
August 5, 2022
Via FedEx

Township of West Orange Planning Board
66 Main Street
West Orange, NJ 07052

Attn: Planning Board Secretary

**Re: Traffic Impact and Parking Assessment
Proposed Residential Subdivision
Block 80.03 – Lots 21 & 10
2 & 10 Ridge Road
West Orange Township, Essex County, NJ
DT # 4266-99-001T**

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 the proposed single-family residential subdivision of a site located on the corner of Mount Pleasant Avenue (CR 577) and Ridge Road in the Township of West Orange, Essex County, New Jersey. The site is designated as Block 80.03 – Lots 21 and 10 on the Township of West Orange Tax Maps. The site is currently undeveloped and access is not provided. It is proposed to construct four (4) single-family dwelling units (The Project) on the subject property. Access to the site is proposed via four (4) driveways, one (1) for each single-family home.

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.
- 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.
- The parking supply was assessed based on accepted design standards and demand experienced at similar developments.

Existing Conditions

Mount Pleasant Avenue (CR 577) is an Urban Principal Arterial roadway under Essex County jurisdiction with a general east/west orientation. In the vicinity of the site, the posted speed limit is 40 MPH and 20 MPH for Trucks and Buses. The roadway provides one (1) travel lane in each direction proximate to the site and on-street parking is not permitted along either side of the roadway. Curb is provided along both sides of the roadway and sidewalk is periodically provided along the northerly side of the roadway. Bus stops for NJ Transit Bus Route 71 are located proximate to the site along Mount Pleasant Avenue at the corner of Ridge Road. NJ Transit Bus Route serves stops to/from Fairfield and Newark and provides service to Newark Penn Station. Mount Pleasant Avenue provides a straight horizontal alignment along the site frontage and a slight downhill vertical alignment in the eastbound direction. Approximately 600 feet east of Ridge Road, Mount Pleasant Avenue transitions into a general north/south orientation. To the west of Prospect Street, Mount Pleasant Avenue becomes Route 10 and is under the jurisdiction of the New Jersey Department of Transportation (NJDOT). The land uses along Mount Pleasant Avenue in the vicinity of The Project are a mix of commercial and residential.

Ridge Road is a local roadway under West Orange Township jurisdiction with a general north/south orientation. The roadway provides one (1) travel lane in each direction. On-street parking is permitted along both sides of the roadway. Curb is periodically provided along both sides of the roadway and sidewalk is not provided. Ridge Road provides a straight horizontal alignment along the site frontage and a flat vertical alignment. The land uses along Ridge Road in the vicinity of The Project are residential.

Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 210 – Single-Family Detached Housing in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, Eleventh Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites. The **Table I** shows the anticipated trip generation for The Project.

Table I
Trip Generation

Use	AM PSH			PM PSH			Sat PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
Proposed Four (4) Single-Family Homes <i>ITE LUC 210</i>	1	3	4	3	2	5	7	6	13

According to the trip generation calculations the proposed development would generate four (4) trips during the weekday morning peak hour, five (5) trips during the weekday evening peak hour, and 13 trips during the Saturday midday peak hour. It should be noted that the number of new trips falls significantly 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

As previously noted, access to the site will be provided via four (4) driveways, one (1) for each single-family home along Ridge Road. The Township of West Orange Ordinance and the Residential Site Improvement Standards (“RSIS”) (N.J.A.C. 5:21-4.14) state that a two-car garage and driveway combination shall count as 3.5 off-street parking spaces, provided that a minimum parking width of 20 feet is provided for a minimum length of 18 feet between the face of the garage door and the right-of-way. It is anticipated that each single-family home would provide a two-car garage (minimum) and more than 18 feet is provided between the garage and right-of-way. As such, the proposed single-family homes are anticipated to provide a minimum of 3.5 vehicle spaces and the proposed development would provide a total parking supply of 14 spaces. The Township of West Orange Ordinance defers to the RSIS regarding residential parking requirements which states a requirement of 3.0 parking spaces per five-bedroom single-family detached dwelling. For the four (4) single-family homes, this equates to a parking requirement of 12 parking spaces. Consequently, the Ordinance parking requirements are met and the proposed parking supply will be sufficient to support the anticipated demand of the project.

Findings

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

- The proposed single-family residential subdivision will generate four (4) trips during the weekday morning peak hour, five (5) trips during the weekday evening peak hour, and 13 trips during the Saturday midday peak hour which is not anticipated to have a significant impact on the traffic operations of the adjacent roadway network.
- Access to the site will be provided via four (4) driveways, one (1) for each single-family home along Ridge Road.
- As proposed, The Project’s access has been designed to provide for safe and efficient movement of automobiles.
- The proposed parking supply and design is sufficient to support the projected demand and exceeds the RSIS and Ordinance requirements.

Conclusion

Based upon our Traffic 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 West Orange, Essex County, and NJDOT will not experience any significant degradation in operating conditions with the development 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 effective 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



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JPT/sqb

c: Will Cummings (via email w/encl.)
Ryan Ward/Robert Freud (via email w/encl.)