

ATTACHMENT 9

Y2K Engineering, LLC
Parking Demand Analysis – Super Star Car Wash
Magnolia Avenue and Rockvill Street – Santee, California
January 29, 2024.

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Parking Demand Analysis

January 29, 2024

Luke Eid
SSCW Companies
960 W. Behrend Drive, Suite 2
Phoenix, AZ 85027

Phone: (412) 628-5535
Email: leid@sscwaz.com



Expires
3/31/24

**Subject: Parking Demand Analysis – Super Star Car Wash
Magnolia Avenue and Rockvill Street – Santee, California**

Dear Mr. Eid,

Y2K Engineering, LLC. (Y2K) has been retained to prepare this parking analysis for the proposed Super Star Car Wash, located at 8837 Magnolia Avenue in Santee, California. The development will occupy a parcel of land that is currently occupied by an existing RV rental facility and dealership. The proposed site includes an automatic carwash facility with one 140-foot tunnel and parking for 31 vacuum stalls (including three ADA spaces).

The purpose of this analysis is to evaluate if the site plan provides sufficient parking for customers based on local and national standards.

A vicinity map of the project site is shown in **Figure 1** and the proposed site plan for the development is shown in **Figure 2**.

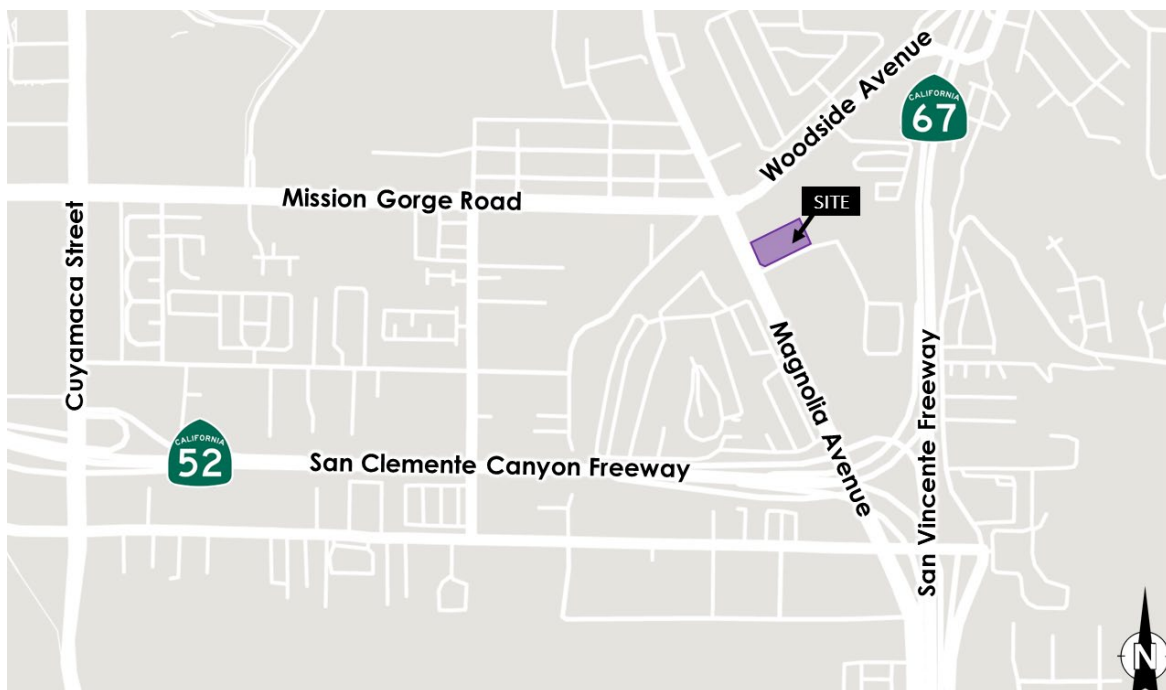


Figure 1: Vicinity Map



Figure 2: Site Plan

PROPOSED DEVELOPMENT

TRIP GENERATION

In order to evaluate the necessary parking on site it is necessary to evaluate the trip generation associated with the project. ITE’s *Trip Generation Manual, 11th Edition* contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the manual includes average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and generated trips for each categorized land use.

The ITE *Trip Generation Manual* does not provide data for the daily and AM peak hour for the Automated Car Wash land use. Therefore, data from the “(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region” (SANDAG) was utilized.

Table 1 shows the project weekday peak hour trip generation for the site.

Table 1: Trip Generation

DESCRIPTION OF LAND USE				VEHICLE GENERATED TRIPS						
ID	Land Use	Quantity	Size	Daily	AM Peak Hour		PM Peak Hour			
				Total	Enter	Exit	Total	Enter	Exit	Total
1	Automated Car Wash	1	Tunnels	900	18	18	36	41	41	82

1. Source: (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (SANDAG)

The proposed Super Star Car Wash is anticipated to generate a total of 82 weekday PM peak hour trips (entering and exiting).

