



February 21, 2022

Brandon Handfield, P.E.  
Owner, Civil Engineer  
Yantic River Consultants, LLC.  
191 Norwich Avenue  
Lebanon, CT 06249

Re: Zone Change Traffic Statement  
Fenn Road Development  
Newington, Connecticut

Dear Brandon:

As requested, this traffic statement is provided in support of a Zone Change Application for the referenced project.

The existing parcel is located on the west side of Fenn Road, also known at State Route 505 and just south of the Ella Grasso Boulevard signalized intersection. The site is directly opposite the Mobil gas station on the east side of Fenn Road and has State of Connecticut property on the northern, southern and western boundary (Route 9 expressway).

The existing site is zoned industrial. An Application for Zoning Map Change from Industrial Zone (I) to the Planned Development District (PD) will be submitted to the Newington Town Plan and Zoning Commission. The development intent is to allow for an approximate 2,000 square foot Drive-Thru Fast-Food Restaurant use as described under Section 3.19 of the Zoning Regulations.

Fenn Road and Ella Grasso Boulevard are classified as urban collector roadways by CTDOT, and based upon 2018 pre-pandemic conditions, carry between 24,000 and 20,000 vehicles per day respectively. Fenn Road carries nearly 2,000 vehicles per hour in the peak hours.

This section of Fenn Road between Ella Grasso Boulevard and Cedar Street is a congested roadway in particular in the weekday afternoon peak hours, with connections to the Route 9 ramps for east/west commuting traffic flow in the region coinciding with commercial development traffic and CCSU campus traffic to the west.

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As a result of these conditions, CTDOT has embarked upon a design study for a reconfiguration of the adjacent Fenn Road at Ella Grasso Boulevard intersection into a modern roundabout intersection with significant approach changes. These improvements will vastly improve the traffic operations along Fenn Road and Ella Grasso Boulevard and are expected to be implemented in the next couple of years. These improvements will facilitate ingress to the proposed zone change site from the south and egress to the north (left turns in and left turns out).

Without these improvements, it is expected that ANY access to the site for any zone will be restricted during peak hours to right turn in and right turn out. The access will need to be reviewed and approved by CTDOT as part of Encroachment Permit application.

### **Traffic Generation**

Based upon the proposed development program, trips generated by the proposed zoning were estimated using the ITE Trip Generation Manual, 11<sup>th</sup> Edition. These trips were estimated based upon the approved 2,520 square foot medical-dental office versus a potential 2,000 square foot fast food restaurant with drive through.

While industrial zone uses are generally lower traffic generating developments, a medical-dental office generates higher traffic than industrial uses. The following table summarizes the trips generated for both the approved and zone change use.



Trip Generation - ITE Trip Generation Handbook 11 <sup>th</sup> Edition				
		DAILY	AM	PM
Existing approved use:	<u>S.F.</u>			
Medical Dental Office	2,520	90	9	10
Proposed Uses:				
Fast Food Restaurant w/Drive Thru	2,000	935	89	66
	Difference (+)	845	80	56
	Passby Trips - 20%	-180	-18	-13
	<b>NET NEW TRAFFIC ON ROADWAY</b>	<b>+665</b>	<b>+72</b>	<b>+43</b>

Pass by trips are considered traffic volume already on the roadway network that are passing by the site and access the site, they are not destined for the site, but the site is on the route. The Office of State Traffic Administration (OSTA) allows a maximum 20% credit of site generated traffic when it is understood that fast food restaurant uses generated a higher pass by percentage so the traffic generated indicated in the above summary is conservatively estimated.

The increased traffic generated by the proposed restaurant results in approximately one more vehicle per minute added to the roadway network during the peak hours.

### Summary

The proposed zone change to allow a fast food restaurant with drive through window will result in additional traffic generated on Fenn Road throughout the course of the day. The traffic generated during the peak hours will be between 1 and 2 vehicles per minute, a negligible increase for a roadway carrying nearly 2,000 vehicles in the peak hour and 24,000 vehicles per day.

The site development plan for the proposed restaurant should incorporate the right turn in and right turn out operation on the approved site plan for the medical dental office. This will focus the traffic generation in the southbound direction and actually result in a reduced traffic generation than estimated in the above summary.

Name  
Ref: 86408.21  
[Click here to enter a date.](#)  
Page 4



In conclusion, the proposed zone change will not have a significant impact upon the roadway network with the right turn in and right turn out site drive layout. This design will require CTDOT Encroachment Permit review and approval.

Very truly yours,

A handwritten signature in black ink that reads "Joseph C. Balskus". The signature is fluid and cursive, with the first letter of each name being significantly larger and more prominent.

