TRAFFIC IMPACT STUDY FOR

RANCHO SAN CLEMENTE BUSINESS PARK DELIVERY STATION

DATE:
May 13, 2021

LOCATION:
San Clemente, California

PREPARED FOR:
City of San Clemente

PREPARED BY:
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EXECUTIVE SUMMARY

A new e-commerce delivery station is proposed for construction in San Clemente, CA. The proposed site for the new construction will encompass the 97,962 SF delivery station, staging and loading areas for delivery vehicles, and parking for 462 vehicles. The site will have two (2) primary access points - one on the west side of the site at the terminus of Calle Amanecer and one on the east side of the site at the terminus of Calle Sombra.

Traffic generated by the delivery station will consist of four (4) different types of vehicle trips – employee commuter trips, delivery van trips, private carrier (personal passenger delivery vehicles) trips, and line haul (tractor trailer) truck trips. The delivery station will generate a total of 920 one-way daily vehicle trips. During the peak hours of the local roadway network, the facility will produce 2 vehicle trips during the AM peak hour (1 inbound, 1 outbound) and 56 vehicle trips during the PM peak hour (37 inbound, 19 outbound).

The study consists of capacity analyses for three different scenarios (existing, no-build, and build conditions) of five (5) intersections located within a ½ mile radius of the project. Considering a level of service (LOS) D as a benchmark, all intersections perform adequately at an overall LOS D or better except for Avenida Pico & Avenida La Pata which experiences an LOS E during the PM peak hour. The level of service is driven by the NB left turn movement which has a v/c ratio that exceeds the generally accepted 0.85. The ICU for each intersection is less than 82% at an LOS C or better.

The additional of project traffic to the study network poses no significant impacts to the intersections' performance. All intersections continue to operate as in no-build conditions with increases of less than one (1) second of delay at the study intersections.

The delivery station is anticipated to generate 21.1 Vehicle Miles of Travel (VMT) per employee per day which is less than the Orange County average of 24.1 VMT/employee. The delivery station's transportation impacts should not be considered significant for CEQA purposes.

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Introduction

A new e-commerce delivery station with a footprint of 97,962 SF is planned for construction on two vacant parcels along Calle Amanecer in San Clemente, California. The proposed site includes a delivery station, a delivery van queueing area, and parking facilities that will accommodate 123 automobile parking stalls and 339 van parking stalls. The site includes two access points located at the end of Calle Sombra on the east side of the site and Calle Cordillera on the west side of the site.

This traffic impact study analyzes the impact of new traffic added to the local roadways upon the occupancy of the delivery station.

This study includes analysis of the Existing Conditions, No-Build Conditions (including background growth and expected traffic from adjacent/nearby developments), and Build Conditions at the following intersections:

1. Avenida Pico & Calle Amanecer
2. Calle Amanecer & Calle Cordillera
3. Calle Sombra & Calle Amanecer
4. Avenida La Pata & Calle Amanecer
5. Avenida La Pata & Avenida Pico

The report summarizes background and projected traffic at the study locations, analysis of traffic impacts including level of service (LOS) and conclusions and recommendations from the analysis.

Figure 1 depicts the site location in San Clemente. The study intersections listed above are depicted in Figure 2. A copy of the development concept plan is included in Appendix A.

