

TRAFFIC ENGINEERING EVALUATION

PROPOSED MIXED-USE REDEVELOPMENT 252 CENTRAL AVENUE BLOCK 4404, LOT 3 CITY OF JERSEY CITY HUDSON COUNTY, NEW JERSEY

Prepared for:

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April 6, 2022

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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 Lot 3 in Block 4404 located at 252 Central Avenue in the City of Jersey City, Hudson County. The site has approximately 30 feet of frontage along the east side of Central Avenue. The site is in the Neighborhood Commercial (NC) district and is occupied by a former grocery store. The proposal is to construct a mixed-use building to include a total of 8 dwelling units of multifamily housing (mid-rise) in four stories over 1,513 square feet of ground floor retail space, with no proposed on-site parking spaces.

EXISTING CONDITIONS

The site is located at 252 Central Avenue between Franklin Street and Sherman Place. The site is currently occupied by a grocery market. The surrounding properties generally consist of a mix of commercial and residential uses. The adjacent roadways of Central Avenue, Franklin Street, and Sherman Place serving the subject site are described as follows:

Central Avenue is a local street under the jurisdiction of the City of Jersey City, oriented in a north-south direction, between the Paterson Plank Road in the north and Summit Avenue in the south. There are sidewalks on both sides of the street. Parking is permitted on both sides of the street. Central Avenue is posted as a Snow Emergency Route, No Parking When Road is Snow Covered. There are signs posted indicating Zone 16 Permit Parking over 2 hours metered parking, 9 AM to 6 PM, Monday – Saturday. No Parking 9 AM – 10 AM, Monday – Saturday on the east side, and No Parking, 7:30 AM to 9:30 AM on the west side. There are no designated loading zones near the subject site. There is a bus stop on the east side, just north of Franklin Street. There are other multifamily housing units above the commercial spaces within the area that do not have on-site parking. There are approximately 9 parking spaces on the east side of the block of Central Avenue between Franklin Street and Hutton Avenue. There are approximately 11 parking spaces on the west side of the block of Central Avenue between Hutton Avenue and Franklin Street. The statutory speed limit is 25 MPH.

Franklin Street is categorized as a local street under the jurisdiction of the City of Jersey City. Franklin Street is oriented in an eastbound direction, extending between Central Avenue and Ogden Avenue. Near the proposed site, Franklin Street provides a one-lane cartway in each direction. There are a mix of metered (8 meters) and additional standard parallel parking spaces on the block of Franklin Street between Central Avenue and Cambridge Avenue. On both sides of Franklin Street, there are signs posted indicating Zone 16 Permit Parking over 4 hours metered parking, All Times, Monday – Saturday. No Parking 10 AM – Noon, Monday & Thursday on the north side, and No Parking, 10 AM - Noon on the south side. Fairmount Avenue has Resident Parking Zone 11 restrictions for residents only, Monday through Friday, 3 PM to 9 PM. There are sidewalks on both sides of the street. The statutory speed limit is 25 MPH.

Sherman Place is a local street under the jurisdiction of the City of Jersey City, oriented in a one-way, westbound direction, from Central Avenue in the east to Kennedy Boulevard in the west. There are sidewalks on both sides of the street and parking is permitted on both sides of the street. On this block of Sherman Place, there are signs posted indicating Zone 16 Permit Parking over 4 hours metered parking, All Times, Monday – Saturday, and No Parking 10 AM – Noon, Monday & Thursday on the north side, and No Parking, 10 AM - Noon on the south side. There is a one-way westbound bicycle lane on the south side of the street. The statutory speed limit is 25 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 one-way, westbound bicycle lane on Sherman Place, and two-way, shared use lane on Central Avenue.

Pedestrian Enhancement Plan 2018

At the intersection of Central Avenue with Sherman Place and the intersection of Central Avenue with Franklin Street, there are recommendations for crosswalk improvements, upgrade pedestrian countdown timers at the existing traffic signal, raised crosswalks, curb extensions, transit bus bulbs, pedestrian scale lighting, bicycle parking facilities, and high-visibility paint on the pavement.

School Travel Plan 2019

Near the subject site, as of July 2019, the Jersey City School Travel Plan identified the intersection of Central Avenue with Franklin Street as having 2 to 3 bicycle crashes between the years 2012 and 2016.

Vision Zero Action Plan

The *Vision Zero Action Plan*, February 2019 shows Central Avenue as being in the High Injury Network on City Streets. The plan identified Moderate Bike-Ped Injury crashes at Central Avenue with Franklin Street.

Mass Transportation Options

The number 88 bus line, with service between North Bergen and Journal Square, and the 119 with service to/from Bayonne and New York City, stop on Central Avenue at Franklin Street and at Sherman Place. The 2nd Street Light Rail Station is approximately 0.7 miles/14-minute walk from the subject site. With the frequency of mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location is an attractive alternative to owning a car.

DEVELOPMENT PROPOSAL

The proposed development consists of the construction of 8 units of multifamily housing (mid-rise) in four stories over 1,513 square feet of commercial space with no on-site parking. There are no required parking spaces. Tenants of the proposed residential units would access the site via the front doors proposed on Central Avenue.

