

STONEFIELD

March 24, 2021

Neptune Planning Board
Township of Neptune
25 Neptune Boulevard
Neptune City, NJ 07753

APR 22 2021

**RE: Traffic & Parking Assessment Report
Proposed Mixed-Use Development
NJSH Route 35 & West Bangs Avenue
Block 808, Lots 5-8
Township of Neptune, Monmouth County, New Jersey
SE&D Job PRI-200234**

FILE

Dear Board Members:

Stonefield Engineering and Design, LLC ("Stonefield") has prepared this analysis to examine the potential traffic and parking impacts of the proposed mixed-use development on the adjacent roadway network. The subject property is located along the westerly (southbound) side of NJSH Route 35 between West Bangs Avenue and Monroe Avenue in the Township of Neptune, Monmouth County, New Jersey. The subject property is designated as Block 808, Lots 5-8 as depicted on the Township of Neptune Tax Map. The site has approximately 342 feet of frontage along NJSH Route 35, approximately 173 feet of frontage along West Bangs Avenue, and approximately 168 feet of frontage along Monroe Avenue. The existing site is undeveloped with access provided via three (3) curb-cut driveways along NJSH Route 35, one (1) curb-cut along West Bangs Avenue, and one (1) curb-cut along Monroe Avenue. Under the proposed development program, a four (4)-story mixed-use building consisting of 42 residential units and 4,250 square feet of commercial space would be constructed. Access is proposed via two (2) full-movement driveways along West Bangs Avenue and one (1) full-movement driveway along Monroe Avenue.

Existing Conditions

The subject property is located along the westerly (southbound) side of NJSH Route 35 between West Bangs Avenue and Monroe Avenue in the Township of Neptune, Monmouth County, New Jersey. The subject property is designated as Block 808, Lots 5-8 as depicted on the Township of Neptune Tax Map. The site has approximately 342 feet of frontage along NJSH Route 35, approximately 173 feet of frontage along West Bangs Avenue, and approximately 168 feet of frontage along Monroe Avenue. Land uses in the area are a mix of residential and commercial uses.

NJSH Route 35 is classified as an Urban Principal Arterial roadway with a general north-south orientation and is under the jurisdiction of New Jersey Department of Transportation (NJDOT). Along the site frontage, the roadway provides one (1) lane of travel in each direction and has a posted speed limit of 35 mph. Curb and sidewalk is provided along both sides of the roadway, shoulders are provided along both sides of the roadway, and on-street parking is not permitted. NJSH Route 35 provides north-south mobility within the Township of Neptune and neighboring municipalities and provides access to NJSH Route 66 to the north and NJSH Route 33 to the south for to a mix of commercial and residential uses along its length.

West Bangs Avenue (County Route 17) is classified as an Urban Major Collector roadway with a general east-west orientation and is under the jurisdiction of Monmouth County. Along the site frontage, the roadway provides one (1) lane of travel in each direction and has a posted speed limit of 30 mph. Curb and sidewalk is

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provided along both sides of the roadway, shoulders are not provided, and on-street parking is not permitted. West Bangs Avenue provides east-west mobility throughout the Township of Neptune and provides access to NJSH Route 18 and NJSH Route 33 to the west for a mix of commercial and residential uses along its length.

Monroe Avenue is a local roadway with a general east-west orientation and is under the jurisdiction of the Township of Neptune. 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 is provided along the southerly side of the roadway, shoulders are not provided, and on-street parking is generally permitted along both the sides of the roadway. Monroe Avenue provides east-west mobility throughout the Township of Neptune for access to predominantly residential uses along its length.

NJSH Route 35 and West Bangs Avenue intersect to form a signalized four (4)-leg intersection. The eastbound and westbound approaches of West Bangs Avenue each provide one (1) full-movement lane. The northbound and southbound approaches of NJSH Route 35 each provide one (1) full-movement lane. A crosswalk is provided across the southerly leg of the intersection.

Monroe Avenue and NJSH Route 35 intersect to form an unsignalized four (4)-leg intersection with the eastbound and westbound approaches of Monroe Avenue operating under stop control. The eastbound and westbound approaches of Monroe Avenue each provide one (1) exclusive right-turn lane. The northbound and southbound approaches of NJSH Route 35 each provide one (1) full-movement lane. Crosswalks and pedestrian signals are not provided at the intersection.

