

# TRAFFIC ENGINEERING EVALUATION

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## PROPOSED REDEVELOPMENT

85-87 Storms Avenue  
BLOCK 15203, LOTS 4 & 5  
CITY OF JERSEY CITY  
HUDSON COUNTY, NEW JERSEY

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Prepared for:

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## INTRODUCTION

The purpose of this Traffic Engineering Evaluation is to assess the traffic impacts associated with the redevelopment of the subject property known as Lots 4 & 5 in Block 15203 located at 85-87 Storms Avenue in the City of Jersey City, Hudson County. The site has approximately 50 feet of frontage along the west side of Storms Avenue.

The property in question is in the Neighborhood Commercial Zone (NC). The proposal is to construct a residential building consisting of 23 units of multifamily housing (mid-rise) in four stories over 6 parking spaces enclosed within the ground floor of the building with one driveway on Storms Avenue.

## EXISTING CONDITIONS

The site is located Storms Avenue, one lot south of the intersection of Monticello Avenue. The site is occupied by a two-family home. The surrounding properties generally consist of a mix of commercial and residential uses. The adjacent roadways of Storms Avenue and Monticello Avenue serving the subject site are described as follows:

**Storms Avenue** is a local street under the jurisdiction of the City of Jersey City. Storms Avenue is oriented in a one-way southbound direction, between Bergen Avenue in the north with Jewett Avenue in the south. Near the proposed site, Storms Avenue provides one travel lane with parking permitted on both sides of the street. There are sidewalks on both sides of the street. The statutory speed limit is 25 miles per hour (MPH).

**Monticello Avenue** is a local street under the jurisdiction of the City of Jersey City. There are sidewalks on both sides of the street and parking is permitted on both sides of the street. Monticello Avenue is a two-way street. The posted speed limit is 25 miles per hour (MPH).

### *Bicycle Master Plan 2019*

Near the subject site, as of 9/30/2019, the *Let's Ride JC Bicycle Master Plan* shows a protected, striped bicycle lane southbound on Storms Avenue between Bergen Avenue and Fairmount Avenue. There is a shared use lane on Monticello Avenue, as well as protected bike lanes on Bergen Avenue and Montgomery Street.

### *Pedestrian Enhancement Plan 2018*

Near the subject site, there are no references to the streets surrounding the project in the Pedestrian Enhancement Plan 2018.

### School Travel Plan 2019

Near the subject site, as of July 2019, the Jersey City School Travel Plan conducted walkability audits of Priority Area 3, which follows along Storms Avenue. The result is to enhance pedestrian walkability and safety with enhanced crosswalks within Priority Area 3.

### Crashes (2012 to 2016)

Between the years 2012 and 2016, the School Travel Plan identified one crash involving a pedestrian at Storms Avenue with Monticello Street.

### Mass Transportation Options

Within a few blocks of the subject site, there are bus stops for the 80-bus line to Exchange Place and the 87-bus line to the Hoboken PATH station and Journal Square Transportation Center. With frequent mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location provides an attractive alternative to commuting by car or even owning a car.

### DEVELOPMENT PROPOSAL

The proposed development consists of the construction of 23 units of multifamily housing (mid-rise) in four stories over 6 ground-floor parking spaces. Consistent with the Neighborhood Commercial Zone, there is a minimum parking requirement of 0.2 parking spaces per unit, or 6 parking spaces required. Electric Vehicle Charging Equipment/Make-Ready are proposed for 3 of the 6 parking spaces.

