

ATTACHMENT 3

Y2K Engineering, LLC
Traffic Impact Statement – Super Star Car Wash
Magnolia Avenue and Rockvill Street – Santee, California
January 29, 2024.

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January 29, 2024

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

Phone: (412) 628-5535
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Expires
3/31/24

**Subject: Traffic Impact Statement – Super Star Car Wash
Magnolia Avenue and Rockvill Street – Santee, California**

Dear Mr. Eid,

Y2K Engineering, LLC. (Y2K) has been retained to prepare a traffic impact statement (TIS) 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 covered vacuum stalls (including three ADA spaces). Access to the facility will be provided from Rockvill Street and through cross access with the parcel north of site, which provides access to Magnolia Avenue.

A vehicle-miles traveled (VMT) analysis was not performed for this site because car washes are considered local serving businesses. Additionally, this site is in a developed area and located on a bus route on Magnolia Avenue. Because the daily trips generated by the site are under 1,000, a full traffic study is not required.

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

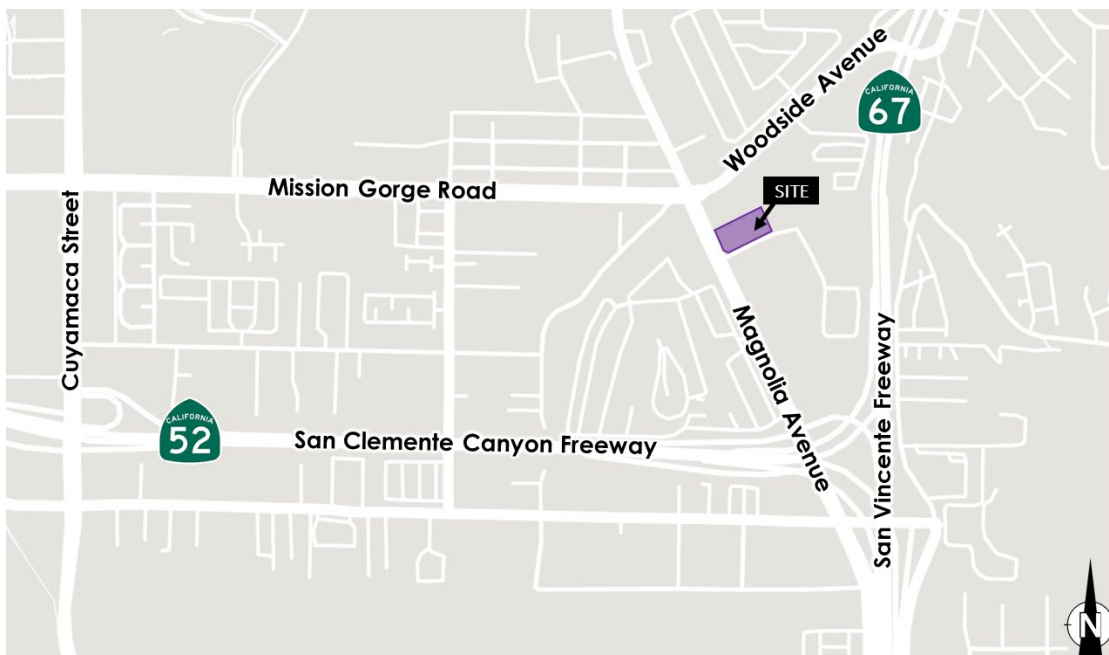


Figure 1: Vicinity Map



Figure 2: Site Plan

EXISTING CONDITIONS

ROADWAY NETWORK

Magnolia Avenue is a northwest-southeast-aligned roadway classified as a minor arterial per Caltrans Functional Classification. In the site’s vicinity, three through lanes are provided in each direction, separated by a raised median. Magnolia Avenue connects the site to California State Route 52 (SR52) and California State Route 67 (SR67) south of the project site. Streetlights, sidewalks, curbs, and gutters are available on both sides of the road. Bike lanes are not present along this roadway within the vicinity of the project site. The posted speed limit on Magnolia Avenue is 40 mph.

Rockvill Street is a northeast-southwest aligned roadway classified as a local roadway per the Caltrans Functional Classification. Rockvill Street terminates at Magnolia Avenue and extends approximately 700 feet before making a 90 degree right-turn and eventually terminates in a cul-de-sac. At the intersection of Magnolia Avenue/Rockvill Street, Rockvill Street is aligned with the southwest approach that serves as a commercial driveway. In the site’s vicinity, Rockvill Street is a two-lane undivided roadway. Roadway striping terminates approximately 275 feet northeast of the intersection of Magnolia Avenue & Rockvill Street where the roadway maintains sufficient width for bidirectional traffic. Roadway improvements such as curb, gutter, sidewalks, and streetlights are located along both sides of Rockvill Street. Bike lanes are not present along this roadway. The assumed speed limit of Rockvill Street is 25 mph.

