



MEMO

To: Paul Ferriero, P.E.
From: Marco Navarro, P.E. PTOE
Date: July 26, 2024
Subject: Proposed Multi-Family Residential Development
Block 801, Lot 20
Borough of Mendham
Morris County
Our File No. MDES-135

At the request of the Mendham, the documents reviewed for this application were:

1. Traffic Impact Study (TIS), prepared by Stonefield Engineering & Design, LLC, dated October 20, 2022.
2. Preliminary & Final Site Plan, V-Fee Mendham Apartments, LLC, prepared by Stonefield Engineering & Design, LLC, dated July 2, 2024.
3. Truck Turning Templates, V-Fee Mendham Apartments, LLC, prepared by Stonefield Engineering & Design, LLC, dated July 2, 2024.

Comments and observations are:

Traffic Impact Study (TIS)

1. The proposed development will be located on the northerly side of East Main Street / County Road 510, west of the intersection of Mendham Road and Cold Hill Road.
2. The existing land use / space is comprised of the following:
 - a. 80,472 square feet (SF) of retail space (i.e., Mendham Village Shopping Center)
 - b. 53,914 SF health and racquet club with six (6) tennis courts
 - c. Access to the site is provided by three (3) full-movement driveways along East Main Street (all unsignalized)
3. The proposed land use / space will comprise of the following:
 - a. 80,472 square feet (SF) of retail space (i.e., Mendham Village Shopping Center) (no change)

- b. Removal of the health and racquet club
 - c. Replacement of the racquet club with a 75-unit multi-family residential building
 - d. Access to the site will be modified by providing two (2) full-movement driveways and one (1) entry-only driveway along East Main Street (all unsignalized)
4. For clarification purposes, it would be beneficial if the number of stories for the residential building (five (5)) was provided within the Introduction section. It is mentioned only in the Site Circulation / Parking Supply portion of the TIS.
 5. Per the turning movement counts obtained, the peak hours were the following:
 - a. Weekday AM peak: 7:15 to 8:15 AM
 - b. Weekday PM peak: 4:45 to 5:45 PM
 - c. Saturday peak: 11:45 AM to 12:45 PM

The data and peak hour determinations are acceptable.

6. Additional clarification is requested regarding the data collection study area. Please explain why turning movement counts for the intersection of Cold Hill Road and East Main Street / Mendham Road (Old Route 24) were not included, as it is approximately 700 feet east of the eastern site driveway.
7. Additional clarification is requested regarding the access driveways for the mixed-use development area. Please explain why the decision was made to convert the western site driveway from two-way (i.e., enter and exit) to entry only.
8. The original traffic volume data from 2019 was grown to the baseline year of 2022. The Applicant utilized the New Jersey Department of Transportation (NJDOT) Annual Background Growth Rate Table value of 1.00 percent. East Main Street / Mendham Road (Old Route 24) is classified as an Urban Minor Arterial in Morris County, per the NJDOT Straight Line Diagrams. For the time period in question, the background growth rate value utilized corresponds to this roadway classification. Hence, the growth rate is acceptable.
9. Additional clarification is requested regarding the as-counted weekday morning, weekday evening, and Saturday midday peak hour trip generation volumes. Please provide a more detailed explanation regarding how these volumes were obtained and what they represent.
10. For the proposed build year of 2024, the Applicant also utilized the NJDOT Annual Background Growth Rate Table value of 1.00 percent. However, from November 2023 through November 2025, the NJDOT Annual Background Growth Rate Table value is 2.50 percent for an Urban Minor Arterial in Morris County. As a result of the discrepancy in annual background growth rate utilized, the No Build and Build Condition traffic volumes will require revision using a rate of 2.50 percent from the 2022 baseline year to the 2024 build year.
11. Additional clarification is requested regarding a future infrastructure improvement project for the area. Under “Other Planned Development Projects,” the Applicant stated that a forthcoming roadway improvement project would restripe East Main Street to provide one (1) lane in each

direction and one (1) shared center-left-turn lane. Please explain if the shared left turn lane would be considered the same as a two-way left turn lane (TWLTL).

