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July 19, 2021

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

Attn: Planning Board

**Re: Traffic Impact and Parking Assessment  
Altera Development Company, LLC  
Block 166.15 – Lot 9  
769 Northfield Avenue  
Township of West Orange  
Essex County, NJ  
DT # 2530-99-006T**

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 proposed site improvements to an existing office building at 769 Northfield Avenue in the Township of West Orange, Essex County, New Jersey (see Figure 1). The site is designated as Block 166.15 – Lot 9 on the Township of West Orange Tax Maps and is currently developed with a 67,803 square foot, 3-story office building. It is proposed to renovate the existing office building and improve the parking and circulation at the rear of the building in connection with achieving compliance with ADA requirements (The Project).

Access to the site is currently provided via separate ingress and egress driveways along Northfield Avenue and this access configuration is proposed to remain after the site improvements are constructed. A total of 226 parking spaces are provided for the building and the number of spaces will remain at 226 spaces after the reconfiguration of the rear parking field and circulation.

### **Existing Conditions**

Northfield Avenue is an Urban Principal Arterial roadway under Essex County jurisdiction with a general east/west orientation, designated as County Route 508. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides two travel lanes in each direction with a two-way center left-turn lane. Curb and sidewalk are provided along both sides of the roadway. Northfield Avenue provides a straight horizontal alignment along the site frontage. The land uses along Northfield Avenue in the vicinity of The Project are primarily commercial.

### Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 720 – Medical-Dental Office Building in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, Tenth Edition*. This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country. The following table shows the trip generation potential of the property during peak street hours (PSH), which will remain unchanged between existing and proposed conditions as no modifications are proposed to the size of the building.

**Table I**  
**Trip Generation**

| Use                                      | AM PSH |     |       | PM PSH |     |       | Sat PSH |     |       |
|------------------------------------------|--------|-----|-------|--------|-----|-------|---------|-----|-------|
|                                          | In     | Out | Total | In     | Out | Total | In      | Out | Total |
| 67,803 SF Medical-Dental Office Building | 123    | 35  | 158   | 65     | 167 | 232   | 162     | 122 | 284   |

### Site Access, Parking and Circulation

As previously noted, access to the site will remain unchanged via separate ingress and egress driveways along Northfield Avenue. The driveways provide access to/from a small parking area in front of the building and via separate one-way aisles on either side of the building, access to/from the main parking field in the rear of the building. Under existing conditions, vehicles must circulate to the rear of the parking field from the easterly ingress drive aisle in order to access the westerly egress drive aisle. Additionally, no patient drop-off area is provided. The proposed reconfiguration brings inbound vehicles to a one-way drop off area or, a drive aisle with ADA compliant parking stalls located at the rear of the building. Vehicles can then turn left to circulate to the westerly drive aisle for egress or turn right to proceed into the parking field which will provide full two-way circulation throughout. This is an improved site circulation scheme that will be more efficient for vehicular access on the property and provide improved access to the building and comply with ADA accessibility standards.

It is proposed to continue to provide 226 parking spaces to serve the building. The Ordinance sets forth a requirement of 1 parking space per 200 SF which equates to a parking requirement of 339 parking spaces. This is an existing condition and will not be exacerbated by the proposed site enhancement. In fact, pursuant to the 5<sup>th</sup> Edition of Parking Generation, published by ITE, the average peak demand for medical office buildings is 3.23 vehicles per 1,000 square feet. This equates to a peak demand of 219 parking spaces for the 67,803 square foot building. Therefore, it is expected that the existing parking supply will be adequate for the maximum anticipated demand.