PARKING DEMAND (NATIONAL DATA)

A parking analysis is required to determine if sufficient parking is designed at the proposed car wash during peak times of utilization. According to the Santee, California Municipal Code Title 13, Chapter 13.24 Parking Regulations Code 13.24.040, for automobile uses regarding washing and detailing including full-service car wash, self-service car wash, and/or express car wash, a parking demand study is required to be approved by the Director.

ITE’s *Parking Generation Manual*, 6th Edition does not provide parking demand data for LUC 948, Automated Car Wash.

Previous research on parking generation data with different land uses has been conducted and was presented in a blog post written by Mike Spack (PE, PTOE) at Spack Solutions in Minneapolis, Minnesota. Mike Spack is a nationally known traffic engineer who’s companies have significant amounts of traffic data which has been collected over many years.

In the article, *New Parking Generation Data for Uses Not in ITE’s Parking Generation Report* (<https://www.mikeontraffic.com/new-parking-generation-data-for-uses-not-in-ites-parking-generation-report/>), several new parking generation data sets are presented for 14 different land uses that are not provided in the ITE’s *Parking Generation Manual*.

Table 2 provides the parking rate criteria for carwash stalls.

Table 2: Mike Spack Parking Generation Data

Land Use	Rate in Vehicles Per:	Average Peak Rate
Car Wash	Wash Stalls	9

As shown in Table 2, the average peak parking rates were presented, and the car wash land use is stated to obtain a maximum average of 9 occupied parking spaces per wash stall at the peak time. Based on the data available from Mike Spack, it is expected that the proposed 31 vacuum parking stalls will be adequate due to an anticipated average of 9 vehicles utilizing the stalls during the weekday or Saturday peak hour.

PARKING DEMAND (SUPER STAR CAR WASH DATA)

Another parking demand calculation can be completed based on data from Super Star Car Wash. It is assumed that users will spend a maximum time of 15 minutes at the carwash, including time in the tunnel as well as at the vacuum stalls. According to calculations provided by Super Star Car Wash, 50 vehicles are anticipated to enter the site during the weekday peak hour and 75 vehicles during the Saturday peak hour. Based on data from existing Super Star Car Wash facilities, a maximum of 40% of entering traffic is anticipated to park on site and utilize the vacuum stalls. The remaining 60%, likely having monthly memberships, would just utilize the wash tunnel and proceed through the site.

Of the 40% who choose to park and vacuum or wipe down their vehicle, there would be a weekend peak hour total of 30 vehicles parking on site spread throughout the course of an hour. If this number were evenly distributed throughout the hour, assuming a total time at the car wash of 15 minutes, the average number of parking spaces utilized would be approximately 7.5 spaces. Assuming even half of the total vehicles who decided to park in the peak hour overlapped their 15-minute stay, a maximum parking demand of 15 vehicles would be realized. Based on these calculations, only half of the 31 parking stalls would be utilized.

CONCLUSIONS

- The proposed car wash site includes an automated car wash facility with one 140-foot tunnel and parking spaces for 31 vacuum stalls.
- Based on national data collected by Mike Spack and Spack Solutions, the peak parking demand for a one-tunnel car wash is 9 parking stalls.
- Utilizing information available from Super Star Car Wash, a maximum of 40% of the traffic visiting their locations utilizes the parking spaces to vacuum or wipe down their vehicle. Based on this information and the 75 typical weekend visitors during the peak hour; the maximum parking demand expected at a Super Star Car Wash is between 8 and 15 vehicles.
- It is expected that the proposed 31 parking spaces will adequately serve the project site.

We appreciate the opportunity to prepare this parking demand analysis. Should you have any questions, please feel free to contact me by email at cwilliams@y2keng.com or by phone at (602) 380-8686.