The intersection of **Magnolia Avenue and Rockvill Street** is a four-legged signalized intersection, with a commercial driveway serving as the southwestern leg of this intersection. The southeastbound and northwestbound approach consists of one designated left-turn lane, two lanes that serve through traffic, and one shared through/right-turn lane. The southwestbound and northeastbound approach provides one left-turn lane and one shared lane for through and right-turning traffic. Improvements such as sidewalks, pedestrian ramps, crosswalks, and streetlights are present on all four corners of this intersection.

The intersection of **Magnolia Avenue and North Drive Aisle** is a unsignalized right-out only driveway access to the existing commercial developments located north of the project site. An arrow directing exiting traffic indicates that this access is intended to only serve egress traffic. It is assumed that vehicles exiting the North Drive Aisle must yield to traffic on Magnolia Avenue. The southwestbound approach consists of one dedicated right-turn lane (no other movement is allowed). The northwestbound approach provides three through lanes, with the outer right turn lane transitioning into a dedicated right-turn lane north of this intersection.

The existing roadway network and intersection control is depicted in Error! Reference source not found..

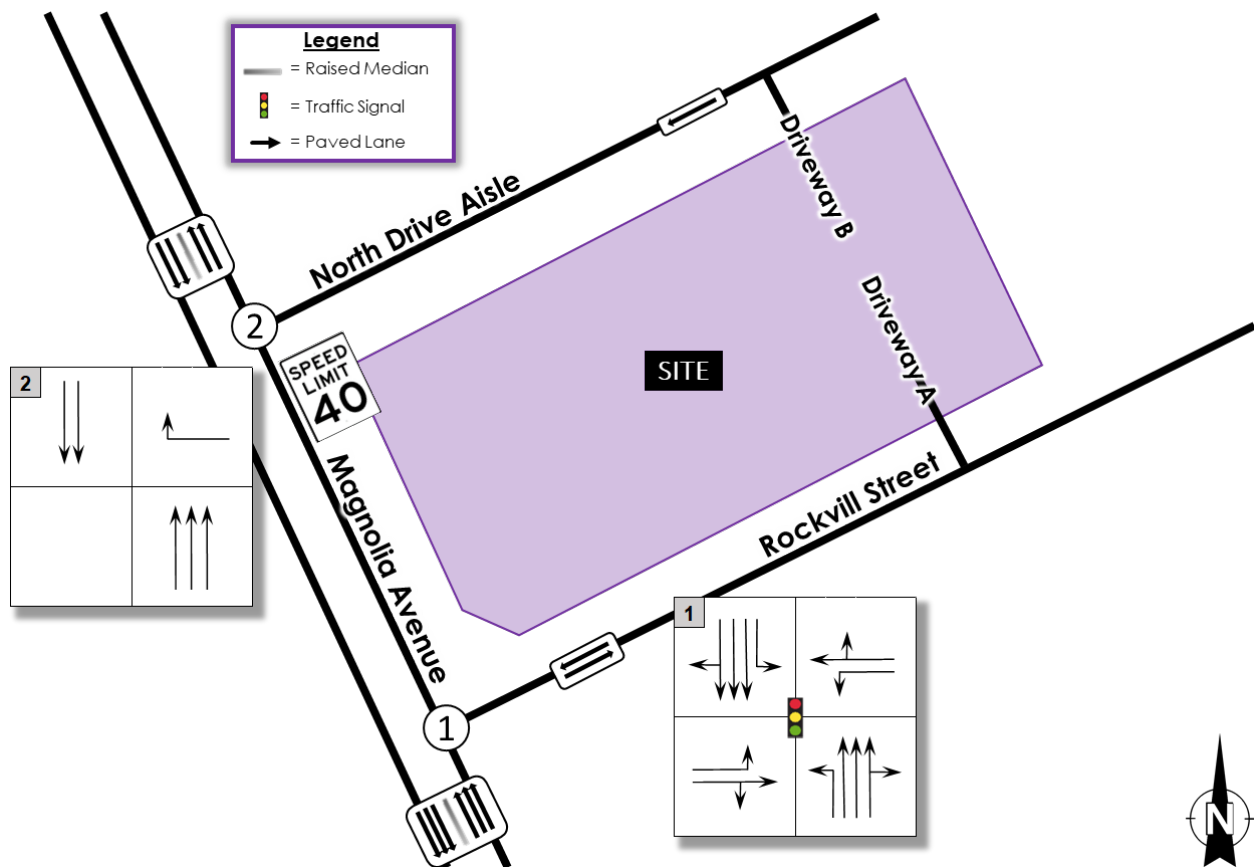


Figure 3: Existing Roadway Network and Intersection Lane Configuration

PROPOSED DEVELOPMENT

SITE LOCATION, LAND USE, AND ACCESS

The project proposes an automated car wash facility with a 140-foot wash tunnel, thirty-one (31) vacuum bays, and three pay stations. The Super Star Car Wash is proposed on a parcel (approximately 1.26 acres in size) that is currently an RV rental and dealership facility. The parcel is located on the northeast corner of Magnolia Avenue and Rockvill Street. The car wash will be located adjacent to an existing commercial complex located north of the project site that currently provides a church, an auto repair shop, and a pest control service.