Figure 1. Vicinity Map

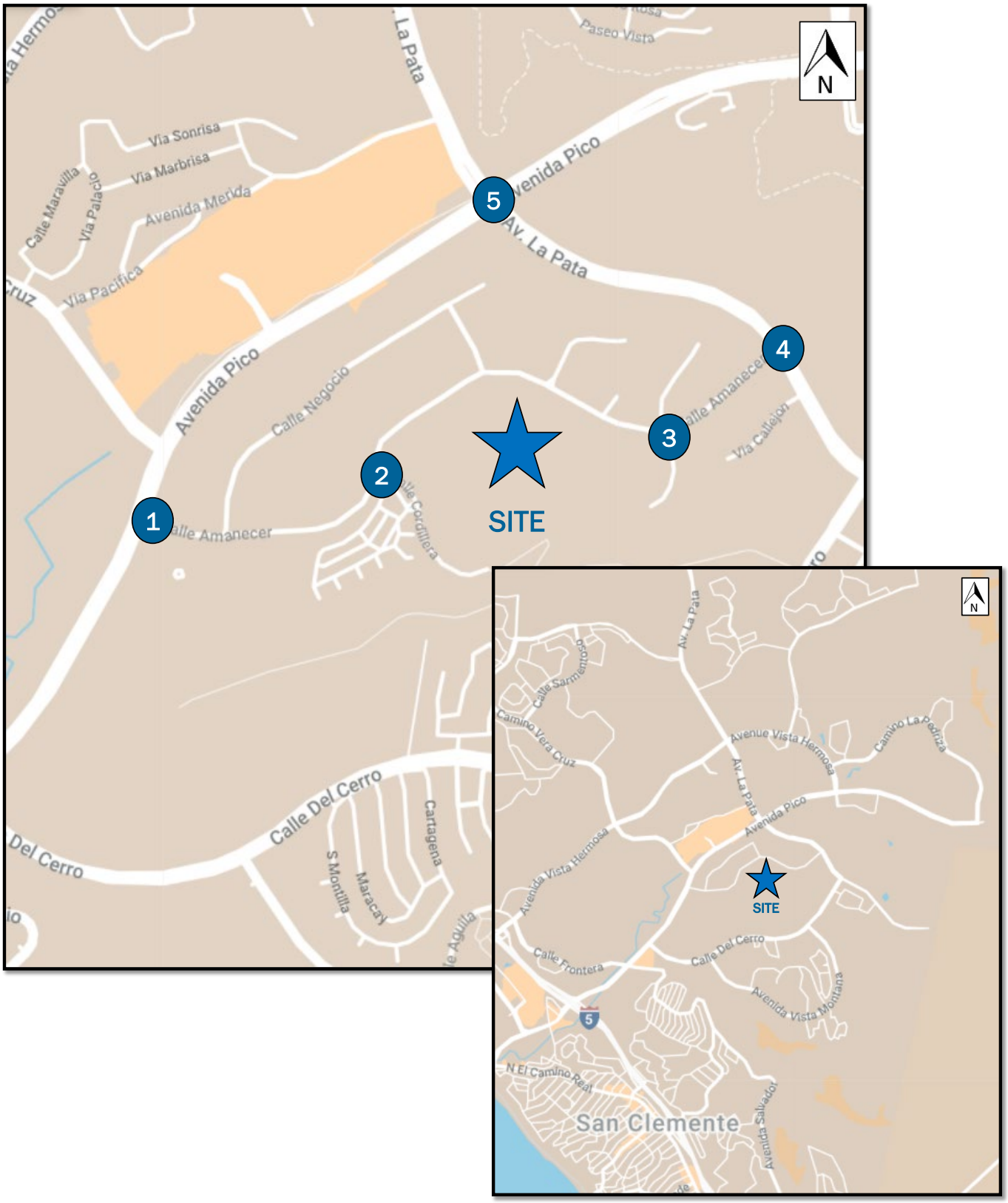


Figure 2. Site Location Aerial

Existing Conditions

A.1. Transportation Facilities

Avenida Pico is an approximately four (4) mile long, six-lane divided, east-west major arterial. The roadway has a posted speed limit of 45 MPH within the study area. The posted speed varies throughout the corridor and is posted as 45 MPH south of Avenida La Pata and 50 MPH north of Avenida La Pata. The roadway facilitates access to primarily commercial and retail developments to the west and some residential development to the east. There are bike lanes present in both directions along the roadway. Avenida Pico also provides ramp access to I-5 approximately 1 ½ miles west of the site. The roadway intersects both Avenida La Pata and Calle Amanecer at signalized intersections.

Avenida La Pata is a six-lane divided major arterial north/west of Avenida Pico and a four-lane divided primary arterial south/west of Avenida Pico, that provides access to commercial, recreational and some residential land uses. The roadway has a posted speed limit of 45 MPH and includes bike lanes in both directions. The roadway ranges as far north as Rancho Mission Viejo and dead ends a little over a mile from the subject development at a park.

Calle Amanecer is an approximately one-mile-long stretch of roadway that traverses between Avenida Pico to the west and Avenida La Pata to the east. Calle Amanecer is a two-lane collector divided by a Two-Way Left Turn Lane. The roadway has posted speed of 35 MPH and exclusively serves commercial, office, and service-based land uses. All traffic for the subject development will utilize Calle Amanecer for access to/from the facility.

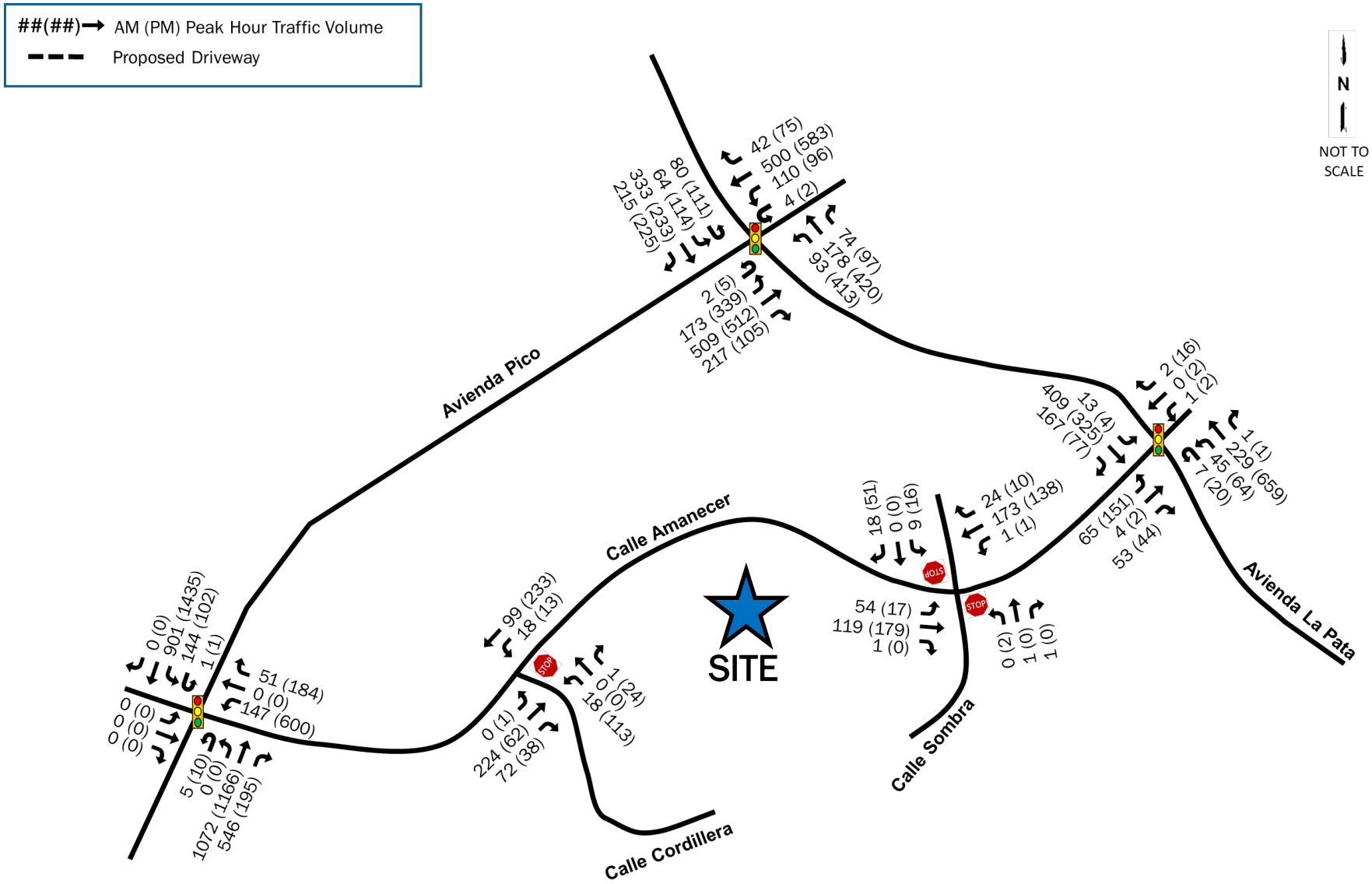
Calle Cordillera is a collector roadway, measuring ¼ mile in length, that provides exclusive access to commercial and service-based land uses. Calle Cordillera intersects Calle Amanecer at a minor road stop-controlled intersection. The roadway will act as one (1) of two (2) access points to the subject development.

