

March 24, 2023 Via FedEx

City of Jersey City Planning Board 1 Jackson Square, 2<sup>nd</sup> Floor Jersey City NJ 07302

Attn: Planning Board Secretary

Re: Traffic and Parking Assessment
Proposed Truck Sales Facility
Block 4101 – Lot 1
361 Tonnele Avenue
City of Jersey City, Hudson County, NJ

DT # 4710-23-00599

# 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 the development of a site located along the southbound side of Tonnele Avenue (US Route 1 & 9) proximate to the Route 139 interchange in the City of Jersey City, Hudson County, New Jersey (see Site Location Map). The site is designated as Block 4101 – Lot 1 on the City of Jersey City Tax Maps. The site is currently undeveloped with access provided along Tonnele Avenue via one (1) right-in/right-out driveway. It is proposed to develop a 240 SF truck sales facility on the undeveloped property (The Project). Access to the site is proposed via the existing right-in/right-out driveway along Tonnele Avenue. Parking will be provided via two (2) on-site parking spaces.

This assessment documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.
- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.
- The proposed site driveway was inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.
- The parking layout and supply was assessed based on accepted design standards and demand experienced at similar developments.

#### **Existing Conditions**

Tonnele Avenue (US Route 1 & 9) is an Urban Principal Arterial roadway under NJDOT jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides two (2) travel lanes in the northbound direction and three (3) travel lanes in the southbound direction along the site frontage, separated by a Jersey barrier. Curb is provided along both sides of the roadway, while sidewalk is provided along the westerly (southbound) and portions of the easterly (northbound) side of the roadway. Tonnele Avenue provides a straight horizontal alignment along the site frontage and a relatively flat vertical alignment. The land uses along Tonnele Avenue in the vicinity of The Project are primarily commercial.

# **Existing Mass Transit Facilities**

It should be noted that the subject property is not located in downtown Jersey City. As such, NJ Transit does not provide significant bus or rail service in the immediate area. Based on the proposed use, patrons and employees are not anticipated to utilize public transportation to access the site.

# **Existing Pedestrian and Bicycle Facilities**

Pedestrian and bicycle facilities are provided in the form of sidewalk along the westerly (southbound) side of Tonnele Avenue and portions of the easterly (northbound) side of the roadway. The sidewalk along the southbound side of Tonnele Avenue also interconnects with other streets well beyond the block in which the site is located via crosswalks across Tonnele Avenue.

## Jersey City School Travel Plan

The Jersey City School Travel Plan does not propose any improvements in the immediate vicinity of the site, however numerous improvement measures throughout the City are identified which could potentially be implemented. According to the School Travel Plan, these improvements could include updated crosswalk markings, updated curb ramps and truncated domes, and installing delineators.

### **Vision Zero Action Report**

The Vision Zero Action Report identifies roadways within the City where fatal and serious injury crashes are most common, which is referred to as the High Injury Network (HIN). To note is that none of the roadways in the immediate area surrounding the site are included on the HIN. However, numerous improvement measures throughout the City are identified which could potentially be implemented. According to the Vision Zero Action Report, these improvements could include the installation of traffic calming devices, neighborhood slow zones and crosswalk visibility features.

#### **Pedestrian Enhancement Plan**

The Pedestrian Enhancement Plan does not propose any specific improvements in the immediate vicinity of the site, however numerous improvement measures throughout the City are identified which could potentially be implemented. According to the Pedestrian Enhancement Plan, these improvements could include pedestrian countdown timers and audible signals at traffic signals, pedestrian activated Rectangular Rapid Flash Beacons (RRFB) at mid-block crosswalks, updated crosswalk visibility features, raised intersections, curb extensions, improved bicycle and transit facilities and streetscape enhancements.

## **On-Street Parking**

As previously noted, the operations of the proposed use dictate that customers and employees of the site would likely only drive directly to/from the site via their personal vehicles. Nonetheless, on-street parking was reviewed in the vicinity of the subject property. The following are descriptions of the surrounding roadways:

- Spruce Street from its western terminus to Liberty Avenue can park 10 cars.
- Carlton Avenue from Tonnele Avenue to Liberty Avenue can park 22 cars.
- Liberty Avenue from Spruce Street to Carlton Avenue can park approximately 42 cars.

