

January 23, 2024

Chuck Marshall Land Development/Permitting Stewart's Shops Corp. 2907 State Route 9 Ballston Spa, New York, 12020

Subject: Stewart's Shops Egress Assessment, East Main Street, Village of Marcellus, NY CHA Project No. 88684

### Introduction

The purpose of this memorandum is to provide a trip generation assessment for the proposed Stewart's Shop in Marcellus, New York. This memo will evaluate and compare the trips generated by the existing supermarket with the trips generated by the proposed development for the weekday AM and PM peak hour as well as for the weekend peak hours.

# **Project Description**

The proposed project would redevelop an existing 12,000 square foot supermarket into a combination convenience store and gas station. The project is located at 27 East Main Street, approximately 750 feet east of New York State Route 174.

## **Existing Condition**

The existing supermarket is approximately 12,000 square feet and has access along East Main Street. It has a combined single entry and exit driveway that is approximately 65 feet wide, with a usable width of approximately 40 feet due to parking. The ITE forecast of weekday trips generated by the supermarket is presented in Table 1 and the weekend trips generated in Table 2. For a more accurate measure of trips generated, traffic or customer data should be obtained from the existing supermarket.

## **Proposed Condition**

Stewart's Shops is a combination convenience store and gas station consisting of a 4,300 square foot convenience store and a gas station with 8 fueling locations. The proposed access is to be on East Main Street and Orange Street but for this analysis, all the trips generated would be assumed to fall on the East Main Street driveway. The ITE forecast of weekday trips generated by the proposed Stewart's Shops is presented in Table 1 and the weekend trips generated in Table 2.

### **Traffic Volumes**

According to the available New York State Department of Transportation (NYSDOT) data from 2019, the Average Annual Daily Traffic (AADT) along East Main Street at the project location is 6,677 vehicles per day, with a peak-hour maximum of 528 vehicles.

Updated traffic counts will be obtained as part of the detailed project study for the proposed development.

## Trip Generation

The typical traffic generated by the existing and proposed conditions was estimated utilizing the Trip Generation Manual (11<sup>th</sup> Edition) from the Institute of Transportation Engineers' (ITE). The estimated values for peak hour conditions are provided in Table 1 and Table 2.

# Pass-by Trip Rates

Pass-by trips are defined as trips that are not new trips generated by a proposed development but rather by "stop in" traffic travelling on the roadway anyway. Each occurrence is not a trip-end and is applicable only for commercial and retail developments, leading to a reduction in new generated trips.

Land Use	ITE Land Use Code	Size		AM		PM Peak Hour (vph)						
			ln (vph)	Out (vph)	Pass- by Rate	Total Trips (vph)	Adjusted Total Trips (vph)	ln (vph)	Out (vph)	Pass- by Rate	Total Trips (vph)	Adjusted Total Trips (vph)
Existing – Nojaim Brothers	850	12,000 SF	20	14	24%	34	26	54	53	24%	107	81
Proposed - Stewart's Shops	945	8 VFP, 4,300 SF	98	98	60%	196	78	95	95	60%	190	76

#### Table 1: Estimated Weekday Traffic Volume During Peak Periods



Land Use	ITE Land Use Code	Size	Saturday Peak Hour (vph)					Sunday Peak Hour (vph)				
			ln (vph)	Out (vph)	Pass- by Rate	Total Trips (vph)	Adjusted Total Trips (vph)	ln (vph)	Out (vph)	Pass- by Rate	Total Trips (vph)	Adjusted Total Trips (vph)
Existing – Nojaim Brothers	850	12,000 SF	61	60	24%	121	92	56	51	24%	107	81
Proposed - Stewart's Shops	945	8 VFP, 4,300 SF	83	81	60%	164	66	32	34	60%	66	26

#### Table 2: Estimated Weekend Traffic Volume During Peak Periods

#### Conclusion

The proposed development is forecast to generate slightly higher peak hour vehicle trips during weekday mornings, with slightly lower peak hour vehicle trips during weekday afternoons and weekends. Further traffic analysis may be warranted to determine any impacts on the traffic network. Overall, the shift in traffic peaks is not concerning, as NYSDOT considers less than 100 additional trips as not significant.

Sincerely,

Like M. Morenus\_

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