



TRAFFIC IMPACT ANALYSIS REPORT
EL CAMINO SPECIFIC PLAN AMENDMENT
San Juan Capistrano, California
April 17, 2025

Prepared for:
CITY OF SAN JUAN CAPISTRANO
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EXECUTIVE SUMMARY

Project Description

- The El Camino Specific Plan, adopted in August 2022, includes the recently approved mixed use developed located at 31776 El Camino Real. The ECSP site is a 1.68± acre parcel of land that is generally located south of Old Mission Road, east of El Camino Real. The proposed ECSP Amendment project (herein after referred to as Project or ECSPA) is generally located south of Old Mission Road (formerly Ortega Highway), east of El Camino Real, extending southerly to Forster Street within the City’s historic downtown; commercial properties border the site on the east and south. The ECSPA would encompass the following parcels of land: Assessor’s Parcel Numbers (APNs): 124-160-08, 124-160-09, 124-160-10, 124-160-011, 124-160-12, 124-160-37, 124-160-51, and 124-160-52.
- With the Project, the El Camino Specific Plan (ECSP), which now totals 1.68± acres, would be amended to encompass eight (8) parcels of land with a combined total of approximately 7.29± acres of land. Approximately 3.17± acres of land on the southern portion of the Project site would be redeveloped with the Forster & El Camino Mixed-Use Development. The middle 1.88± acres of the Project include the HTC park and an area set aside for development of a Performing Arts Center. Although no development will occur on the 0.56-acre Blas Aguilar Adobe Museum property, it is also proposed to be part of the expanded ECSPA.

The proposed Forster & El Camino mixed-use component of the Project consists of 95 multi-family apartment homes with 50 one-bedroom units, and 45 two-bedroom units, a 3,500 SF residential clubhouse/leasing office, and a one-story building that would house a 4,294 SF quality restaurant and a one-story, 3,100 SF health/fitness club. This Project component will provide a total of 179 parking spaces, comprised of 83 structured spaces in the garage, and 93 surface spaces on site.

The middle 1.88 acres of the Project include the HTC park, and land that is set aside for development of a 48,235 SF performing arts center with a capacity of 352 seats in the Main Auditorium and a capacity of 100 seats in the “Black Box” theater.

Access to the Forster & El Camino Mixed-Use Development and Performing Arts Center will be provided via the El Camino Real and Forster Street intersections as well as the potential future extension of Forster Lane to Del Obispo Street. The Project driveway at the El Camino Real and Forster Street intersection is expected to be stop-controlled and El Camino Real and Foster Street will continue to operate as is and serve “through” traffic.

- The proposed Forster & El Camino Real Mixed-Use Community is forecast to generate 628 daily trips (one half arriving and one half departing), with 41 trips (14 inbound, 27 outbound) produced in the AM peak hour and 68 trips (43 inbound, 25 outbound) produced in the PM peak hour on a “typical” weekday. The AM peak hour falls between 7:00 AM – 9:00 AM and the PM peak hour falls between 4:00 PM to 6:00 PM.

For the proposed Performing Arts Center, this Project component is expected to generate 606 daily trips (one half arriving and one half departing), with 22 trips (18 inbound, 4 outbound) produced in the AM peak hour and 102 trips (79 inbound, 23 outbound) produced in the PM peak hour on a “typical” weekday.

Overall, the proposed Project is forecast to generate 1,234 daily trips (one half arriving and one half departing), with 63 trips (32 inbound, 31 outbound) produced in the AM peak hour and 170 trips (122 inbound, 48 outbound) produced in the PM peak hour on a “typical” weekday.

Study Area

- The following ten (10) key study intersections were selected for detailed peak hour level of service analyses during the AM and PM peak hour under Existing, Existing plus Project, Existing plus Project plus Cumulative (Year 2028) and General Plan Buildout Traffic Conditions:

1. Camino Capistrano at Old Mission Road
2. El Camino Real at Old Mission Road
3. Del Obispo Street at Old Mission Road (*Traffic Operation Hot Spot*)
4. I-5 SB Ramps at Ortega Highway (*Traffic Operation Hot Spot*)
5. I-5 NB Ramps at Ortega Highway (*Traffic Operation Hot Spot*)
6. Camino Capistrano at Forster Street
7. Del Obispo Street at Forster Lane (*Traffic Operation Hot Spot*)
8. Alipaz Street at Del Obispo Street
9. Paseo Adelanto at Del Obispo Street
10. Camino Capistrano at Del Obispo Street (*Traffic Operation Hot Spot*)

- The midblock link analysis conducted as part of this traffic evaluation focused on the following seven (7) key roadway segments:

- A. Old Mission Road *between*
Camino Capistrano and Del Obispo Street
- B. Ortega Highway *between*
Del Obispo Street and I-5 SB Ramps (*Traffic Operation Hot Spot*)

- C. Ortega Highway *between*
I-5 SB Ramps and I-5 NB Ramps (*Traffic Operation Hot Spot*)
- D. Camino Capistrano *between*
Old Mission Road and Del Obispo Street
- E. Del Obispo Street *between*
Old Mission Road and Camino Capistrano (*Traffic Operation Hot Spot*)
- F. Del Obispo Street *between*
Alipaz Street and Paseo Adelanto (*Traffic Operation Hot Spot*)
- G. Del Obispo Street *between*
Paseo Adelanto and Camino Capistrano (*Traffic Operation Hot Spot*)

Related Projects Trip Generation

- Fourteen (14) related projects were considered in the cumulative traffic setting. The related projects are expected to generate a combined total of 22,831 daily trips on a “typical” weekday, with 1,844 trips (1,003 inbound and 841 outbound) forecast during the AM peak hour and 1,660 trips (830 inbound and 830 outbound) during the PM peak hour.

Traffic Impact Analysis

- **Table A** summarizes the results of the ICU analysis, HCM analysis, roadway segment analysis, and Synchro analysis for the Existing, Existing Plus Project, Existing Plus Project Plus Cumulative, and General Plan Buildout traffic conditions for both the Without Forster and With Forster analyses.

**TABLE A
(WITHOUT FORSTER EXTENSION) COMPARISON SUMMARY TO (WITH FORSTER EXTENSION)**

Analysis Type	Analysis Scenario	(1) Without Forster Extension	(2) With Forster Extension	(3) Comparison	
				Without Forster	With Forster
1) ICU Analysis	Ex	<i>No Intersections with Unacceptable LOS</i>		--	--
	E+P	<i>No Intersections Significantly Impacted</i>	<i>No Intersections Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
	E+P+C	<i>No Intersections Significantly Impacted</i>	<i>No Intersections Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
	BO	<i>No Intersections Significantly Impacted</i>	<i>No Intersections Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
2) HCM Analysis	Ex	<i>1 Intersection with Unacceptable LOS</i> ▪ 2. El Camino Real at Ortega Highway (LOS F)		--	--
	E+P	<i>2 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Modify existing traffic signal to operate split-phase in the north-south direction. ▪ 6. Camino Capistrano at Forster Street (LOS F) ○ Restrict the WB approach to WB right-turn only.	<i>2 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Modify existing traffic signal to operate split-phase in the north-south direction. ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Restrict the EB approach to EB right-turn only.	▪ Del Obispo St/Forster Ln remains acceptable	▪ El Camino Real/Old Mission Road operates by up to 3.7 s/v better but is still adverse ▪ Camino Capistrano/Forster St remains acceptable
	E+P+C	<i>2 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Same as E+P. ▪ 6. Camino Capistrano at Forster Street (LOS F) ○ Same as E+P.	<i>3 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Same as E+P. ▪ 6. Camino Capistrano at Forster Street (LOS F) ○ Restrict the WB approach to WB right-turn only. ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Same as E+P.	▪ Del Obispo St/Forster Ln remains acceptable	▪ El Camino Real/Old Mission Road operates by up to 6.6 s/v better but is still adverse ▪ Camino Capistrano/Forster St operates by up to 5.9 s/v better but is still adverse
	BO	<i>2 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Same as E+P and E+P+C. ▪ 6. Camino Capistrano at Forster Street (LOS E) ○ Same as E+P and E+P+C.	<i>3 Intersections Significantly Impacted</i> ▪ 2. El Camino Real at Old Mission Road (LOS F) ○ Same as E+P and E+P+C. ▪ 6. Camino Capistrano at Forster Street (LOS F) ○ Same as E+P+C. ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Same as E+P and E+P+C.	▪ Del Obispo St/Forster Ln remains acceptable	▪ Camino Capistrano/Forster St operates by up to 3.7 s/v better but is still adverse

Notes:

- Ex = Existing Traffic Conditions
- E+P = Existing Plus Project Traffic Conditions
- E+P+C = Existing Plus Project Plus Cumulative Traffic Conditions
- BO = General Plan Buildout Traffic Conditions

TABLE A (CONTINUED)
(WITHOUT FORSTER EXTENSION) COMPARISON SUMMARY TO (WITH FORSTER EXTENSION)

Analysis Type	Analysis Scenario	(1) Without Forster Extension	(2) With Forster Extension	(3) Difference (Without Forster vs. With Forster)	
				Without Forster	With Forster
3) Roadway Segment Analysis	Ex	<i>No Roadway Segments with Unacceptable LOS</i>		--	--
	E+P	<i>No Roadway Segments Significantly Impacted</i>	<i>No Roadway Segments Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
	E+P+C	<i>No Roadway Segments Significantly Impacted</i>	<i>No Roadway Segments Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
	BO	<i>No Roadway Segments Significantly Impacted</i>	<i>No Roadway Segments Significantly Impacted</i>	▪ No New Impacts	▪ No New Impacts
4) Synchro Analysis	Ex	<i>No Intersections with Unacceptable LOS</i>		--	--
	E+P	<i>No Intersections Significantly Impacted</i>	<i>1 Intersection Significantly Impacted</i> ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Restrict the EB approach to EB right-turn only.	▪ Del Obispo St/Forster Ln remains acceptable	▪ Del Obispo St/Forster Ln is adverse
	E+P+C	<i>No Intersections Significantly Impacted</i>	<i>1 Intersection Significantly Impacted</i> ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Same as E+P.	▪ Del Obispo St/Forster Ln remains acceptable	▪ Del Obispo St/Forster Ln is adverse
	BO	<i>No Intersections Significantly Impacted</i>	<i>1 Intersection Significantly Impacted</i> ▪ 7. Del Obispo Street at Forster Lane (LOS F) ○ Same as E+P and E+P+C.	▪ Del Obispo St/Forster Ln remains acceptable	▪ Del Obispo St/Forster Ln is adverse

Notes:

- Ex = Existing Traffic Conditions
- E+P = Existing Plus Project Traffic Conditions
- E+P+C = Existing Plus Project Plus Cumulative Traffic Conditions
- BO = General Plan Buildout Traffic Conditions

Recommended Improvements (Without Forster)

Existing Plus Project Traffic Conditions (Without Forster)

- The improvements recommended at the one intersection impacted by Project traffic (without Forster) based on the HCM Method of Analysis is as follows:
 - 2 – El Camino Real at Old Mission Road: Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (Without Forster)

- The improvements recommended at the two intersections impacted by Project traffic (without Forster) based on the HCM Method of Analysis are as follows:
 - 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (Without Forster)*.
 - 6 – Camino Capistrano at Forster Street: Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

General Plan Buildout Traffic Conditions (Without Forster)

- The improvements recommended at the two intersections impacted by Project traffic (without Forster) based on the HCM Method of Analysis are as follows:
 - 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (Without Forster)*.
 - 6 – Camino Capistrano at Forster Street: *Same as Existing Plus Project Plus Cumulative (Without Forster)*.

Recommended Improvements (With Forster)

Existing Plus Project Traffic Conditions (With Forster)

- The improvements recommended at the two intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis are as follows:
 - 2 – El Camino Real at Old Mission Road: Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano

Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

- 7 – Del Obispo Street at Forster Lane: Subject to review and approval of the City, restrict the eastbound approach to eastbound right-turn only through the construction of a half porkchop median to limit access to left-in/right-in/right-out at Forster Lane. There is an existing “Keep Clear” striping in front of the Fire Station on the southwest corner of the intersection. To maintain the existing northbound left-turn movement during peak commute hours that may have an excessive southbound queue through the intersection, it is recommended that the “Keep Clear” zone be extended through the intersection. Further, it is recommended that “Watch for Oncoming Traffic” and “Watch for Turning Traffic” warning signs be installed facing northbound left-turning traffic and southbound through and right-turning traffic on Del Obispo Street at Forster Lane, respectively, be installed as a part of this improvement. All improvements, inclusive of half porkchop median, need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (With Forster)

- The improvements recommended at the three intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis are as follows:
 - 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (With Forster)*.
 - 6 – Camino Capistrano at Forster Street: Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).
 - 7 – Del Obispo Street at Forster Lane: *Same as Existing Plus Project (With Forster)*.

General Plan Buildout Traffic Conditions (With Forster)

- The improvements recommended at the four intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis is as follows:
 - 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (With Forster)*.
 - 6 – Camino Capistrano at Forster Street: *Same as Existing Plus Project Plus Cumulative (With Forster)*.