Joseph C. Balskus, P.E., PTOE, RSP1  
Director of Transportation Systems

# Medical-Dental Office Building - Stand-Alone (720)

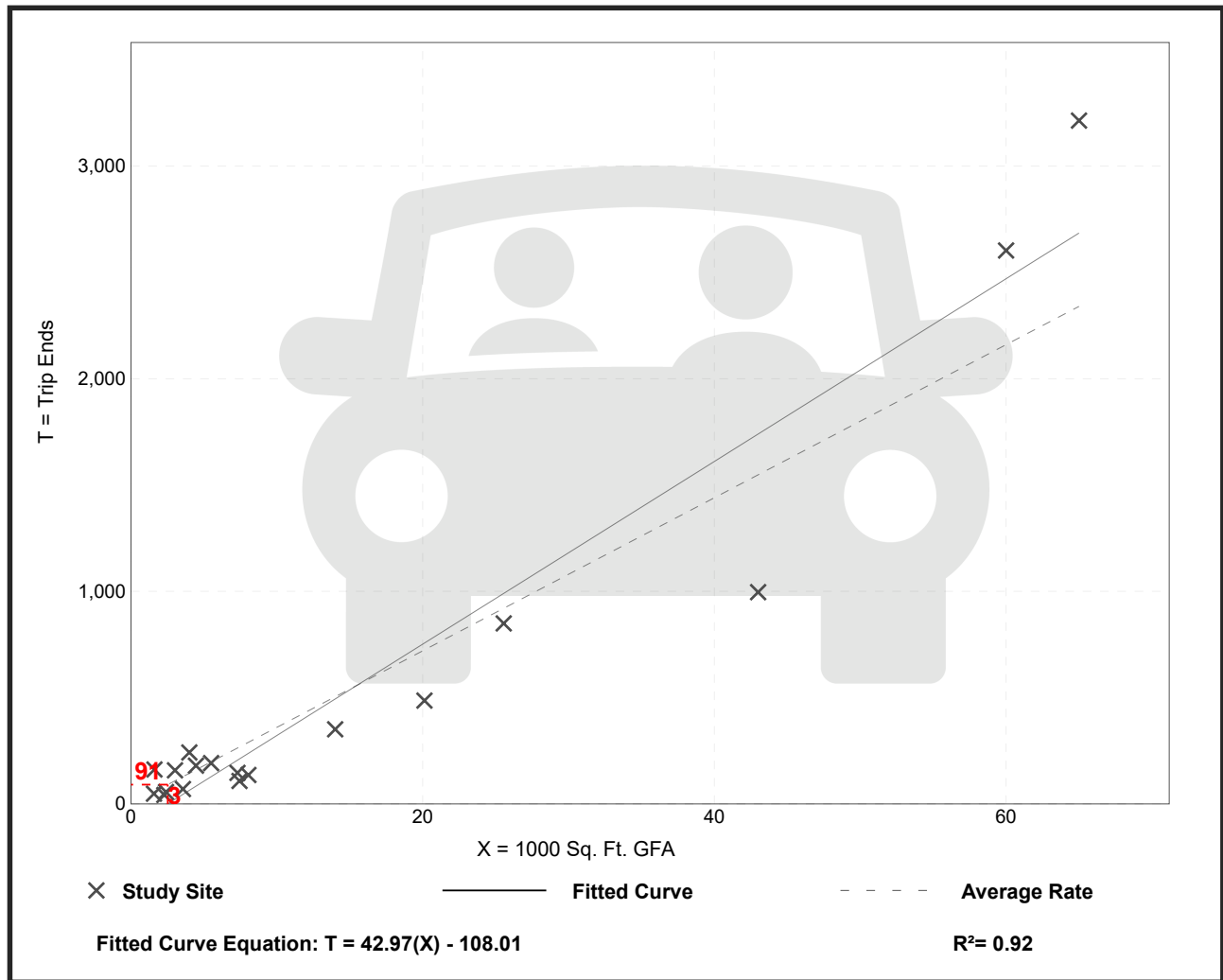
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
On a: Weekday

Setting/Location: General Urban/Suburban  
Number of Studies: 18  
Avg. 1000 Sq. Ft. GFA: 15  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
36.00	14.52 - 100.75	13.38

