

Dynamic Traffic, LLC 1904 Main Street Lake Como, NJ T. 732.681.0760

February 17, 2022 Via Fed-Ex

Township of Franklin Planning Board 475 DeMott Lane Somerset, NJ 08873

Attn: Christine Woodbury, Secretary

Re: Traffic Impact and Parking Assessment Proposed Warehouses Block 517.06 – Lot 15.10 200 Cottontail Lane Township of Franklin, Somerset County, NJ DT # 3566-99-004T

Dear Planning Board Members:

Dynamic Traffic has prepared the following assessment to determine the traffic impact and adequacy of access, circulation, and parking associated with redevelopment of a site located on the east side of Cottontail Lane between Campus Drive to the north and Memorial Drive to the south in the Township of Franklin, Somerset County, New Jersey (see Site Location Map). The site is designated as Block 517.06 – Lot 15.10 on the Franklin Township Tax Maps. The site is currently developed with an approximate 193,000 SF office building. It is proposed to raze the site and construct two warehouse buildings with a total size of 235,855 SF (inclusive of 11,793 SF of office space) (The Project). Access to the site is currently provided via two full movement driveways along Cottontail Lane. It is proposed to construct minor geometric improvements to the existing driveways while maintaining the existing access configuration.

This assessment documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.
- A comparison between the existing and proposed traffic generation was conducted in order to determine the traffic impacts of the proposed development.
- The proposed site driveways were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.

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Lake Como, NJ • Chester, NJ • Toms River, NJ • Newark, NJ • Newtown, PA • Philadelphia, PA Bethlehem, PA • Allen, TX • Houston, TX • Austin, TX • Delray Beach, FL • The parking layout and supply was assessed based on accepted design standards and the requirements of the Township Ordinance

Existing Conditions

<u>Cottontail Lane</u> is a local roadway under the jurisdiction of the Township of Franklin with a general north/south orientation. In the vicinity of the site the speed limit is unposted and the roadway provides one travel lane in each direction. On-street parking is prohibited along both sides of the roadway. Curb is provided along both sides of the roadway while sidewalk is not provided along either side of the roadway. Cottontail Lane provides a straight horizontal alignment and a rolling vertical alignment. The land uses along Cottontail Lane in the vicinity of The Project are primarily industrial.

Site Generated Traffic

Trip generation projections for the existing and proposed uses were prepared utilizing trip generation research data as published under Land Use Code (LUC) 150 – Warehousing and LUC 710 – General Office Building in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation*, 11th *Edition*. This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country.

The projected truck trips were prepared utilizing ITE published data. Specifically, ITE has determined the following truck percentages for the corresponding time periods.

- Land Use Code 150 Warehousing
 - \circ AM PSH = 13%
 - \circ PM PSH = 15%
 - Weekday Daily = 27%
- Land Use Code 710 General Office Building
 - \circ AM PSH = 1%
 - \circ PM PSH = 1%
 - Weekday Daily = 1%

The following table details the trip generation associated with the existing use on-site and compares it to the trip generation of the proposed use.

Land Use	Trip	AM PSH			PM PSH			Weekday Daily		
	Туре	In	Out	Total	In	Out	Total	In	Out	Total
Existing 193,000 SF Office Building	Total	260	35	295	49	238	287	1,046	1,046	2,092
	Trucks	3	-	3	-	3	3	10	11	21
	Cars	257	35	292	49	235	284	1,036	1,035	2,071
Proposed 235,855 SF Warehouse	Total	40	12	52	15	40	55	206	205	411
	Trucks	5	2	7	2	6	8	56	55	111
	Cars	35	10	45	13	34	47	150	150	300
Difference	Total	-220	-23	-243	-34	-198	-232	-840	-841	-1,681
	Trucks	+2	+2	+4	+2	+3	+5	+46	+44	+90
	Cars	-222	-25	-247	-36	-201	-237	-886	-885	-1,771

Table ITrip Generation Comparison

As shown above, the proposed redevelopment from the existing office use to warehouse use is anticipated to generate 243 fewer trips during the weekday morning peak hour, 232 fewer trips during the weekday evening peak hour, and 1,681 fewer weekday daily trips. It should be noted that the 4 additional trucks during the weekday morning peak hour, 5 additional trucks during the weekday evening peak hour, and 90 additional weekday daily trucks are anticipated to be complementary to the existing truck traffic patterns along Cottontail Lane due to the other existing warehouse uses.

It should be noted that the traffic anticipated by the warehouse use falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour." Additionally, NJDOT has determined that the same 100 vehicle threshold is considered a "significant increase in traffic". The proposed warehouse use will generate less traffic than the existing office use.

Site Access, Parking and Circulation

The site was reviewed with respect to the site access and on-site circulation design. As previously noted, access to the site will be provided via minor modifications (increase driveway radii) to the two existing full movement driveways along Cottontail Lane.

The site will be served by 26 foot wide parking aisles for two-way movements, which allows for full site circulation for the anticipated vehicle mix on site and exceeds generally accepted design standards. Note that the minimum aisle width of the anticipated truck path on-site is 30'.

It is proposed to provide 141 parking spaces in support of The Project. The Ordinance sets forth a parking requirement of 1 parking space per 1,000 SF of GFA for the first 5,000 SF, 1 parking space for each 2,500 SF thereafter for warehouse and distribution uses, and 1space for each 250 square feet of gross floor area for general and professional offices. With 224,062 SF of warehouse space and 11,793 SF of office space this equates to a parking requirement of 141 parking spaces. Consequently, the Ordinance parking requirements are satisfied and the proposed parking supply will be sufficient to support the anticipated demand of the project. The proposed parking stalls are 9'x18' which satisfies the Ordinance requirement of 9'x18'.

Additionally, it is proposed to provide 61 loading spaces (30 on north building & 31 on south building). It should be noted that the Ordinance does not set a specific loading requirement for the proposed warehouse use; however, the 61 proposed loading spaces are anticipated to adequately support the anticipated truck demand. The proposed loading stalls are 13.5'x60' which satisfies the Ordinance minimum requirement of 12'x48'.

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 235,855 SF warehouse is projected to generate 220 fewer entering trip and 23 fewer exiting trips during the weekday morning peak hour, 34 fewer entering trips and 198 fewer exiting trips during the weekday evening peak hour, and 840 fewer entering weekday daily trips and 841 fewer exiting weekday daily trips when considering the traffic associated with the existing office development.
- Access to the site is proposed to be maintained in the same location along Cottontail Lane with minor modifications to the radii.
- The Project's site driveways and internal circulation have been designed to provide for safe and efficient movement of automobiles and trucks.
- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Ordinance requirements.

Conclusion

Based upon our Traffic Impact and Parking Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the Township of Franklin will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways provide safe and efficient access to the adjacent roadway system. The site plan provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

If you have any questions on the above, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC

J√stin Taylor, PE, PTOE Principal NJ PE License 45988

JPT;jdp Enclosures

Nick Verderese, PE Senior Principal NJ PE License 38991

c: Josh Sewald/Kyle Kavinski (via email w/ enclosures)

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