



MEMORANDUM

To: Rob Sprinkle
Deputy Director
City of Santa Rosa Traffic Engineering Department

Date: December 2, 2025

From: Zawwar Saiyed, M.S., P.E., R.S.P., Principal
Megan Lam, P.E., Transportation Engineer III
Linscott, Law & Greenspan, Engineers

LLG Ref: 2.25.5020.1

CC: Torina Wilson, Transportation Planner
Jandon Briscoe, City Planner

Subject: ***Mister Car Wash Traffic Impact Analysis Scope of Work***
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Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit the following Traffic Impact Analysis Scope of Work for the proposed Mister Car Wash (hereinafter referred as “Project”) in the City of Santa Rosa, Sonoma County, California for your review and approval.

Traffic Impact Analysis (TIA) Scope of Work

The traffic analysis for the proposed Project, inclusive of a Vehicle Miles Traveled (VMT) screening assessment, will satisfy the traffic impact requirements of the City of Santa Rosa and will also be consistent with the thresholds and criteria published in the *City of Santa Rosa Guidance for the Preparation of Traffic Operational Analysis (July 2019)* and the *City of Santa Rosa Vehicle Miles Traveled (VMT) Guidelines Final Draft (June 5, 2020)*.

- A. Project Location:** The Project site is a 0.838±-acre rectangular-shaped parcel of land addressed at 2700 Santa Rosa Avenue in the City of Santa Rosa, Sonoma County, California. The subject property is developed with an existing 10,000 square foot (SF) office building that is currently vacant. See the attached vicinity map and existing site aerial of the Project site – ***Figure 1-1*** and ***Figure 2-1***.
- B. Project Description:** The proposed Project includes the development of a new automated car wash consisting of a 4,700 SF building containing a 130-foot wash tunnel and three (3) entry lanes with a queuing storage capacity of approximately 20 vehicles. The proposed Project also includes 15 parking stalls (including 11 with vacuum equipment). Vehicular access to the Project site will be provided via two (2) unsignalized right-turn only driveways located along Santa Rosa Avenue.

Year 2027 will be utilized to assess the Project’s anticipated traffic impacts within a near-term traffic setting upon completion and full buildout/occupancy of the proposed Project. See the attached proposed site plan prepared by Ware Malcomb – ***Figure 2-2***.



C. Project Study Area: The following four (4) key study intersections have been selected for evaluation based on location of the Project and proximity to the subject property and the City of Santa Rosa's 50-trip threshold. The study intersections listed herein are provided for consideration and approval by City of Santa Rosa staff. See the attached vicinity map *Figure 1-1* which also identifies the study locations.

Key Study Intersections

- 1) Santa Rosa Avenue at Kawana Springs Road
- 2) Santa Rosa Avenue at Hearn Avenue
- 3) Santa Rosa Avenue at Yolanda Avenue/US 101 NB Ramps
- 4) Santa Rosa Avenue at Southside

D. Traffic Counts: The AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) traffic counts for the above listed four (4) key study intersections will be conducted on a weekday (Tuesday, Wednesday, or Thursday) in November 2025 when local area schools are in session.

E. Project Trip Generation: *Table 5-1* presents the trip generation forecast for the proposed Project. As shown in the upper portion of *Table 5-1*, the trip generation potential of the Project will be estimated using ITE Land Use 948: Automated Car Wash trips rates.

Review of the bottom of *Table 5-1* indicates that the proposed Project is forecast to generate 1,191 weekday daily trips, with 70 trips (38 inbound, 32 outbound) produced in the AM peak hour and 115 trips (56 inbound, 59 outbound) produced in the PM peak hour on a "typical" weekday.

After adjustment for "pass-by trips", the proposed Project is expected to result in an additional 893 weekday net daily trips, with 52 net AM peak hour trips and 57 net PM peak hour trips. For this assessment, a pass-by reduction factor of 25%, 25% and 50% is assumed for the daily, AM and PM peak hours, respectively. The potential impact of these additional trips will be assessed in the traffic study.

