KLEIN
TRAFFIC CONSULTING, LLC

156 Walker Road
West Orange, NJ 07052
973-985-3464
leekleintraffic@gmail.com

June 23, 2026
REVISED: August 3, 2026
REVISED: September 1, 2026

Jessica Liebold
Code Enforcement Department
Township of Nutley
1 Kennedy Drive
Nutley, NJ 07110

VIA EMAIL: jliebold@nutleynj.org

Re: *Third* **Traffic Engineering Review**
Proposed Warehouse Development
536-544 Washington Avenue, Block 1502, Lot 12Nutley, Essex County, NJ
PB-26-00002

Dear Ms. Liebold:

I reviewed the Preliminary and Final Major Site Plan for 536-544 Washington Avenue, dated 3/18/2026, consisting of 10 sheets, Alternate Site Plan, dated 07/19/2026, prepared by MCB Engineering Associates, LLC. I also reviewed the Circulation drawings, consisting of 15 sheets, revision 01 dated 06/25/26, date prepared 07/21/2026, prepared by Stonefield. I reviewed the architectural plans dated 03/18/26, by Sanbar Design. *I also reviewed the Traffic Engineering Review Response Letter, dated August 26, 2026, prepared by Stonefield.* **The Applicant's RESPONSES are in bold.** I offer the following comments:

1. The Applicant did not provide a traffic analysis or a trip generation calculation for the proposed 24,740 square foot warehouse. According to the *Trip Generation, 12th Edition*, published by the Institute of Transportation Engineers (ITE), a 30,094 square foot warehouse would generate approximately 17 vehicle trips during the weekday AM peak hour and 23 vehicle trips during the weekday PM peak hour. However, the size of this proposed warehouse at 30,094 square feet is well below the average size of the sample size of 554,000 square feet. Table 1 – Trip Generation Calculations shows the various trip generation results. According to *Transportation Impact Analysis for Site Development*, published by the Institute of Transportation Engineers (ITE), an increase

of less than 100 vehicle trips would not change the level of service of the local street network nor appreciably increase the volume-to-capacity ratio of an intersection approach. Also, NJDOT Access Management Code considers a significant increase in trips greater than 100 peak hour trips AND greater than a 10 percent increase in previously anticipated daily trips. Therefore, the proposed development does not require a Traffic Impact Study to assess the operations of the driveway or local streets. However, when large tractor trailers circulate in and out of the site, traffic will slow along Washington Avenue. The Applicant shall opine as to the number of trucks per hour and the number of trucks per day that will access the subject property. The change from a 30,094 square foot warehouse, including 5,354 square feet of office space, to a 26,833 square foot warehouse with zero office space results in a reduction of less than 1 trip for each of the peak hours. The Applicant shall provide revised architectural floor plans. **RESPONSE: The Township's Site Plan Application Checklist does not identify a Traffic Impact Study as a required submission item. Consistent with the conclusion stated in the review letter, a Traffic Impact Study is not required to assess the operations of the driveway or local streets. Additionally, revised architectural floor plans have been submitted to the Board. Separately, regarding the estimation of truck traffic, the building is being developed speculatively and does not have a confirmed end user. To estimate truck traffic for the site, truck trip generation calculations were performed using the ITE *Trip Generation Manual*, 12th Edition. The ITE data projects one (1) total truck trip during each of the weekday morning and evening peak hours and 12 total daily truck trips (six (6) entering and six (6) exiting). As noted in the review letter, the size of the proposed warehouse is well below the average size of the ITE sample sites. Therefore, NCHRP Synthesis 298, *Truck Trip Generation Data*, was also reviewed as an independent comparison. Appendix C of the NCHRP report summarizes additional truck trip generation data for light warehouse uses in Fontana, California. The data indicates a daily truck trip generation rate of 0.38 truck trips per 1,000 SF of warehouse space (ITE rate: 0.43 per 1,000 SF) and weekday morning and evening peak-hour truck trip generation rates of 0.03 truck trips per 1,000 SF (ITE rate: 0.02 per 1,000 SF). Accordingly, the two independent data sources produce generally consistent results, indicating approximately one (1) truck trip during each peak hour and approximately 10 to 12 total one-way truck trips, or approximately five (5) to six (6) truck visits, over the course of a typical weekday.** *The Applicant shall provide testimony.*

