

George W. Nickelson, P.E.

Traffic Engineering – Transportation Planning

July 27, 2011

Ms. Kathryn Reasoner
Executive Director
di Rosa
5200 Sonoma Highway
Napa, CA 94559

Subject: *Traffic Analysis for Proposed Visitor Increases at the di Rosa Preserve on State Route 121 (SR 121) in Napa County*

Dear-Ms. Reasoner:

This letter report summarizes a focused traffic analysis of the proposed visitor increases at the di Rosa Preserve on SR 121 in Napa County. Based on input from Napa County staff, the analysis has examined current and projected trip generation and the effects of added trips on the inbound left turn lane and outbound left turn refuge area.

1. Existing Conditions

Currently, the di Rosa Preserve is open to visitors Wednesday through Saturday 9:30 AM – 3:00 PM or a total of 5.5 hours per day. Visitors are generally a part of on-site tours although an average of 30 daily “drop-in” visitors also arrive on weekdays. Based on actual visitor counts, the Preserve has 61 weekday visitors and 66 Saturday visitors. The di Rosa staff peak on weekdays with 12 persons; only 2 staff persons are on site on Saturday.

As outlined in Table 1, the existing Preserve operations generate 79 daily trips on a weekday and 59 daily trips on a Saturday. The current hourly visitor volumes generate 9 trips on a weekday and 10 trips on a Saturday.

At the site access, SR 121 is a two-lane rural type roadway with an eastbound left turn lane and a refuge area for outbound left turns. The eastbound left turn lane (into the site) is approximately 420 feet in length, sufficient to store about 18-19 cars. The refuge area for outbound left turns is about 50 feet in length, and the extra refuge area width extends an additional 25 feet, providing space for 2-3 outbound cars. Each day, the highest inbound volume of 4-5 vehicles would occur at the beginning of the Preserve’s visitor period and the highest outbound volume at the end of the day would similarly be 4-5 vehicles (see Table 1). These volumes are accommodated within the inbound left turn lane and outbound left turn refuge area.

2. Proposed Visitor Program

The Preserve’s proposed visitor program would extend the daily hours of operation to 8 hours per day Wednesday, Friday and Saturday (10 AM – 6 PM), 11 hours on Thursday (10 AM – 9 PM) and add Sunday with 8 hours of operation (10 AM – 6 PM), during the summer months. In

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addition, it is proposed that Saturday and Sunday operations would have an average of 30 daily drop-in visitors, consistent with current weekday activity. There would be an expected increase in weekend employment from 2 to 4 persons. The proposed visitor program expansion traffic generation has been calculated in Table 1.

Although the weekday trip total would increase from 79 to 106 daily trips, the hourly visitor activity would not be expected to change. There would be no measurable change in the hourly inbound and outbound left turn volumes.

The Saturday (and Sunday) expansion of hours and additional drop in visitors would result in a daily traffic increase from 59 trips to 111 trips. The hourly activity would increase from 10 vehicle trips to 13 vehicle trips on a Saturday or Sunday. The minimal increase in hourly visitor activity would not be expected to measurably affect operation of the inbound left turn lane or outbound left turn refuge area.

3. Events and Bus Activity

The Preserve is currently allowed a total of 36 annual events with varying attendance limits (up to a maximum of 250 persons). In total, these events would allow a maximum of 3,670 persons each year. The proposed program would merely simplify the event discussion by continuing to allow a total of 36 annual events with a maximum attendance of 250 persons at any event. As with the current permit, 3 additional annual events with more than 250 attendees are allowed with temporary event permits. The Preserve does not anticipate a measurable change in the actual events/attendance.

The current visitor program limits bus access to 25 passenger buses. The proposed program would allow full sized buses. The increased vehicle size (full size buses are typically 40 feet in length vs. 25-30 feet for smaller buses) could theoretically affect traffic operations. However, the frequency of bus activity is very low (1-2 buses per week), and an allowance for larger buses would not measurably affect operations.