TRIP GENERATION

According to the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers, “Multifamily Housing (Mid-Rise)” are located in rental buildings that have between three and ten levels (floors). Therefore, trip generation for the proposed 8 units of multifamily housing (mid-rise) was calculated using the current Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* for the land use “Multifamily Housing (Mid-Rise)” in a dense multi-use urban setting/location with no rail transit close-by was used. Table 1, Trip Generation Summary, tabulates the trip generation for the proposed 8 units of multifamily housing (mid-rise) and the proposed 1,513 square feet of retail space.

Based on the size of the retail space, the percentage of trips associated with the retail space would be primarily pass-by trips, which is reflected in the PM peak hour pass-by rate of 100 percent, which was calculated based on ITE standards and is also shown in Table 1. Pass-by trips are trips that are already on the roadway network and are not new trips to the area. The 1,513 square feet of retail space would generate 4 new vehicle trips and 1 pedestrian trip during the weekday AM peak hour and would generate 0 new vehicle trips and 6 pedestrian trips during the PM peak hour. Since no on-site parking is being proposed and there is already high pedestrian activity in this area, most of the new trips to and from this project would be predominantly pedestrian trips. The vehicular trips would park in the on-street parking spaces.

The proposed redevelopment is expected to generate less than 10 new pedestrian trips during the AM or PM peak hours. Because there is no on-site parking, the proposed development is not expected to generate any new vehicular trips. Therefore, in my professional opinion, the increase in pedestrian trips along the existing sidewalks and crossing the existing intersections would not have a significant impact on current intersection operations.

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 parking requirement is zero parking spaces per unit, where the site is proposed with zero parking spaces. Since zero on-site parking spaces are proposed none of the potential residents of this proposed multifamily housing (mid-rise) building would own a vehicle. There is access to frequent mass transportation services, as well as local shopping, dining, and entertainment options; therefore, those residents would not need to own a vehicle.

Rideshare vehicles, such as Uber or Lyft, would park in an available on-street parking space to pick-up or drop-off a passenger associated with the proposed multifamily housing at 252 Central Avenue.

The bicycle parking requirement is 0.5 bicycle spaces per unit or 4 bicycle parking spaces. Bicycle parking could be accommodated within the storage room on the ground floor.

CONCLUSIONS

Based upon our trip generation evaluation, it is our professional opinion that the proposed mixed-use, 8-unit, Multifamily Housing (Mid-Rise) and 1,513 square feet of retail space with no on-site parking would generate little to no new vehicle trips and would not have a significant impact on traffic operations at the adjacent intersections during the weekday AM and PM peak commuting traffic hours.

The proposed development is expected to generate less than 10 new pedestrian trips. Since there is no on-site parking proposed, the project is expected to generate no new vehicular trips. Any ride share trips would be accommodated by on-street parking in the area. Therefore, in my professional opinion, the increase in pedestrian trips along the existing sidewalks and crossing the existing intersections would not have a significant impact on the operations of those intersections.

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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Professional Traffic Operations Engineer 1627

Mixed-Use Development - 252 Central Avenue, Jersey City
 Table 1 Trip Generation Summary

| CODE | LAND USE | AMOUNT | AM PEAK HOUR | | | | PM PEAK HOUR | | | |
|--------------------------|--|----------|--------------|-----|-------|-----|--------------|-------|--|--|
| | | | IN | OUT | TOTAL | IN | OUT | TOTAL | | |
| | | | WEEKDAY | | | | | | | |
| VEHICLE TRIPS | | | | | | | | | | |
| 221 | Multifamily Housing (Mid-Rise)(Average)(Dense Multi-Use Urban-Vehicle Trips) | 8 units | 0 | 2 | 2 | 1 | 1 | 2 | | |
| 822 | Strip Retail Plaza (<40KSF) - Vehicle Trips | 1,513 SF | 2 | 1 | 4 | 5 | 5 | 10 | | |
| | Pass By Percentage (PM) | -100% | | | | (5) | (5) | (10) | | |
| | NEW SHOPPING CENTER TRIPS (Subtotals) | | 2 | 1 | 4 | 0 | 0 | 0 | | |
| | TOTAL PEAK HOUR NEW VEHICLE TRIPS | | 2 | 3 | 6 | 1 | 1 | 2 | | |
| WALK+BIKE+TRANSIT | | | | | | | | | | |
| 221 | Multifamily Housing (Mid-Rise)(Average Rate-Dense Multi-Use Urban-Walk+Bike+Transit) | 8 units | 1 | 3 | 4 | 3 | 1 | 4 | | |
| 820 | Shopping Center (Avg Rates-Walk+Bike+Transit) | 1,513 SF | 1 | 1 | 1 | 3 | 3 | 6 | | |
| | Pass By Percentage (PM) | -100% | | | | (3) | (3) | (6) | | |
| | NEW SHOPPING CENTER TRIPS (Subtotals) | | 1 | 1 | 1 | 0 | 0 | 0 | | |
| | TOTAL PEAK HOUR NEW WALK+BIKE+TRANSIT TRIPS | | 2 | 4 | 5 | 3 | 1 | 4 | | |

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

Google Maps 252 Central Avenue, Jersey City, NJ to 2nd Street Light Rail Station

Walk 0.7 mile, 14 min