F. Trip Distribution: See the attached project traffic distribution pattern – *Figure 5-1* for review by the City. The trip distribution pattern was developed based on the following considerations:

- the site's proximity to major traffic carriers (i.e. U.S. Route 101 Freeway, Santa Rosa Avenue, etc.)
- expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals, and

- ingress/egress availability at the Project site.

G. Year 2027 Cumulative Traffic:

- Ambient Growth Rate: 1.0% per year
- Cumulative Projects – Based on coordination with City of Santa Rosa Planning Department, the City does not currently have any other planned/pending projects.

H. Analysis Methodology and Scenarios: The following traffic analysis scenarios will be prepared for the proposed Project:

- (a) Existing Traffic Conditions;
- (b) Existing Plus Project Traffic Conditions;
- (c) Scenario (b) with Improvements, if necessary;
- (d) Year 2027 Cumulative (Existing Plus Cumulative Projects) Traffic Conditions;
- (e) Year 2027 Cumulative (Existing Plus Cumulative Projects) Plus Project Traffic Conditions; and
- (f) Scenario (e) with Improvements, if necessary.

The LOS calculations will be based on the Highway Capacity Manual 7 (HCM 7) methodology for signalized and unsignalized intersections.

Per the City of Santa Rosa guidelines, LOS D should be maintained along all major corridors. The Project's potential impact will be based on the following significant impact criteria per the City of Santa Rosa guidelines:

- The level of service (LOS) at an intersection degrading from LOS D or better to LOS E or F, or
- An increase in average vehicle delay of greater than 5 seconds at a signalized intersection where the current LOS operates at either LOS E or F.
- Queueing impacts based on a comparative analysis between the design queue length and the available queue storage capacity. Impacts include, but are not limited to, spillback queue at project access locations (both ingress and egress), turn lanes at intersections, lane drops, spill back that impacts upstream intersections or interchange ramps.

I. Other Issues:

- Evaluate site access and internal circulation, including level of service calculations at the project driveways.
- Queueing analysis at the study intersections and project driveways.
- On-site queueing evaluation to confirm that vehicles will not queue back onto Santa Rosa Avenue.

J. VMT Screening Assessment: Using the *City of Santa Rosa Vehicle Miles Traveled (VMT) Guidelines Final Draft (June 5, 2020)* as guidance, prepare a VMT screening letter, as a separate document, to determine if the proposed Project screens out from the preparation of a full VMT analysis. There are seven types of screening that can be applied to effectively screen projects from project-level assessment, which include:

- Small Infill Projects
- Map-Based Screening for Residential and Office Projects
- Near Transit Station
- Affordable Housing
- Locally Serving Retail
- Mixed Use Projects
- Local-Serving Public Facilities (excluding schools)