- 7 – Del Obispo Street at Forster Lane: Same as Existing Plus Project (With Forster).

Site Access Evaluation

- For the proposed Performing Arts Center and the Forster & El Camino Mixed-Use Development, access will be provided via the El Camino Real at Old Mission Road and Camino Capistrano at Forster Lane intersections as well as the potential future extension of Forster Street to Del Obispo Street.
- The internal circulation was evaluated in terms of vehicle-pedestrian conflicts. Based on our review of the preliminary site plan, the overall layout does not create significant vehicle-pedestrian conflict points and the driveway throat lengths are sufficient such that access to parking spaces is not impacted by internal vehicle queuing/stacking. Curb return radii within the Project site are adequate for passenger cars, small service vehicles (SU-30), small delivery trucks, fire trucks, and trash trucks. The on-site circulation is acceptable based on our review of the site plan.

State of California (Caltrans) Methodology

- Adequate storage is provided to accommodate the forecast 95th percentile queues under Existing, Existing Plus Project, Existing Plus Project Plus Cumulative (Year 2028), and General Plan Buildout traffic conditions at the two (2) off-ramp locations. The Project is expected to neither cause nor contribute towards vehicle queuing which extends back into the I-5 Freeway mainline travel lanes for all traffic conditions. Therefore, the proposed project is not anticipated to negatively influence safety on the State Highway System.

Congestion Management Program (CMP) Compliance Assessment

- The three percent (3%) limit for Project trips along the roadway segment at Ortega Highway between the I-5 Northbound Ramps and I-5 Southbound ramps was not met, therefore a CMP analysis is not required.

Parking Analysis

- Based on City of San Juan Capistrano code requirements, the proposed Project, in combination with the adopted ECSP, would require a total of 520 parking spaces. With a total proposed on-site parking supply of 395 spaces, a theoretical parking deficiency of 125 spaces is forecast. However, the proposed mix of uses provides opportunities to apply the shared parking methodology. *Section 18.2* details the City Code parking requirements.

- Based on ULI 3rd Edition Shared Parking Methodology, the proposed Project would result in a balanced condition. Consequently, there is adequate parking on site to accommodate the proposed Project. **Section 18.6** details the shared parking analysis.
- Nevertheless, to maintain adequate parking supply at all times, it is recommended that a Parking Management Plan (PMP) be implemented to ensure parking is available for all users, inclusive of patrons of the Performing Arts Center, based on the actual needs of the Project, and when the use of off-site / public parking facilities or implementation of a valet/valet operations program may be warranted.
- The PMP identifies strategies for which could be implemented by the Property Owner and/or Property Management Company to ensure adequate parking is available to all users and is detailed in **Section 18.10**.

TRAFFIC IMPACT ANALYSIS REPORT
EL CAMINO SPECIFIC PLAN AMENDMENT
San Juan Capistrano, California
April 17, 2025

1.0 INTRODUCTION

1.1 Senate Bill 743

Senate Bill (SB) 743 (2013), codified in Public Resources Code section 21099, changed the methodology for analyzing transportation impacts under the California Environmental Quality Act (CEQA). SB 743 directed the Office of Planning and Research (OPR) to prepare proposed revisions to the CEQA Guidelines establishing new criteria for determining the significance of transportation impacts. The Secretary of the Natural Resources Agency subsequently certified CEQA Guideline 15064.3, establishing vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. Upon certification of the new Guideline, automobile delay, as measured by "level of service" and other similar metrics, is no longer considered a significant impact on the environment under CEQA. (Public Resources Code 21099(b)(2).) However, the amendments to the Public Resources Code and the Guidelines did not relieve a public agency of the requirement to analyze a project's potentially significant transportation impacts related to air quality, noise, safety, or other secondary impacts associated with transportation. (Pub. Res. Code 21099(b)(3).) Consequently, this study has been commissioned to provide an evidentiary basis for analyzing the secondary impacts of the project associated with transportation and as detailed more fully below, the project's consistency with the City's General Plan Circulation Element.

1.2 Compliance with City of San Juan Capistrano Circulation Element

In addition to providing an evidentiary basis for evaluating a project's potentially significant impacts related to air quality, noise, safety, or other secondary impacts associated with transportation, a traffic study is necessary to evaluate a project's consistency with applicable goals and policies of the City's General Plan Circulation Element, including:

- *Policy 1.1: Provide and maintain a City circulation system that is in balance with the land uses in San Juan Capistrano.*
- *Policy 1.2: Implement the City's Master Plan of Streets and Highways.*
- *Policy 1.4: Improve the San Juan Capistrano circulation system roadways in concert with land development.*
- *Policy 2.1: Encourage the increased use and expansion of public transportation system.*
- *Policy 3.1: Provide and maintain an extensive trails network that supports bicycles, pedestrians and horses and is coordinated with those networks in adjacent jurisdictions.*

- *Policy 4.1: Provide sufficient right-of-way widths along roadways to incorporate features that buffer pedestrians, horse, and bicycles from vehicular traffic.*
- *Policy 4.2: Provide traffic management improvements within areas where through traffic creates public safety problems.*
- *Policy 4.3: Install additional street improvements within areas where necessary to improve vehicular and non-vehicular safety.*
- *Policy 5.1: Monitor alternative transportation programs, such as rail and bus providing service to the City.*

1.3 Traffic Study

This Traffic Impact Analysis report addresses the potential traffic impacts associated with a proposed amendment to the El Camino Specific Plan (ECSP) in the City of San Juan Capistrano, California. The El Camino Specific Plan, adopted in August 2022, includes the recently approved mixed use developed located at 31776 El Camino Real. The ECSP site is a 1.68± acre parcel of land that is generally located south of Old Mission Road, east of El Camino Real. The proposed ECSP Amendment project (herein after referred to as Project or ECSPA) is generally located south of Old Mission Road (formerly Ortega Highway), east of El Camino Real, extending southerly to Forster Street within the City’s historic downtown; commercial properties border the site on the east and south. The ECSPA would encompass the following parcels of land: Assessor’s Parcel Numbers (APNs): 124-160-08, 124-160-09, 124-160-10, 124-160-011, 124-160-12, 124-160-37, 124-160-51, and 124-160-52.

With the Project, the ECSP would be amended to encompass eight (8) parcels of land with a combined total of approximately 7.29± acres of land. Approximately 3.17± acres of land on the southern portion of the Project site would be redeveloped with a mixed-use residential and retail/commercial that is now occupied with a vacant office building and surface parking. The middle 1.88± acres of the Project include the HTC park and land that is is set aside for development of a performing arts center. Although no development will occur on the 0.56acre Blas Aguilar Adobe Museum property, it is also proposed to be part of the expanded ECSPA.

The Project is expected to be completed in the next several years or so but is dependent on several factors, including the timing of Project approval, Project funding, and/or market conditions which could delay Project completion. As such, in order to provide a conservative assessment, Year 2028 was utilized to assess the Project’s potential opening year (full buildout/occupancy) traffic impacts within a near-term traffic setting.

1.3.1 Scope of Work

This report documents the findings of a traffic impact analysis conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine the potential impacts that the Project may have on the local and regional network in the vicinity of the Project site.

The traffic impact analysis evaluates the existing and future operating conditions at ten (10) existing intersections and seven (7) existing roadway segments within the Project vicinity. It also estimates the trip generation potential of the proposed Project and superimposes the Project-related traffic volumes on the circulation system as it currently exists.

In addition, the analysis forecasts cumulative (near-term) operating conditions (based both on approved and reasonably foreseeable future projects and growth projections) and long-range (General Plan Buildout) operating conditions and where necessary, identifies appropriate intersection improvements.

The Scope of Work for this Project was developed in collaboration with City planning and engineering staff and complies with the traffic impact requirements of the City of San Juan Capistrano, as documented in the *San Juan Capistrano Amended Administrative Policy 310, Preparation and Use of Traffic Reports, dated June 21, 2023* and the accompanying *City of San Juan Capistrano Vehicle Miles Traveled (VMT) Guidelines and Thresholds Memorandum* and applicable requirements and procedures outlined in the most current *Congestion Management Program (CMP) for Orange County* and is shown in **Appendix A**.

The Project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing peak hour and daily traffic information has been collected at ten (10) intersections and seven (7) roadway segments on a “typical” weekday for use in the preparation of intersection and roadway level of service calculations. Information concerning cumulative projects (planned and/or approved) within the vicinity of the Project has been researched at the City of San Juan Capistrano. Based on our research and information provided by the City, fourteen (14) planned or approved related projects were considered in the cumulative traffic analysis for this Project.

1.4 Study Area

Key study intersections are typically selected based on the location in relation to the vicinity of the Project and whether potential significant Project-related traffic will pass through such intersections. The key study intersections evaluated in this report as identified by City Staff are listed in **Table 1-1**. Of the study intersections evaluated in this report, Del Obispo Street at Ortega Highway, I-5 SB Ramps at Ortega Highway, I-5 NB Ramps at Ortega Highway, Camino Capistrano at Del Obispo Street, Plaza Drive at Del Obispo Street, and Del Obispo Street at Forster Lane (Project Driveway) are designated as “Traffic Operations Hot Spot” intersections.

The mid-block link analysis conducted as part of this traffic evaluation focused on key roadway segments along Ortega Highway, Camino Capistrano and Del Obispo Street. The study segments are identified in **Table 1-2**.

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the Project and surrounding street system. The Volume to Capacity (V/C), Delay characteristics and Level of Service (LOS) calculations for the Daily and AM and PM peak hours at the key intersections and roadway segments referenced above were used to evaluate the potential traffic-related impacts associated with the Project traffic and cumulative projects traffic.

Included in this traffic analysis are:

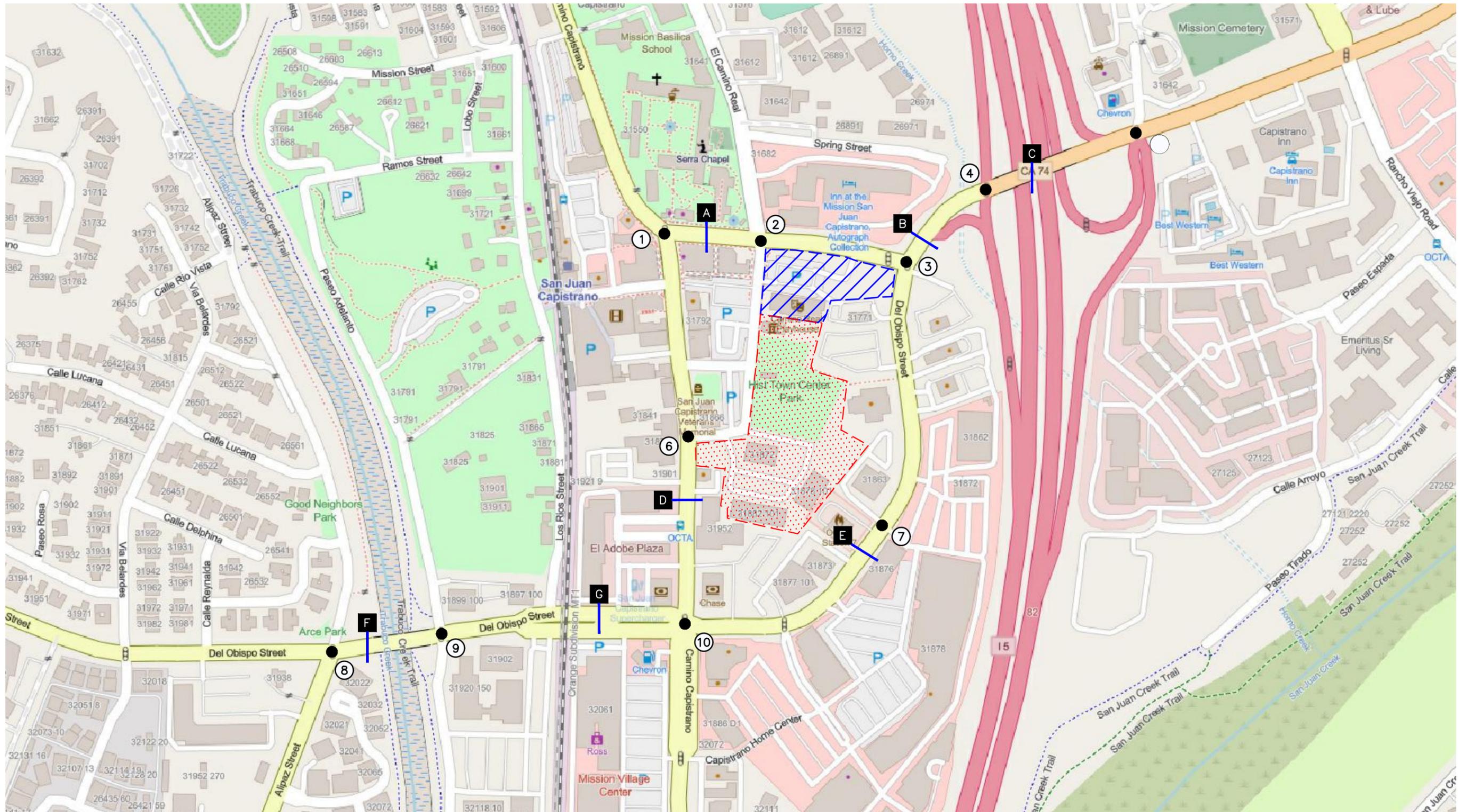
- Existing traffic counts,
- Estimated Project traffic generation/distribution/assignment,
- Estimated cumulative projects traffic generation/assignment,
- AM and PM peak hour and Daily analyses for Existing conditions,
- AM and PM peak hour and Daily analyses for Existing plus Project traffic conditions, Without and With Forster Lane Extension
- AM and PM peak hour and Daily analyses for Existing plus Project plus Cumulative (Year 2028) traffic conditions, Without and With Forster Lane Extension
- AM and PM peak hour and Daily analyses for General Plan Buildout traffic conditions, Without and With Forster Lane Extension
- Synchro Analysis for Del Obispo Street,
- Recommended area improvement measures,
- Project-specific improvements,
- Site Access and Internal Circulation Evaluation, and
- Parking Analysis.