Calle Sombra is a collector roadway, measuring ¼ mile long, that provides access to commercial and service-based land uses. The roadway intersects Calle Amanecer at a minor-road, stop-controlled intersection, and acts as the eastern access point for the subject development. Traffic Counts

A.2. Traffic Volumes

The traffic data in the study was developed using new counts collected on Tuesday, November 17, 2020. Due to the COVID-19 pandemic, two (2) 'pandemic factors' were developed using historical data collected in May 2019 from one of the study intersections. The factors differ by AM and PM periods and are used to increase the new traffic counts. The traffic counts for the AM peak hour at each intersection was multiplied by a factor of 1.18 and the traffic counts for the PM peak hour of each intersection was multiplied by a factor of 1.22. The resulting volumes representing existing conditions are seen in Figure 3. The worksheet for the factors' development is included in Appendix B.

Figure 3: Existing Conditions



Future Conditions

B.1. Background Data Collection

The anticipated buildout and opening of the subject development is 2023. The study utilizes a conservative growth rate of 1.5% per year for three (3) years to reflect ambient growth. The growth rate is based off the population growth evidenced in the Community Profile for the City of San Clemente (May 2010) as well as the potential for development in the area.

The study considers the Station Brewery planned for the property currently located at 1130 Via Callejon. Station Brewery is a proposed microbrewery and tasting room that will encompass approximately 15,700 square feet (as measured in Google Earth) of building space and include grain silos, an outdoor dining area, as well as a sandwich shop. The traffic impact study for the proposed development was not made available at the time of the performance of this study. To account for the additional traffic from the proposed development, the study utilizes trip generation data from an open-source trip generation resource. The data more closely resembles the probable trip generation to/from the brewery than the ITE Trip Generation Land Use Code 925, 'Drinking Place'. The open-source data and the ITE trip generation land use description are included in Appendix C. The estimated trips for the development were distributed based on traffic patterns evidenced in the existing counts collected. Figure 4 (No-Build Volumes) depicts the existing volumes with the growth rate applied and the traffic from the proposed brewery.

B.2. Project Trip Generation

Delivery stations are the last mile connection between the tenant's fulfillment process and their customers. Packages are transported to delivery stations via line-haul (tractor trailer) trucks from nearby fulfillment and sortation centers and are further sorted, organized, and loaded into delivery vehicles. The delivery stations operate 24/7 to support delivery of packages to customer locations between 10:00 AM and 9:00 PM. At the proposed San Clemente, CA facility, the tenant expects 13 line-haul trucks delivering packages to the delivery station each day, primarily between the hours of 10:00 PM and 8:00 AM. There will be 126 on-site employees, resulting in 252 trips per day.

The delivery operation consists of 142 employees, resulting in 284 trips per day; delivery drivers start to arrive around 9:20 AM. Beginning at 9:50 AM and ending at 11:30 AM, 142 delivery vans will load and depart from the delivery station at a rate of about 20 vans every 20 minutes. The vans return to the delivery station between 7:10 PM and 9:10 PM. The drivers park the delivery vans and leave using personal vehicles or public transport.

The delivery station will also use private carrier (traditional passenger vehicles) to deliver packages from this location. The tenant anticipates 37 passenger vehicles entering the facility staggered between 4:00 PM and 5:30 PM. Private carrier vehicles will load and depart every 15 minutes. They

will not return to the station that same day. This site is expected to only generate 3 trips between 7:00 and 9:00 AM and 76 between 4:00 and 6:00 PM as seen in when summing the highlighted portions of site-generation counts in Appendix D. Table 1 shows the anticipated traffic volume by vehicle type. Table 2 shows the expected traffic generated during the peak periods of the roadway network.

Table 1: Project Trip Generation - Traffic Volume by Vehicle Type

Traffic	Number of Vehicles	Daily Trips
Auto - Employees	268	536
Delivery Vans	142	284
Auto – Private carrier	37	74
Line-Haul Trucks	13	26
Total	**460**	**920**

Table 2: Project Trip Generation – Peak Hour Traffic Volume

Land Use	Code	Project Density		Total	Inbound	Outbound
Proposed: E-Commerce Delivery Station	User-Specified	290 employees/day	Daily	920	460	460
			AM	2	1	1
			PM	56	37	19

B.3. Trip Distribution and Assignment

The trips associated with the proposed use include four specific groups: associates driving personal vehicles, private carriers delivering parcels to customers, vans delivering parcels to customers, and trucks delivering parcels from sort centers to the site. The user has a network of facilities to which this site is intended to complement. Based on the proposed area of service, the site will have the following distribution for vans and automobiles: 60% to/from the west via Avenida Pico (to/from I-5), 10% to/from the east via Avenida Pico, 20% to/from the north via Avenida La Pata, and finally 10% to/from the south via Avenida La Pata.

All trips during the AM peak hour are made by line haul trucks. All trucks will access the site from the west and will utilize the western access point along Calle Cordillera for both ingress and egress. All trips during the PM peak hour are those of private carriers coming to the site for loading and those being dispatched to make deliveries. From the site plan provided at the time of completion of this study, private carrier vehicles will enter from the eastern access point (Calle Sombra) and will exit from the western access point (Calle Cordillera). The trip distribution (by movement) is depicted in Figure 5. The distributed trips are depicted in Figure 6. The Build Volumes (No-Build + Project Trips) are seen in Figure 7.