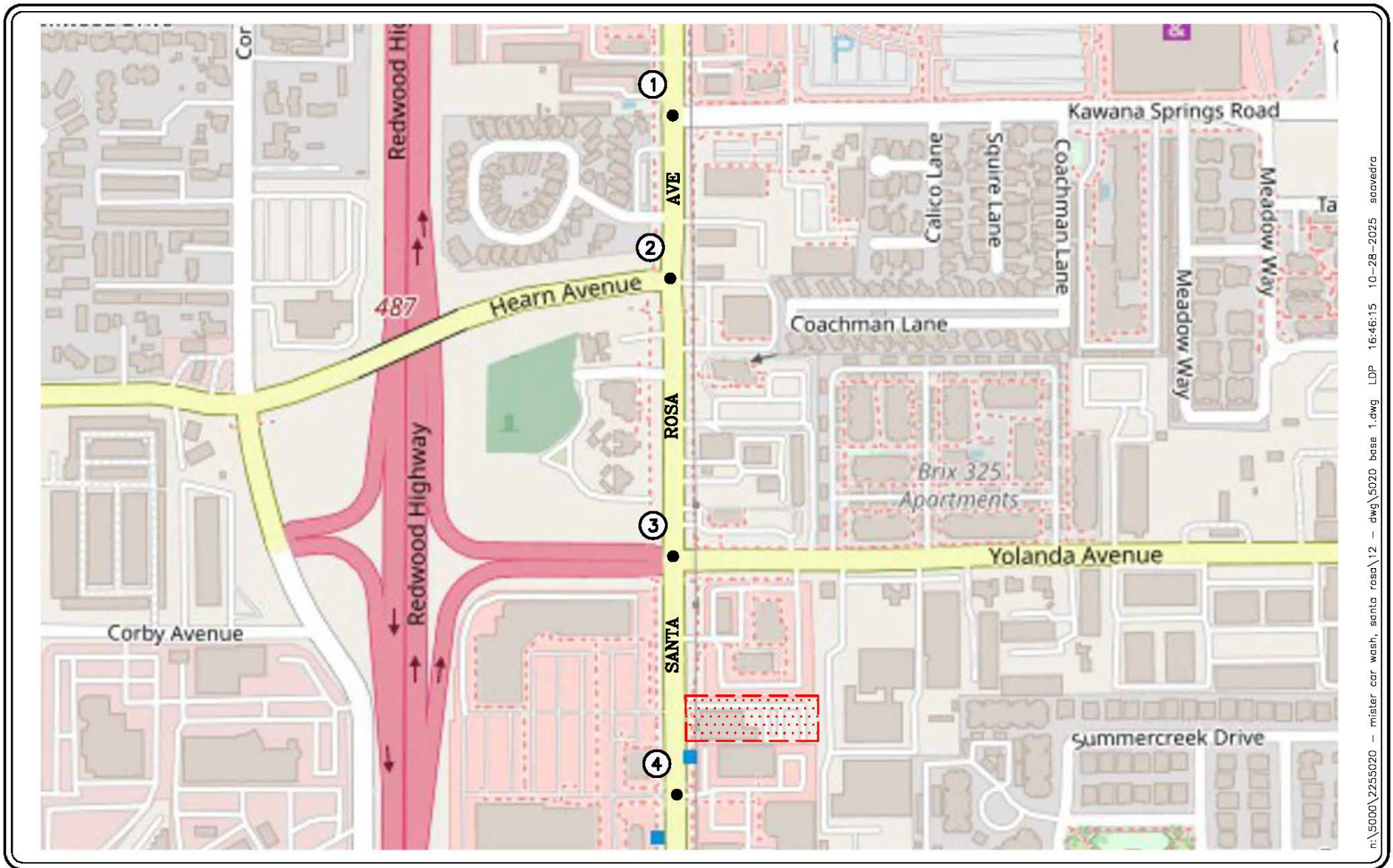
* * * * *

We appreciate the opportunity to provide this scope of work. Should you have any questions, please call us at (949) 825-6175. Thank you.

Approved by:

City of Santa Rosa

Date



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SOURCE: OPEN STREETS

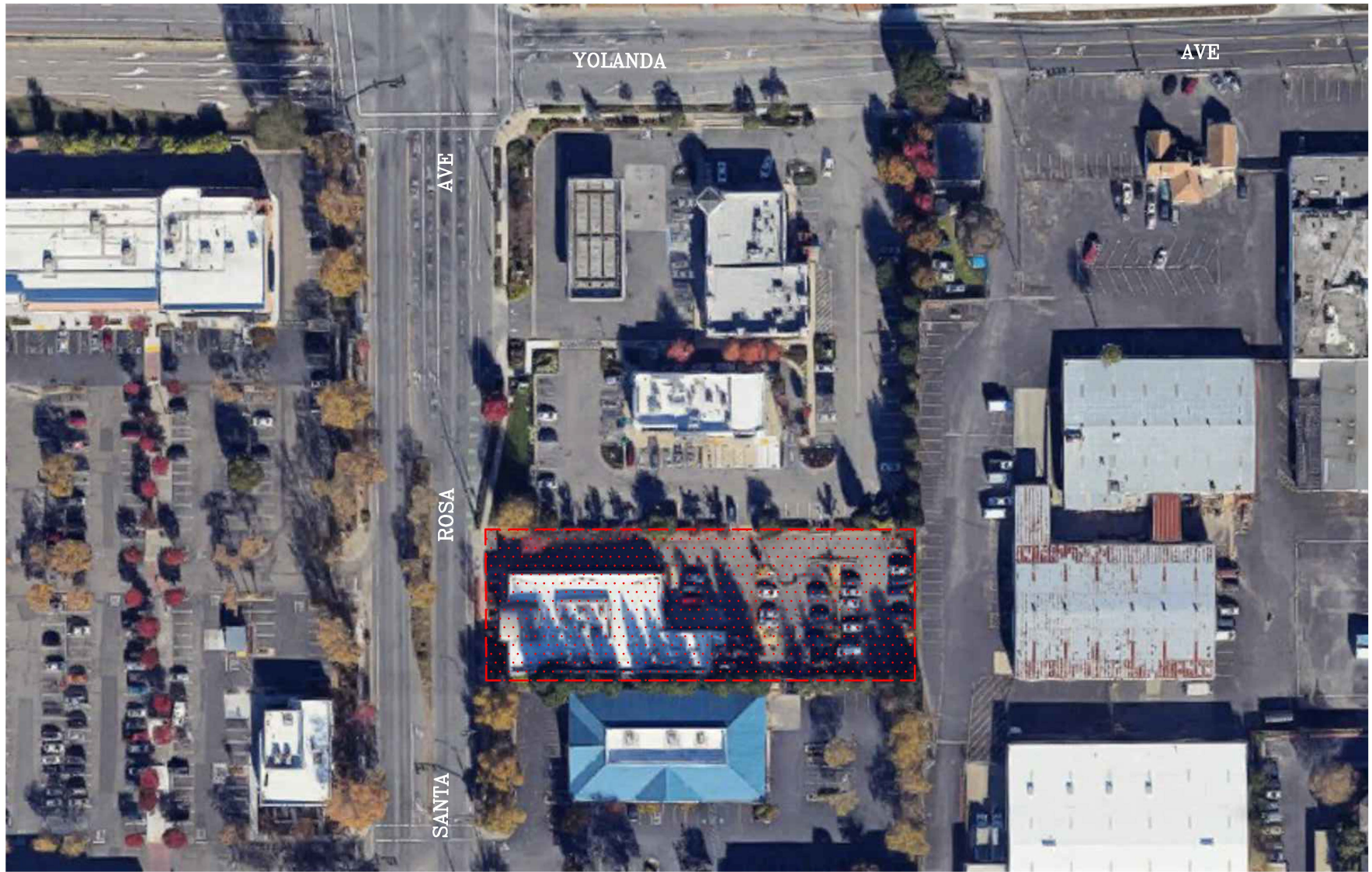
KEY

-  = STUDY INTERSECTION
-  = PROJECT SITE

FIGURE 1-1

VICINITY MAP