TABLE 1-1
KEY STUDY INTERSECTIONS

1. Camino Capistrano at Old Mission Road
2. El Camino Real at Old Mission Road
3. Del Obispo Street at Old Mission Road (<i>Traffic Operation Hot Spot</i>)
4. I-5 SB Ramps at Ortega Highway (<i>Traffic Operation Hot Spot</i>)
5. I-5 NB Ramps at Ortega Highway (<i>Traffic Operation Hot Spot</i>)
6. Camino Capistrano at Forster Street
7. Del Obispo Street at Forster Lane (<i>Traffic Operation Hot Spot</i>)
8. Alipaz Street at Del Obispo Street
9. Paseo Adelanto at Del Obispo Street
10. Camino Capistrano at Del Obispo Street (<i>Traffic Operation Hot Spot</i>)

TABLE 1-2
KEY STUDY ROADWAY SEGMENTS

A.	Old Mission Road <i>between</i> Camino Capistrano and Del Obispo Street
B.	Ortega Highway <i>between</i> Del Obispo Street and I-5 SB Ramps (<i>Traffic Operation Hot Spot</i>)
C.	Ortega Highway <i>between</i> I-5 SB Ramps and I-5 NB Ramps (<i>Traffic Operation Hot Spot</i>)
D.	Camino Capistrano <i>between</i> Old Mission Road and Del Obispo Street
E.	Del Obispo Street <i>between</i> Old Mission Road and Camino Capistrano (<i>Traffic Operation Hot Spot</i>)
F.	Del Obispo Street <i>between</i> Alipaz Street and Paseo Adelanto (<i>Traffic Operation Hot Spot</i>)
G.	Del Obispo Street <i>between</i> Paseo Adelanto and Camino Capistrano (<i>Traffic Operation Hot Spot</i>)



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SOURCE: GOOGLE

KEY

- = STUDY INTERSECTION
- = STUDY ROADWAY SEGMENT
- = EXISTING EL CAMINO SPECIFIC PLAN
- = PROJECT SITE

FIGURE 1-1

VICINITY MAP

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



2.0 PROJECT DESCRIPTION AND LOCATION

The proposed Project is generally located south of Old Mission Road (formerly Ortega Highway), east of El Camino Real, extending southerly to Forster Street within the City's historic downtown; commercial properties border the site on the east and south.

2.1 Adopted El Camino Specific Plan

The El Camino Specific Plan, adopted in August 2022, includes the recently approved mixed use developed located at 31776 El Camino Real. The ECSP site is a 1.68± acre inclusive of four parcels of land that is generally located south of Old Mission Road, east of El Camino Real. *Figure 2-1* presents the existing site aerial of the ECSP site.

The approved project consists of the development of a 27,457 square-foot (SF) mixed use development in place of the El Camino Real Downtown Playhouse and public parking lot. The Project's retail/commercial space consists of 7,391 SF of retail, of which 2,607 SF is located on the ground floor of the parking structure, and 7,586 SF of restaurant space, plus 5,436 SF of medical office use and 7,044 SF of office space. Parking will be provided via a total of 216 parking spaces; it is expected that this parking structure would also serve as parking to the Project's Performing Arts Center component. Access to the Project will be provided via a full access driveway on El Camino Real, south of Ortega Highway.

2.2 Proposed El Camino Specific Plan Amendment

With the Project, the El Camino Specific Plan (ECSP), which now totals 1.68± acres, would be amended to encompass eight (8) parcels of land with a combined total of approximately 7.29± acres of land. Approximately 3.17± acres of land on the southern portion of the Project site would be redeveloped with the Forster & El Camino Mixed-Use Development. The middle 1.88± acres of the Project include the HTC park and land that is set aside for development of a Performing Arts Center. Although no development will occur on the 0.56-acre Blas Aguilar Adobe Museum property, it is also proposed to be part of the expanded ECSPA. The ECSPA site is also shown in *Figure 2-1*, whereas *Figure 2-2* presents the Proposed El Camino Specific Plan Boundary with the Project.

The proposed Forster & El Camino mixed-use component of the Project consists of 95 multi-family apartment homes with 50 one-bedroom units, and 45 two-bedroom units, a 3,500 SF residential clubhouse/leasing office, and a one-story building that would house a 4,294 SF quality restaurant and a one-story, 3,100 SF health/fitness club. This Project component will provide a total of 179 parking spaces, comprised of 83 structured spaces in the garage, and 96 surface spaces on site.

The proposed Performing Arts Center, which will developed within the middle 1.88± acres of the Project, totals 48,235 SF of floor area a capacity of 352 seats in the Main Auditorium and a capacity of 100 seats in the "Black Box" theater. This Project component is expected to share parking with the 216 space parking structure that is planned as a part of the adopted ECSP development.

Access to the Forster & El Camino Mixed-Use Development and Performing Arts Center will be provided via the El Camino Real and Forster Street intersections as well as the potential future

extension of Forster Lane through the Project site to Del Obispo Street. Forster Street within the project site will be constructed to City standards, with a paved width of 26-feet, with on-street diagonal parking along the Project frontage. The Project driveway at the El Camino Real and Forster Street intersection is expected to be stop-controlled and El Camino Real and Foster Street will continue to operate as is and serve “through” traffic.

Figure 2-3 presents the Conceptual Composite Site Plan for the Project, provided by the City and prepared by RRM Design Group.

The Project is expected to be completed in the next several years or so but is dependent on several factors, including the timing of Project approval, Project funding, and/or market conditions which could delay Project completion. As such, in order to provide a conservative assessment, Year 2028 was utilized to assess the Project’s potential opening year (full buildout/occupancy) traffic impacts within a near-term traffic setting.



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SOURCE: GOOGLE

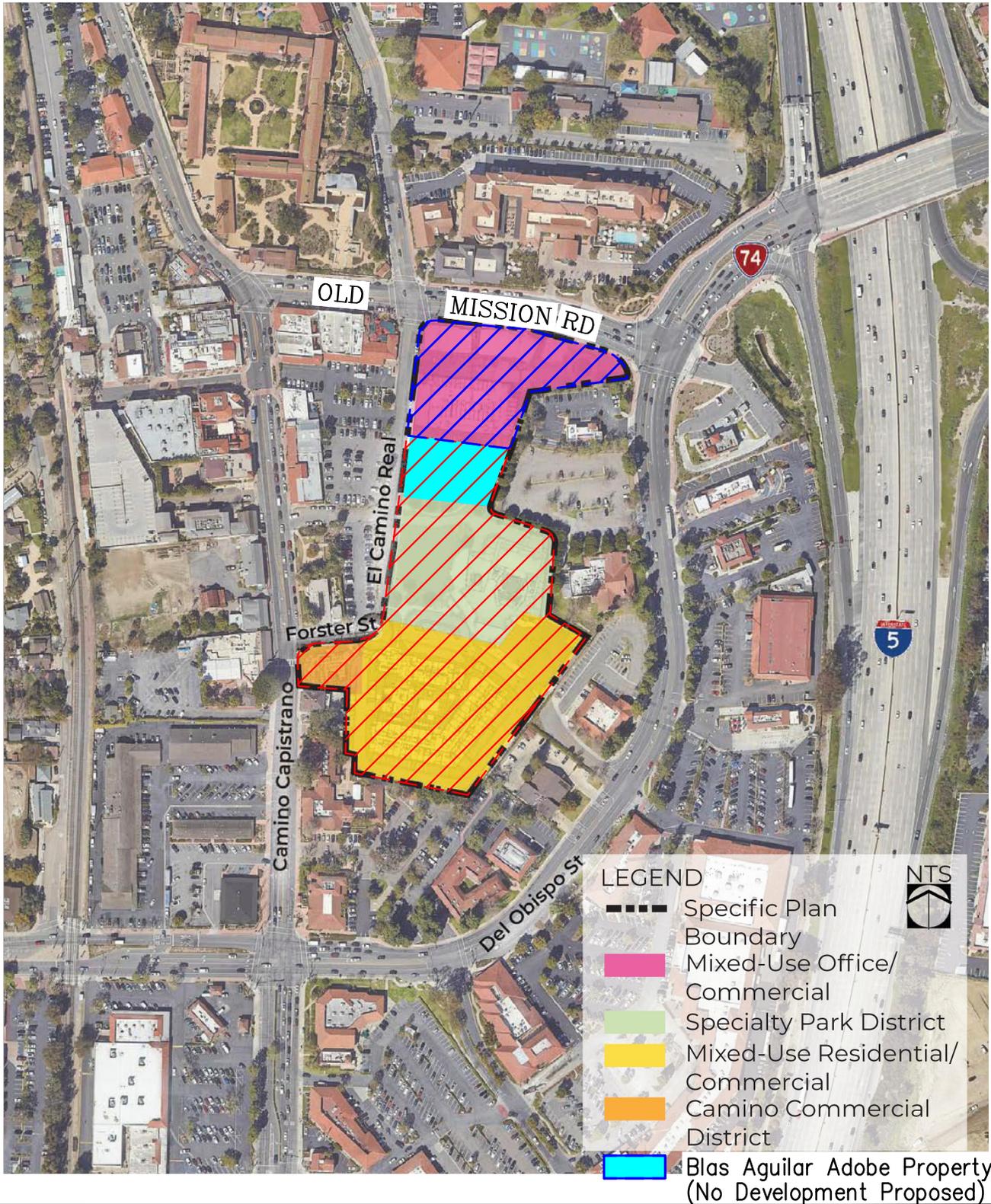
KEY

-  = PROJECT SITE
-  = EXISTING EL CAMINO SPECIFIC PLAN



FIGURE 2-1

EXISTING SITE AERIAL
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



LEGEND

- Specific Plan Boundary
- Mixed-Use Office/Commercial
- Specialty Park District
- Mixed-Use Residential/Commercial
- Camino Commercial District
- Blas Aguilar Adobe Property (No Development Proposed)



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SOURCE: EL CAMINO SPECIFIC PLAN

