

September 17, 2021

Mr. Neil Angelillo  
Yosemite and G, LLC.  
1155 W. Shaw Avenue, #104  
Fresno, California, 93711

Via E-mail Only: [neil@truenorthprops.com](mailto:neil@truenorthprops.com)

**Subject: Trip Generation Analysis of the Previously Analyzed Site Plan and the Site Plan Version 3.0 of the proposed Project at the Northeast Corner of "G" Street and Yosemite Avenue in the City of Merced (JLB Project 035-003)**

Dear Mr. Angelillo,

JLB Traffic Engineering, Inc. (JLB) has completed a Trip Generation Analysis (TGA) to compare the prior site plan, which was the basis for the Traffic Impact Analysis for the Merced Mixed-Use Development dated September 24, 2019, and the new site plan version 3.0 for the proposed Project. The Project is located at the northeast corner of "G" Street and Yosemite Avenue in the City of Merced.

### **Project Description**

The Project is located on the northeast corner of "G" Street and Yosemite Avenue in the City of Merced. The prior project site plan proposed to develop 66,465 square feet of medical-dental office space, a 107-room hotel, 9,066 square feet of fast-food restaurant with drive-through window, a gasoline/service station with convenience market (12 fueling positions), 20,869 square feet of shopping center, 2,016 square feet of coffee/donut shop with drive-through window, 3,866 square feet of automated car wash, 12,000 square feet of general office space, 4,804 square feet of day care center, and 48 multifamily housing (low-rise) units. The project site plan version 3.0 proposes 96 multifamily housing (low-rise) units, 5,000 square feet of high-turnover (sit-down) restaurant, 10,814 square feet of fast-food restaurant with drive-through window, a gasoline/service station with convenience market (12 fueling positions), 42,962 square feet of shopping center, 2,586 square feet of coffee/donut shop with drive-through window, 5,381 square feet of automated car wash, 33,048 square feet of general office space and 4,804 square feet of day care center. Exhibit A illustrates the project site plan version 3.0.

### **Trip Generation Analysis**

Trip generation rates for the proposed Project were obtained from the 10th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table I presents the trip generation for the prior project site plan (Used for Basis of TIA Dated September 24, 2019). Based on the prior project site plan, the Project at buildout is estimated to generate a maximum of 13,741 daily trips, 1,092 AM peak hour trips and 1,074 PM peak hour trips. Table II presents the trip generation for the site plan version 3.0. At buildout, site plan version 3.0 is projected to produce a total of 14,033 daily trips, 1,116 AM peak hour trips and 1,067 PM peak hour trips.



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**Table I: Prior Project Site Plan Trip Generation-- (Basis of TIA Dated September 24, 2019)**

Land Use (ITE Code)	Size	Unit	Daily		AM (7-9) Peak Hour						PM (4-6) Peak Hour					
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%						%				
Medical-Dental Office Building (720)	66.465	k.s.f.	34.8	2,313	2.78	78	22	144	41	185	3.46	28	72	64	166	230
Hotel (310)	107	o.r.	8.36	895	0.47	59	41	30	20	50	0.60	51	49	33	31	64
Fast-Food Restaurant with Drive-Through Window (934)	9.066	k.s.f.	470.95	4,270	40.19	51	49	186	178	364	32.67	52	48	154	142	296
Gasoline/Service Station with Convenience Market (945)	12	f.p.	205.36	2,464	12.47	51	49	77	73	150	13.99	51	49	86	82	168
Shopping Center (820)	20.896	k.s.f.	37.75	789	0.94	62	38	12	8	20	3.81	48	52	38	42	80
Coffee/Donut Shop with Drive-Through Window (937)	2.016	k.s.f.	820.38	1,654	88.99	51	49	91	88	179	43.38	50	50	44	43	87
Automated Car Wash (948)*	3.866	k.s.f.	170.40	659	14.20	50	50	28	27	55	14.20	50	50	28	27	55
General Office Building (710)	12.000	k.s.f.	9.74	117	1.16	86	14	12	2	14	1.15	16	84	2	12	14
Day Care Center (565)	4.804	k.s.f.	47.62	229	11.00	53	47	28	25	53	11.12	47	53	25	28	53
Multifamily Housing (Low-Rise) (220)	48	d.u.	7.32	351	0.46	23	77	5	17	22	0.56	63	37	17	10	27
<b>Total Project Trip Generation</b>				<b>13,741</b>				<b>613</b>	<b>479</b>	<b>1,092</b>				<b>491</b>	<b>583</b>	<b>1,074</b>

Note: \* = Daily Rate assumed to be 12 times the PM peak hour rate. AM peak hour rate assumed to be the equal to the PM peak hour rate.  
 k.s.f. = Thousand Square Feet  
 o.r. = Occupied Rooms  
 f.p. = Fueling Positions  
 d.u. = Dwelling Units