Figure 4: No-Build Volumes

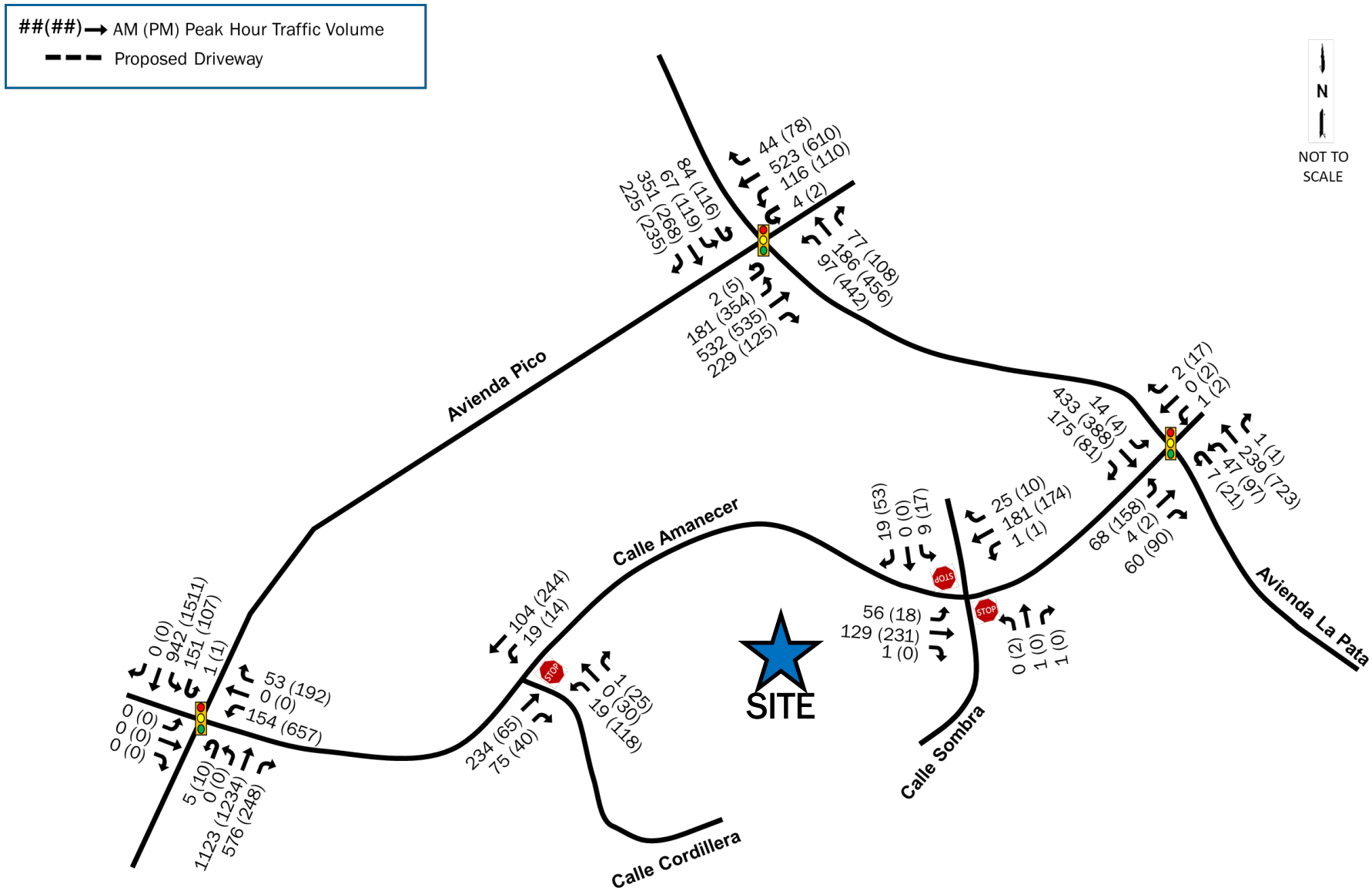


Figure 5: Trip Distribution

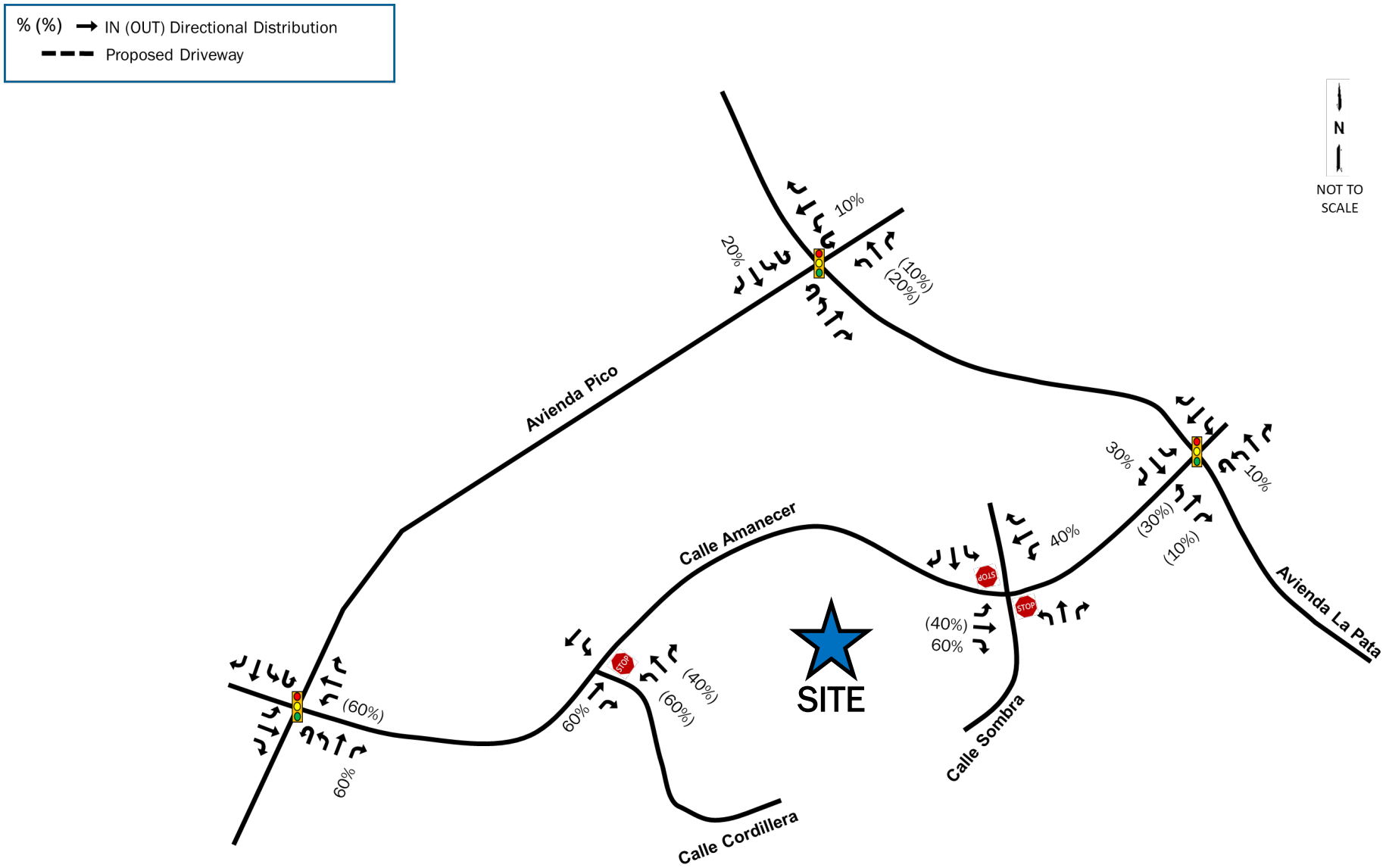


