

December 1, 2022 Via Fed-Ex

Township of Franklin 475 DeMott Lane Somerset, NJ 08873

Attn: Zoning Board of Adjustment

RE: Traffic & Parking Impact Assessment

Odin Pharmaceuticals, LLC
Proposed Building Expansion
300 Franklin Square Drive

Township of Franklin, Somerset County, NJ

DT# 2137-99-001T

Dear Board Members,

Dynamic Traffic has prepared the following assessment to determine the traffic impact and adequacy of access, circulation, and parking associated with the expansion of a site located in the southwest quadrant of the intersection of Franklin Square Drive with Davidson Avenue in the Township of Franklin, Somerset County, New Jersey (see Site Location Map). The site is designated as Block 502.02 – Lot 39.05 on the Township of Franklin Tax Maps. The site is currently developed with a 69,139 SF office/warehouse building and it was recently approved for a 70,043 SF addition. It is now proposed to modify the addition to create 26,208 SF of office space (inclusive of 14,048 SF of ancillary space), 39,608 SF of warehouse space (inclusive of 14,048 SF of ancillary space) and 75,104 SF of manufacturing space (inclusive of 14,048 SF of ancillary space) (The Project). Access to the site is currently provided via one full movement driveway along Franklin Square Drive. Access to the site with the proposed expansion will be provided via relocation of the existing driveway further west as well as the construction of two (2) new full movement driveways along Franklin Square Drive at the eastern and western ends of the property. Parking will be provided via 176 on-site parking spaces (including 6 handicap spaces).

Existing Conditions

<u>Davidson Avenue</u> is an urban major collector roadway under the Township of Franklin jurisdiction. The roadway provides one travel lane for each direction of travel with a general north/south orientation and a 45 MPH posted speed limit. Curb is provided along both sides of the roadway. Davidson Avenue provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Davidson Avenue in the vicinity are predominantly commercial.

<u>Franklin Square Drive</u> is a local roadway under the Township of Franklin jurisdiction. The roadway provides one travel lane for each direction of travel with a general east/west orientation and the speed limit is not posted. Curb is provided along both sides of the roadway. Franklin Square Drive provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Franklin Square Drive are primarily commercial in the vicinity of the site.

Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 140 – Manufacturing, LUC 150 – Warehouse 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 following Table I shows the projected trip generation for The Project.

Table I Proposed Trip Generation

Land Haa	AM PSH			PM PSH		
Land Use	In	Out	Total	In	Out	Total
26,208 SF Office	47	6	53	9	46	55
39,608 SF Warehouse	22	6	28	9	22	31
75,104 SF Manufacturing Facility	42	13	55	15	33	48
Total Proposed	111	25	136	33	101	134

As mentioned previously, the site is currently developed with an office/warehouse building. The following Table II provides a trip generation comparison between the existing site and proposed use based on ITE data.

Table II
Trip Generation Comparison

Trip Generation Comparison						
Land Has	AM PSH			PM PSH		
Land Use	In	Out	Total	In	Out	Total
Total Proposed	111	25	136	33	101	134
28,334 SF Office (Existing)	50	7	57	10	48	58
40,805 SF Warehouse (Existing)	22	7	29	9	22	31
Net Increase	+39	+11	+50	+14	+31	+45

As shown above, the proposed expansion is anticipated to generate a maximum of 50 additional new trips to the adjacent roadway network. It should be noted that the number of new trips 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," hence, it is not anticipated that the change in use have any perceptible impact on the traffic operation of the adjacent roadway network.

Site Access, Parking and Circulation

Site Access

As previously noted, access to the site will be provided via three (3) full movement driveways along Franklin Square Drive.

The site will be served by parking aisles with a minimum width of 24' for two-way circulation, which does not satisfy the Ordinance requirement of 26' and a variance is requested. It should be noted that a 24' parking aisle width with 18' long parking stalls meets industry standards and is anticipated to provide adequate space for vehicles to turn into/out of the parking stalls. As such, the Board can feel comfortable granting the variance. Review of the site plan design indicates that the site can sufficiently accommodate, within paved areas, a large wheel base vehicle, such as a WB-50 design vehicle along with other smaller delivery vehicles, emergency vehicles, refuse trucks and the automobile traffic anticipated.

Parking

The Ordinance sets forth a requirement of 1 parking space per 250 SF for office uses, 1 parking space per 1,000 SF up to 5,000 SF then 1 parking space per 2,500 SF of additional SF for warehouse uses and 2 parking spaces per 1,000 SF up to 5,000 SF then 1 parking space per 2,500 SF of additional SF for manufacturing uses. Table III below summarizes the number of parking spaces required per the Ordinance.