Access to the proposed carwash will be through two driveways. One full access is proposed on Rockvill Street. Existing driveways on Rockvill Street will be consolidated to one driveway on the eastern limit of the site. A cross access agreement with the adjacent parcel north will provide an additional access point for ingress and egress traffic (Driveway B). Access to the proposed car wash tunnel will be provided through the north portion of the site, adjacent to Driveway B. It is expected that the majority of vehicles will enter the carwash through Driveway A, due to turning restrictions on North Drive Aisle.

TRIP GENERATION

In order to evaluate the traffic impacts of the 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 36 weekday AM peak hour trips (entering and exiting) and 82 PM peak hour trips (entering and exiting). A significant number of the trips to and from a car wash site are “pass-by” in nature meaning that they are trips that are already in place on the surrounding roadway network and will convert from a through movement to a turning movement into and out of the proposed site.

Therefore, the trips generated by the car wash are not anticipated to equate to the total net trips added to the roadway as a result of the development.

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

Trip distributions and driveway percentages have been created in conjunction with the proposed site. Distribution percentages were determined by analyzing the developments nearby the proposed site and assumed existing traffic patterns. It is estimated that 50% of traffic will be arriving from the north, however, due to limitations on North Drive Aisle (right-out access only), most traffic is expected to use Driveway A to access the car wash. An estimated 25% of traffic is expected to access the site from Driveway B through adjacent driveways north of the site. The trip distribution for the overall development and the driveway percentage distributions are displayed in Figure 4.

The site traffic expected to enter and exit the site was estimated using the trip generation and distribution shown in Figure 4. Figure 5 below shows the weekday AM and PM peak hour turning movement traffic associated with the proposed site at proposed driveways.