KEY

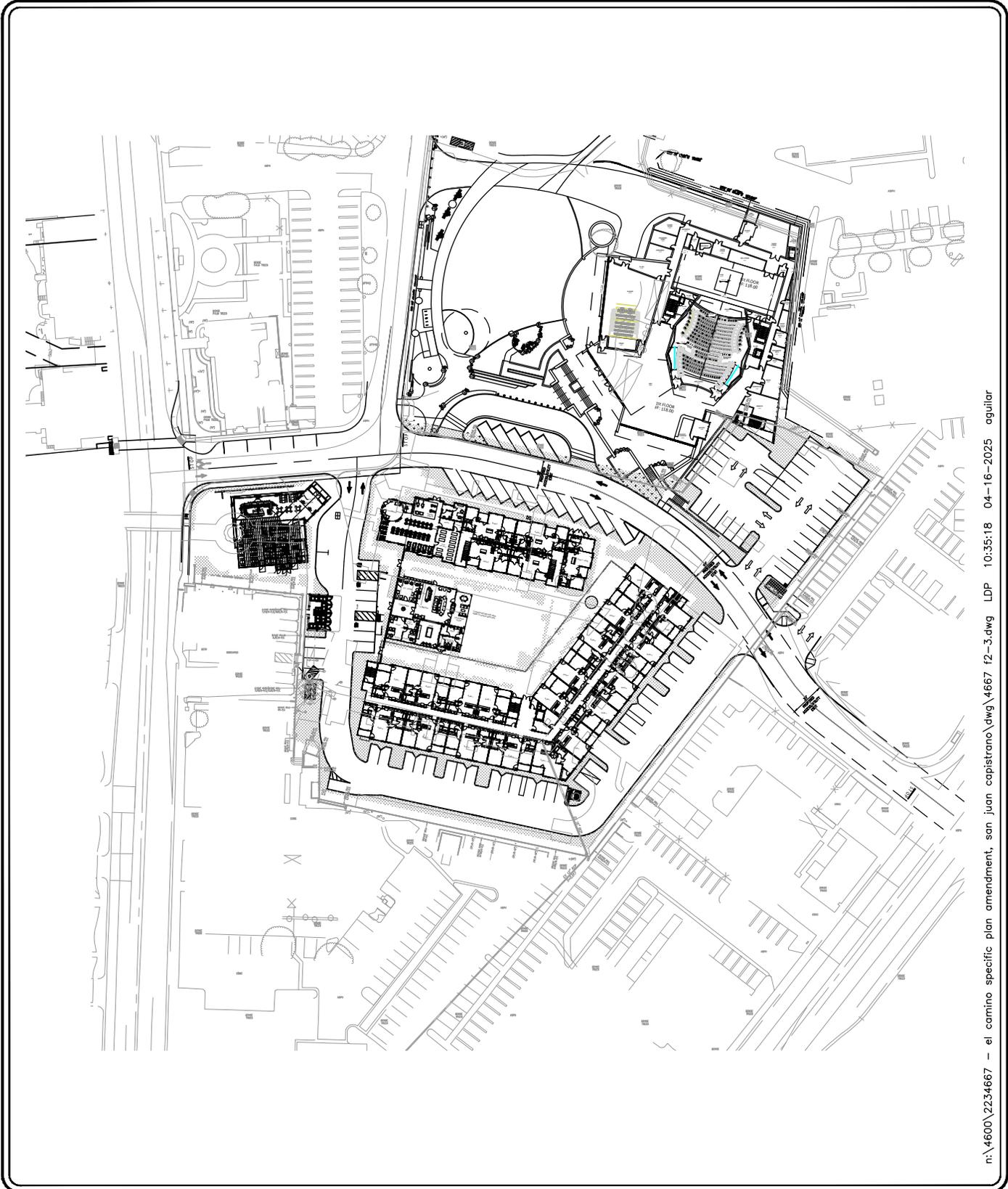
- = EXISTING EL CAMINO SPECIFIC PLAN
- = PROPOSED E.C.S.P. AMENDMENT

FIGURE 2-2



NO SCALE

PROPOSED EL CAMINO SPECIFIC PLAN BOUNDARY
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



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SOURCE: EL CAMINO SPECIFIC PLAN

FIGURE 2-3



NO SCALE

PROPOSED SITE PLAN

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

3.0 EXISTING CONDITIONS

3.1 Regional Access

Regional access to the Project site is provided via the San Diego Freeway (I-5). The I-5 Freeway, located east of the Project site, is a major highway that extends throughout Orange County, Los Angeles County and San Diego County. Direct access from the I-5 Freeway is provided via the I-5 Freeway/Ortega Highway Interchange.

3.2 Existing Street Network

The principal local network of streets serving the Project site are Ortega Highway, Del Obispo Street, and Camino Capistrano. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

Ortega Highway is a primary arterial (four-lane divided roadway) from Del Obispo Street to the east and as it transitions (or renamed) to **Old Mission Road** to the west, it is a secondary roadway from Del Obispo Street west to Camino Capistrano. It extends in the east-west direction. Parking is permitted on both sides of Old Mission Road between Camino Capistrano and east of El Camino Real. The posted speed limit on Old Mission Road is 25 miles per hour (mph) from Camino Capistrano to I-5. The study intersections of Old Mission Road at Camino Capistrano, El Camino Real, Del Obispo Street, and Ortega Highway at I-5 SB Ramps and I-5 NB Ramps are controlled by traffic signals.

Del Obispo Street is designated as a secondary arterial; however it is constructed as a primary arterial (four-lane divided roadway) that extends more or less in the north-south direction, directly east of the Project site. It is designated as a hot spot between Camino Capistrano and I-5 NB Ramps. Parking is not permitted on either side of the roadway within the vicinity of the Project. Access to the commercial properties located along the section of Del Obispo Street between Ortega Highway and Forster Lane is provided via a two-way left-turn lane. Del Obispo Street is designated as a Secondary Arterial in the City's Circulation Element, it functions as a six-lane facility between Camino Capistrano and Alipaz Street due to the provision of dual left turn lanes and the added capacity at the signalized intersections of Camino Capistrano, Paseo Adelanto and Alipaz Street. Nevertheless, this segment of Del Obispo Street was evaluated as a four-lane divided arterial to provide a conservative traffic assessment. The posted speed limit on Del Obispo Street is 35 mph within the vicinity of the Project. The study intersections of Del Obispo Street at Old Mission Road, Camino Capistrano, Paseo Adelanto and Alipaz Street are controlled by traffic signals. The study intersection of Del Obispo Street at Forster Lane is controlled by a one-way stop.

Camino Capistrano is a primary arterial from Del Obispo Street to the South City Limit and a limited secondary arterial north from Del Obispo Street. The speed limit is 25 mph north of Del Obispo Street, 35 mph from Del Obispo Street to San Juan Creek Road and 45 mph south of San Juan Creek Road. Parking is permitted on both sides of the roadway north from Forster Street. In all other areas within the vicinity of the Project, parking is not permitted on either side of this roadway. The study intersection of Camino Capistrano at Forster Street is controlled by a one-way stop.

El Camino Real is a local arterial (two-lane, undivided roadway) that extends in the north-south direction. Parking is generally permitted on both sides of this roadway within the vicinity of the Project. The speed limit on El Camino Real is 25 mph.

Forster Street is a local arterial (two-lane, undivided roadway) that extends in the east-west direction. Parking is generally permitted on the north side of this roadway within the vicinity of the Project. The speed limit on Forster Street is 25 mph.

Alipaz Street is designated as a secondary arterial south of Del Obispo Street; however it is constructed as a primary arterial (four-lane, divided roadway) that extends in the north-south direction. Parking is permitted on both sides of this roadway south of Del Obispo Street within the vicinity of the Project. The posted speed limit on Alipaz Street is 40 mph.

Paseo Adelanto is a local arterial (two-lane, undivided roadway) that extends in the north-south direction. Parking is not permitted on either side of this roadway south of Del Obispo Street within the vicinity of the Project. The posted speed limit on Paseo Adelanto is 25 mph.

Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. The number of travel lanes and intersection controls for the key area intersections are also identified.

3.3 Existing Traffic Volumes

Ten (10) key study intersections and seven (7) key study roadway segments have been identified by City Staff at which to evaluate existing and future traffic operating conditions.

Existing average AM and PM peak hour traffic volumes for the ten (10) key study intersections as well as the average daily traffic volumes for the seven (7) key study roadway segments were conducted by *Counts Unlimited, Inc.* for three consecutive days in April 2023.

Figures 3-2 and *3-3* depict the existing average AM and PM peak hour traffic volumes at the key study intersections, respectively. *Figure 3-3* also depicts the existing average daily traffic (ADT) volumes at the key roadway segments.

Appendix B contains copies of the peak period traffic count sheets for the existing key study intersections as well as the daily traffic counts for the key roadway segments evaluated in this report.

3.4 Existing Public Transit

The Orange County Transportation Authority (OCTA), Metrolink and Amtrak provide public transit services in the vicinity of the proposed Project. In the vicinity of the Project, the OCTA Route 91 currently serves Camino Capistrano. The nearest bus stop location currently exists along the west side of Camino Capistrano between Ortega Highway and Del Obispo Street.

The Metrolink Orange County Line and Inland Empire OC Line, as well as the Amtrak Pacific Surfliner line currently connect to the San Juan Capistrano Station, east of Los Rios Street and north of Del Obispo Street. *Figure 3-4* graphically illustrates the transit routes of OCTA within the vicinity of the Project site.

3.5 Existing Bicycle Facilities

The City of San Juan Capistrano promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. In the vicinity of the Project, Class III Bicycle routes currently exist along Camino Capistrano.

3.6 Level Of Service (LOS) Analysis Methodologies

In conformance with the City of San Juan Capistrano requirements, existing AM and PM peak hour operating conditions for the key study intersections were evaluated using the *Intersection Capacity Utilization (ICU) Methodology* for signalized intersections.

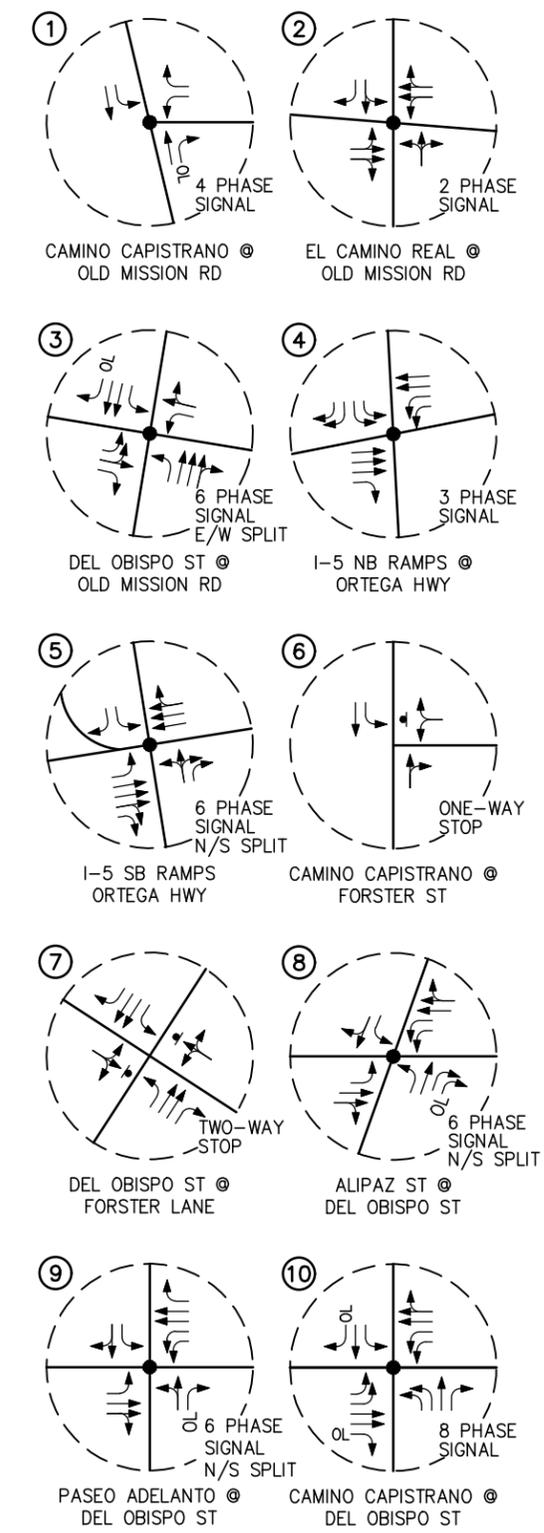
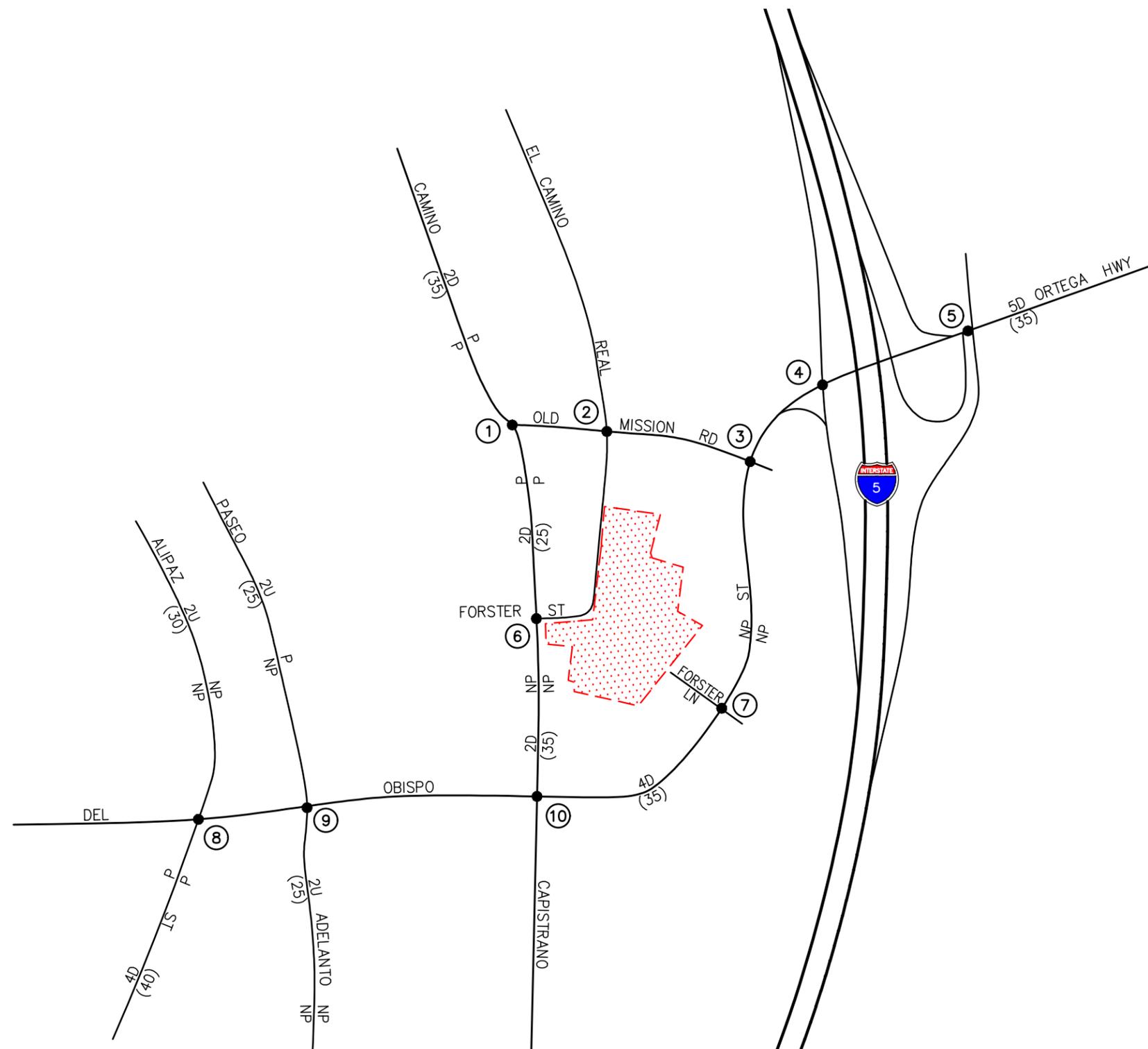
Additionally, AM and PM peak hour operating conditions for the key study intersections were also evaluated using the *Highway Capacity Manual 7th Edition (HCM 7)* methodology.