Figure 6: Project Development Trips

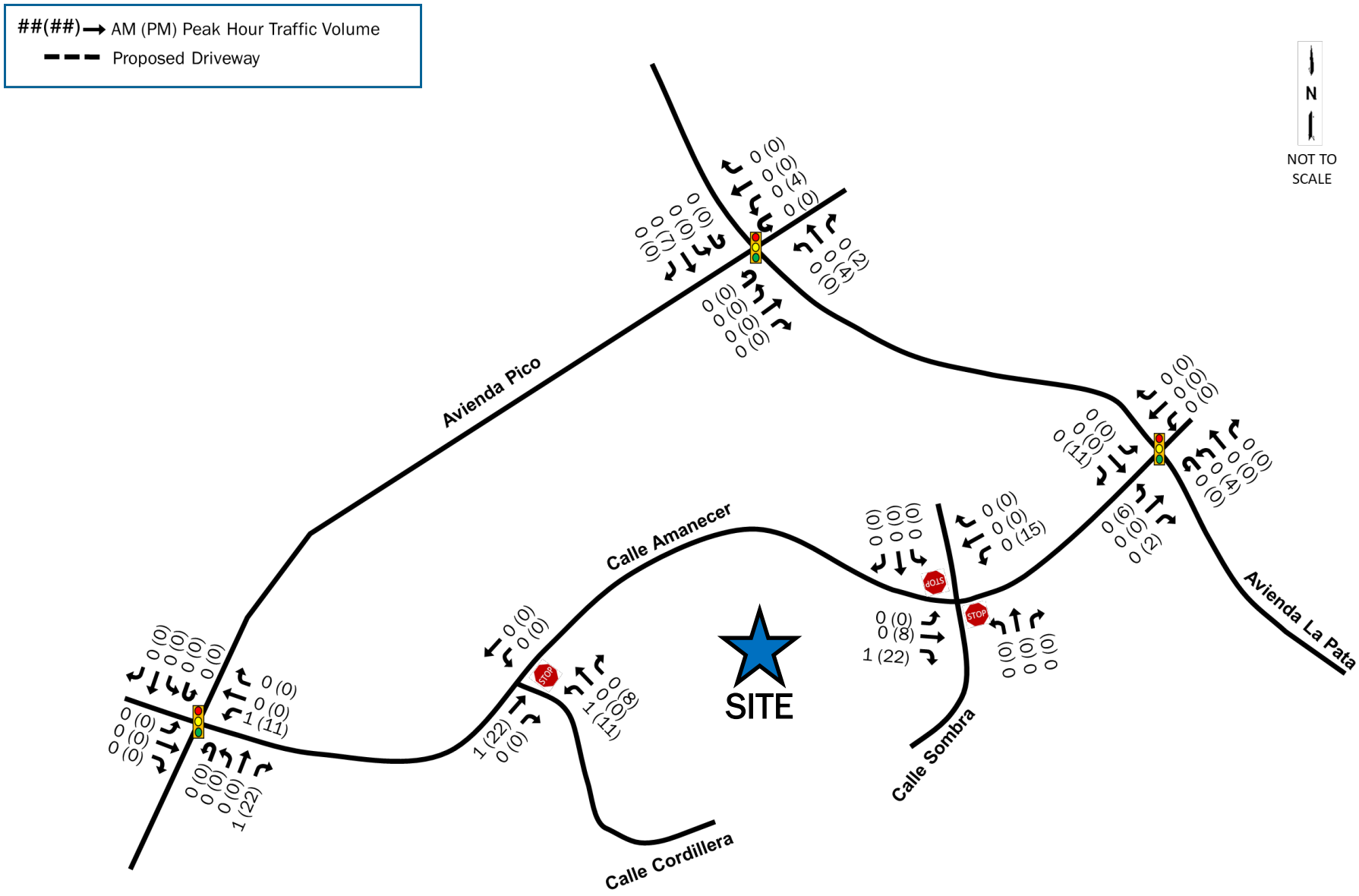
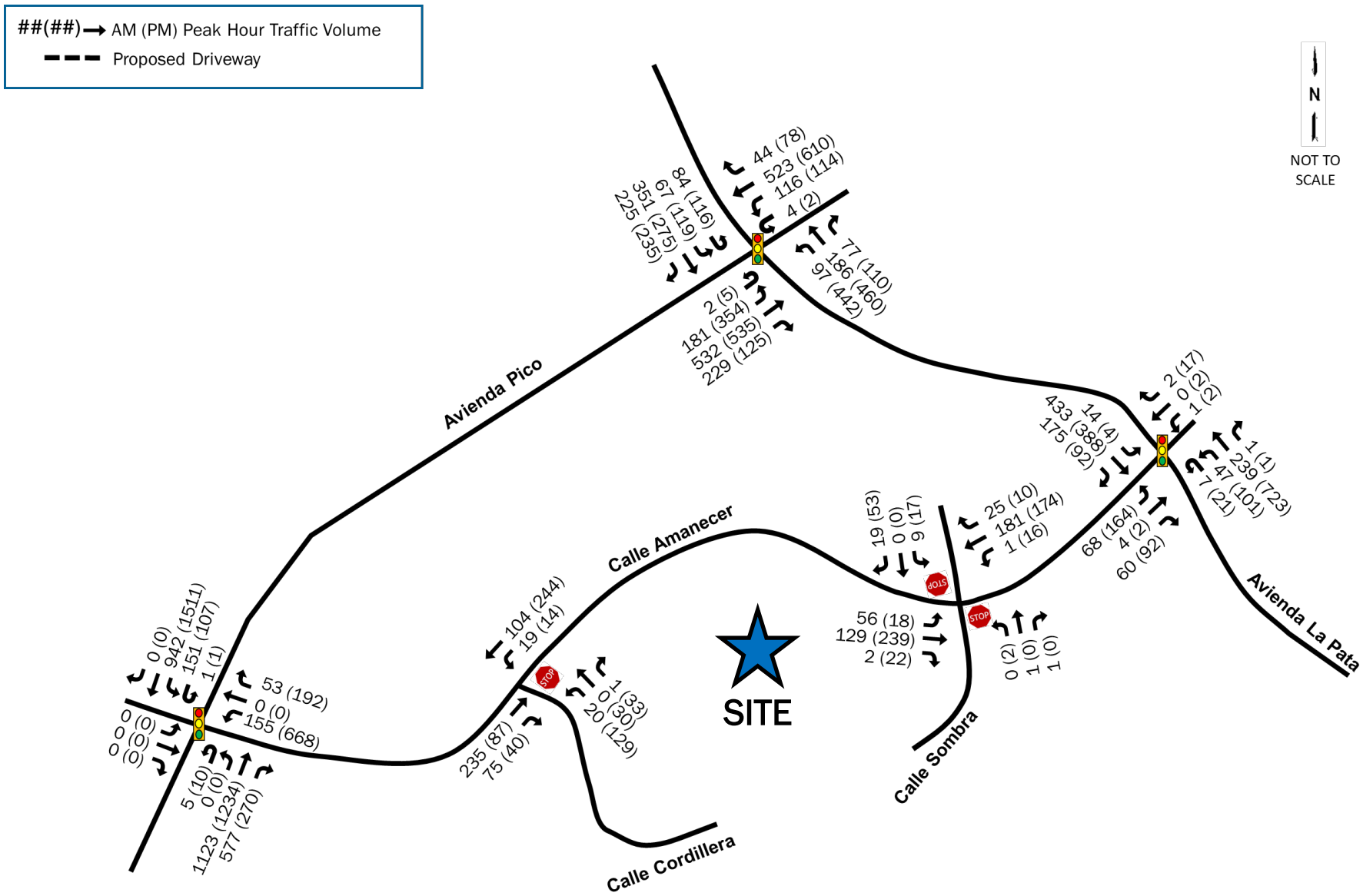