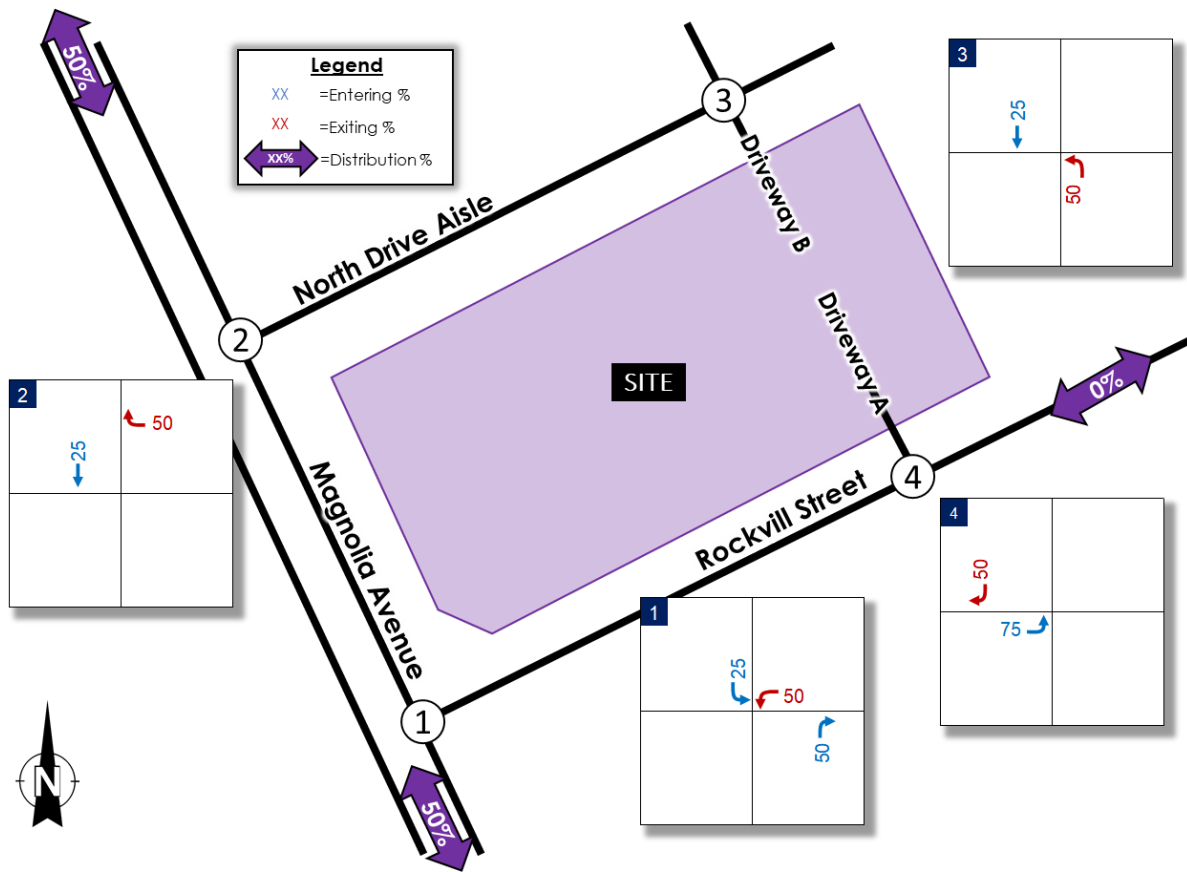


Figure 4: Trip Distribution

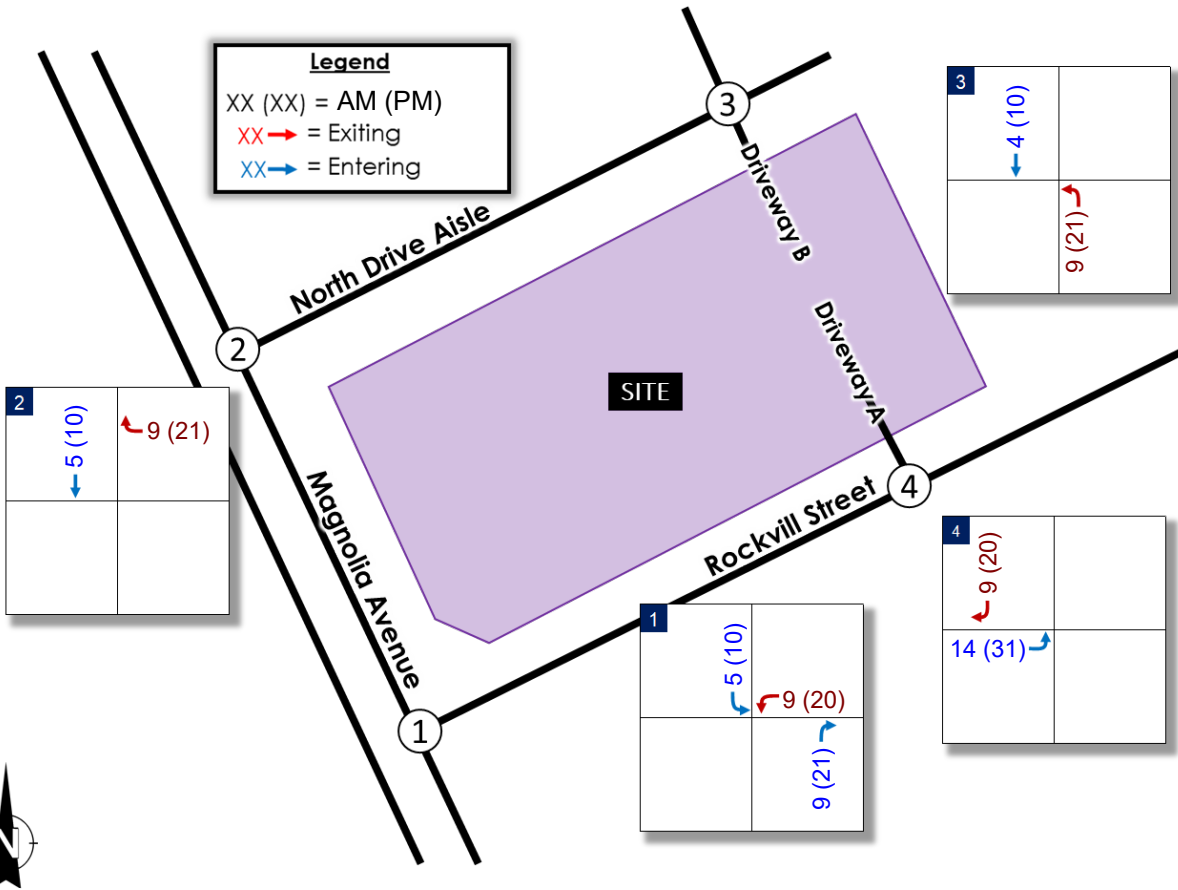


Figure 5: Weekday AM and PM Peak Hour Site Volumes

ON-SITE CIRCULATION

As shown in Figure 2 and Attachment A, three proposed queue lanes on the northern side of the site will allow customers to order, pay, and wait to proceed through the car wash tunnel. Access to these queue lanes is immediately west of Driveway B, allowing for easy entry from the internal drive aisle network that is currently in place. The three queue lanes merge to one lane before proceeding through the car wash tunnel, after which vehicles may access the vacuums if they choose. The vacuum stalls are located along a 26-foot-wide drive aisle that allows for bidirectional vehicular travel. There is expected to be sufficient internal circulation on site with connections between the queuing lanes, and the vacuum stall drive aisle.

Three queue lanes are provided in advance of the car wash tunnel which will allow for approximately 200 feet of queuing per lane. Assuming an average vehicle length of 25 feet, it is estimated that around 24 vehicles (8 per lane) can queue before impacting access to the drive aisle within the site. As this car wash site is not a full-service car wash site that vacuums the vehicles prior to entering the tunnel, the queue in each lane will only be for payment. Thus, the queue is not anticipated to extend more than 3 or 4 vehicles at once and ample storage is expected to be provided in the designated queuing area per the site plan.

CONCLUSIONS

- The proposed car wash site includes an automated car wash facility with one 140-foot tunnel and parking for 31 vacuum stalls.
