
Last Revised: September 19, 2022

Dated: March 21, 2022

Via Fed-Ex

Township of Cranford Planning Board
8 Springfield Avenue
Cranford, NJ 07016

Attn: Kathy Lenahan, Board Administrator

**Re: Traffic Impact and Parking Assessment
Proposed Residential Development
Block 484 – Lot 19.01
201 Walnut Avenue (CR 632)
Cranford Township, Union County, NJ
DT # 2956-99-005TE**

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 redevelopment of a site bounded by High Street to the east, Walnut Avenue (CR 632) to the west, and Chestnut Street to the north in the Township of Cranford, Union County, New Jersey (see Site Location Map). The site is designated as Block 484 – Lot 19.01 on the Township of Cranford Tax Maps. The site is currently developed with a Wells Fargo drive-in bank, inclusive of four (4) drive-in lanes and a 600 SF office building. It is proposed to raze the site and construct a residential development consisting of 39 units (The Project). Access to the site is currently provided via one (1) full movement driveway and one (1) egress only driveway along Chestnut Street as well as one (1) ingress only driveway along High Street. It is proposed to close all of the existing driveways and construct one (1) new right turn out only driveway along Walnut Avenue and one (1) new full movement driveway along High Street. It should be noted that the proposed site access is consistent with the site access configuration outlined under the South Avenue and Chestnut Street Redevelopment Plan.

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 driveways were 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 the South Avenue and Chestnut Street Redevelopment Plan and the Residential Site Improvement Standards.

Existing Conditions

Walnut Avenue (CR632) is an Urban Minor Arterial roadway under Union County jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction. On-street parking, curbing, and sidewalk are provided along both sides of the roadway. Walnut Avenue provides a straight horizontal alignment and a relatively flat vertical. The land uses along Walnut Avenue in the vicinity of The Project are primarily commercial north of the roadway's intersection with Chestnut Street and a mix of institutional (house of worship), recreational (Cranford Community Center), and residential.

Chestnut Street is a local roadway under Cranford Township jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is unposted and the roadway provides one travel lane in each direction. On-street parking, curbing, and sidewalk are provided along both sides of the roadway. Chestnut Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Chestnut Street in the vicinity of The Project is a mix of commercial and residential.

High Street is a local roadway under Cranford Township jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction. On-street parking, curbing, and sidewalk are provided along both sides of the roadway. High Street provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along High Street in the vicinity of The Project are a mix of commercial, institutional (houses of worship), and residential.

Site Generated Traffic

Trip generation projections for the existing and proposed uses were prepared utilizing trip generation research data as published under Land Use Code (LUC) 220 – Multifamily Housing (Low-Rise), LUC 712 – Small Office Building and LUC 912 – Drive-in Bank in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, 11th Edition*. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites.

It should be noted that ITE does not publish Saturday midday peak period trip generation data for LUC 712. As such, reference was also made to the NJDOT published trip generation rates; however, due to the small size of the existing office building, the resulting Saturday midday peak hour trip generation projections equate to 0 trips.

It should be further noted that ITE separates trip generation data under LUC 220 based off whether a site is considered close to rail transit. Quoting ITE, “A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.” Due to the close proximity of the Cranford Train Station to the subject site (less than 1,000’ walking distance), trip generation data found under the “Close to Rail Transit” subcategory of LUC 220 was referenced for the trip generation projections for the subject site.

The following table details the trip generation associated with the existing uses on-site and compares it to the trip generation of the proposed use.

**Table I
 ITE Trip Generation Comparison**

Land Use	AM PSH			PM PSH			SAT PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
4 Lane Drive-in Bank (<i>Existing</i>)	21	13	34	53	55	108	54	57	111
600 SF Office (<i>Existing</i>)	1	-	1	-	1	1	-	-	-
Existing Total	22	13	35	53	56	109	54	57	111
39 Residential Units (<i>Proposed</i>)	4	11	15	14	10	24	8	8	16
Difference	-18	-2	-20	-39	-46	-85	-46	-49	-95

As shown in Table I, the proposed redevelopment from the existing bank and office to the residential use is anticipated to generate 20 fewer trips during the weekday morning peak hour, 85 fewer trips during the weekday evening peak hour, and 95 fewer trips during the Saturday midday peak hour. This results in a reduced impact to traffic on the surrounding roadway network versus current conditions.

