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May 28, 2025

Kristine Sullivan
Land Use Analyst
11 Meetinghouse Lane
Woodbridge, CT 06525

Re: Traffic Peer Review
Proposed Residential Development
804 Fountain Street
Woodbridge, Connecticut

Dear Ms. Sullivan,

VN Engineers, Inc. (VNE) is pleased to provide this peer review of the traffic impact study for the proposed residential development at 804 Fountain Street in Woodbridge, Connecticut. The project site is 5.71 acres of which 3,135 square feet are located in the City of New Haven. The traffic impact study only focuses on the portion of the development that's located within Woodbridge, as no work of any kind is proposed on the New Haven side of the land. The parcel within Woodbridge is 5.6 acres, and the current land use is listed as residential vacant land (Zone A).

The project includes the construction of a single 4-story building with 16 studios, 56 single-bedroom, and 24 two-bedroom apartments. The proposed development does not meet the thresholds for Major Traffic Generator (MTG) to require CTDOT Office of the State Traffic Administration (OSTA) review.

The following information was provided to VNE for review:

- Traffic Impact Study, 804 Fountain Street, Residential Development, Woodbridge, Connecticut, prepared by Benesch, dated December 2024.
- Site/Architectural Plans, Residential Development, 804 Fountain Street, Woodbridge, Connecticut, prepared by Manuel Jose Silva & Rose Tiso & Co. LLC., dated August 2024.
- Synchro files provided by Benesch on February 7, 2025.

Overall, the traffic impact study has been performed in a professional manner in accordance with standard traffic engineering procedures, however, additional information and analysis should be provided to further demonstrate that the proposed development will not have an adverse impact on the study area. Based on our review of the information provided, we offer the following comments:

Introduction

1. According to the traffic study, the lot size is 5.6 acres but according to the site plans, the lot size is 5.71 acres. This discrepancy calls for further clarification in the traffic study report.
2. The traffic report mentions a total of 178 parking spaces. But according to the Site Plan, this development is accommodating 145 parking spaces. This difference should be addressed.

Existing Conditions

3. The turning movement counts (TMC) were collected in November 2024 during the weekday morning and afternoon peak hours for the intersection of Ansonia Road/Fountain Street (Route 243) at Rimmon Road (Route 313) and Park Lane. The data was collected at an appropriate time, and the volumes collected are in line with the CTDOT Traffic volumes collected at count station WDBR-014.

4. Exhibit 2 in the report shows the 2024 existing traffic volumes. The following turning movement data presented in Exhibit 2 does not match the count data from the appendix: S2U2 PM and WR2 PM,. These minor differences should be addressed but are not expected to have a significant impact on the operations reported.

5. Based on visual observations conducted at the study intersection during peak hours, queue lengths were minimal and did not exceed the available storage lengths for all approaches.

2026 No-Build Volumes

6. The westbound AM movement at the Fountain Street and Site Driveway intersection should be revised as this varies slightly from the projected value from existing conditions. This should be addressed for consistency but not expected to have a significant impact on the reported operations.

Collision

7. The report mentions that a five-year period of crash data was obtained and analyzed for crashes occurring within the limits of Seneca Road in New Haven and Rimmon Road in Woodbridge. Based on these criteria, a total of 16 crashes occurred at the study location. The report mentions a total of 17 crashes. The additional crash is probably a crash that occurred on Rt-15. This minor discrepancy should be revised for consistency.

8. Seneca Road has been incorrectly labeled as Senica Street in the traffic report.

Impact of the Proposed Development

9. The number of new trips generated by the proposed residential community were estimated using Land Use Code 221: Multi-family Housing (Mid-Rise) per the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. This land use code is appropriate for use in this study.

10. The trip generation volumes used in performing the capacity analysis for the build scenario were appropriately estimated using the ITE Trip Generation equations for the AM and PM peak hours of adjacent street traffic. Based on a review of the trip generation manual for Land Use Code 221, the peak hour of generator volumes would be expected to be greater than those using the peak hour of adjacent street traffic.

    A comparison of the number of trips estimated using the peak hour of adjacent street traffic and the overall peak hour are presented in Table 1.

Table 1: Trip Generation Comparison- Land Use Code 221: Multi-family Housing (Mid-Rise) (96 Dwelling Units)

	Peak Hour of Adjacent Street Traffic			Peak Hour of Generator		
Peak Hour	Enter	Exit	Total	Enter	Exit	Total
AM Peak	8	28	36	10	27	37
PM Peak	23	15	38	28	18	46

The applicant should consider performing the capacity analysis using the trips estimated for the peak hour of generator to provide a worst-case scenario for the development. Based on the hourly distribution of entering and exiting vehicle trips in the Trip Generation Manual Appendices, the weekday peak hours of generator are expected to occur between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m., which coincides with the rush hour periods.

11. According to the report, the trip distribution percentages have been calculated based on the existing volume. Based on the existing volume, during AM peak hour, 49% of the traffic is coming from Rimmon Road and 28% traffic is coming from Ansonia Rd. In the PM peak hour, these values are 18% and 15% respectively. These values do not match what is described in the report. It is suggested that the applicant reviews these numbers.

12. Park Lane was excluded from the analysis, but the report does not provide any explanation why that decision was made.

13. The report indicates the intersection sight distance at the proposed site access road as 445 feet to the west and exceeding 500 feet to the east. According to the CTDOT Highway Design Manual Figure 11-2B, the intersection sight distance for a passenger car to turn left or right from a minor road is 445 feet assuming a 40 mile-per-hour design speed. ATR Speed data suggests 85th percentile speed as 44 miles-per-hour in both directions. Assuming a 45 mile-per-hour design speed, the intersection sight distance for passenger cars is 500 feet. Since it was noted that the developer will seek permission from the CTDOT to remove ledge along the south side of Fountain Street to provide a 500-foot sightline to the west, we believe the proposed sightline is appropriate. The applicant should show the intersection sight distance requirements and sight lines available on the site plans.

Capacity Analysis of the Surrounding Roadways

14. An ambient growth rate of 0.8 percent was applied to the 2024 peak-hour volumes to forecast the 2026 background and build scenario volumes. The 0.8 percent annual growth rate is appropriate for the study area to account for background traffic growth.

15. The no-build and build scenarios are projected for 2026. The applicant should address if this build year is still appropriate given that the project is still in the permitting phase.

16. 2026 No-Build Volumes have been incorrectly labeled as 2025 No-Build Volumes in the Capacity Analysis of the Surrounding Roadways.

17. The capacity analysis section does not report on the queue length. This is crucial information and should be part of the report.

Synchro

18. The capacity analysis performed for this traffic impact statement follows the standard traffic engineering methodologies outlined in the Highway Capacity Manual and was performed using Synchro software to evaluate the operations of the No-Build and Build Scenario. A revised capacity analysis and summary of the findings should be provided based on the comments provided.

19. The intersection geometry for the intersection of Route 243 (Ansonia Road/Fountain Street) at Route 313 (Rimmon Road) and Park Lane should be revised to reflect existing conditions. The intersection is currently modelled to show Park Lane as a northbound approach. In reality, there is no Northbound approach at this intersection, and Park Ln. is an additional southbound approach that was not analyzed. The peak hour factors in Synchro should be revised to match the Intersection Movement Counts data.

Conclusions

20. The conclusion and summary tables should be updated pending any additional or revised analysis.

We hope that this letter is useful in your review for the proposed project. If you have any questions, please do not hesitate to contact us.

Sincerely,

Arianna Davis
Traffic Engineer

Nancy Dutta, Ph.D., P.E., PTOE
Project Manager