4. Conclusions

Our analysis has determined that the proposed di Rosa Preserve visitor expansion program would not significantly impact traffic conditions. Although daily volumes would increase by 27 weekday trips and 52 Saturday/Sunday trips due to the expanded visitor hours, the hourly changes in trip generation would be minimal. The traffic generated by the added Preserve visitors would not measurably affect operation of the inbound left turn lane or outbound left turn refuge area.

Proposed changes in annual events and the allowance of larger buses would not measurably impact traffic operations.

July 27, 2011
Ms. Kathryn Reasoner
Page 3 of 4

I trust that this report responds to your needs. Please review this information and call me with any questions or comments.

Sincerely,

A handwritten signature in cursive script that reads "George W. Nickelson". The signature is written in dark ink and is positioned above the printed name.

George W. Nickelson, P.E.

TABLE 1
DI ROSA PRESERVE TRIP GENERATION COMPARISON
EXISTING CONDITIONS VS. PROPOSED VISITOR PROGRAM

WEEKDAY CONDITIONS (WEDNESDAY – FRIDAY)

Existing Daily:

• 61 weekday visitors/2.5 per car x 2 one-way trips	=	49 weekday trips
• 12 weekday staff x 2 one-way trips	=	24 weekday trips
• 3 delivery vehicles x 2 one-way trips	=	<u>6 weekday trips</u>
		79 weekday trips

Proposed Daily:

• 95 weekday visitors/2.5 per car x 2 one-way trips	=	76 weekday trips
• 12 weekday staff x 2 one-way trips	=	24 weekday trips
• 3 delivery vehicles x 2 one-way trips	=	<u>6 weekday trips</u>
		106 weekday trips

Existing Hourly:

• 11 hourly visitors/2.5 per car x 2 one-way trips	=	9 hourly trips; 5 in/4 out
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Proposed Hourly:

• 11 hourly visitors/2.5 per car x 2 one-way trips	=	9 hourly trips; 5 in/4 out
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SATURDAY (SUNDAY) CONDITIONS

Existing Saturday:

• 66 daily visitors/2.5 per car x 2 one-way trips	=	53 weekday trips
• 2 daily staff x 2 one-way trips	=	4 weekday trips
• 1 delivery vehicle x 2 one-way trips	=	<u>2 weekday trips</u>
		59 weekday trips

Proposed Saturday and Sunday:

• 126 daily visitors/2.5 per car x 2 one-way trips	=	101 weekday trips
• 4 daily staff x 2 one-way trips	=	8 weekday trips
• 1 delivery vehicle x 2 one-way trips	=	<u>2 weekday trips</u>
		111 weekday trips

Existing Hourly:

• 12 hourly visitors/2.5 per car x 2 one-way trips	=	10 hourly trips; 5 in/5 out
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Proposed Hourly:

• 16 hourly visitors/2.5 per car x 2 one-way trips	=	13 hourly trips; 7 in/6 out
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DI ROSA PRESERVE

ANALYSIS OF CURRENT ALLOWABLE VS. PROJECTED WITH AMENDED OPERATING PERMIT

CURRENTLY ALLOWED VISITATION per August 2004 Permit (no maximums, estimated likely averages by KR)

Week Day	Tours	Drop-ins	Hours	Notes
Monday	75	est 25+	5.5	3 tours daily @estimated 25 guests per (9:25, 11:15, 12:55)
Tuesday	75	est 25+	5.5	3 tours daily @estimated 25 guests per (9:25, 11:15, 12:55)
Wednesday	75	est 25+	5.5	3 tours daily @estimated 25 guests per (9:25, 11:15, 12:55)
Thursday	75	est 25+	5.5	3 tours daily @estimated 25 guests per (9:25, 11:15, 12:55)
Friday	75	est 25+	5.5	3 tours daily @estimated 25 guests per (9:25, 11:15, 12:55)
Saturday	75		7.5	3 tours @ 9:25, 10:25 AM and 4:30 PM
Sunday		est 35+	4	3 to 7 pm only
	450	160	39	TOTAL WEEKLY VISITORS OF 610 at least