2. The Applicant shall opine as to the separation of 83 feet between the exit driveway and Wilmington Drive and how site-generate traffic and Wilmington Drive traffic will interact. **RESPONSE: The Applicant is requesting a design waiver from the suggested 100-foot driveway separation, where practicable, as the proposed exit driveway is located approximately 83 feet from Wilmington Drive. The anticipated trip generation associated with the proposed warehouse is relatively low. In addition, the proposed egress driveway is restricted to right-turn movements only, which directs exiting site traffic northbound away from Wilmington Drive. Truck traffic is also anticipated to**

originate from and return to Route 3 to the north; therefore, truck traffic associated with the site would not be expected to travel past Wilmington Drive when entering or exiting the property. Based on the low anticipated traffic volumes and proposed circulation pattern, significant interaction between site-generated traffic and Wilmington Drive traffic is not anticipated. *The Applicant shall provide testimony.*

3. The Applicant shall opine as to the route of travel that any truck traffic arriving to and departing from the subject property would take. If all traffic is expected to be oriented to and from Kingsland Rod, then the entrance driveway should be redesigned to orient traffic entering from the north, like the orientation of the exit driveway oriented toward the north. **RESPONSE: Although the proposed ingress driveway has been designed to accommodate traffic from both directions, truck traffic is anticipated to originate from Route 3 to the north via Kingsland Road. Accordingly, trucks entering the site will approach from the north and make a left turn into the proposed ingress driveway. Although the ingress driveway is not angled to the same degree as the proposed egress driveway, the proposed curb opening is approximately 80 feet wide and the driveway is approximately 28.5 feet wide. This geometry provides sufficient width to facilitate truck ingress movements, as demonstrated by the truck circulation exhibits prepared by Stonefield and submitted as part of the application. Accordingly, further modification of the ingress driveway configuration is not considered necessary.** *The Applicant shall provide testimony.*
4. The Site Plan, sheet 2 of 10 of the site plan set shows the off-street parking computations based on 5,354 square feet of office space at 1 parking space per 300 square feet or 18 parking spaces, and 1 parking space per 3,000 square feet for the 24,740 square feet of warehouse space or 9 parking spaces for a total of 27 parking spaces required. However, the computations show a total of 10 employees or 3 parking spaces required. The Applicant shall provide testimony regarding the actual occupancy of the proposed office and warehouse, including any expectations for visitors. If not all the 26 parking spaces along the rear property line are not required by the end user, then some of those parking spaces should be "banked" and replaced with pervious surface. The Alternate Site Plan shows the "Off-street Parking Computations" as requiring 9 parking spaces. The "Off street Parking Computations" have removed the "Office" component of the warehouse. The Applicant shall provide testimony regarding where and how the warehouse administrative staff will be accommodated. **RESPONSE: The revised Site Plan calculates the parking requirement in accordance with Section 700-91 of the Township Ordinance, which requires one (1) parking space for each four (4) employees, but in no case less than one (1) parking space for each 3,000 square feet of total floor area. Based on 10 employees, three (3) parking spaces would be required; however, the 26,833-square-foot building results in a requirement of nine (9) parking spaces, which governs. The revised Site Plan proposes 19 parking spaces and therefore exceeds the ordinance requirement by 10 spaces. The building is being developed speculatively and an end user has not yet been identified. Maintaining parking in excess of the minimum requirement provides flexibility to accommodate a**

future warehouse tenant that may have greater staffing, administrative, or visitor parking needs. Accordingly, the Applicant does not propose to bank the additional parking spaces. *The Applicant shall provide testimony.*

5. The Applicant shall describe the walking path between the rear parking spaces and the entrance in the Lobby. There is a 4-foot wide sidewalk along the south side of the building. However, pedestrians will be required to cross in front of the loading dock area. The Applicant shall opine as to what safety measures would be required to create a safe path between the 26 parking spaces in the rear and the Lobby entrance. The Applicant shall provide testimony regarding the walking path for parking spaces 1 through 12. There is no sidewalk on the north side of the building. The Applicant shall provide testimony regarding the hours of operation of the ~~office~~ warehouse and hours of operation of the loading docks. **RESPONSE: The revised Site Plan provides building entrances at the rear of the site near both the northern and southern ends of the building. Employees parking within the rear parking area will utilize these entrances based on the location of their parking space. As is typical of parking facilities, pedestrians will be required to walk within and cross portions of the parking lot drive aisles. Certain employees may also cross portions of the loading area when traveling between their parking space and a building entrance. The parking area will primarily serve employees who are familiar with the site layout and circulation pattern rather than customers or other first-time visitors. The Applicant will provide testimony regarding site operations, loading activity, and operational safety measures that will be implemented to manage interaction between pedestrians and truck activity.** *The Applicant shall provide testimony.*
6. The site plan is proposed with ~~2~~ 1 ADA parking spaces, which is adequate for ~~28~~ 19 parking spaces. The site plan shall show the location of a crosswalk from the ADA parking spaces to the accessible office entrance. The Applicant shall provide testimony regarding the adequacy of the ADA accessible path(s) based on slope. **RESPONSE: Testimony will be provided regarding the ADA-accessible parking space, accessible route, and associated site improvements.**
7. ~~The Applicant shall provide signage to direct motorists to the ADA parking spaces.~~
8. The Applicant proposes ~~2~~ 1 Electric Vehicle Charging Station (EVCS)/make-ready parking spaces on the site plan and takes a credit of 1 additional parking spaces for a total of ~~29~~ 20 equivalent parking spaces. The Applicant has not accounted for the EVCS Credit. The Applicant shall provide testimony regarding the change in the parking requirement from 27 to 9 parking spaces and the parking supply change from 29 to 19 parking spaces. **RESPONSE: Acknowledged. Testimony will be provided regarding the EVCS/make-ready parking space and the revised parking requirement and supply.**
9. The Applicant proposes 4 loading stalls to meet their off-street loading computations. **RESPONSE: Acknowledged.** *The Applicant shall provide testimony.*
10. The Applicant shall provide a vehicle turning template for the largest tractor trailer that will access the subject property. The path shall be entering the site, circulating to and maneuvering into the western-most dock, then exiting the dock, and exiting the site.