12. The Applicant utilized the Institute of Transportation Engineers (ITE) **Trip Generation Manual, 11th Edition** in analyzing volumes for the future street network. The Racquet / Tennis Club (Land Use 491) and the Multifamily Housing (Mid-Rise) (Land Use 221) land uses are acceptable.
13. With the demolition of the health and racquet club, the Applicant proposed a vehicle trip credit related to the amount of vehicles that would no longer visit the site. This resulted in a total of 23 vehicle trips during the weekday evening and Saturday midday peak hours, based on the ITE **Trip Generation Manual**. This methodology is acceptable.
14. The Applicant utilized the ITE **Trip Generation Manual** in analyzing volumes the Multifamily Housing (Mid-Rise) (Land Use 221) land use. This resulted in 28 vehicle trips for the weekday morning peak hour and 29 vehicle trips for the weekday evening and Saturday midday peak hours. The information presented is acceptable.
15. The Applicant stated that internally captured trips may be a component of the travel patterns, since the development will remain mixed-use. However, to be conservative in the analysis, no internal captured trips were considered. This methodology is acceptable.
16. As a result of the incorrect annual growth factor utilized to grow traffic volumes from 2022 to 2024, the Build Condition capacity and Level of Service analyses for the provided in the TIS will require revision.
17. Based on the Build Condition LOS E for the southbound left turns during the weekday evening peak hour at the intersection of East Main Street and Central Site Driveway, there is concern that the revised analyses may result in LOS F. The Applicant should be prepared to develop measures to mitigate the potential operational impact(s) for exiting vehicles at this driveway.
18. The crash history of this area along East Main Street was investigated via the NJDOT Safety Voyager website. The limits utilized were 150 feet from the easterly and westerly driveways. From 2020 through 2024, the following crashes were reported in this area:
 - 2020: 1 – Fixed Object
 - 2021: 1 – Same Direction, Rear End
 - 2022: 1 – Same4 Direction, Rear End
 - 2023: 0
 - 2024: 0 (so far)

The results provided are not reflective of a critical need for design or infrastructure mitigation at a signalized intersection.

Site Circulation / Parking Supply

1. The five (5)-story 75-unit residential building will contain ground floor parking, a separate premium vehicle storage building, and a new surface parking lot with a turnaround drop-off/pick-up area at the center of the proposed residential development.
2. Other improvements will be made to the existing parking area throughout the mixed-use development, including striping for new parking spaces and shared residential visitor parking.
3. Per the Borough of Mendham Ordinance and New Jersey Administrative Code Residential Site Improvements Standards (RSIS), 146 parking spaces are required for the residential building, including two (2) spaces for parking attendant employees. For the existing retail area, the Borough of Mendham requires 283 parking spaces. The total parking requirement is 428 spaces.
4. The Applicant proposes 116 spaces within the residential development area. The retail area is proposed to be restriped and improved in order to provide 341 parking spaces, which would include 28 residential visitor spaces. The total parking would result in 457 parking spaces for the overall site.
5. Additional clarification is requested regarding the parking spaces for residential use. Please explain how the site will distribute the shortfall (i.e., 146 required vs. 116 provided) in the residential component as well as the amount provided in the proposed restriped retail portion of the site.
6. Additional clarification is requested regarding the proposed 28 residential visitor spaces located on the site. Please explain where these spaces would be located in reference to the residential development, as it was not readily apparent on the site plan drawings (C-5 through C-7).
7. While the residential development area requires 146 spaces, six (6) spaces must comply with the American with Disabilities Act (ADA), including one (1) that is van-accessible. With 116 spaces proposed with the residential area, the layout shown in the surface lot and garage area provide seven (7) ADA-compliant spaces, including three (3) van-accessible spaces. The number of ADA-compliant spaces, including van-accessible spaces, is acceptable.
8. For the 116 parking spaces proposed, the Applicant proposes 17 “make-ready” spaces, including one (1) that is ADA compliant. This information is acceptable.

Site Plan

1. As shown on the Site Plan (Drawing C-7), the central site driveway leads to a delineated north-south travel way with proposed mountable island. The northbound and southbound lanes are 12 feet wide, while the mountable island appears to be approximately 5 feet wide.

2. Additional clarification is requested regarding the mountable island. Please provide additional explanation and/or insight regarding the slope(s), height of the pavers, and total height of the island from pavement.
3. The provision of parking along the west side of the northbound/southbound travel way with mountable curb appears to present a circulation concern. There are 17 parking spaces proposed at a 90-degree angle. The travel way width is not large enough to for backing out of a parking space. As a result, in order to safely exit the parking spaces before proceeding southbound towards the central site driveway, drivers will have to travel across the southbound lane and onto the mountable island, potentially encroaching the northbound lane. This seems to present operational challenges for drivers entering and exiting the site from either the central site driveway or the residential building, and may induce congestion in both directions. The location and layout of the parking spaces and travel way should be revisited.
4. Truck Turning templates have been provided as Drawings C-26 through C-28. Drawings C-26 and C-27 utilized the WB-67 design vehicle to demonstrate tractor trailer parking in the loading bay for the supermarket on the premises. Drawing C-28 utilized the Fire Truck design vehicle to demonstrate circulation with the residential development surface lot grounds.
5. Additional clarification is required regarding truck movement and circulation. The easterly site driveway was utilized for the WB-67 entry and exit. For the fire truck, the easterly driveway was utilized for entry, while the central site driveway was utilized for exit. Please explain if designated truck entry and exit areas are to be provided, and how they will be demarcated.
6. Additional clarification is requested regarding truck movement within the residential development. Please explain and/or show via turning template how garbage trucks, furniture/appliance delivery trucks, and rental trucks will circulate. Please provide insight regarding how these vehicles may access the residential area, and if they may use any of the site driveways along East Main Street.
7. Additional clarification is requested regarding the ground floor parking garage and premium garage areas. Please explain if the vertical clearances for both buildings will allow for fire truck access.