Trip Generation

Trip generation projections for the proposed mixed-use development were prepared utilizing the NJDOT's Highway Access Permit System (HAPS) and ITE's Trip Generation Manual, 10th Edition. Trip generation rates associated with Land Uses 221 "Multifamily Housing (Mid-Rise)" and Land Use 820 "Shopping Center" were cited for the proposed mixed-use development consisting of 42 residential units and 4,250 square feet of commercial space. **Table I** provides the weekday morning, weekday evening, and Saturday midday 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			Saturday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
42-Unit Multifamily Housing (Mid-Rise) HAPS Land Use 221	4	11	15	11	7	18	9	9	18
4,250 SF Shopping Center HAPS Land Use 820	2	2	4	28	30	58	27	24	51
Total	6	13	19	39	37	76	36	33	69

As shown in Table I, the proposed development is anticipated to generate a total of 76 trips (38 vehicles) during the critical 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 mixed-use development using the Site Plan prepared by our office, dated March 24, 2021. In completing this review, particular attention was focused on the site access, circulation, and parking supply.

Under the proposed development program, a four (4)-story mixed-use building consisting of 42 residential units and 4,560 square feet of commercial space would be constructed. Access is proposed via two (2) full-movement driveways along West Bangs Avenue and one (1) full-movement driveway along Monroe Avenue.

The proposed building would be located in the easterly portion of the site with the proposed commercial space located on the ground floor and the proposed residential units on floors two (2) through four (4). A portion of the proposed parking supply would be located at grade, with a portion of the parking supply located underneath the second floor of the building. On-site circulation and parking maneuvers would be facilitated via two (2) 24-foot-wide drive aisles that would run parallel to NJSH Route 35 with a connection provided at the center of the site.

Regarding the parking requirements for the residential portion of the proposed development, the Township of Neptune Ordinance references the New Jersey Administrative Code Residential Site Improvements Standards (RSIS) (NJAC 5:21) which requires 1.8 spaces per one-bedroom apartment unit and two 2.0 spaces per two-bedroom apartment unit. For the commercial portion of the proposed development, the Township of Neptune Ordinance requires one (1) space per 250 square feet of gross floor area. For the proposed mixed-use development, which consists of 18 one-bedroom units, 24 two-bedroom units, and 4,250 square feet of commercial space, this equates to 80 spaces and 17 spaces required for the proposed residential and commercial portions of the proposed development, respectively, for a total of 97 total spaces. The proposed development would provide 80 spaces dedicated to the proposed residential units and 17 spaces dedicated to the proposed commercial space for an effective total of 97 spaces, inclusive of four (4) ADA accessible spaces, which meets the Ordinance requirement for each proposed use and the overall site. The spaces would be 9 feet wide by 18 feet deep in accordance with the Ordinance requirements and industry standards.

The parking supply was evaluated with respect to data published within the ITE's Parking Generation, 5th Edition, for Land Use 221 "Multifamily Housing (Mid-Rise)" and Land Use 820 "Shopping Center." The 85th percentile parking demand rate during the peak weekday overnight period for Land Use 221 "Multifamily Housing (Mid-Rise)" is 1.47 vehicles per dwelling unit. The 85th percentile parking demand rate during the peak weekday period for Land Use 820 "Shopping Center" is 3.68 vehicles per 1,000 square feet. For the proposed mixed-use development that consists of 42 residential units and 4,250 square feet of commercial space, this equates to a parking demand of 62 vehicles for the residential portion of the site and 16 vehicles for the commercial portion of the site for an overall demand of 78 vehicles. As such, the proposed residential parking supply of 80 spaces and commercial parking supply of 17 spaces would be adequate to support the anticipated parking demand for each proposed use and the overall site.

Conclusions

This report was prepared to examine the potential traffic and parking impacts of the proposed mixed-use development. 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 driveways and on-site layout have been designed to provide for effective access to and from the subject property. Based on RSIS and the Ordinance parking requirements and published ITE parking demand rates the proposed parking supply would be sufficient to support this project.

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

Best regards,



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