- Site access is proposed to be provided by two existing access points. Existing driveways on Rockvill Street will be consolidated to one full access driveway on the eastern limit of the site. One full access driveway (Driveway B) will be provided on the north limits of the site to provide access to adjacent driveways through cross access agreements.
- The Super Star Car Wash is anticipated to generate a total of 36 trips (entering and exiting) during the weekday AM peak hour and a total of 82 trips (entering and exiting) during the weekday PM peak hour.
- Many of the trips to and from a car wash site are typically “pass-by” in nature. Therefore, the trips generated by the car wash are not anticipated to equate to the total net trips added to the roadway network as a result of the development.
- The proposed site is expected to generate approximately 900 daily vehicle trips based on SANDAG’s Brief Guide of Vehicular Traffic Generation rates for the San Diego Region; therefore the site is not expected to have a significant impact on the surrounding roadway network.
- Because the daily trips generated by the site are under 1,000, a full traffic study is not required.
- Approximately 24 vehicles may queue within the three ordering lanes before impacting the internal drive aisle within the site. Significant queuing is not anticipated and is not expected to extend beyond the site at either access point.
- A vehicle-miles traveled (VMT) analysis was not performed for this site because car washes are considered local serving businesses. Additionally, this site is in a developed area and located on a bus route on Magnolia Avenue.
- New site driveways should be built to the new City of Santee Standard Drawing PW-38.