### 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 and Essex County will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways are located to continue to provide safe and efficient access to the adjacent

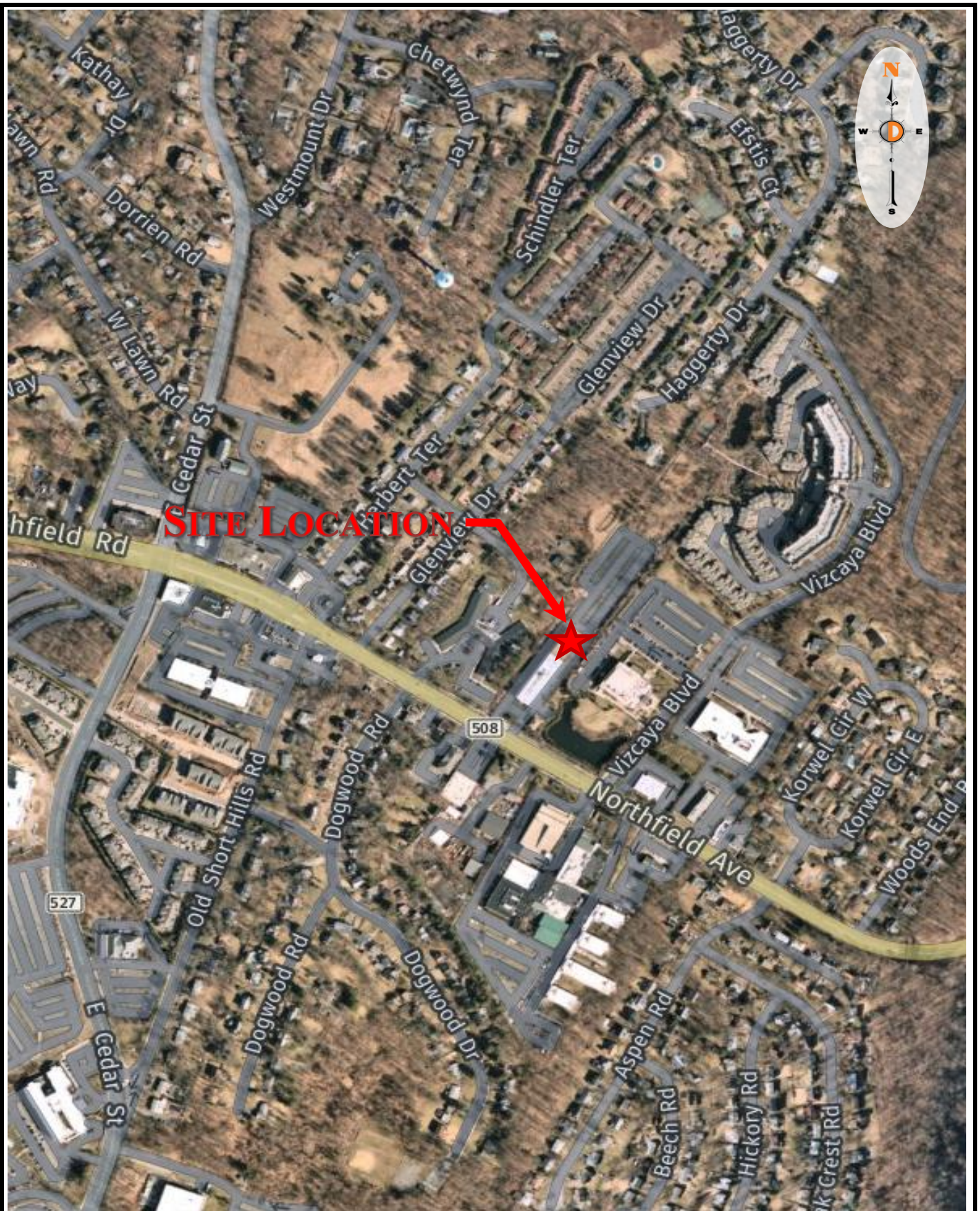
roadway system. The site plan as proposed provides for improved circulation throughout the site and provides adequate parking to accommodate The Project's needs.

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

Sincerely,  
**Dynamic Traffic, LLC**

A handwritten signature in black ink, appearing to read 'CWP', with a long horizontal stroke extending to the right.

Craig W. Peregoy, PE  
Principal  
NJ PE License 45880



Proposed Medical Office Site Improvements  
Traffic & Parking Assessment  
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7/15/2021

Figure 1

Site Location Map