COMPARISON BETWEEN PERMIT ALLOWED AND PROJECTED DAILY SUMMER HOURS

Week Day	Allowed TL	Projected*	Hours	Notes
Monday	100			di Rosa proposes to close 2 days to offset weekend hours
Tuesday	100			di Rosa proposes to close 2 days to offset weekend hours
Wednesday	100	95	8	with summer extended hours 10 to 6 PM
Thursday	100	95	11	with summer extended hours 10 to 9 pm
Friday	100	95	8	with summer extended hours 10 to 6 PM
Saturday	75	63	8	with summer extended hours 10 to 6 PM
Sunday	35	63	8	with summer extended hours 10 to 6 PM
	610	411	43	figures shown are minimum since there is no drop in limit

* Projected figures from Table 1 generation comparison based on May 2011 figures

COMPARISON BETWEEN PERMIT ALLOWED AND PROJECTED DAILY WINTER HOURS

Week Day	Allowed TL	Projected*	Hours	Notes
Monday	100			di Rosa proposes to close 2 days to offset weekend hours
Tuesday	100			di Rosa proposes to close 2 days to offset weekend hours
Wednesday	100	95	6	with summer extended hours 10 to 4 PM
Thursday	100	95	11	with summer extended hours 10 to 9 pm
Friday	100	95	6	with summer extended hours 10 to 4 PM
Saturday	75	63	6	with summer extended hours 10 to 4 PM
Sunday	35	63	6	with summer extended hours 10 to 4 PM
	610	411	35	figures shown are minimum since there is no drop in limit

* Projected figures from Table 1 generation comparison based on May 2011 figures

ACTUAL CURRENT LEVEL OF VISITATION DURING THE MONTH OF MAY 2011

Week Day	TL Avg Visitors	Notes
Monday		not open to the public (too few visitors to cover costs)
Tuesday		not open to the public (too few visitors to cover costs)
Wednesday	61	
Thursday	61	
Friday	61	
Saturday	66	
Sunday		not open to the public (too few visitors to cover costs)
	249	TOTAL WEEKLY VISITORS

***NOTE:** There are no daily visitor limits; "Allowable" is shown as tour capacity & average drop-in visitation. Above figures do not include guests for additional private tours allowed for individuals and school groups, gallery openings, and artist talks all allowed under current permit. Di Rosa also hosts several hundred each year for various special permitted activities.

Prepared by K. Reasoner 7/15/11

November 10, 2011

To: Linda St. Claire

Re: di Rosa - Response to Comments of Gary Arnold, Cal Trans, in letter dated Oct. 10, 2011:

1. Cal Trans has been reconstructing State Route 121 over the last two years. The section containing the di Rosa frontage was completed in 2010. Cal Trans Project Manager, Ahmad Rahimi, P.E. is very familiar with the site and was in frequent communication with di Rosa during the construction to insure that the design met the needs for bus traffic. Mr. Rahimi forwarded to di Rosa the attached copy of the as built plans for this section of the highway in September, 2010. The earlier designs, marked draft, are also attached. These plans provide the information that was requested about the project's entrance/frontage.
2. The traffic analysis prepared for this project by George Nickelson, P.E. in July 2011 (attached) discusses the left turn lane and the refuge lane. The eastbound left-turn into the site is approximately 420 feet in length which is sufficient to store 18-19 vehicles and can easily accommodate a 40 foot bus. The use permit modification request is to extend the hours of operation, thereby increasing the number of weekly trips but not the number of hourly trips. There is no anticipated increase in the current 5 inbound trips and 4 outbound trips per hour. The left turn queue is more than adequate to accommodate this traffic.

Prepared by Carol Poole
for Kathryn Reasoner
Executive Director, di Rosa