall provide vehicle queues for all approaches at the analyzed intersections.
10. The Engineer shall produce a Level of Service (LOS) Summary Table to highlight results of the Existing, No-Build, and Build conditions for a clearer comparison between the three different traffic conditions. The table should be organized to include the volume to capacity ratio (V/C ratio), vehicle delay, 95<sup>th</sup> percentile vehicle queue, and LOS for each movement each analyzed intersection approach.
11. The intersection approaches of Pascack Road & Washington Avenue are shown to operate at unacceptable levels of service under No-Build conditions with majority of the approaches operating at LOS E or LOS F during both AM and PM peak hours. The Build conditions provide minimal increases in delay compared to the No-Build conditions but none the less worsen an existing unacceptable condition. The Engineer shall testify as to why traffic improvements were not proposed at this intersection despite an unacceptable LOS. If improvement alternatives were considered, the process should be noted in the traffic report.



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- a. Bergen County has submitted plans which detail proposed improvements at the intersection of Pascack Road & Washington Avenue. The improvements include widening approaches and reconfiguring lanes which will improve traffic conditions in the area. These proposed improvements are not reflected in the LOS analysis or mentioned in the text of the traffic report. The Engineer shall determine whether the proposed site will be constructed prior to the County's intersection improvements. If the proposed site will be in full operation prior to the County's intersection improvements, the 2021-Build condition should remain and an additional "Build w/ Mitigation" condition should be added. The "Build w/ Mitigation" condition should include proposed intersection improvements and background growth up to the year in which the intersection improvement is constructed.
12. The proposed site driveway is located in very close proximity to the intersection of Pascack Road & Washington Commons/Business Driveway. The Engineer shall assess vehicle queue lengths at the proposed site driveway and provide testimony regarding impacts.
13. The surrounding land-use consists primarily of residential housing. The Engineer shall comment on the type of facility-related vehicles expected to utilize the proposed site. The Engineer shall provide testimony regarding the frequency of emergency vehicle use.
14. The proposed site is situated along Pascack Road (CR 63) which is under the jurisdiction of Bergen County. Additionally, the majority of traffic volumes generated by the proposed site are anticipated to utilize the intersection of Pascack Road (CR 63) & Washington Avenue (CR 502) which is a signalized intersection under the jurisdiction of Bergen County. The Engineer shall obtain approval from Bergen County for site access and traffic impacts.

**B. Site Plan and Circulation Review**

1. The proposed parking spaces on the site plan comply with the minimum parking space width requirement of 9' but do not comply with the minimum parking space area requirement of 180 SF set forth by the Township Ordinance. The Engineer shall provide rational for the compliance statement on the site plan (Sheet 4, Note 9.C.) which indicates that the proposed parking spaces comply with the Township Ordinance. The Board shall determine if a design waiver is required.
2. Required parking spaces for Assisted Living Residential Use per RSIS:
  - 0.5 spaces per dwelling unit
  - 85 dwelling units proposed
  - 85 units \* 0.5 spaces/unit = 42.5 → **43 parking spaces required**



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Required parking spaces for Assisted Living Residential Use per 85<sup>th</sup> percentile parking demand from the ITE Parking Generation Manual, 5<sup>th</sup> Edition:

0.53 spaces per dwelling unit  
85 dwelling units proposed  
 $85 \text{ units} * 0.53 \text{ spaces/dwelling unit} = 45.1 \rightarrow \mathbf{46 \text{ parking spaces required}}$

0.58 spaces per bed  
100 beds proposed  
 $100 \text{ units} * 0.58 \text{ spaces/bed} = \mathbf{58 \text{ parking spaces required}}$

**The proposed site provides 51 parking spaces.**

While the proposed site satisfies RSIS parking requirements, it may still be incapable of accommodating peak hour parking demands when utilizing the rates established in the ITE Parking Generation Manual, 5<sup>th</sup> Edition. When considering the number of beds being provided at the facility, the 85<sup>th</sup> percentile parking demand could reach 58 parking spaces, seven more than the site provides.

There is a particular concern with peak parking demands during afternoon shift changes and potential overlaps in parking demand. The Engineer shall provide testimony regarding the number of parking spaces provided and how afternoon peak parking demands will be satisfied.

3. Testimony shall be provided regarding the proposed Assisted Living Facility's use and operation. The Engineer shall be prepared to discuss the following:
  - a. Hours of operation
  - b. Number of employees (total and maximum per shift)
  - c. Designated employee parking
  - d. Non-staff parking
  - e. Delivery schedule and type of delivery trucks
4. The Engineer shall label the site triangles at the proposed driveway to clearly identify the design speed. A 45 MPH design speed should be used.
5. All traffic signs shall be clearly shown and labeled on the Site Plan.



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6. The Engineer should consider adding R5-1 (DO NOT ENTER) and R5-11 (AUTHORIZED VEHICLES ONLY) signs at both ends the proposed grass paver emergency vehicle access lane located in the northeast corner of the site.
7. The Engineer shall install R5-1 (DO NOT ENTER) signs at the exit of the pick-up/drop-off driveway loop.
8. The Engineer should consider adding R7-1 (NO PARKING) signs along the paved portion of the emergency access path which runs along the north side of the building (if applicable).
  - a. Similar signs may be used along the pick-up/drop-off loop at the main entrance of the building.
9. The Engineer shall install R7-1 (NO PARKING) signs along the frontage of the site along Pascack Road. County approval will be required for any work within County right of way.
10. The island located at the pick-up/drop-off loop is situated so that eastbound traveling vehicles must turn away to avoid colliding with on-coming vehicles and westbound traveling vehicles must turn away to avoid colliding with the curb around the perimeter. The Engineer should consider providing a mountable curb around the island and adding centerline striping to assist with navigating vehicles around the island.
11. Vehicle turning templates are provided for a fire truck, garbage truck, and delivery truck.
  - a. Fire truck
    - i. We defer to the local Fire Marshal for review.
  - b. Garbage truck
    - i. Travel path acceptable as shown.
  - c. Delivery truck
    - i. The SU-30 design vehicle requires an excessive number of turning points to navigate to/from the loading zone. The Engineer shall confirm that this is the largest type of delivery vehicle which will service the proposed site.
    - ii. The Engineer shall confirm that delivery trucks will not be permitted to utilize the emergency access driveway.



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Please contact me at this office with any questions regarding this review.

Very truly yours,

T&M ASSOCIATES

BRUCE P. KLEIN, P.E., P.T.O.E.  
TRAFFIC CONSULTANT

BPK:CJD:lkc  
Enclosure

cc: Township Zoning Board Members  
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