## Data Plot and Equation



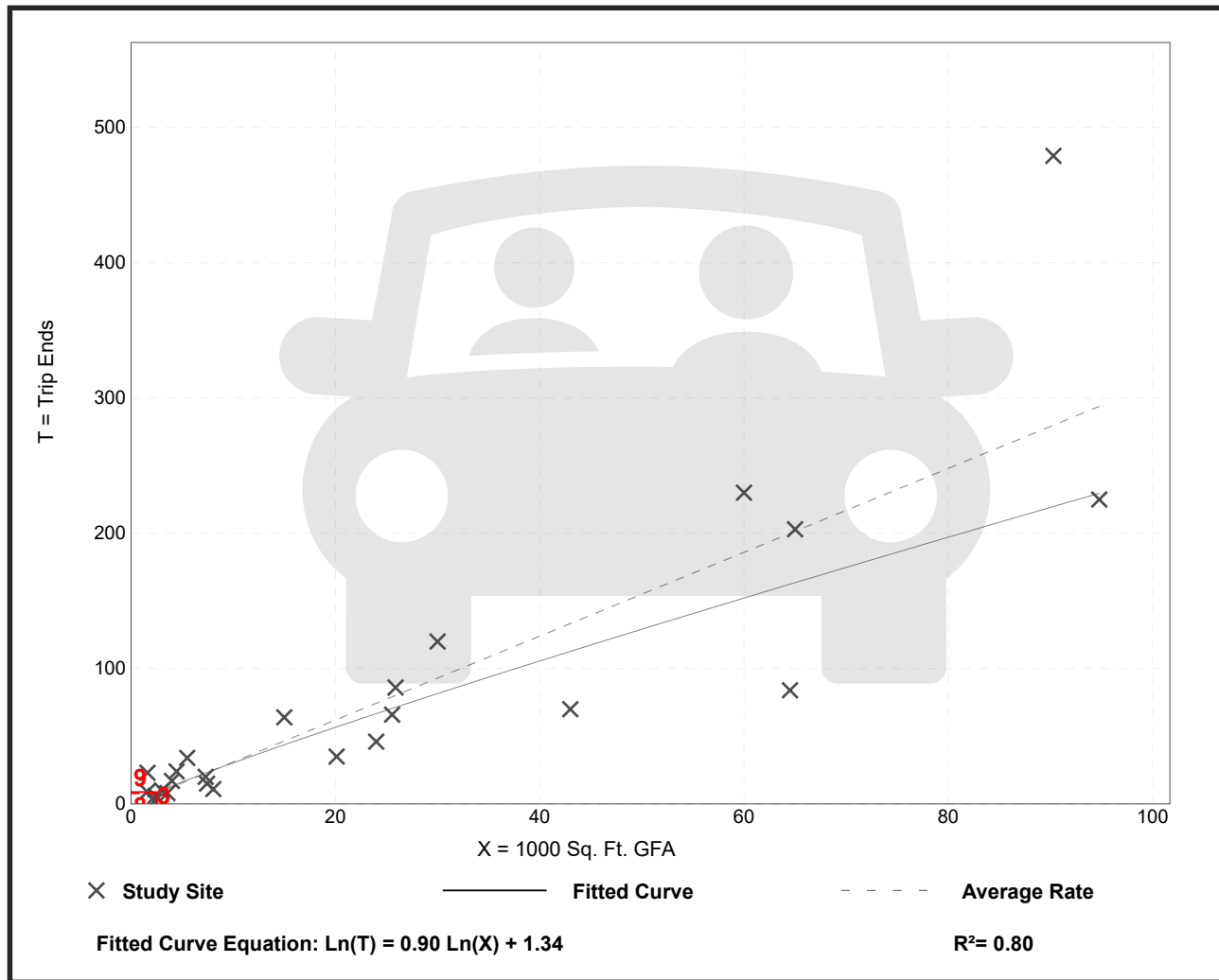
# Medical-Dental Office Building - Stand-Alone (720)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
 On a: Weekday,  
 Peak Hour of Adjacent Street Traffic,  
 One Hour Between 7 and 9 a.m.  
 Setting/Location: General Urban/Suburban  
 Number of Studies: 24  
 Avg. 1000 Sq. Ft. GFA: 25  
 Directional Distribution: 79% entering, 21% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.10	0.87 - 14.30	1.49

## Data Plot and Equation



# Medical-Dental Office Building - Stand-Alone (720)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA  
 On a: Weekday,  
 Peak Hour of Adjacent Street Traffic,  
 One Hour Between 4 and 6 p.m.  
 Setting/Location: General Urban/Suburban  
 Number of Studies: 30  
 Avg. 1000 Sq. Ft. GFA: 23  
 Directional Distribution: 30% entering, 70% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.93	0.62 - 8.86	1.86

## Data Plot and Equation

