

STONEFIELD

September 24, 2021

Planning Board
Township of West Orange
66 Main Street
West Orange, New Jersey 07052

**RE: Traffic & Parking Assessment Report
Proposed Renovation and Addition
66 Franklin Avenue
Block 134.02, Lots 75.03, 79 & 81
Township of West Orange, Essex County, New Jersey
SE&D Job No. RUT-210050**

Dear Board Members:

Stonefield Engineering and Design, LLC ("Stonefield") has prepared this analysis to examine the potential traffic and parking impacts of the proposed renovation and addition to an existing building on the adjacent roadway network. The subject property is located along the easterly side of Franklin Avenue between Chestnut Street and Elm Street in the Township of West Orange, Essex County, New Jersey. The subject property is designated as Block 134.02, Lots 75.03, 79, and 81 as depicted on the Township of West Orange Tax Map. The site has approximately 100 feet of frontage along Franklin Avenue. The existing site contains a one (1)-story commercial building on Lot 75.03 and unpaved parking lot on Lots 79 and 81. The existing building consists predominately of storage space within the first floor and basement. Existing access is provided via one (1) full-movement driveway along Franklin Avenue. Under the proposed development program, the existing building would be renovated and expanded to provide a three (3)-story building with 804 square feet of office and conference space, 2,266 square feet of storage space, and one (1) three-bedroom residential unit with attic on the second and third floors. No changes to the existing basement are proposed. Further, the existing parking lot would be paved and striped to provide 11 parking spaces. Access is proposed to be provided via one (1) full-movement driveway along Franklin Avenue controlled by an electronic sliding gate.

Existing Conditions

The subject property is located along the easterly side of Franklin Avenue between Chestnut Street and Elm Street in the Township of West Orange, Essex County, New Jersey. The subject property is designated as Block 134.02, Lots 75.03, 79, and 81 as depicted on the Township of West Orange Tax Map. The site has approximately 100 feet of frontage along Franklin Avenue. Land uses in the area are predominately residential, with a mix of educational and commercial uses.

Franklin Avenue is classified as an Urban Major Collector roadway with a general north-south orientation and is under the jurisdiction of the Township of West Orange. Along the site frontage, the roadway provides one (1) lane of travel in each direction and has a posted speed limit of 25 mph. Curb and sidewalk are provided along both sides of the roadway, shoulders are not provided, and on-street parking is permitted along both sides of the roadway. Franklin Avenue provides north-south mobility within the Township of West Orange for primarily residential uses along its length.

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Trip Generation

Trip generation projections for the proposed renovation and addition were prepared utilizing the ITE Trip Generation Manual, 10th Edition. The proposed development would be occupied by a landscaping and construction company, therefore trip generation rates associated with Land Use 180 "Specialty Trade Contractor" were cited for the combined 804-square-foot office and conference space and 2,266-square-foot storage space. Trip generation rates associated with Land Use 210 "Single-Family Detached Housing" were cited for the proposed one (1) residential unit. **Table I** provides the weekday morning and weekday evening peak hour trip generation volumes associated with the proposed development.

TABLE I – PROPOSED TRIP GENERATION

Land Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
1 Unit Single-Family Detached Housing <i>ITE Land Use 210</i>	0	1	1	1	0	1
3,070 SF Specialty Trade Contractor <i>ITE Land Use 180</i>	4	1	5	2	4	6
Total	4	2	6	3	4	7

The proposed development is expected to generate six (6) new trips during the weekday morning peak hour and seven (7) new trips during the weekday evening peak hour. Based on Transportation Impact Analysis for Site Development published by ITE, a trip increase of less than 100 vehicle trips would likely not change the level of service of the adjacent roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach. As such, the proposed development is not anticipated to significantly impact the operations of the adjacent roadway network.

Site Circulation/Parking Supply

A review was conducted of the proposed development using the Site Plan prepared by Stonefield, dated September 24, 2021. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Under the proposed development program, the existing one (1)-story building on the subject site would be renovated and expanded to provide a three (3)-story building with 804 square feet of office and conference space, 2,266 square feet of storage space, and one (1) three-bedroom residential unit with attic on the second and third floors. The existing storage space within the basement level would remain as-is. The existing parking lot would be paved and striped, and a six (6)-foot-tall chain link fence would be installed along its perimeter. Access is proposed via one (1) full-movement driveway along Franklin Avenue and would be controlled via a 20-foot-wide electronic sliding gate. The existing shed located at the southerly corner of the property would be maintained. Pedestrian access would be provided via a five (5)-foot-wide concrete walkway along Franklin Avenue.

Regarding the parking requirements for the proposed development, the Township of West Orange Ordinance requires one (1) parking space per 250 square feet of office space, one (1) parking space per 600 square feet of storage space, and two (2) parking spaces for single-family residential units with three (3) bedrooms. For the proposed 804-square-foot office and conference space, 2,266-square-foot storage space, and one (1) three (3)-bedroom single-family residential unit, this equates to 10 required spaces. The site would provide a total of 11 parking spaces, inclusive of one (1) ADA-accessible parking stall, which meets the parking requirement.

and would be sufficient to support this project's parking demand. Six (6) parking spaces would be (9) feet wide by 18 feet deep in accordance with the Township of West Orange Ordinance and industry standards. The site is expected to park four (4) trailers that would be seven (7) feet wide by 18 feet long and as such, the remaining (5) parking spaces would be 10 feet wide by 20 feet deep.

The parking supply was evaluated with respect to data published within the ITE's Parking Generation, 5th Edition and the New Jersey Administrative Code Residential Site Improvements Standards (RSIS) (NJAC 5:21). The average parking demand rate during the peak weekday period for Land Use 180 "Specialty Trade Contractor" is 1.76 vehicles per 1,000 square feet, which equates to five (5) vehicles for the combined 804-square-foot office and conference space and 2,266-square-foot storage space. RSIS requires two (2) parking spaces for single-family residential units with three (3) bedrooms. As such, the anticipated parking demand for the proposed renovation and addition would be seven (7) parking spaces, therefore, the proposed parking supply of 11 spaces would be sufficient to support the parking demand of the site.

Conclusions

This report was prepared to examine the potential traffic impact of the proposed renovation and addition. The analysis findings, which have been based on industry standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. The site driveway and on-site layout have been designed to provide for effective access to and from the subject property. Based on industry data and characteristics of the site, the parking supply would be sufficient to support this project.

Please do not hesitate to contact our office if there are any questions.

Best regards,



Matthew J. Seckler, PE, PP, PTOE
Stonefield Engineering and Design, LLC