Figure 7: 2023 Build Traffic Volumes



Traffic Impact Analyses

C.1. Capacity Analysis Methodology

The analysis in each of the scenarios for the study was performed using the traffic analysis software Synchro® 11. Average vehicular delays are calculated and reported as Levels of Service (LOS) as defined by the Highway Capacity Manual, 6th Edition (HCM 6th). Performance Criteria pertaining to HCM methodology is seen in Table 3. All signalized intersections in each analysis utilize the traffic signal timings provided by the City of San Clemente staff. In compliance with the Orange County Transportation Authority (OCTA) requirements for arterial highway, as determined through the Master Plan of Arterial Highways (MPAH), the study considers an LOS D as a benchmark for acceptable intersection operation.

Consistent with the Transportation and Traffic Element in the Environmental Impact Report for the City General Plan, the Intersection Capacity Utilization (ICU) values and associated LOS ratings are reported for each analysis. The thresholds for the ICU and the associated LOS are seen in Table 4. Reports for the capacity analyses are included in Appendix E and reports for Intersection Capacity Utilization (ICU) are included in Appendix F.

Table 3: HCM Level of Service Performance Criteria

Average Delay (seconds/vehicle)		LOS
Signalized Intersections	Unsignalized Intersections	
≤ 10.0	≤ 10.0	A
> 10 - 20	> 10 - 15	B
> 20 - 35	> 15 - 25	C
> 35 - 55	> 25 - 35	D
> 55 - 80	> 35 - 50	E
> 80.0	> 80.0	F

Table 4: ICU Level of Service Performance Criteria

Maximum ICU	LOS
55%	A
64%	B
73%	C
82%	D
91%	E
100%	F
109%	G
over 109%	H

C.2. Existing Conditions

The results of the Existing Conditions capacity analysis are shown in Table 5 and include analysis of the volumes presented in Figure 3 using HCM Methodology. Table 6 depicts the Intersection Capacity Utilization (ICU) and the associated ICU LOS for each of the intersections in existing conditions.

Table 5: Existing Conditions Capacity Analysis Results

ID	Intersection	Control	Movement	AM		PM	
				Delay	LOS	Delay	LOS
1	Calle Amanecer & Avenida Pico	Signal	EB	-	-	-	-
			WB	57.0	E	46.6	D
			NB	36.7	D	22.9	C
			SB	21.9	C	18.6	B
			Overall	32.8	C	26.6	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	WB	10.9	B	11.7	B
			SBL	8.0	A	7.5	A
3	Calle Sombra & Calle Amanecer	Stop-Control	NB	10.8	B	12.2	B
			SB	10.5	B	10.1	B
			EBL	7.8	A	7.6	A
			WBL	7.5	A	7.6	A
4	Calle Amanecer & Avenida La Pata	Signal	EB	14.9	B	34.8	C
			WB	19.8	B	42.0	D
			NB	11.2	B	14.8	B
			SB	11.8	B	11.7	B
			Overall	12.0	B	17.2	B
5	Avenida Pico & Avenida La Pata	Signal	EB	23.6	C	51.8	D
			WB	23.3	C	33.2	C
			NB	46.8	D	110.7	F
			SB	50.9	C	51.2	D
			Overall	33.4	D	64.4	E

Table 6: Existing Conditions Intersection Capacity Utilization

ID	Intersection	Control	AM		PM	
			ICU (%)	LOS	ICU (%)	LOS
1	Avenida Pico & Calle Amanecer	Signal	50.4	A	66.7	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	26.2	A	26.7	A
3	Calle Sombra & Calle Amanecer	Stop-Control	32.2	A	24.5	A
4	Avenida La Pata & Calle Amanecer	Signal	38.7	A	50.3	A
5	Avenida Pico & Avenida La Pata	Signal	46.9	A	69.4	C

In the existing conditions, all intersections perform adequately at an overall LOS D or better with the exception of Avenida Pico & Avenida La Pata which experiences an LOS E during the PM peak hour. The level of service is driven by the NB left turn movement. As seen in the capacity analysis report, the volume to capacity (v/c) ratio is 1.32 which exceeds the generally accepted 0.85. The ICU for each intersection is less than 82% at an LOS C or better.