Daily operating conditions for the key study roadway segments were analyzed using the *Volume to Capacity (V/C) Ratio*.

3.6.1 Intersection Capacity Utilization (ICU) Method of Analysis (Signalized Intersections)

In conformance with the City of San Juan Capistrano requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the *Intersection Capacity Utilization (ICU)* method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements.

The ICU numerical value represents the percent signal (green) time and thus capacity, required by existing and/or future traffic. Per City of San Juan Capistrano requirements, the ICU calculations use a lane capacity of 1,700 vehicles per hour (vph) for left-turn, through and right-turn lanes. A clearance adjustment factor of 0.05 (5%) was added to each Level of Service calculation. The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in *Table 3-1*.



- KEY**
- ← = APPROACH LANE ASSIGNMENT
 - = TRAFFIC SIGNAL, ▼ = STOP SIGN
 - P = PARKING, NP = NO PARKING
 - U = UNDIVIDED, D = DIVIDED
 - 2 = NUMBER OF TRAVEL LANES
 - (XX) = POSTED SPEED LIMIT (MPH)
 - OL = OVERLAP
 - [Red Dotted Area] = PROJECT SITE

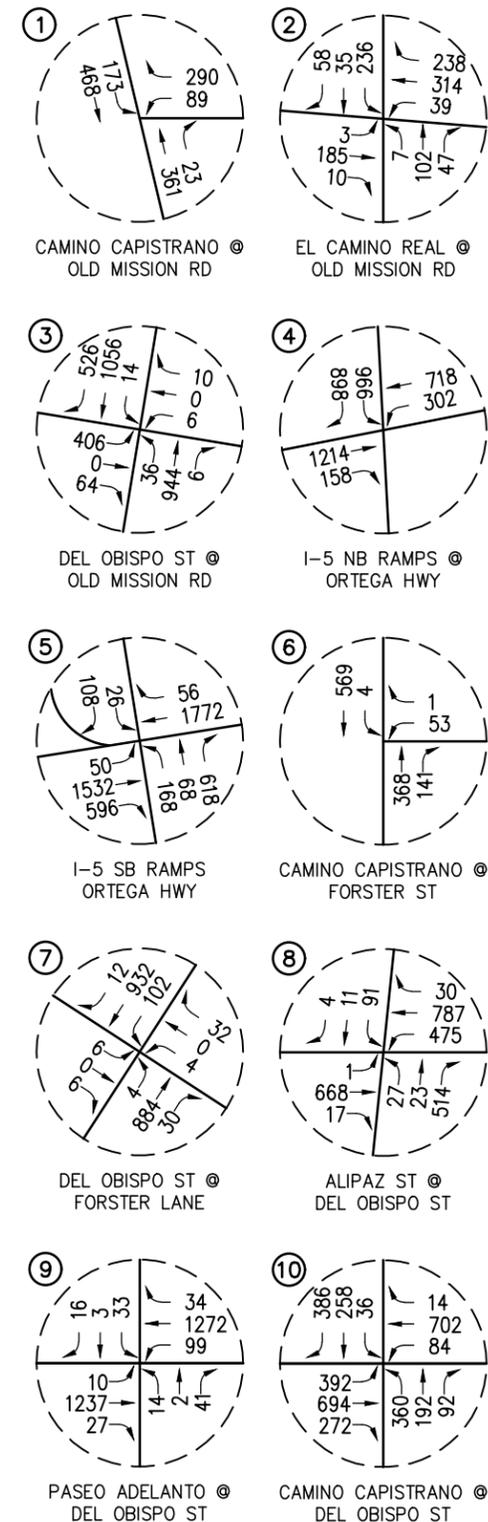
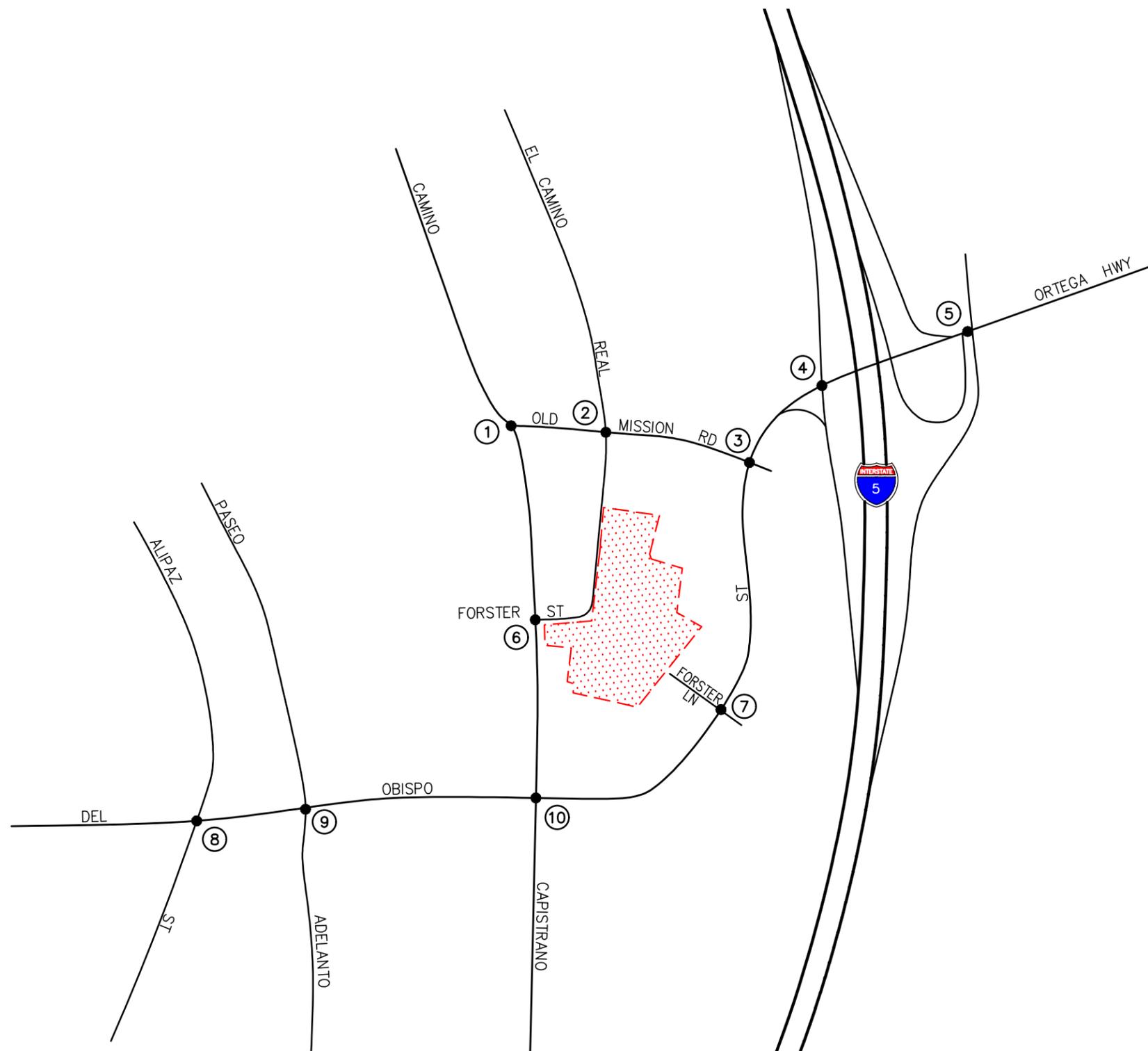


FIGURE 3-1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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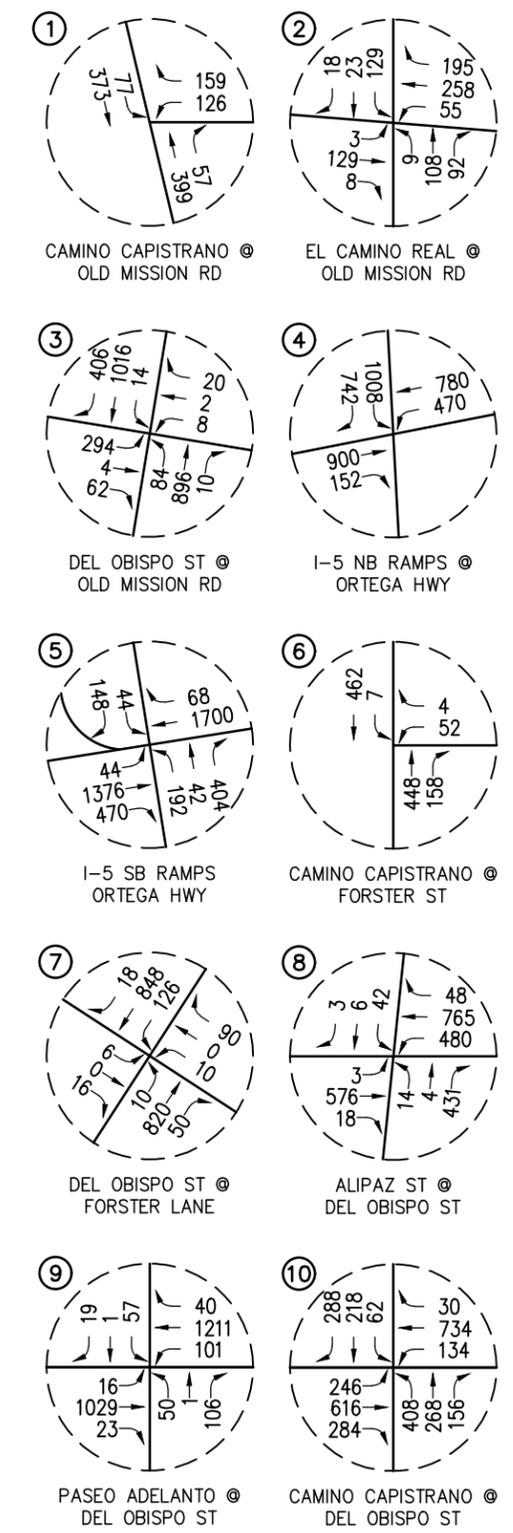
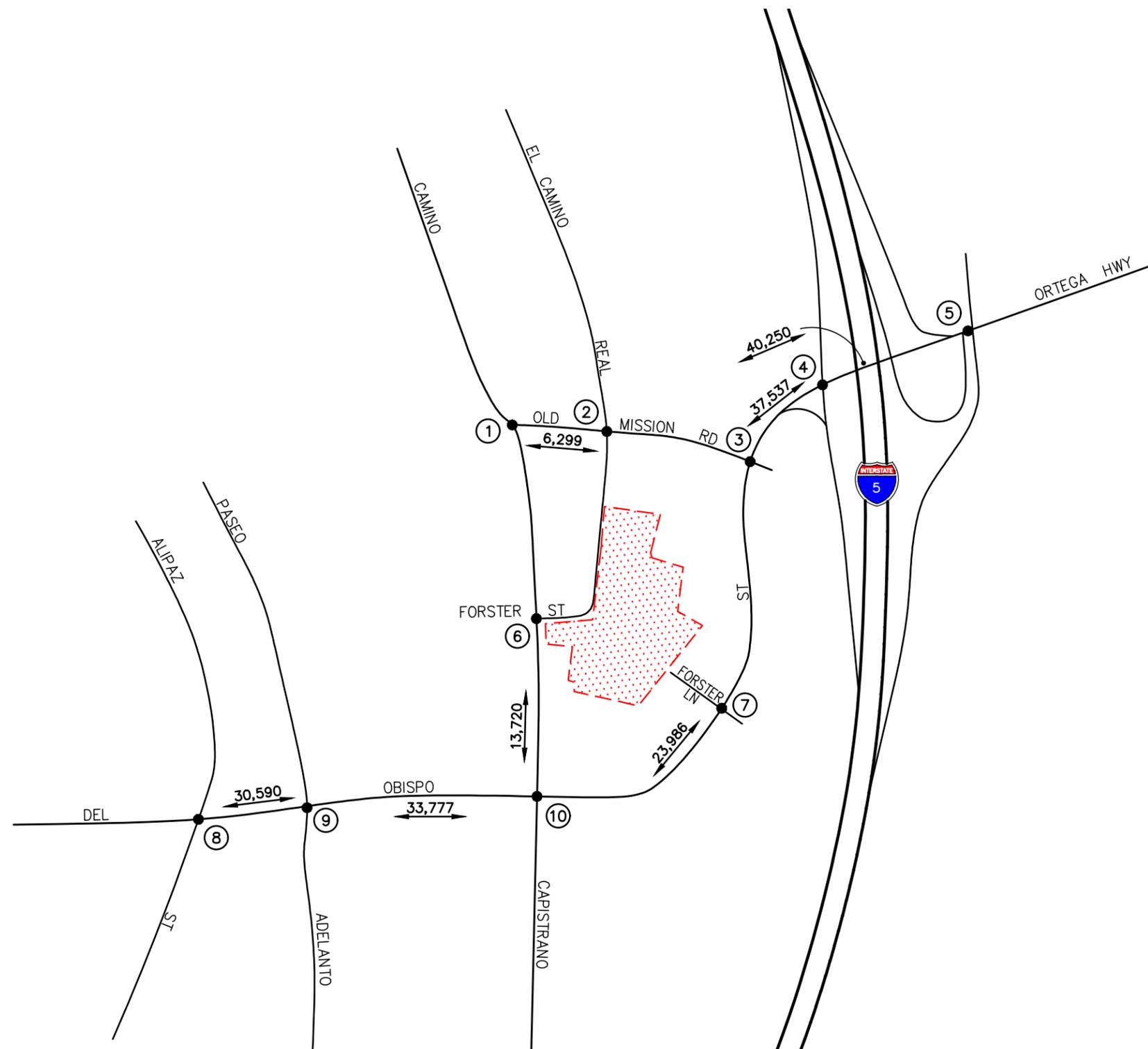


KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

n:\4600\2234667 - el camino specific plan amendment, san juan capistrano\dwg\4667 f3-2.dwg LDP 10:35:36 07-31-2024 aguilar



KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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SOURCE: OCTA



FIGURE 3-4

OCTA TRANSIT ROUTES
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

3.6.2 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM operations method of analysis, level of service for signalized intersections and approaches is defined in terms of control delay, which is a measure of the increase in travel time due to traffic signal control, driver discomfort, and fuel consumption. Control delay includes the delay associated with vehicles slowing in advance of an intersection, the time spent stopped on an intersection approach, the time spent as vehicles move up in the queue, and the time needed for vehicles to accelerate to their desired speed. LOS criteria for traffic signals are stated in terms of the control delay in seconds per vehicle. The LOS thresholds established for the automobile mode at a signalized intersection are shown in *Table 3-2*.

3.6.3 Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)

The HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. LOS criteria for unsignalized intersections differ from LOS criteria for signalized intersections as signalized intersections are designed for heavier traffic and therefore a greater delay. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable, which can reduce users' delay tolerance.

Two-way stop-controlled intersections are comprised of a major street, which is uncontrolled, and a minor street, which is controlled by stop signs. Level of service for a two-way stop-controlled intersection is determined by the computed or measured control delay. The control delay by movement, by approach, and for the intersection as a whole is estimated by the computed capacity for each movement. LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. The worst side street approach delay is reported. LOS is not defined for the intersection as a whole or for major-street approaches, as it is assumed that major-street through vehicles experience zero delay. The HCM control delay value range for two-way stop-controlled intersections is shown in *Table 3-3*.

3.6.4 Daily Volume to Capacity (V/C) Ratio Method of Analysis (Roadway Segments)

In conformance with the City of San Juan Capistrano requirements, daily operating conditions for the key study roadway segments have been investigated according to the Volume to Capacity (V/C) Ratio of each roadway segment. The V/C relationship is used to estimate the LOS of the roadway segment with the volume based on the 24-hour traffic volumes and the capacity based on the City's classification of each roadway. The six qualitative categories of Level of Service have been defined along with the corresponding Volume to Capacity (V/C) value range and are shown in *Table 3-4*.

The roadway link capacity of each street classification according to the Orange County Master Plan of Arterial Highways (MPAH) is presented in *Table 3-5*, along with the six corresponding service levels and associated V/C ratios.

3.7 Impact Criteria and Thresholds

3.7.1 Intersections

According to City of San Juan Capistrano criteria, LOS “D” is the level of service goal during the morning and evening peak commute hours at all City intersections. LOS “E” is the level of service goal during the morning and evening peak commute hours at all City-designated “Hot Spot” intersections.

3.7.2 Roadway Segments

The City of San Juan Capistrano General Plan Circulation Element has established LOS “D” as the minimum link level of service performance goal for major, primary, secondary and limited secondary arterials and LOS “C” for local residential arterials within the City. It has also established LOS “E” as the minimum link level of service performance goal for designated “Hot Spot” locations within the City.

TABLE 3-1
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (ICU METHODOLOGY)¹

Level of Service (LOS)	Intersection Capacity Utilization Value (ICU)	Level of Service Description
A	≤ 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

¹ Source: *Transportation Research Board Circular 212 - Interim Materials on Highway Capacity.*

TABLE 3-2
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)²

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and ≤ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and ≤ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and ≤ 55.0	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and ≤ 80.0	Very long traffic delays This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

² Source: *Highway Capacity Manual 7*, Chapter 19: Signalized Intersections.

TABLE 3-3
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM 7 METHODOLOGY)³

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

³ Source: *Highway Capacity Manual 7*, Chapter 20: Two-Way Stop-Controlled Intersections. The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

TABLE 3-4
LEVEL OF SERVICE CRITERIA FOR ROADWAY SEGMENTS (V/C METHODOLOGY)⁴

Level of Service (LOS)	Volume to Capacity Ratio (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT. Describes primarily free flow operations at average travel speeds, usually about 90% of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	0.601 – 0.700	VERY GOOD. Represents reasonably unimpeded operations at average travel speeds, usually about 70% of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.
C	0.701 – 0.800	GOOD. Represents stable conditions; however, ability to maneuver and change lanes in mid-block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50% of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving.
D	0.801 – 0.900	FAIR. Borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40% of free flow speed.
E	0.901 – 1.000	POOR. Characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	> 1.000	FAILURE. Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.

Note:

- LOS F applies whenever the flow rate exceeds the segment capacity.

⁴ Source: *Transportation Research Board 2000.*

**TABLE 3-5
ROADWAY LINK CAPACITIES⁵**

Facility Type	Number of Lanes	Level of Service Criteria with associated Roadway Capacity						Peak Hour Capacity ⁶ (VPH)
		Daily Values (VPD)						
		Level of Service (LOS)						
		A	B	C	D	E	F	
Major	8-Lanes Divided	45,000	52,500	60,000	67,500	75,000	-	7,500
Major	6-Lanes Divided	33,900	39,400	45,000	50,600	56,300	-	5,630
Primary	4-Lanes Divided	22,500	26,300	30,000	33,800	37,500	-	3,750
Secondary	4-Lanes Undivided	15,000	17,500	20,000	22,500	25,000	-	2,500
Limited Secondary	2-Lanes Undivided	12,000	14,000	16,000	18,000	20,000	-	2,000
Local Arterial	2-Lanes Undivided	7,500	8,800	10,000	11,300	12,500	-	1,250
V/C Ratio		≤0.600	0.601-0.700	0.701-0.800	0.801-0.900	0.901-1.000	≥1.01	

Notes:

- VPD = Vehicles per day
- VPH = Vehicles per hour

⁵ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*. The City of San Juan Capistrano references these capacities in the *San Juan Capistrano General Plan Circulation Element*. Note: The “Limited Secondary” facility-type and associated capacities shown in this table are referenced in the *San Juan Capistrano General Plan Circulation Element*.

⁶ Peak Hour Capacity based on 10% of Daily LOS “E” capacity

3.8 Existing Intersection Level of Service Results

3.8.1 ICU Method of Analysis

Table 3-6 summarizes the existing peak hour service level calculations for the existing key signalized study intersections based on existing traffic volumes, street geometry and ICU Method of Analysis.

Review of *Table 3-6* indicates that based on the ICU Method of Analysis and LOS criteria defined in this report, all signalized intersections currently operate at an acceptable LOS during both AM and PM peak hours of a “typical” weekday.

Appendix C contains the Existing Traffic Conditions Intersection ICU/LOS calculation worksheets for the key signalized study intersections based on the ICU methodology.

3.8.2 HCM Method of Analysis

Table 3-7 summarizes the existing peak hour service level calculations for the existing key study intersections based on existing traffic volumes, street geometry and HCM Method of Analysis. Review of *Table 3-7* indicates that based on the HCM Method of Analysis and LOS criteria defined in this report, all key intersections, except two, currently operate at an acceptable LOS during both AM and PM peak hours of a “typical” weekday.

The intersection of El Camino Real at Old Mission Road currently operates at unacceptable LOS F during the AM peak hour. It should be noted that this intersection is close to San Juan Elementary School, Mission School, and Pre-College Prep School and the existing unacceptable LOS F during the AM peak hour is associated with the school drop off time. The intersection of Del Obispo Street at Forster Lane also currently operates at unacceptable LOS F during the AM peak hour. This intersection is located along Del Obispo Street, which has a high volume of commuter traffic in the AM peak hour and therefore makes the movements from the side street experience high delays.

Appendix D contains the Existing Traffic Conditions Intersection Delay/LOS calculation worksheets for the key signalized and unsignalized study intersections based on the HCM methodology.

TABLE 3-6
EXISTING PEAK HOUR LEVELS OF SERVICE (ICU METHOD OF ANALYSIS)⁷

Key Intersection	“Hot Spot” Designation ⁸	LOS ⁹ Goal	Time Period	Control Type	ICU	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	4Ø Traffic Signal	0.535 0.424	A A
2. El Camino Real at Old Mission Road	--	D	AM PM	2Ø Traffic Signal	0.456 0.400	A A
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	6Ø Traffic Signal	0.507 0.499	A A
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	3Ø Traffic Signal	0.661 0.661	B B
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	6Ø Traffic Signal	0.753 0.697	C B
6. Camino Capistrano at Forster Street ¹⁰	--	D	AM PM	One-Way Stop	-- --	-- --
7. Del Obispo Street at Forster Lane ¹⁰	Traffic Operation	E	AM PM	Two-Way Stop	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	6Ø Traffic Signal	0.461 0.399	A A
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	6Ø Traffic Signal	0.480 0.482	A A
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	8Ø Traffic Signal	0.634 0.595	B A

Notes:

- ICU = Intersection Capacity Utilization.
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions.
- **Bold ICU values** indicate adverse service levels.

⁷ Appendix B contains ICU/LOS calculation worksheets for all signalized intersections.

⁸ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

⁹ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

¹⁰ Unsignalized Intersection. ICU Method of Analysis does not apply.

TABLE 3-7
EXISTING PEAK HOUR LEVELS OF SERVICE (HCM METHOD OF ANALYSIS)¹¹

Key Intersection	“Hot Spot” Designation ¹²	LOS ¹³ Goal	Time Period	Control Type	Delay (s/v)	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	4Ø Traffic Signal	20.7 15.9	C B
2. El Camino Real at Old Mission Road	--	D	AM PM	2Ø Traffic Signal	90.1 28.3	F C
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	6Ø Traffic Signal	13.8 14.0	B B
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	3Ø Traffic Signal	34.0 28.9	C C
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	6Ø Traffic Signal	39.3 30.7	D C
6. Camino Capistrano at Forster Street	--	D	AM PM	One-Way Stop	23.9 23.1	C C
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	Two-Way Stop	50.5 34.5	F D
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	6Ø Traffic Signal	24.6 22.2	C C
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	6Ø Traffic Signal	11.0 13.1	B B
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	8Ø Traffic Signal	30.7 32.3	C C

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2* and *3-3* for the LOS definitions.
- **Bold Delay values** indicate adverse service levels.

¹¹ Appendix C contains Delay/LOS calculation worksheets for all signalized and unsignalized intersections.

¹² Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹³ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

3.9 Existing Roadway Segment Level of Service Results

3.9.1 Daily V/C Ratio Method of Analysis

Table 3-8 summarizes the existing service level calculations for the seven (7) study roadway segments based on existing 24-hour traffic volumes and current roadway geometry. As shown in **Table 3-8**, all of the study roadway segments currently operate at an acceptable level of service on a daily basis when compared to the City's LOS standards.

As directed by the City, the roadway segment of Del Obispo Street between Old Mission Road and Camino Capistrano has been further analyzed under peak hour conditions to determine if there are any peak hour deficiencies. As presented in **Table 3-9**, the roadway segment currently operates at an acceptable level of service during the AM and PM peak hours.