MISTER CAR WASH, SANTA ROSA



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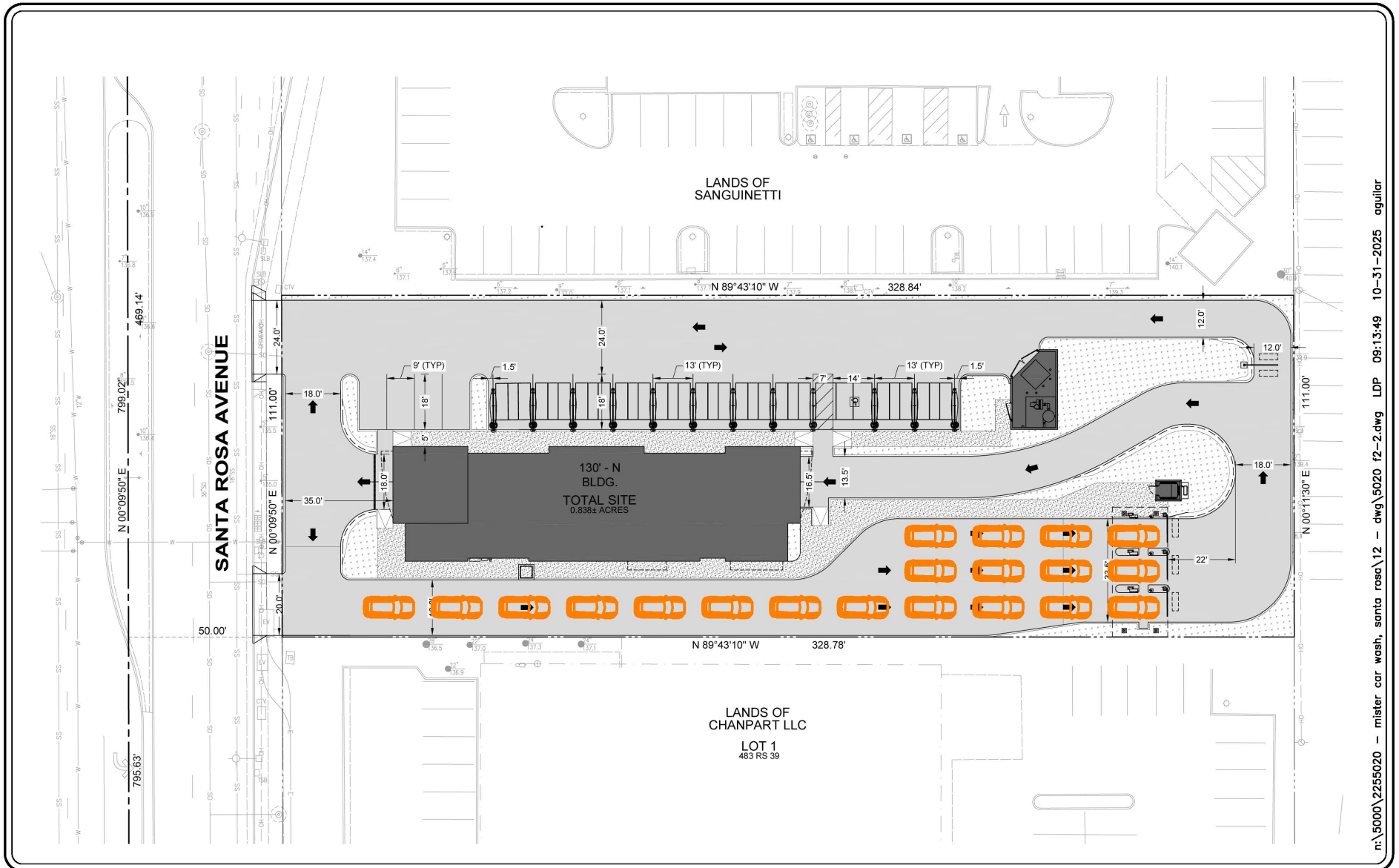
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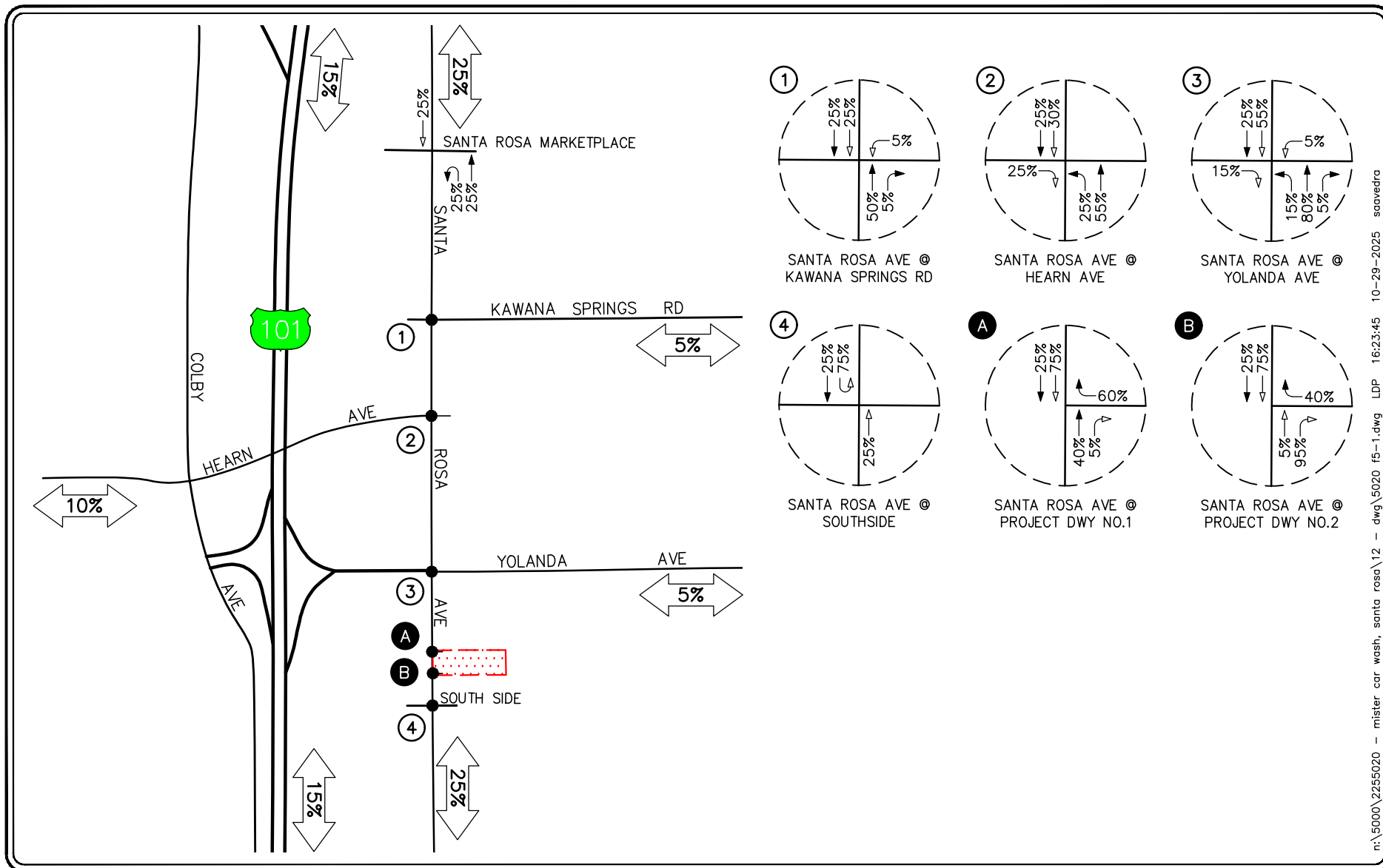
KEY