C.3. No-Build Conditions

The results of the No Build Conditions capacity analysis are shown in Table 7 and include analysis of the volumes presented in Figure 4 using HCM Methodology. Table 8 depicts the Intersection Capacity Utilization (ICU) and the associated ICU LOS for each of the intersections in no-build conditions.

Table 7: No-Build Conditions Capacity Analysis Results

ID	Intersection	Control	Movement	AM		PM	
				Delay	LOS	Delay	LOS
1	Avenida Pico & Calle Amanecer	Signal	EB	-	-	-	-
			WB	56.4	E	47.7	D
			NB	10.3	B	25.7	C
			SB	11.7	B	20.5	C
			Overall	14.3	B	28.7	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	WB	11.1	B	11.9	B
			SBL	8.0	A	7.5	A
3	Calle Sombra & Calle Amanecer	Stop-Control	NB	11.0	B	13.5	B
			SB	10.7	B	10.7	B
			EBL	7.8	A	7.7	A
			WBL	7.5	A	7.8	A
4	Avenida La Pata & Calle Amanecer	Signal	EB	35.2	D	36.5	D
			WB	37.9	D	42.9	D
			NB	15.5	B	17.3	B
			SB	10.2	B	13.4	B
			Overall	14.9	B	19.5	B
5	Avenida Pico & Avenida La Pata	Signal	EB	23.0	C	56.1	E
			WB	24.8	C	34.3	C
			NB	45.4	D	126.8	F
			SB	49.6	D	50.7	D
			Overall	33.0	C	70.7	E

Table 8: No-Build Conditions Intersection Capacity Utilization

ID	Intersection	Control	AM		PM	
			ICU (%)	LOS	ICU (%)	LOS
1	Avenida Pico & Calle Amanecer	Signal	52.4	A	69.9	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	26.9	A	27.6	A
3	Calle Sombra & Calle Amanecer	Stop-Control	32.7	A	25.5	A
4	Avenida La Pata & Calle Amanecer	Signal	39.5	A	52.5	A
5	Avenida Pico & Avenida La Pata	Signal	48.4	A	72.9	C

As seen in Table 7, the intersections' performance with (addition traffic from ambient growth and the background development) is like that presented for the existing conditions with expected increases in delays. The ICU for each intersection is less than 82% at an LOS C or better.

C.4. 2023 Build Conditions Capacity Analysis

The results of the No Build Conditions capacity analysis are shown in Table 9 and include analysis of the volumes presented in Figure 7 using HCM Methodology. Table 10 depicts the Intersection Capacity Utilization (ICU) and the associated ICU LOS for each of the intersections in build conditions.

Table 9: 2023 Build Capacity Analysis

ID	Intersection	Control	Movement	AM		PM	
				Delay	LOS	Delay	LOS
1	Avenida Pico & Calle Amanecer	Signal	EB	-	-	-	-
			WB	56.7	E	48.0	D
			NB	37.7	D	26.0	C
			SB	21.3	C	20.7	C
			Overall	33.2	C	29.1	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	WB	11.0	B	12.3	B
			SBL	8.0	A	7.5	A
3	Calle Sombra & Calle Amanecer	Stop-Control	NB	10.9	B	14.4	B
			SB	10.6	B	10.9	B
			EBL	7.8	A	7.7	A
			WBL	7.5	A	7.8	A
4	Avenida La Pata & Calle Amanecer	Signal	EB	14.9	B	36.8	D
			WB	20.0	B	43.0	D
			NB	11.5	B	17.7	B
			SB	12.1	B	13.5	B
			Overall	12.3	B	19.8	B
5	Avenida Pico & Avenida La Pata	Signal	EB	24.5	C	56.0	E
			WB	24.0	C	34.4	C
			NB	46.1	D	126.3	F
			SB	20.7	C	50.6	D
			Overall	33.7	C	70.6	E

Table 10: Build Conditions Intersection Capacity Utilization

ID	Intersection	Control	AM		PM	
			ICU (%)	LOS	ICU (%)	LOS
1	Avenida Pico & Calle Amanecer	Signal	52.5	A	70.3	C
2	Calle Cordillera & Calle Amanecer	Stop-Control	26.9	A	28.7	A
3	Calle Sombra & Calle Amanecer	Stop-Control	32.7	A	25.5	A
4	Avenida La Pata & Calle Amanecer	Signal	39.5	A	52.8	A
5	Avenida Pico & Avenida La Pata	Signal	48.4	A	73.0	C

As depicted in Table 9, the addition of project traffic does not significantly affect the study network. At the intersection of Avenida Pico & Avenida La Pata, the trips are added to movements that rely heavily on the intersection's timing. Given this, there is a slight improvement in the overall delay by 0.1 seconds. During the AM peak hour, there are minimal changes to delay since there are only two (2) trips generated by the subject development. The largest increases in delay are less than one (1) second and occur at the stop-controlled intersections of Calle Cordillera & Calle Amanecer and Calle Sombra & Calle Amanecer. The ICU for each intersection is less than 82% at an LOS C or better.

C.5. Vehicle Miles Travelled (VMT) Analysis

A vehicle-miles traveled (VMT) analysis was conducted to verify that the proposed site meets CEQA requirements for vehicle-miles traveled. The methodology and assumptions for determining the VMT for each vehicle type previously discussed is provided below.

Employee Commuter Trips

The analysis assumes that employees will live within a reasonable commuting distance of the site and likely follow the same trends as those that are now employed within the same area. Using the Census Transportation Planning Product (CTPP) developed by the American Association of State Highway Officials (AASHTO), the employees who currently work in the census tract where the site is located were cross referenced with their home census tracts; the analysis applies the same distribution of employment to the new site.

