Attachment 4

Alternative 5 Trip Generation

Stantec

Memo

To:	Wiley Canyon, LLC	From:	Sandhya Perumalla, and Daryl Zerfass Stantec
Project/File:	2042605700	Date:	April 4, 2025

Reference: Trip Generation for the Wiley Canyon Mixed-Use New Project Alternative

This memo presents the results of a trip generation for a new Project alternative for the Wiley Canyon mixed-use project in the City of Santa Clarita, California. The new Project alternative includes development of 275 residential units—205 multifamily units, 25 duplex units and 45 single family units; 9,000 square feet (SF) of commercial retail development; and a 120-unit senior living facility. The Project's traffic study, prepared by Stantec in July 2023, was based on development of 379 multifamily residential units, 8,914 SF of commercial retail development, and a 217-unit senior living facility. A comparison of trip generation estimates for the new Project alternative and for the proposed Project evaluated in the July 2022 traffic study is presented below.

The site is located on the west side of Wiley Canyon Road, north of Calgrove Boulevard. Primary access to the Project site would be via a Project driveway on Wiley Canyon Road, south of Wabuska Street. The Project entrance would be located at the northern end of the site and controlled by a single-lane roundabout. An emergency vehicle only access would be provided by a driveway on Hawkbyrn Avenue.

Trip Generation

Trip generation estimates for the new Project alternative were prepared using standardized Institute of Transportation Engineers (ITE) 11th Edition trip generation rates for the Single-Family Detached Housing (210) category, the Single-Family Attached Housing (215) category, the Strip Retail Plaza less than 40,000 SF (822) category, and the Continuing Care Retired Community (CCRC) (255) category (the ITE manual describes CCRC as a land use category that includes various combinations of senior adult housing, congregate care, assisted living, and nursing home).

As shown in **Table 1**, the new Project alternative is expected to generate approximately 2,985 average daily trips (ADT), 186 trips during the AM peak hour and 268 trips during the PM peak hour; whereas, the proposed Project analyzed in the July 2022 traffic study is expected to generate approximately 3,696 ADT, with 210 trips during the AM peak hour and 307 trips during the PM peak hour.

In comparison to the trip generation outlined in the Project's July 2022 traffic study, the new Project alternative would generate 711 fewer daily trips, 24 fewer AM peak hour trips, and 39 fewer PM peak hour trips, which shows that the new Project alternative represents a reduction in traffic compared to the Project analyzed in the July 2022 traffic study.

Reference: Trip Generation for the Wiley Canyon Mixed-Use New Project Alternative

Table 1 Trip Generation Summary

	Amount	Unit	AM Peak Hour			PM Peak Hour			ADT
			In	Out	Total	In	Out	Total	
Trip Rates									
Single-Family Attached Housing (215)	-	DU	0.12	0.36	0.48	0.34	0.23	0.57	7.20
Single-Family Detached Housing (210)	-	DU	0.18	0.53	0.70	0.59	0.35	0.94	9.43
Strip Retail Plaza <40k (822)	-	TSF	Ln(T) = 0.66 Ln(X) + 1.84 In = 60% x Ln(T) Out = 40% x Ln(T)			Ln(T) = 0.71 Ln(X) + 2.72 In = 50% x Ln(T) Out = 50% x Ln(T)			T=42.20 (X)+229.68
Continuing Care Retired Community (255)	-	Units	0.10	0.05	0.15	0.07	0.12	0.19	2.47
New Alternative Trip Generation									
Multifamily Apartments[1]	205	DU	25	73	98	69	48	117	1,476
Duplex[1]	25	DU	3	9	12	8	6	14	180
Single Family Detached	45	DU	8	23	31	27	15	42	424
Commercial Shopping Center[2]	9.0	TSF	16	11	27	36	36	72	609
Senior Living Facilities	120	Units	12	6	18	9	14	23	296
		Total	**64**	**122**	**186**	**149**	**119**	**268**	**2,985**
Proposed Project – Wiley Cyn Traffic Study (July 2022) Trip Generation									
Proposed Project			**73**	**137**	**210**	**174**	**133**	**307**	**3,696**
Comparison between Alternative and Proposed Project			-9	-15	-24	-25	-14	-39	-711

