Kimley»Horn

October 22, 2015

Ahmad Ghaderi
A & S Engineering, Inc.
28405 Sand Canyon Rd., Suite "B"
Canyon Country, CA 91387

Subject: *Trip Generation Analysis for the Proposed Gas Station Project in the City of Culver City*

Dear Mr. Ghaderi:

This memorandum has been prepared to evaluate the trip generating characteristics of the proposed Gas Station with Convenience Market & Car Wash, compared to an existing Gasoline/Service Station located at 3801 Sepulveda Boulevard in the City of Culver City. The proposed project would expand the facilities at the existing gas station.

The proposed project would include a drive-through car wash, a 2,114 square-foot convenience market, and an increase in fueling positions from eight to sixteen.

Access to the existing site lot is provided via four driveways: two driveways on Venice Boulevard and two driveways on Sepulveda Boulevard. The proposed site will reuse these four driveways.

PROJECT TRIP GENERATION

This trip generation comparison has been prepared to determine the net change in site-generated traffic that would result from the additional construction. Trip generation estimates are based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition* (2012) for the following land use categories:

- ITE Category 944 – Gasoline/Service Station was used to estimate the trips generated by the existing gas station business.

- ITE Category 946 – Gasoline/Service Station with Convenience Market & Car Wash was used to estimate the trips generated by the proposed gas station business.

The ITE trip generation rates and resulting trip generation for the existing and proposed uses are summarized on Table 1.

- It is estimated that the Gasoline/Service Station currently generates approximately 1,348 trips per day, with 98 trips (50 inbound and 48 outbound) in the morning peak hour, and 110 trips (55 inbound and 55 outbound) in the evening peak hour.

- It is estimated that Gasoline/Service Station with Convenience Market & Car Wash would generate approximately 2,445 trips per day, with 190 trips in the morning peak hour (97 inbound and 93 outbound) and 222 trips (113 inbound and 109 outbound) in the evening peak hour.

- When pass-by reductions are taken into account, the net trip generation for each use would be commensurately less than the unadjusted trip generation rates. The ITE Trip Generation Manual indicates that the Gasoline/Service Station pass-by rates are 58% and 42% in the morning and evening peak hours, respectively; and the Gasoline/Service Station with Convenience Market & Car Wash pass-by rates are 62% and 56% in the morning and evening peak hours, respectively.

- Comparing the existing land use trip generation to the proposed land use trips, a Gasoline/Service Station with Convenience Market & Car Wash is estimated to generate 1,097 new trips to the roadway network on a daily basis, with 31 more trips in the morning peak hour, and 34 more trips in the evening peak hour.

TABLE 1
SUMMARY OF PROJECT TRIP GENERATION

Land Use	ITE Code	Unit	Trip Generation Rates [1]						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Gasoline/Service Station	944	Fueling Position	168.560	6.202	5.958	12.160	6.935	6.935	13.870
Gasoline Station w/ Conv. Mkt. & Car Wash	946	Fueling Position	152.840	6.038	5.802	11.840	7.069	6.791	13.860

Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Existing Land Use									
Gasoline/Service Station	8	Fueling Position	1,348	50	48	98	55	55	110
- Pass-by Trips (AM 58%, PM 42%) [2]			-	-29	-28	-57	-23	-23	-46
Total Existing Trips			1,348	21	20	41	32	32	64
Proposed Land Use									
Gasoline Station w/ Conv. Mkt. & Car Wash	16	Fueling Position	2,445	97	93	190	113	109	222
- Pass-by Trips (AM 62%, PM 56%) [2]			-	-60	-58	-118	-63	-61	-124
Total Proposed Project Trips			2,445	37	35	72	50	48	98
Net Trips (Proposed Minus Existing)			1,097	16	15	31	18	16	34

[1] *Source: Institute of Transportation Engineers (ITE) Trip Generation Manual , 9th Edition*

[2] *Source: ITE Trip Generation Manual - Volume 1: User's Guide and Handbook.*