Sincerely,

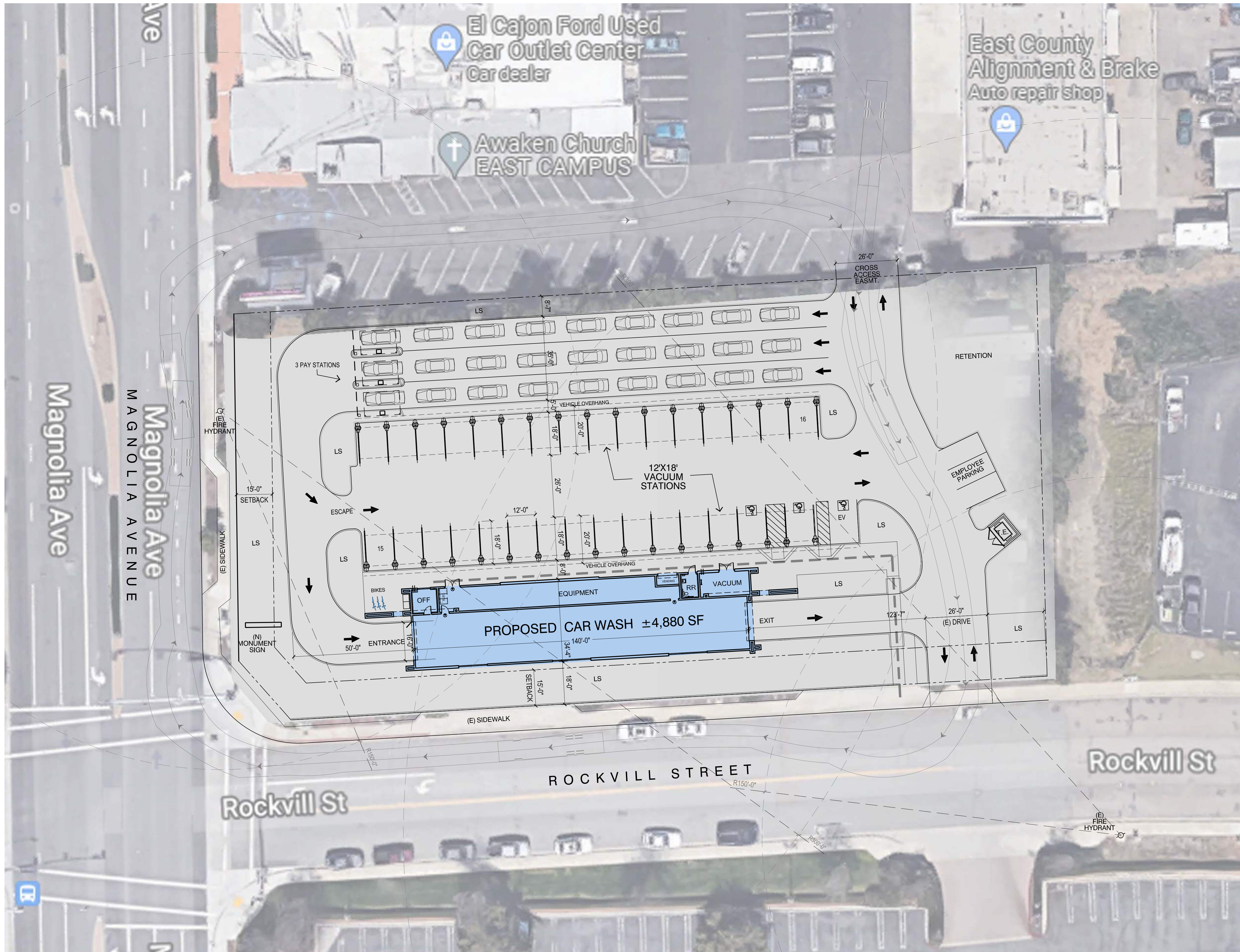


Christopher B. Williams, PE, PTOE
Senior Traffic Engineer

Attachments



**ATTACHMENT A:
SITE PLAN**



VICINITY MAP N.T.S.

PROJECT SUMMARY

APN: 384-470-3300
 ZONING: IL/GC
 SITE AREA: ±1.26 AC (54,450 SF)
 PROPOSED CAR WASH USE
 TOTAL BUILDING AREA: ±4,880 SF
 - 140' CARWASH BAY / TUNNEL
 - 3 PAY STATIONS
 - 31 VACUUM STATIONS
 CONSTRUCTION TYPE: V-B
 OCCUPANCY: B

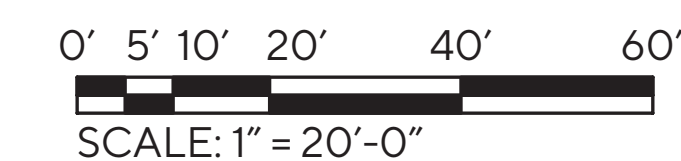
NOTE:
 THE PRELIMINARY INFO ON THIS EXHIBIT ARE BASED ON A SCALED IMAGE, AND SUBJECT TO ADJUSTMENT. ANY FURTHER DEVELOPMENT IS SUBJECT TO A THOROUGH SITE INVESTIGATION, THE APPROVAL OF CLIENTS, AND GOVERNMENTAL AGENCIES.



MAGNOLIA AVE & ROCKVILL ST
 8837 MAGNOLIA AVE | SANTEE, CA 92071



PROJECT NORTH



SITE PLAN



A-01

Scale
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