**TABLE 3-8
EXISTING DAILY ROADWAY SEGMENTS LEVEL OF SERVICE SUMMARY**

Key Roadway Segment	(1) No. of Lanes ¹⁴	(2) “ Hot Spot” Classification ¹⁵	(3) LOS ¹⁶ Goal	(4) LOS “E” Capacity (VPD) ¹⁷	(5) Existing Traffic Conditions		
					Daily Volume	V/C Ratio	LOS
A. Old Mission Road, <i>between</i> Camino Capistrano and Del Obispo Street	4U	--	D	25,000	6,299	0.252	A
B. Ortega Highway, <i>between</i> Del Obispo Street and I-5 SB Ramps	5D	Traffic Operation	E	46,900	37,537	0.800	D
C. Ortega Highway, <i>between</i> I-5 SB Ramps and I-5 NB Ramps	8D	Traffic Operation	E	75,000	40,250	0.537	A
D. Camino Capistrano, <i>between</i> Old Mission Road and Del Obispo Street	2D	--	D	22,000	13,720	0.624	B
E. Del Obispo Street, <i>between</i> Old Mission Road and Camino Capistrano	4D	Traffic Operation	E	37,500	23,986	0.640	B
F. Del Obispo Street, <i>between</i> Alipaz Street and Paseo Adelanto	4D	Traffic Operation	E	37,500	30,590	0.816	D
G. Del Obispo Street, <i>between</i> Paseo Adelanto and Camino Capistrano	4D	Traffic Operation	E	37,500	33,777	0.901	E

Notes:

- VPD = Vehicles per Day
- V/C = Volume over Capacity
- LOS = Level of Service, please refer to *Table 3-4* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁴ D = Divided, U = Undivided

¹⁵ Source: *San Juan Capistrano General Plan Circulation Element*.

¹⁶ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023*.

¹⁷ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*.

**TABLE 3-9
EXISTING PEAK HOUR ROADWAY SEGMENT ANALYSIS SUMMARY**

Key Roadway Segment	Type of Arterial	Approach	Time Period	(1)	(2) Existing Traffic Conditions					(3) Operational Deficiency
				Link Capacity (VPHPL)	Lanes	Total Link Capacity (VPH)	Peak Hour Volume	V/C Ratio	LOS	Yes/No
E. Del Obispo Street, <i>between</i> Old Mission Road and Camino Capistrano	Primary	Eastbound	AM	1,600	2	3,200	986	0.308	A	No
			PM	1,600	2	3,200	990	0.309	A	No
		Westbound	AM	1,600	2	3,200	1,126	0.352	A	No
			PM	1,600	2	3,200	1,086	0.339	A	No

Notes:

- VPHPL = Vehicles Per Hour Per Lane
- VPH = Vehicles Per Hour
- V/C = Volume to Capacity Ratio
- LOS = Level of Service, please refer to *Table 3-3* for the LOS definitions

4.0 TRAFFIC FORECASTING METHOD OF ANALYSIS

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the Project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of Project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and Project traffic assignments developed, the impact of the Project is isolated by comparing operational (LOS) conditions at selected key intersections and road segment using expected future traffic volumes with and without forecast Project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

5.0 PROJECT TRAFFIC CONDITIONS

5.1 Project Trip Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. The trip generation potential of the proposed Project will be estimated using trip rates contained in the 11th Edition of Trip Generation, published by the Institute of Transportation Engineers (ITE), [Washington, D.C., 2021].

Table 5-1 summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project, whereas *Table 5-2* presents the proposed Project's forecast weekday daily and peak hour traffic volumes. As shown in the *Table 5-1*, and based on the Project description, ITE Land Use 220: Multifamily Housing (Low-Rise), ITE 492: Health/Fitness Club, and ITE 931: Fine Dining Restaurant trip rates will be used to forecast the trip generation potential of the proposed Project. However, for the proposed 452-seat Performing Arts Center, the use and operational characteristics of this Project component are not similar to the available land use categories provided in *Trip Generation*, 11th Edition. Therefore, trips generated by this Project component were conservatively estimated based on the anticipated unique operational characteristics (i.e., attendance levels, anticipated visitor arrival and departure patterns during weekdays and weekends, events, educational, and other programming, employees, etc.). The trip generation associated with the Performing Arts Center reflects the Project condition that start times of simultaneous events in the theatre on weekday evenings (e.g., after 6:00 PM) hours in order to be conservative.

As shown in *Table 5-2*, the proposed Forster & El Camino Real Mixed-Use Community, after application of internal capture, mode split, and pass-by adjustment factors, is forecast to generate 628 daily trips (one half arriving and one half departing), with 41 trips (14 inbound, 27 outbound) produced in the AM peak hour and 68 trips (43 inbound, 25 outbound) produced in the PM peak hour on a "typical" weekday.

For the proposed Performing Arts Center, as presented in the lower portion of *Table 5-2*, this Project component is expected to generate 606 daily trips (one half arriving and one half departing), with 22 trips (18 inbound, 4 outbound) produced in the AM peak hour and 102 trips (79 inbound, 23 outbound) produced in the PM peak hour on a "typical" weekday.

Overall, as shown in the last row of *Table 5-2*, the proposed Project is forecast to generate 1,234 daily trips (one half arriving and one half departing), with 63 trips (32 inbound, 31 outbound) produced in the AM peak hour and 170 trips (122 inbound, 48 outbound) produced in the PM peak hour on a "typical" weekday.

**TABLE 5-1
PROJECT TRIP GENERATION RATES¹⁸**

ITE Land Use Code/ Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<i>Trip Generation Factors:</i>							
• 220: Multifamily Housing (Low-Rise) (TE/DU) ^{19,20}	4.72	29%	71%	0.38	60%	40%	0.61
• 492: Fitness/Health Club (TE/TSF)	32.18 ²¹	51%	49%	1.31	57%	43%	3.45
• 931: Fine Dining Restaurant (TE/TSF)	83.84	90%	10%	0.73	67%	33%	7.80

Notes:

- TE/TSF = Trip end per 1,000 SF

¹⁸ Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

¹⁹ Low-Rise Multifamily Housing consists of buildings that are between 1 and 3 levels.

²⁰ ITE Land Use 220: Multifamily Housing (Low-Rise) has further subcategories of “Close to Rail Transit” and “Not Close to Rail Transit”. The Weekday Daily, Weekday AM peak hour, and Weekday PM peak hour utilize “Close to Rail Transit” trip generation rates.

²¹ Source: A daily trip rates are not available for this land use per the *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017). Therefore, the daily ratio was estimated by applying the same relationship between Daily and PM ratio from the ITE Land Use Code 492: Health/Fitness Club from *Trip Generation*, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).

TABLE 5-2
PROJECT TRIP GENERATION FORECAST

ITE Land Use Code/ Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
<u>Forster & El Camino Mixed Use Project:</u>							
• Residential (95 DU)	448	10	26	36	35	23	58
Internal Capture ²²	<u>-75</u>	<u>0</u>	<u>-1</u>	<u>-1</u>	<u>-3</u>	<u>-4</u>	<u>-7</u>
<i>Residential Subtotal</i>	373	10	25	35	32	19	51
• Health/Fitness (3,100 SF)	100	2	2	4	6	5	11
Internal Capture ⁸	<u>-58</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-4</u>	<u>-2</u>	<u>-6</u>
<i>Health/Fitness Subtotal</i>	42	2	2	4	2	3	5
• Fine Dining Restaurant (4,294 SF)	360	3	0	3	22	11	33
Internal Capture ⁸	<u>-97</u>	<u>-1</u>	<u>0</u>	<u>-1</u>	<u>-4</u>	<u>-5</u>	<u>-9</u>
<i>Fine Dining Restaurant Subtotal</i>	263	2	0	2	18	6	24
Mode Split Adjustment ²³	<u>-26</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-2</u>	<u>0</u>	<u>-2</u>
<i>Fine Dining Restaurant Subtotal</i>	237	2	0	2	16	6	22
Pass-by Reduction ²⁴	<u>-24</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-7</u>	<u>-3</u>	<u>-10</u>
<i>Fine Dining Restaurant Subtotal</i>	213	2	0	2	9	3	12
<i>Forster & El Camino Mixed Use Total</i>	628	14	27	41	43	25	68
<u>Performing Arts Center:</u>							
• Performing Arts Center (452 Seats) ²⁵	606	18	4	22	79	23	102
El Camino Specific Plan Amendment Total	1,234	32	31	63	122	48	170

- ²² Consistent with the *Trip Generation Handbook*, published by ITE (2017), Project trip generation was adjusted to account for internal capture between the different components of the Project.
- ²³ A mode shift adjustment factor of 10% was used to account for walk-in traffic from the adjacent downtown area. This factor was applied to the Daily, AM peak hour, and PM peak hour.
- ²⁴ 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, the following pass-by reduction factors were used (Source: *Trip Generation Manual*, 11th Edition, ITE 2021):
- 822: Strip Retail Plaza (< 40k): Daily/AM peak hour – Assume 10%, PM peak hour – Assume 40% (reference 821: Shopping Plaza (40k – 150k),
 - 931: Fine Dining Restaurant: PM peak hour – 44%, Daily/AM peak hour – Assume 10%
- ²⁵ Performing Arts Center trips are based on expected capacity and operations of the theater.

5.2 Project Traffic Distribution

Project traffic volumes, both entering and exiting the site, have been distributed and assigned to the adjacent street system and were further refined based on the following considerations:

- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity, and
- ingress/egress availability at the project site.

Figure 5-1 presents the Project trip distribution for the commercial components of the Project for both without and with the Forster Lane Extension. *Figures 5-2* and *5-3* present the Project trip distribution for the residential and Performing Arts Center components, respectively, without the Forster Lane Extension. *Figures 5-4* and *5-5* present the Project trip distribution for the residential and Performing Arts Center components, respectively, with the Forster Lane Extension. It should be noted that the trip distribution patterns follow the most direct paths to the locations of the various components of the Project.

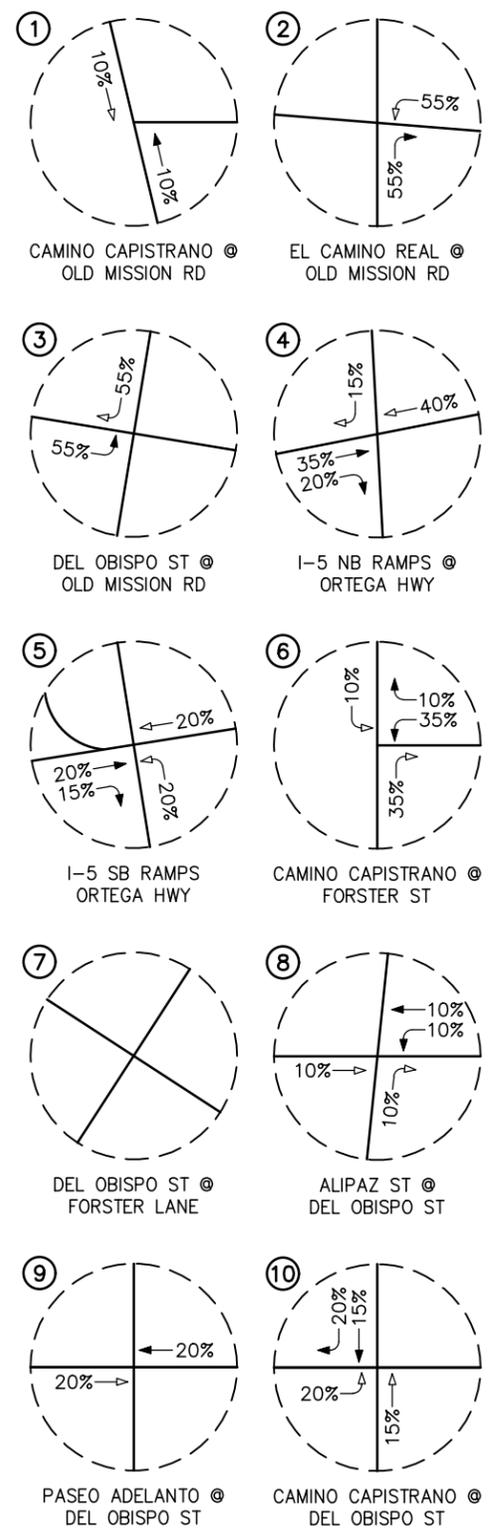
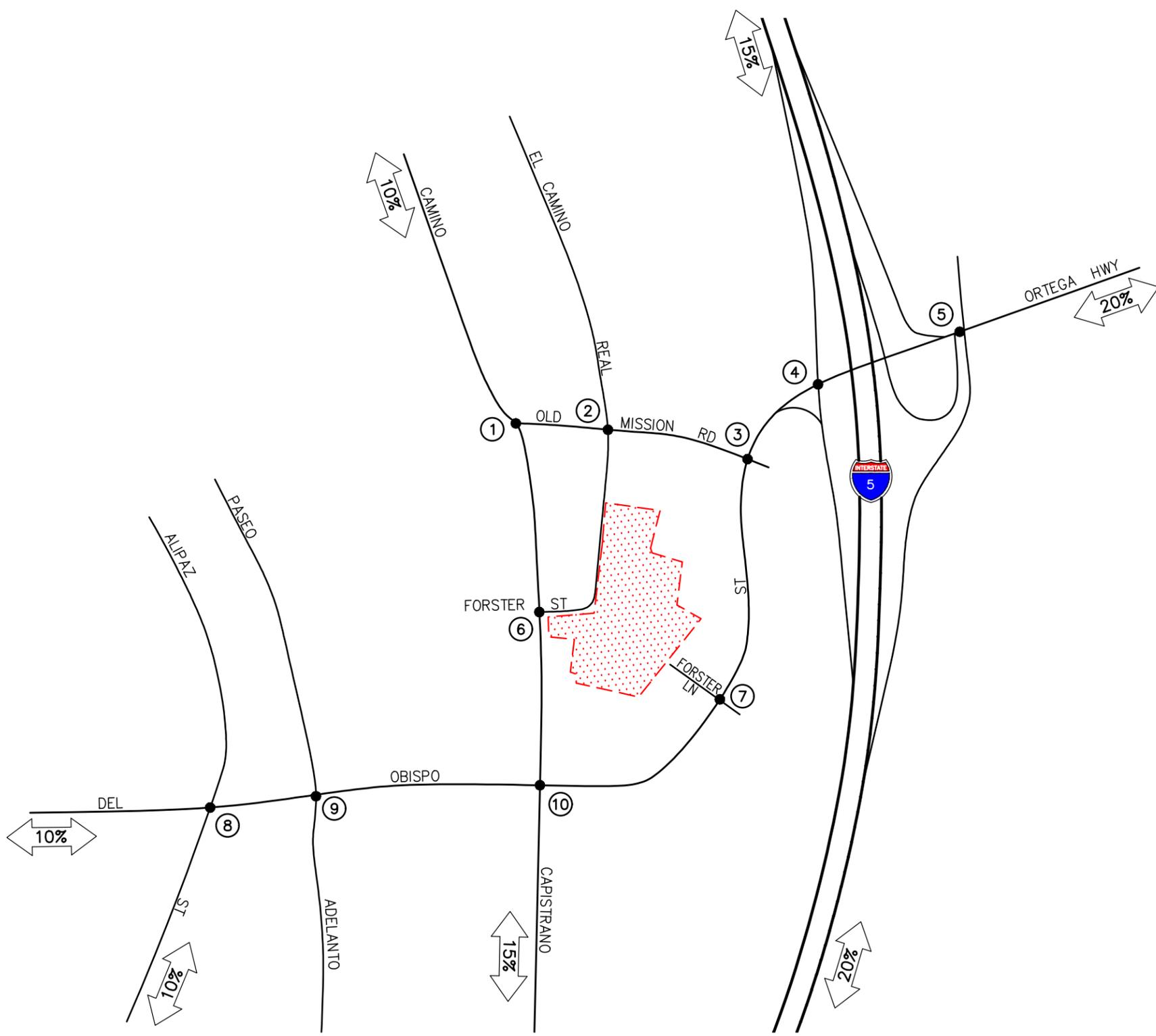
5.3 Project Traffic Assignment