 = PROJECT SITE

FIGURE 2-1

EXISTING SITE AERIAL
MISTER CAR WASH, SANTA ROSA





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NO SCALE

KEY

- ① = STUDY INTERSECTION
- [Red Hatched Box] = PROJECT SITE
- ↔ = INBOUND PERCENTAGE
- ↔ = OUTBOUND PERCENTAGE

FIGURE 5-1

PROJECT DISTRIBUTION PATTERN
MISTER CAR WASH, SANTA ROSA

TABLE 5-1
PROJECT TRIP GENERATION RATES AND EQUATIONS¹

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<i><u>Trip Generation Rates:</u></i>							
▪ 948: Automated Car Wash (TE/KSF)	253.51	55%	45%	14.89	49%	51%	24.40
<i><u>Trip Generation Forecast:</u></i>							
▪ Mister Car Wash (4,700 SF)	1,191	38	32	70	56	59	115
Pass-by (Daily: 25%, AM: 25%, PM: 50%) ²	-298	-10	-8	-18	-28	-30	-58
<i>Total Project Trip Generation</i>	893	28	24	52	28	29	57

Notes:

TE/KSF = Trip end per 1,000 SF

¹ Source: *Trip Generation, 12th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2025).*

² Pass-by trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on adjacent streets, which contain direct access to the generator. For this analysis, engineering judgment and the proposed land use was utilized in determining the rates as follows: Daily – Estimated to be 25% / AM Peak Hour – Estimated to be 25% / PM Peak Hour – 50%