Site Access, Parking and Circulation

As previously noted, access to the site will be provided via one (1) new right turn out only driveway along Walnut Avenue and one (1) new full movement driveway along High Street. The site will be served by a 24’ wide parking aisle for two-way movements, which allows for full site access for the anticipated vehicle mix on site and satisfies the Residential Site Improvement Standards (RSIS) requirement of 24’ wide parking aisles with 90-degree parking.

It is proposed to provide 53 off-street parking spaces and 2 ADA off-street parking spaces, or a total of 55 off-street parking spaces (inclusive of 10 electric vehicle make-ready parking spaces) as well as restripe the existing on-street parking supply along Chestnut Street to provide 2 additional on-street parking spaces in support of The Project. The RSIS sets forth a parking requirement of 1.8 parking spaces for one-bedroom units, 2.0 parking spaces for two-bedroom units, and 2.1 parking spaces for three-bedroom units. It should be noted that the amenities and services anticipated to be provided at the 3 special needs housing units most closely align with the amenities and services provided at a unit the RSIS defines as assisted living. As such, the RSIS parking requirement of 0.50 parking spaces per assisted living unit was utilized for the RSIS parking requirement calculation for the special needs housing units. With eight (8) one-bedroom units, 27 two-bedroom units, one (1) three-bedroom unit, and three (3) special needs housing units this equates to a parking requirement of 72 parking spaces for the proposed 39-unit residential development. Consequently, the RSIS parking requirements are not satisfied and a de minimis exception is requested. It should be noted that the RSIS states;

“Alternative parking standards to those shown in ... shall be accepted if the applicant demonstrates these standards better reflect local conditions. Factors affecting minimum number of parking spaces include household characteristics, availability of mass transit, urban versus suburban location, and available off-site parking resources.”

Specifically, the South Avenue and Chestnut Street Redevelopment Plan was referenced in order to better reflect local conditions (close proximity to transit and mixed-use character of neighborhood). The Redevelopment Plan sets forth a parking requirement of 1.4 parking spaces per multi-family unit and 0 parking spaces per special needs housing units. Further, the Redevelopment Plan states that newly created on-street parking spaces shall count towards meeting the minimum parking requirement. With 36 multi-family units and 3 special needs housing units this equates to a parking requirement of 51 parking spaces for the proposed 39-unit residential development. As noted above, it is proposed to provide 55 off-street parking spaces (inclusive of 10 electric vehicle make-ready parking spaces) as well as restripe the existing on-street parking supply along Chestnut Street to provide 2 additional on-street parking spaces. As per the current Municipal Land Use Law (MLUL) (N.J.A.C. 40:55-D), electric vehicle charging stations count as two spaces for the purposes of complying with parking supply requirements, up to a maximum of 10% of the requirement. As such, the effective proposed parking supply is calculated to be 62 parking spaces. Consequently, the Redevelopment Plan parking requirements are satisfied and the Board can feel comfortable granting the de minimis exception.

It is proposed to provide parking stalls with dimensions of 9'x18', which satisfies the Redevelopment Plan requirement of 9'x18' parking stalls. It should be noted that industry standards recommend stall widths of between 8'3" and 8'6" and a length of 18' for low-turnover land uses such as The Project, which is met as designed.

Findings

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

- The proposed 39 unit residential development is anticipated to generate 18 fewer entering trips and 2 fewer exiting trips during the weekday morning peak hour, 39 fewer entering trips and 46 fewer exiting trips during the weekday evening peak hour, and 46 fewer entering trips and 49 fewer exiting trips during the Saturday midday peak hour when considering the traffic associated with the existing bank.
- Access to the site will be provided via one (1) new right turn out only driveway along Walnut Avenue and one (1) new full movement driveway along High Street.
- As proposed, The Project's site driveways and internal circulation have been designed to provide for safe and efficient movement of the anticipated vehicle mix.
- The proposed parking supply and design is sufficient to support the projected demand and satisfies the South Avenue and Chestnut Street Redevelopment Plan requirements.

