

October 14, 2009

Ms. Demae Rubins, AICP
Summit Engineering, Inc.
463 Aviation Boulevard, Suite 200
Santa Rosa, CA 95403

Focused Traffic Analysis for Mumm Napa Estates

Dear Ms. Rubins;

Whitlock & Weinberger Transportation, Inc. (W-Trans) has completed an analysis of the potential traffic impacts that would be associated with holding special events at the existing Mumm Napa Estates located at 8445 Silverado Trail in the County of Napa. The project would add special events to the approved site activities, while the number of tasting room visitors and wine production level will be unchanged. The focus of the study was to evaluate the adequacy of the existing northbound left-turn lane on Silverado Trail at the access driveway with the addition of event-generated traffic.

Study Area and Periods

The study area consisted of Silverado Trail near the existing driveway to the Mumm Napa Estates. The driveway on Silverado Trail is the only access point for the site.

Conditions during the weekday p.m. peak hour were evaluated. The weekday p.m. peak hour captures the highest traffic volumes on the regional roadway system between 4:00 and 6:00 p.m. and it was assumed to reflect peak inbound traffic for special events to capture worst-case conditions.

Project Description

Mumm Napa Estates is requesting approval for up to 137 annual special events with between 20 and 180 attendees per event. Access to the property would continue to be via the existing driveway on Silverado Trail. Following is a breakdown of the maximum number of attendees and frequency for each type of proposed event:

- Small Private Tastings with Food Pairings – Maximum of 20 attendees with two events per week
- Private Promotional Tastings with Meals – Maximum of 50 attendees with two events per month
- Private Club Tastings with Meals – Maximum of 75 attendees with two events per year
- Private Auction and Release Events with Meals – Maximum of 100 attendees with two events per year
- Annual Growers Breakfast – Maximum of 100 attendees with one event per year
- Private Sunset Tastings – Maximum of 180 attendees with four events per year

Left Turn Lane Queue Lengths

The “Private Sunset Tastings” are expected to have the highest number of attendees, and would be likely to start during the evening peak period, so were used to evaluate the adequacy of the existing left-turn lane on Silverado Trail. An event with 180 guests in attendance would require a staff of five. Using an occupancy

of 2.5 persons per vehicle for guests and solo occupancy for staff, an event of this size would be expected to generate 154 trip ends (77 inbound and 77 outbound).

In the vicinity of the project site Silverado Trail has two 12-foot travel lanes and bike lanes on both sides. At the driveway there is a 75-foot long northbound left-turn. Existing count data for the study segment of Silverado Trail was not readily available, so a sensitivity test was completed to determine the maximum volume of through traffic that would need to be present before the queue exceeded the three vehicles that can be accommodated in the existing left-turn lane assuming a 25-foot long design vehicle.

Assuming that all of the inbound traffic during a special event comes from the south, a maximum of 77 left-turns would be expected at the driveway during the p.m. peak hour. Using a theoretical capacity of 2,000 vehicles during the same hour in both directions on Silverado Trail, the worst case stacking length was estimated to be three vehicles, or approximately 75 feet, which fits in the storage space available in the left-turn lane. Under the more likely conditions where about 40 vehicles enter the site via a left-turn and using 900 vehicles per hour in each direction on Silverado Trail, the maximum queue is only two vehicles, or 50 feet. The existing 75-foot turn pocket is therefore expected to adequately accommodate traffic associated with the largest special event included in the current proposal. Details of the turn lane analysis are shown in the enclosed Maximum Queue Calculation Sheets.

It should be noted that most events will be held outside of the winery's ordinary operating hours; however, for events that have more than 50 guests and occur during ordinary operating hours, all winery facilities including the tasting room will be closed.

Conclusions

The existing northbound left-turn lane on Silverado Trail at the existing Mumm Napa Estates driveway will adequately accommodate the estimated stacking length of 50 feet, or two vehicles, needed under conditions with the addition of traffic associated with the largest proposed special event.

Thank you for giving W-Trans the opportunity to provide these services. If you have any further questions, please call.