The road miles between the site and the centroid of every census tract where employees may live was developed using a routing program within GIS. To obtain the vehicle-miles traveled, the distance between each pair of work/home census tracts was multiplied by the number of employees expected in each home tract to obtain vehicles-miles traveled per trip. The total VMT for employee trips for the site is the sum of all the employee trips times two (2), to account for home-to-work and work-to-home trips. The result of this pairing is a total employee commute VMT of 9,542 miles per day, which is about 35.6 miles per employee per day or an average commute distance of 17.8 miles.

Delivery Van Trips

The tenant delivers packages to zones much like the U.S. Postal Service except that the routes the vans take vary by day and are optimized for the most efficient movement. The analysis estimates the VMT for delivery vehicles by finding the distance from the site to the furthest point within the delivery zone and multiplying by the number of vehicles bound for those zones. The furthest point within the zone is assumed to account for circuitous travel as packages are dropped off throughout a route. (Note, not every van will travel to the furthest point within a zone). The total number of delivery vans is shown in Table 1.

All of the customers from the new delivery station have already been served by an existing delivery station. The existing delivery station is located about 13 miles north of the proposed delivery station in the Saddleback Valley. The proposed delivery station will serve coastal zip codes now served from that delivery station, substantially reducing the travel distance between the delivery station and customers in this area. The existing VMT for deliveries servicing the existing customers is 4,910 miles per day. Most delivery trips are within 2 to 8 miles of the site. Since all vans leave the site and then return, the VMT is doubled to account for the returning trip. The future total two-way VMT for the delivery vans is 2,168 miles per day. The new site will result in 2,742 fewer delivery vehicle miles traveled per day.

Private Carrier Trips

As explained previously, private carrier trips are made by private contractors who deliver packages. These individuals are contacted via a mobile application, are instructed when to arrive at the delivery station, and told how many packages they will be delivering. They are routed from the site to their delivery zones in the same manner as the delivery vans. The only difference is that the private carrier vehicles do not return to the delivery station. It is important to note that it is not possible to account for the trips to the delivery station since it is likely the private carrier drivers do not come from their homes but are most often already in the area conducting other business. Many private carrier drivers work for ride sharing companies or are professional drivers.

The delivery zones are the same as the delivery vans so the methodology for determining VMT is the same except that because the private carrier vehicles do not return to the delivery station, the VMT is not doubled. The existing private carrier VMT is 640 per day. The future total VMT for the Private carrier operations is 282 per day. There will be 358 fewer vehicle miles traveled.

Line-haul Truck Trips

Line-haul truck trips are not considered in VMT calculations.

Table 11: Vehicle Miles Traveled (VMT) for Proposed Delivery Station

Traffic	Daily Trips	Existing Delivery Station VMT	Rancho San Clemente Business Park Delivery Station VMT	Difference between Existing and Future VMT	New VMT per Employee per Day[1]
Auto - Employees	536	0	9,542	9,542	35.603
Delivery Vans	284	4,910	2,168	-2,742	
Auto – Private carrier [2]	37	640	282	-358	
Total	857	5,550	11,992	6,442	21.124

[1]Assumes no delivery station employees are currently employed elsewhere
[2]Private carrier vehicle VMT is for the outbound delivery only
[3]Travel based on 268 commuting employees (on-site employees + drivers)
[4]Travel based on 305 total personnel, including private carrier drivers but not line-haul drivers

The total overall new VMT per employee is less than the Orange County average of 24.1 VMT/employee, so the delivery station's transportation impacts should not be considered significant for CEQA purposes.

It is noteworthy that tenant's delivery stations are located within the company's larger delivery area to consolidate deliveries in smaller geographic areas. The addition of a delivery station results in a reduction of delivery vehicle-miles traveled in the region, which partially offsets any new employee home-based work trips.

Delivery stations contribute very little traffic to the typical commuting period. Employee shifts and delivery schedules are specifically designed to avoid these peak periods, not only to limit a delivery station's impacts but also to minimize any delays for employees and especially delivery routes. This site is expected to only generate 3 trips between 7:00 and 9:00 AM and 76 between 4:00 and 6:00 PM. These schedules should minimize the delivery station's potential negative impacts to critical peak hour congestion.

If necessary, the following Transportation Demand Management (TDM) measures can be implemented at this delivery station:

- Carpool and Vanpool Ride-matching Services
- Designated Employer Contact
- Informational Kiosk
- Bicycle Parking with lockers for users
- Designated Parking for Carpools and Vanpools
- Guaranteed Ride Home

Conclusions

A new e-commerce delivery station is planned for construction on a plot of land in San Clemente, California. The delivery station will produce 920 daily one-way trips with two (2) trips occurring during the AM peak hour (1 inbound, 1 outbound) and 56 trips occurring during the PM peak hour (37 inbound, 19 outbound). The trips are categorized by four (4) types – trips by on-site associates' personal vehicles, delivery vans, private carrier (passenger vehicles), and line haul (tractor trailer trucks). The site is accessible from both Calle Cordillera to the east and Calle Sombra to the west by way of Calle Amanecer. All the traffic to/from the site will utilize Calle Amanecer for site access. This study analyzes the impacts to a study network of five (5) nearby intersections. The following are conclusions from capacity and VMT analyses performed in this study:

Existing Conditions

- All intersections perform adequately at an overall LOS D or better with the exception of Avenida Pico & Avenida La Pata which experiences an LOS E during the PM peak hour. The level of service is driven by the NB left turn movement which has a v/c ratio that exceeds the generally accepted 0.85. The ICU for each intersection is less than 82% at an LOS C or better.

No-Build Conditions

- All intersections perform similarly to existing conditions, with expected increases in delay and no changes to overall level of service.

Build Conditions

- The additional of project traffic to the study network poses no significant impacts to the intersections' performance. All intersections continue to operate as in no-build conditions with increases of less than one (1) second of delay at the study intersections.

Vehicle-Miles Travelled (VMT)

- The overall new VMT per employee per day is 21.1 VMT/employee which is less than the Orange County average of 24.1 VMT/employee, thus the delivery station's transportation impacts should not be considered significant for CEQA purposes.