#### **Site Generated Traffic**

Trip generation projections for The Project were made utilizing trip generation research data as published by NJDOT under Land Use Code (LUC) Y60 – Automobile New & Used Sales. The following table shows the anticipated trip generation for The Project.

Table I Trip Generation

Land Use	AM			PM PSH			Sat PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
Proposed 240 SF Truck Sales Facility	1	0	1	1	0	1	1	0	1

As shown in Table 1, The Project is calculated to generate only one (1) trip during each of the study periods. It should be noted that the number of new trips falls below the industry accepted standard of a significant increase in traffic of 100 trips. Based on *Transportation Impact Analysis for Site Development*, published by the ITE "it is suggested that a transportation impact study be conducted whenever a proposed development will generate 100 or more added (new) trips during the adjacent roadways' peak hour or the development's peak hour." Additionally, NJDOT has determined that the same 100 vehicle threshold is considered a "significant increase in traffic," hence, it is not anticipated that the proposed development will have any perceptible impact on the traffic operation of the adjacent roadway network.

### Site Access, Parking and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As previously noted, access to the site will be provided via the existing right-in/right-out driveway along Tonnele Avenue.

The site will be served by an aisle of approximately 25 feet wide for two-way movements in the vicinity of the parking area, which allows for full site circulation for the anticipated vehicle mix on site and meets generally accepted design standards.

It is proposed to provide two (2) parking spaces in support of The Project. The City of Jersey City Ordinance sets forth a requirement of one (1) parking space per 500 SF. With 240 SF proposed, this equates to a parking requirement of 0.48 spaces. Consequently, the Ordinance requirement is met and the proposed parking supply will be sufficient to support the anticipated demand of the project.

It is proposed to provide parking stalls with dimensions of 8.5'x18' which are consistent with accepted engineering design standards and will adequately accommodate the site traffic anticipated.

# **Findings**

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 240 SF truck sales facility is projected to generate one (1) entering trip and 0 exiting trips during the weekday morning, weekday evening, and Saturday midday peak hours.
- Access to the site will be provided via the existing right-in/right-out driveway along Tonnele Avenue.
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles.
- The proposed parking supply and design is sufficient to support the projected demand and meets the Ordinance requirements.

### Conclusion

Based upon our Traffic and Parking Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of the City of Jersey City and NJDOT will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good 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

Craig Peregoy, FE

**Principal** 

NJ PE License 45880

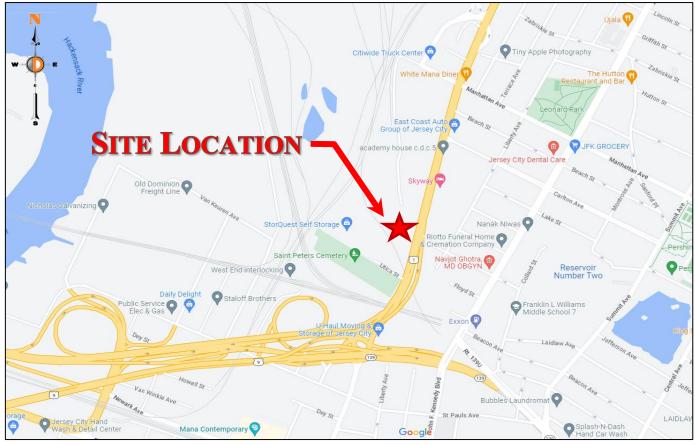
Connor Hughes, PE Project Manager NJ PE License 57245

CGH/sqb Enclosures

c: John I

John Rodriguez (via email w/encl.)
Brian Liebeskind (via email w/encl.)
Chuck Harrington (via email w/encl.)
Veronica Chmiel (via email w/encl.)







Proposed Truck Sales Facility Traffic and Parking Assessment 4710-23-00599

Figure 1