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

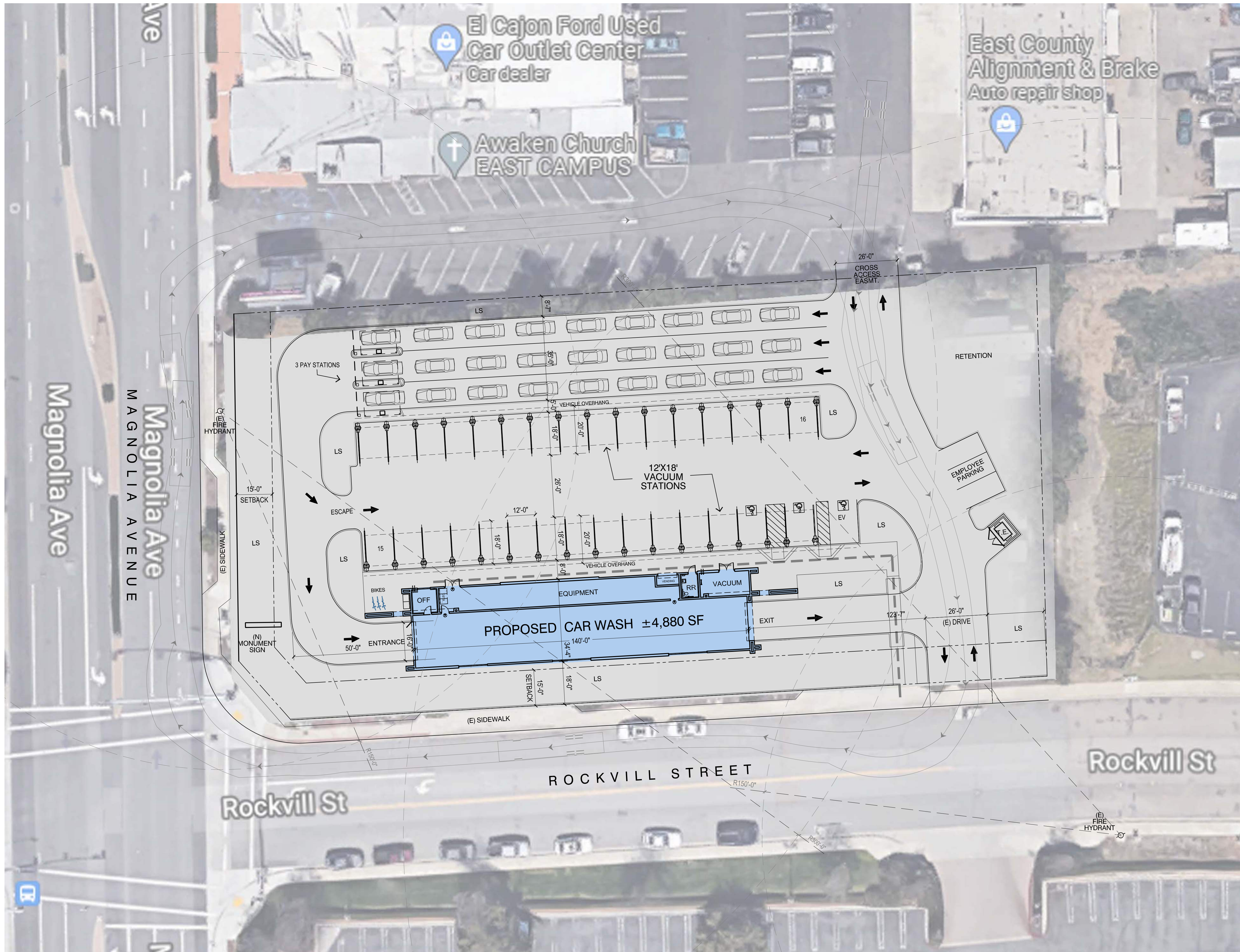
Sincerely,



Christopher B. Williams, PE, PTOE
Senior Traffic Engineer

Attachments

**ATTACHMENT A:
SITE PLAN**



VICINITY MAP N.T.S.

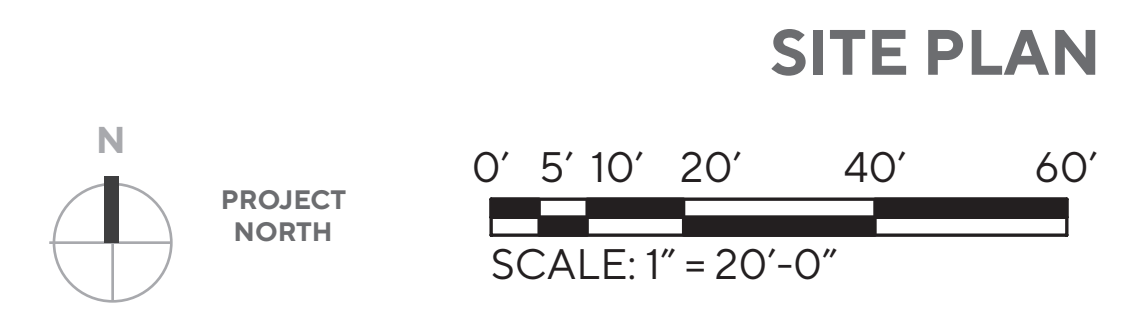
PROJECT SUMMARY

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.



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