### TRIP GENERATION

According to the Trip Generation Manual, 11<sup>th</sup> Edition published by the Institute of Transportation Engineers, Multifamily Housing (Mid-Rise) includes apartments, townhouses, and condominium located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Trip generation for the proposed 23-unit, residential building was calculated using the current Institute of Transportation Engineers (ITE) Trip Generation, 11<sup>th</sup> Edition. The average trip generation rate for "Dense Multi-Use Urban" setting/location with no rail transit within one-half mile was chosen to replicate the surrounding traffic conditions. Table 1 - Trip Generation Summary, tabulates the vehicle trip generation for the proposed 23-units of Multifamily Housing (Mid-Rise). As shown in Table 1, the proposed 23-units of Multifamily Housing (Mid-Rise) would generate 6 vehicle trips during the AM peak hour, and 6 vehicle trips during the PM peak hour. The existing two, two-family houses have driveways to accommodate parked vehicles and would generate 2 vehicle trips during the weekday AM peak hour and 2 vehicle trips during the weekday PM peak hour.

Also shown in Table 1 are the person trips associated with 23-units of Multifamily Housing (Mid-Rise), which would be 11 person trips during the AM peak hour and 12 person trips during the PM peak hour. Less than one person trip per minute generated by the proposed

development would be accommodated by the existing sidewalk network, existing and proposed bicycle lanes, as well as the existing mass transit system.

According to Transportation Impact Analysis for Site Development, published by the Institute of Transportation Engineers (ITE), an increase of less than 100 vehicle trips would not change the level of service of the local street network nor appreciably increase the volume-to-capacity ratio of an intersection approach. Also, NJDOT Access Management Code considers a significant increase in trips greater than 100 peak hour trips AND greater than a 10 percent increase in previously anticipated daily trips. Therefore, the proposed development is not anticipated to significantly impact the operations of the local streets.

#### SITE PLAN REVIEW

The Redevelopment Plan requires a minimum of 0.2 parking spaces per unit or 6 parking spaces, where there are 6 parking spaces proposed, which meets the minimum parking requirement. Based on NJ legislation C.40:55D-66.18 to 66.21, with 3 parking spaces set up as Electric Vehicle Charging Spaces/Make-Ready, the parking requirement can be reduced by 10 percent or to 5 required parking spaces. With frequent mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location provides an attractive alternative to automobile ownership.

By removing the two 16-foot wide driveways and replacing them with one 10-foot wide driveway, an additional on-street parking space would be made available to the neighborhood.

The bicycle parking requirement is 0.5 bicycle spaces per unit or 12 bicycle parking spaces, where 12 bicycles would be accommodated within the designated Bike Room on the ground floor within the building with access through the garage to the street.

## CONCLUSIONS

Based upon this trip generation evaluation, it is my professional opinion that the proposed 23-unit, Multifamily Housing (Mid-Rise) building would generate less than 10 vehicle trips during the weekday AM and PM peak commuter traffic hours, which would not have a significant impact on traffic conditions. The proposed project would generate 11 person trips during the AM peak hour and 12 person trips during the PM peak hour. With frequent mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location provides an attractive alternative to owning a car. It is also my professional opinion that the distribution of person trips throughout the network of sidewalks and intersections would not have a significant impact to any one intersection.

The proposed 6 on-site parking spaces, where 6 parking spaces are required, will be sufficient to support the demand of the project.

In conclusion, the development of this project would have no significant impact on the traffic operations of area roadways and intersections and would not have a significant impact on local parking conditions.

The foregoing is a true representation of my findings.



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**Table 1 - Trip Generation Summary  
85-87 Storms Avenue, Jersey City, Hudson County, NJ**

CODE	LAND USE	AMOUNT	WEEKDAY					
			AM PEAK HOUR		TOTAL		PM PEAK HOUR	
			IN	OUT	TOTAL	IN	OUT	TOTAL
<b>EXISTING USES</b>								
215	Single-Family Attached (Avg Rate)	2 units	0	1	1	1	0	1
<b>VEHICLE TRIPS</b>								
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	23 units	1	5	6	4	2	6
<b>PERSON TRIPS</b>								
221	Multifamily Housing (Mid-Rise)(Average)(Dense Urban)	23 units	2	9	11	8	4	12

**Source:** *Trip Generation, 11th Edition*, published by the Institute of Transportation Engineers (ITE)