Table III
Ordinance Parking Requirements

Land Use	Ordinance Parking Requirement	Size	Ordinance Requirement (spaces)
Office	1 space/250 SF	12,160 SF +	48.64
Office	1 space, 250 S1	14,048 SF Ancillary Space	56.19
Warehouse	1 space/1,000 SF (up to 5,000 SF)	25,560 SF +	13.22
vv arenouse	+ 1 space/additional 2,500 SF	14,048 SF Ancillary Space	8.62
Manufacturing	2 spaces/1,000 SF (up to 5,000 SF)	61,056 SF +	32.42
Facility	+ 1 space/additional 2,500 SF	14,048 SF Ancillary Space	13.62
	173		
	176		
		Difference	+3

Additionally, national parking demand data published by the Institute of Transportation Engineers (ITE) within their publication *Parking Generation*, 5th *Edition* was reviewed. This publication establishes peak parking demands for various land uses based upon counts conducted at study locations throughout the country. Parking demand projections for The Project were prepared utilizing research data as published under LUC 140 – Manufacturing, LUC 150 – Warehouse and LUC 710 – General Office Building. Table IV summarizes the ITE parking demand for The Project.

Table IV ITE Parking Demand

Land Use	ITE Parking Demand	Size	ITE Requirement
Office	2.39 spaces/1,000 SF	26,208 SF	63
Warehouse	0.39 spaces/1,000 SF	39,608 SF	15
Manufacturing Facility	0.92 spaces/1,000 SF	75,104 SF	69
	147		
Proposed Parking Supply			176
	+29		

As shown above, a peak parking demand of 147 spaces is identified by ITE. As designed, the site plan is proposed to construct 176 spaces. The 176 spaces proposed to be constructed are sufficient to accommodate the peak parking demand identified by ITE.

The proposed parking stalls are 9'x18' which satisfies the Ordinance requirement of 9'x18' for the use proposed.

Conclusion

Based upon our Traffic and Parking Impact Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of Township of Franklin will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed 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

Justin Taylor, PE, PTOE

Principal Principal

NJ PE License 45988

Nick Verderese, PE Senior Principal NJ PE License 38991

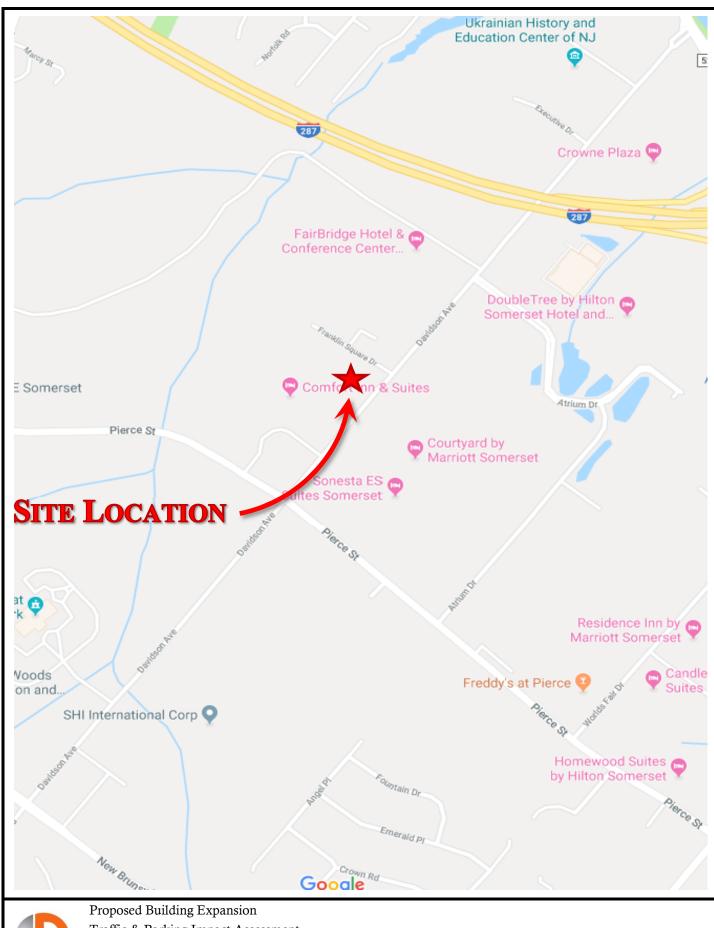
JPT:jdp Enclosures

c: Ilango Subramanian (via email w/enclosure)

Peter Lanfrit, Esq. (via email w/enclosure)

Matt Bersch/Kevin O'Connell (via email w/enclosures

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