Sincerely,

Chris Helmer
Transportation Planner

Dalene J. Whitlock, P.E., PTOE
Principal

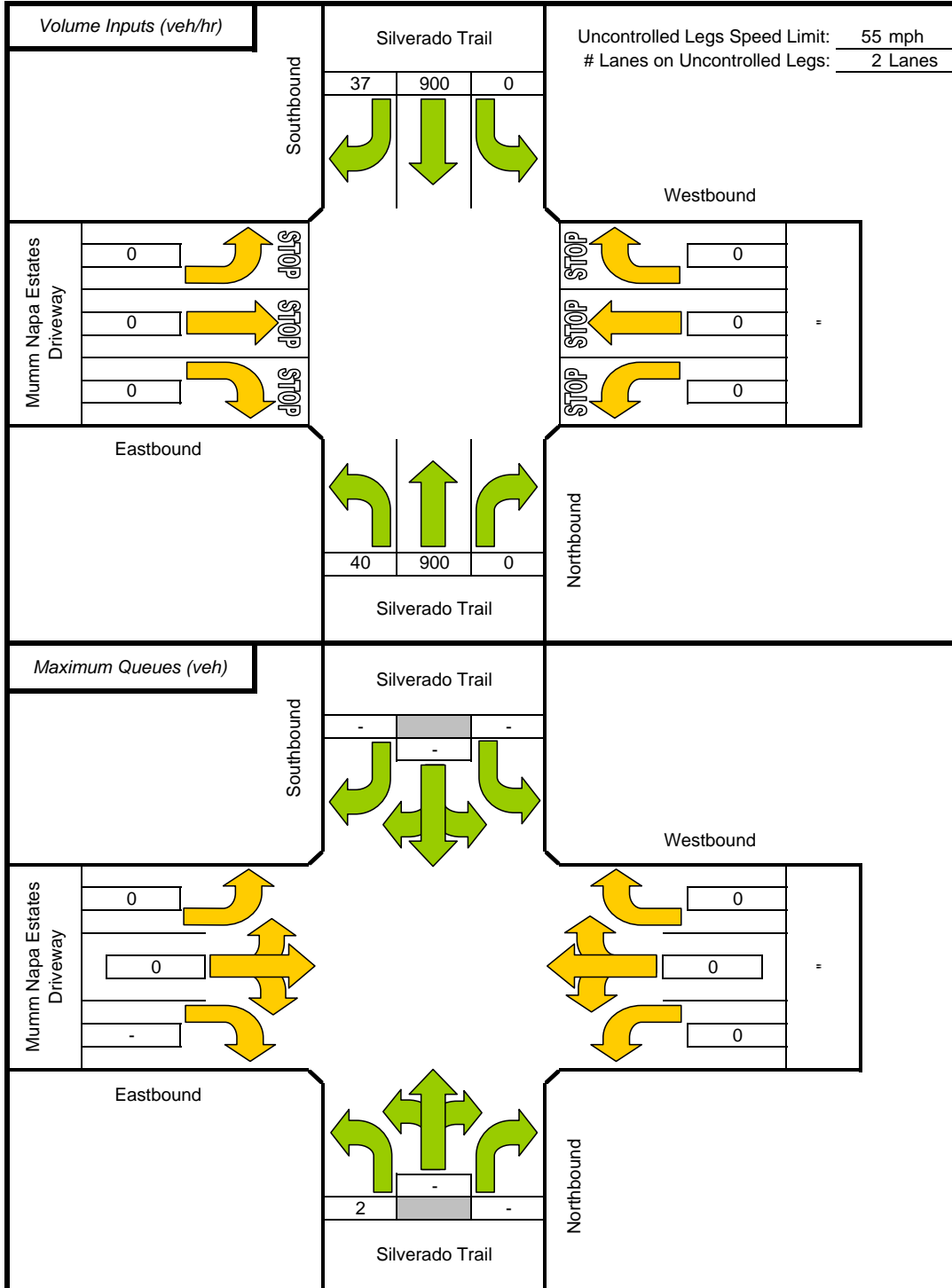
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Enclosure: Maximum Queue Calculation Sheets

Maximum Queue Length Two-Way Stop-Controlled Intersections

Through Street: Silverado Trail
Side Street: Mumm Napa Estates Driveway

Scenario: PM Peak Hour (Likely Case)
Stop Controlled Legs: East/West



Source: John T. Gard, ITE Journal, November 2001, "Estimating Maximum Queue Length at Unsignalized Intersections"