



PLANNING
ENGINEERING
IMPLEMENTATION

Date: February 2, 2026

From: Daniel Finn, P.E., Phelps Engineering, Inc.

Re: Hyper Energy Bar – Lee's Summit
PEI # 250040

Estimate of Trips Generated by Proposed Development

This memo provides estimated trips for the proposed Hyper Energy Bar at the Northeast corner of the NW Lowenstein Drive NW Pryor Road. This project was previously approved for a 707 SF single lane Restaurant Drive-Thru user. The proposed site will be a 985 SF double lane Restaurant Drive-Thru user.

For evaluating the traffic generated by new development, the Institute of Transportation Engineers (ITE) has a manual called *Trip Generation Manual, 12th Edition*. This manual contains data for most of the anticipated commercial, residential, industrial and specialty types of land developments. This manual is used to estimate the number of trips a development will generate based on building size, number of dwellings, number of employees, etc. Volumes were calculated as follows for the daily total and the AM and PM Peak Hours on a typical weekday.

Previously Approved Plan – Per 2019 Plan									
ITE Land Use	Intensity	ITE Code	Weekday Total	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Coffee/Donut Shop w/ Drive-Through & No Indoor Seating	1 lane	938	179	36	18	18	15	8	7
Previous Development Trips			179	36	18	18	15	8	7

Proposed Development Plan									
ITE Land Use	Intensity	ITE Code	Weekday Total	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Coffee/Donut Shop w/ Drive-Through & No Indoor Seating	2 lanes	938	358	89	44	45	30	15	15
Previous Development Trips			179	36	18	18	15	8	7
Net Change in Development Trips			179	53	26	27	15	7	8

The proposed development results in an increase of 179 Weekday trips, 53 AM Peak Hour trips, and 15 PM Peak Hour trips than the previously approved plan based on the change from 1 drive thru lane to 2 drive thru lanes. The increase in trips is minimal and therefore, no further analysis is required.

Please feel free to contact me at (913) 393-1155 if you require additional information.

Sincerely,

Phelps Engineering, Inc.

Daniel Finn, P.E.