The Applicant shall show tractor trailers in the other 3 loading docks when preparing the turning templates. The Applicant shall provide testimony that the tractor trailer in the turning templates will be the largest anticipated vehicle that will access the subject property. The Applicant shall present the 15 vehicle turning template exhibits. The Applicant shall provide testimony regarding the potential to maintain the landscaped buffer on the right rear corner of the property. The Applicant shall provide an Alternate Site Plan where the landscape buffer in the right rear corner of the property can be maintained. **RESPONSE: The 15 submitted truck circulation exhibits reflect the requested vehicle maneuvering parameters. Testimony will be provided regarding the anticipated truck sizes and proposed truck circulation accommodations. The proposed landscape buffer complies with the applicable ordinance requirements, and no increase to the buffer is proposed.** *The Applicant shall provide testimony.*

11. The fire official should provide comments on emergency vehicle access and circulation. **RESPONSE: Acknowledged.**
12. The Applicant shall provide testimony regarding the hours and days of operation of the proposed facility, staffing levels, shifts, etc. **RESPONSE: The proposed building is being developed speculatively and no end user has been identified at this time. Accordingly, specific operational details, including hours, staffing levels, and shift schedules, are not presently available. Any future operations will be required to comply with all applicable state and local requirements.** *The Applicant shall provide testimony.*
13. The Applicant shall testify if customers are expected to visit the warehouse. If so, the Applicant shall provide adequate signage to direct customers to the appropriate parking spaces. **RESPONSE: The proposed building is being developed speculatively and no end user has been identified at this time. Accordingly, the extent of customer or visitor activity is not presently known. Appropriate parking and directional signage will be provided as required based on the needs of the future tenant.** *The Applicant shall provide testimony.*
14. The Alternate Site Plan removed 3 angled parking spaces in the front yard, which accommodated the ADA parking requirement. The Applicant shall provide testimony regarding ADA parking accommodations and the ADA accessible path between the ADA accessible entrance to the building and the ADA parking space. **RESPONSE: The required ADA parking space is provided within the rear parking area. Testimony will be provided regarding the ADA-accessible path between the parking space and the accessible building entrance.**
15. The Applicant shall provide revised architectural floor plans. **RESPONSE: Revised architectural floor plans reflecting the current warehouse configuration have been submitted to the Board.** *The Applicant shall provide testimony regarding the access for people to enter the building from the parking spaces.*
16. The Alternative Site Plan located the trash enclosure in the right rear corner of the property. Sheets 2 and 3 of 15 show the path of the rear-loading trash collection vehicle. **RESPONSE: Acknowledged.**

17. <u>The Alternative Site Plan removed 4 or 5 parking spaces in the right rear portion of the lot to better accommodate the large vehicle circulation. The Applicant shall provide an Alternate Site Plan where the landscape buffer in the right rear corner of the property can be maintained.</u> **RESPONSE: The proposed landscape buffer complies with the applicable ordinance requirements. Accordingly, no additional increase in the landscape buffer is proposed.**

I reserve the right to make additional comments and ask additional questions at the public hearing. If you have any questions, please contact me at 973-985-3464.

Very truly yours,

Lee D Klein

_____

Lee D. Klein, P.E., PTOE
NJPE 24GE03710400
PTOE Certification 1627
https://d.docs.live.net/aea953f91575cccf/Documents/WORK/Nutley-536-544Washington/Klein-2ndTrafficReview_PB-26-00002_Nutley_Rev090126.docx