**Table II: Project Site Plan Version 3.0 Trip Generation**

Land Use (ITE Code)	Size	Unit	Daily		AM (7-9) Peak Hour					PM (4-6) Peak Hour						
			Rate	Total	Trip Rate	In	Out	In	Out	Total	Trip Rate	In	Out	In	Out	Total
						%	%									
Multifamily Housing (Low-Rise) (220)	96	d.u.	7.32	703	0.46	23	77	10	34	44	0.56	63	37	34	20	54
High-Turnover (Sit-Down) Restaurant (932)	5,000	k.s.f.	112.18	561	9.94	55	45	28	22	50	9.77	62	38	30	19	49
Fast-Food Restaurant with Drive-Through Window (934)	10,814	k.s.f.	470.95	5,093	40.19	51	49	222	213	435	32.67	52	48	184	169	353
Gasoline/Service Station with Convenience Market (945)	12	f.p.	205.36	2,464	12.47	51	49	77	73	150	13.99	51	49	86	82	168
Shopping Center (820)	42,962	k.s.f.	37.75	1,622	0.94	62	38	25	15	40	3.81	48	52	79	85	164
Coffee/Donut Shop with Drive-Through Window (937)	2,586	k.s.f.	820.38	2,122	88.99	51	49	117	113	230	43.38	50	50	56	56	112
Automated Car Wash (948)*	5,381	k.s.f.	170.40	917	14.20	50	50	38	38	76	14.20	50	50	38	38	76
General Office Building (710)	33,048	k.s.f.	9.74	322	1.16	86	14	33	5	38	1.15	16	84	6	32	38
Day Care Center (565)	4,804	k.s.f.	47.62	229	11.00	53	47	28	25	53	11.12	47	53	25	28	53
<b>Total Project Trip Generation</b>				<b>14,033</b>				<b>578</b>	<b>539</b>	<b>1,116</b>				<b>538</b>	<b>539</b>	<b>1,067</b>

Note: \* = Daily Rate assumed to be 12 times the PM peak hour rate. AM peak hour rate assumed to be the equal to the PM peak hour rate.  
 k.s.f. = Thousand Square Feet  
 f.p. = Fueling Positions  
 d.u. = Dwelling Units

When compared to the prior project site plan, the project site plan version 3.0 is estimated to generate more daily trips by 2.13% (292 daily trips) and more AM peak hour trips by 2.20% (24 trips), but less PM peak hour trips by 0.65% (7 trips). The difference in net new trips generated between the prior project site plan and the site plan version 3.0 is summarized in Table III.

**Table III: Difference in Trip Generation**

Land Use (ITE Code)	Daily	AM (7-9) Peak Hour	PM (4-6) Peak Hour
	Total	Total	Total
Proposed Project Site Plan Version 3.0	14,033	1,116	1,067
Prior Project Site Plan	13,741	1,092	1,074
<b>Change in Project Trips</b>	<b>292</b>	<b>24</b>	<b>-7</b>

**Effects to Level of Service Analysis of Study Facilities**

The effects to LOS of the study facilities were qualitatively analyzed for the Existing plus Project, Near Term plus Project and Cumulative Year 2039 plus Project Traffic Conditions scenarios to determine if the minor change in peak hour traffic volumes would result in changes to the findings and recommendations contained within the Project TIA dated September 24, 2019. Based on this qualitative analysis JLB has determined that the previously recommended mitigation measures would remain unchanged as a result of the implementation of Site Plan Version 3.0.



### Conclusions

Based on the Trip Generation Analysis, conclusions regarding the proposed Project's land uses at the northeast Corner of "G" Street and Yosemite Avenue in the City of Merced are provided below.

- The prior project site plan is estimated to generate 13,741 daily trips, 1,092 AM peak hour trips and 1,074 PM peak hour trips.
- The project site plan version 3.0 is estimated to generate 14,033 daily trips, 1,116 AM peak hour trips and 1,067 PM peak hour trips.
- When compared to the prior project site plan, the project site plan version 3.0 will increase daily trips by 2.13% (292 trips) and AM peak hour trips by 2.20% (24 trips), but decrease PM peak hour trips by 0.65% (7 trips).
- Based on a qualitative analysis of the Existing plus Project, Near Term plus Project and Cumulative Year 2039 plus Project Traffic Conditions scenarios, JLB has determined that the previously recommended mitigation measures would remain unchanged as a result of the implementation of project site plan version 3.0.

Please feel welcome to contact me with any questions, comments or concerns that you may have after reviewing the results of the Trip Generation Analysis. I can be reached by phone at (559) 570-8991 and by email at [jbenavides@JLBtraffic.com](mailto:jbenavides@JLBtraffic.com).

Sincerely,



Jose Luis Benavides, PE, TE  
President

### Exhibit A – Project Site Plan Version 3.0