Conclusion

Based upon our Traffic Impact 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 Township of Cranford and Union County will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways are 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.

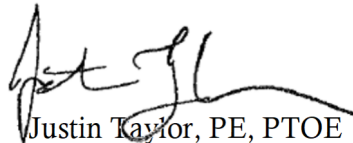
If you have any questions on the above, please do not hesitate to contact me.

Sincerely,

Dynamic Traffic, LLC



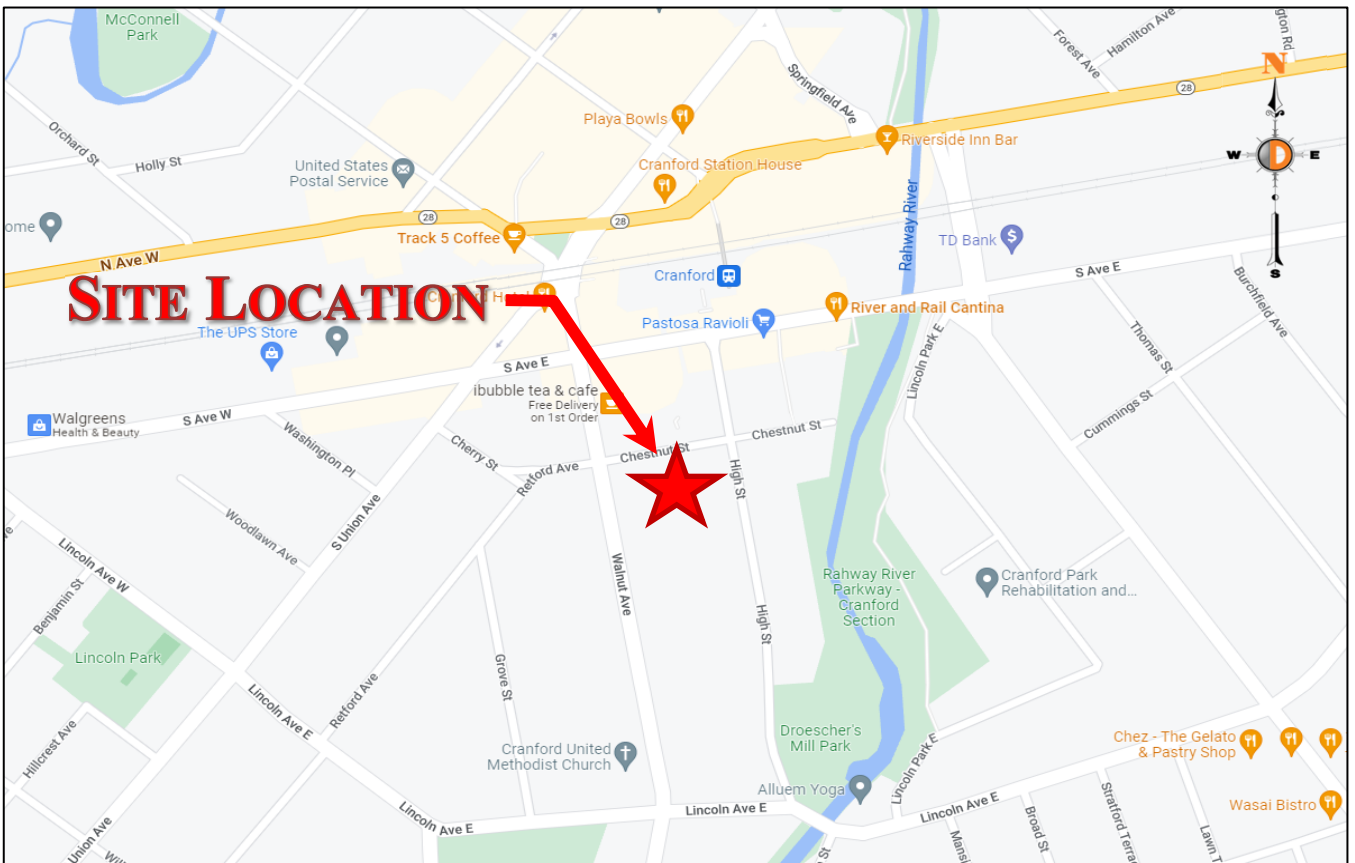
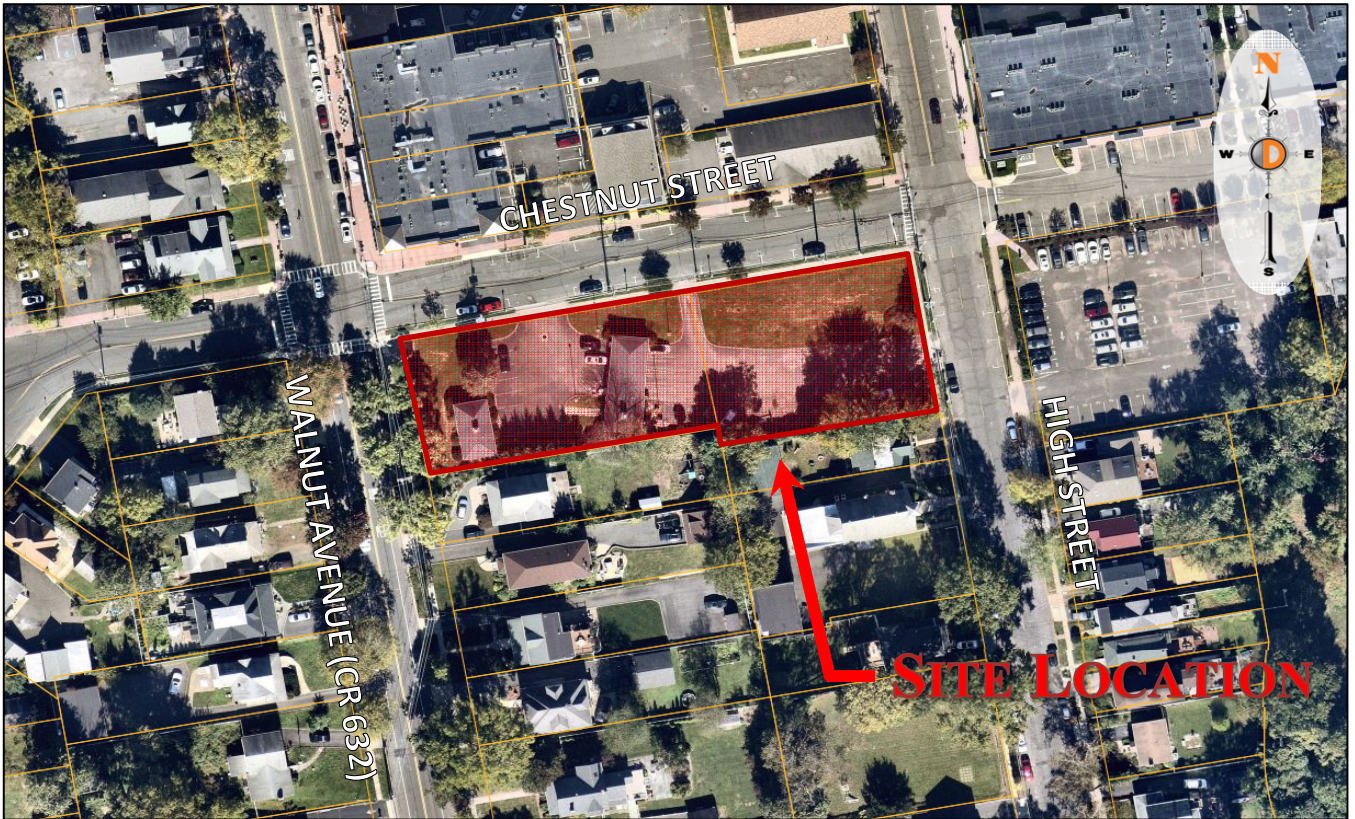
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Enclosures

c: Brandon Boffard (via email w/enclosures)



Proposed Residential Development
 Traffic Impact and Parking Assessment - Rev1
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Site Location Map