Trip Rate Source: Institute of Transportation Engineers (ITE), Trip Generation Manual 11th Edition, 2021, with ITE code in parentheses
[1]used 'Single-Family Attached Housing' trip rate
[2]Shopping Center rate is based on the fitted curve equation
ADT - Average Daily Trips
TSF - Thousand Square Feet
DU - Dwelling Unit

Peak hour intersection level of service analysis of the study area intersections was conducted for the Interim Year cumulative conditions. The Project's trip distribution and background traffic volumes were obtained from the July 2022 traffic study. Project trips generated by the new Project alternative were added onto the background cumulative conditions traffic volumes to derive updated cumulative conditions with Project volumes. A comparison between the new Project Alternative and the July 2022 traffic study's Interim Year cumulative with Project conditions is provided as an Attachment. It shows that with the new Project alternative, intersection LOS remains the same or improves and intersection delay decreases. Therefore, the new Project alternative represents a reduction in delay and results in the same or better LOS compared to the Project analyzed in the July 2022 traffic study.

Reference: **Trip Generation for the Wiley Canyon Mixed-Use New Project Alternative**

Please feel free to contact Sandhya or Daryl if you have any questions or if you would like to discuss the above material.

Sincerely,

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Attachment: Comparison of Interim Year Cumulative Conditions LOS Summary

Interim Year Cumulative Conditions	Traffic Control	No-Project				July 2022 Traffic Study With-Project				Project Increase		New Alternative With-Project				Project Increase	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM Peak Hour		PM Peak Hour		AM	PM
Intersection		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	Delay	Delay	LOS	Delay	LOS	Delay	Delay
1. I-5 SB Ramps & Pico Canyon Rd	Signal	24.8	C	40.5	D	25.2	C	42.3	D	0.4	1.8	25.1	C	42.0	D	0.3	1.5
3. I-5 NB Ramps & Lyons Ave	Signal	72.2	E	47.2	D	76.7	E	50.1	D	**4.5**	2.9	75.9	E	49.8	D	3.7	2.6
4. Wiley Canyon Rd & Lyons Ave	Signal	46.3	D	65.5	E	48.8	D	66.3	E	2.5	0.8	48.4	D	66.2	E	2.1	0.7
5. Wiley Canyon Rd & La Glorita Circle/Evans Ave	Signal	18.0	B	8.3	A	21.9	C	9.6	A	3.9	1.3	21.2	C	9.4	A	3.2	1.1
6. Wiley Canyon Rd & Wabuska St	TWSC	132.3	F	40.7	E	243.8	F	63.6	F	**111.5**	**22.9**	223.1	F	58.7	F	**90.8**	**18.0**
7. I-5 SB Ramps & Calgrove Blvd	TWSC	102.1	F	26.2	D	139.5	F	35.9	E	**37.4**	**9.7**	139.5	F	34.5	D	**37.4**	**8.3**
8. I-5 NB Ramps & Calgrove Blvd	TWSC	31.0	D	126.7	F	32.1	D	137.9	F	1.1	**11.2**	31.9	D	135.6	F	0.9	**8.9**
9. Wiley Canyon Rd & Calgrove Blvd	RAB [1]	20.4	C	195.7	F	11.6	B	10.8	B	-8.8	-184.9	7.6	A	8.2	A	-12.8	-187.5
	Signal					33.7	C	16.6	B	13.3	-179.1	33.1	C	16.5	B	12.7	-179.2
10. Wiley Canyon Rd & Project Access	RAB	--	--	--	--	8.2	A	8.2	A	8.2	8.2	5.4	A	5.3	A	5.4	5.3

[1] Existing two-way stop control, future roundabout

Note:
NB – Northbound
SB – Southbound
TWSC – Two-way stop control
RAB – Roundabout
LOS – Level of Service
Delay – Average Vehicle Delay (seconds)

Interim Year Cumulative Conditions	July 2022 Traffic Study With-Project (with Off-site improvements)				New Alternative With-Project (with Off-site improvements)			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
3. I-5 NB Ramps & Lyons Ave	37.6	D	50.1	D	--	--	--	--
6. Wiley Canyon Rd & Wabuska St	8.7	A	5.2	A	8.6	A	5.1	A
7. I-5 SB Ramps & Calgrove Blvd	28.3	C	24.9	C	28.2	C	24.7	C
8. I-5 NB Ramps & Calgrove Blvd	39.9	D	25.1	C	39.5	D	25.0	C