5.3.1 Project (Without Forster) Traffic Assignment

The anticipated AM and PM peak hour Project (Without Forster) traffic volumes associated with the proposed Project at the key study intersections are presented in *Figures 5-6* and *5-7*, respectively. *Figure 5-7* also illustrates the daily Project traffic volumes on the key roadway segments. The traffic volume assignments presented in *Figures 5-6* and *5-7* reflect the traffic distribution characteristics shown in *Figures 5-1, 5-2 and 5-3* and the traffic generation forecast presented in *Table 5-2*.

5.3.2 Project (With Forster) Traffic Assignment

The anticipated AM and PM peak hour Project (With Forster) traffic volumes associated with the proposed Project at the key study intersections are presented in *Figures 5-8* and *5-9*, respectively. *Figure 5-9* also illustrates the daily Project traffic volumes on the key roadway segments. The traffic volume assignments presented in *Figures 5-8* and *5-9* reflect the traffic distribution characteristics shown in *Figures 5-1, 5-4, and 5-5* and the traffic generation forecast presented in *Table 5-2*.

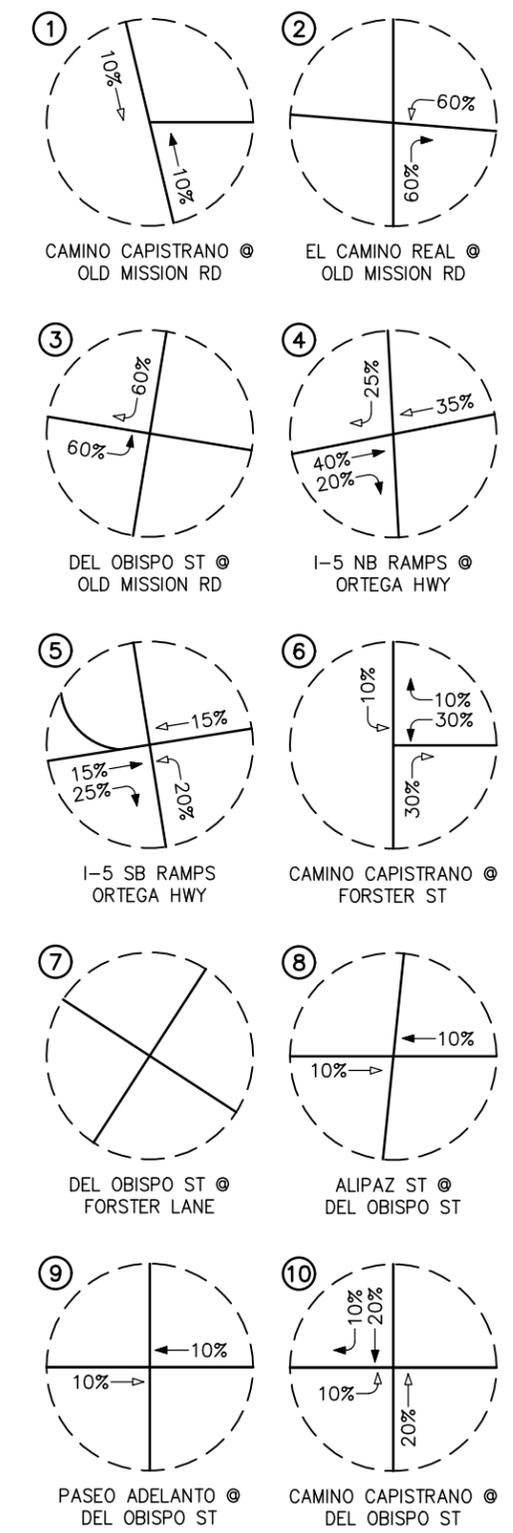
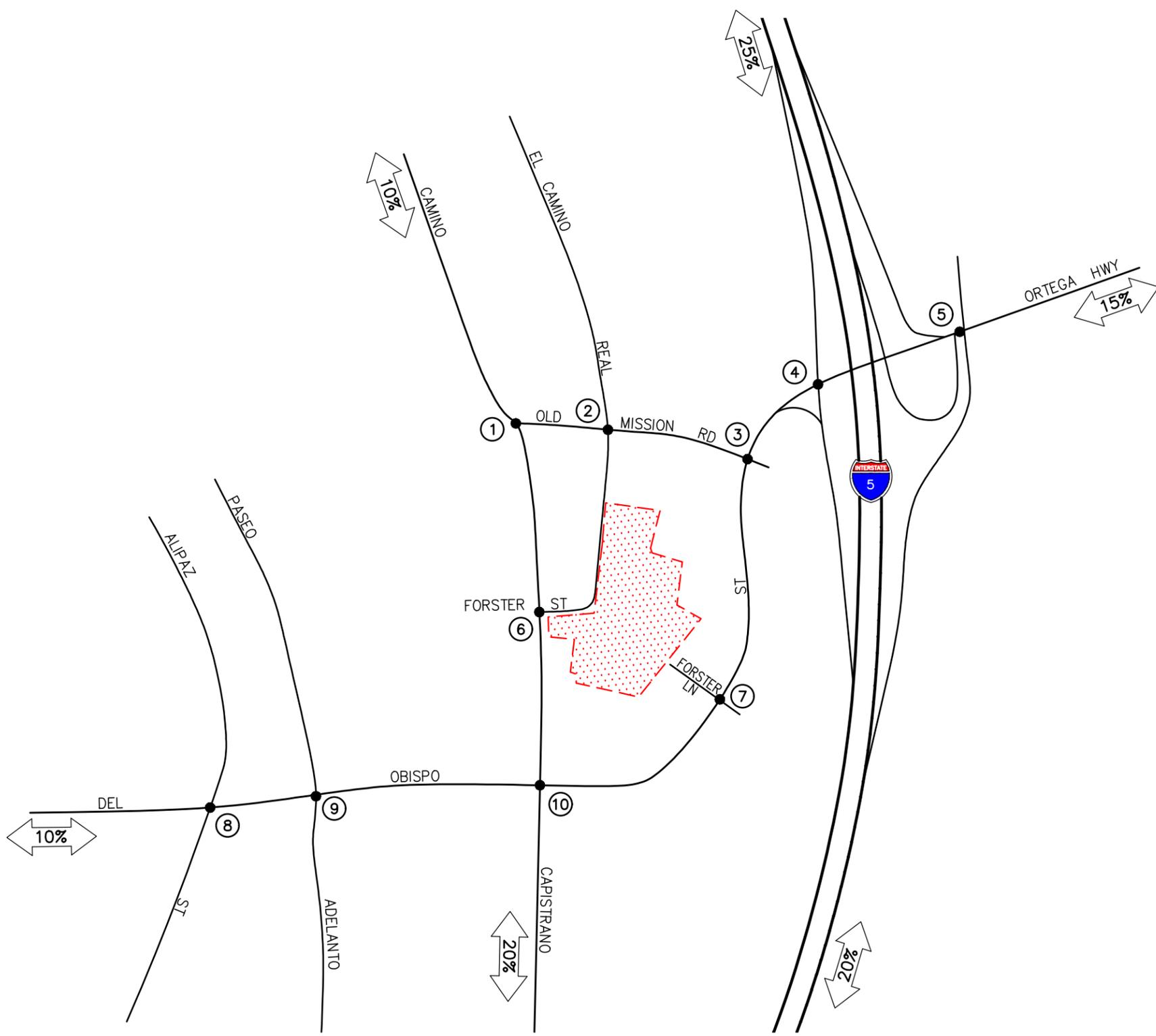


KEY

- ⊕ = STUDY INTERSECTION
- ← = INBOUND PERCENTAGE
- = OUTBOUND PERCENTAGE
- ▨ = PROJECT SITE

FIGURE 5-1

PROJECT TRIP DISTRIBUTION - COMMERCIAL
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



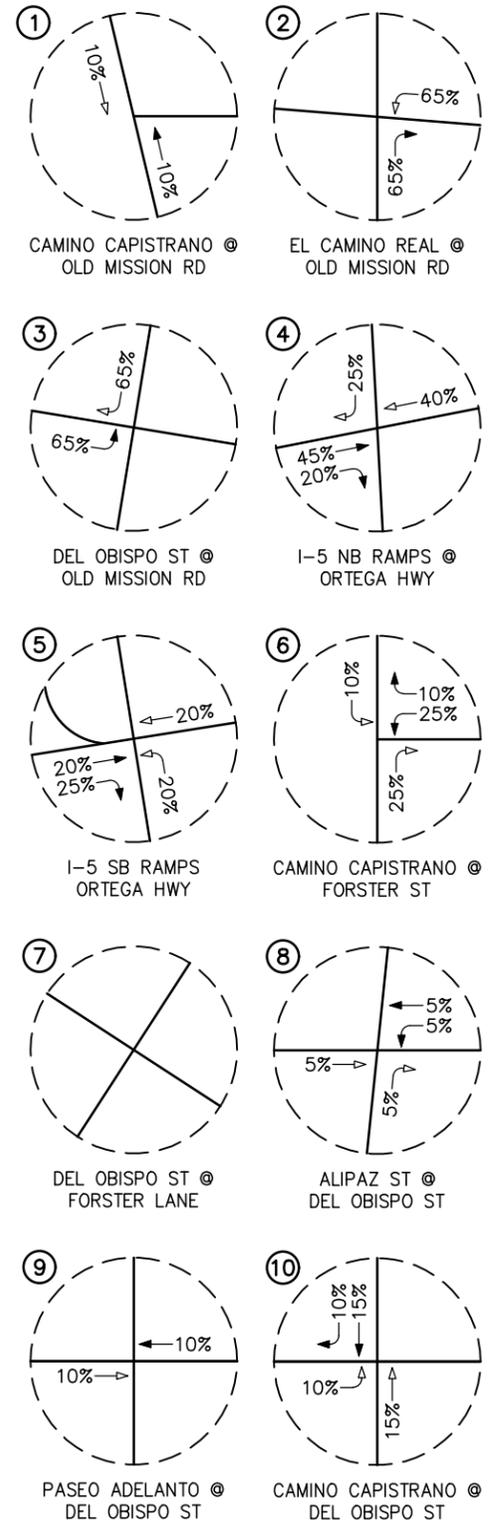
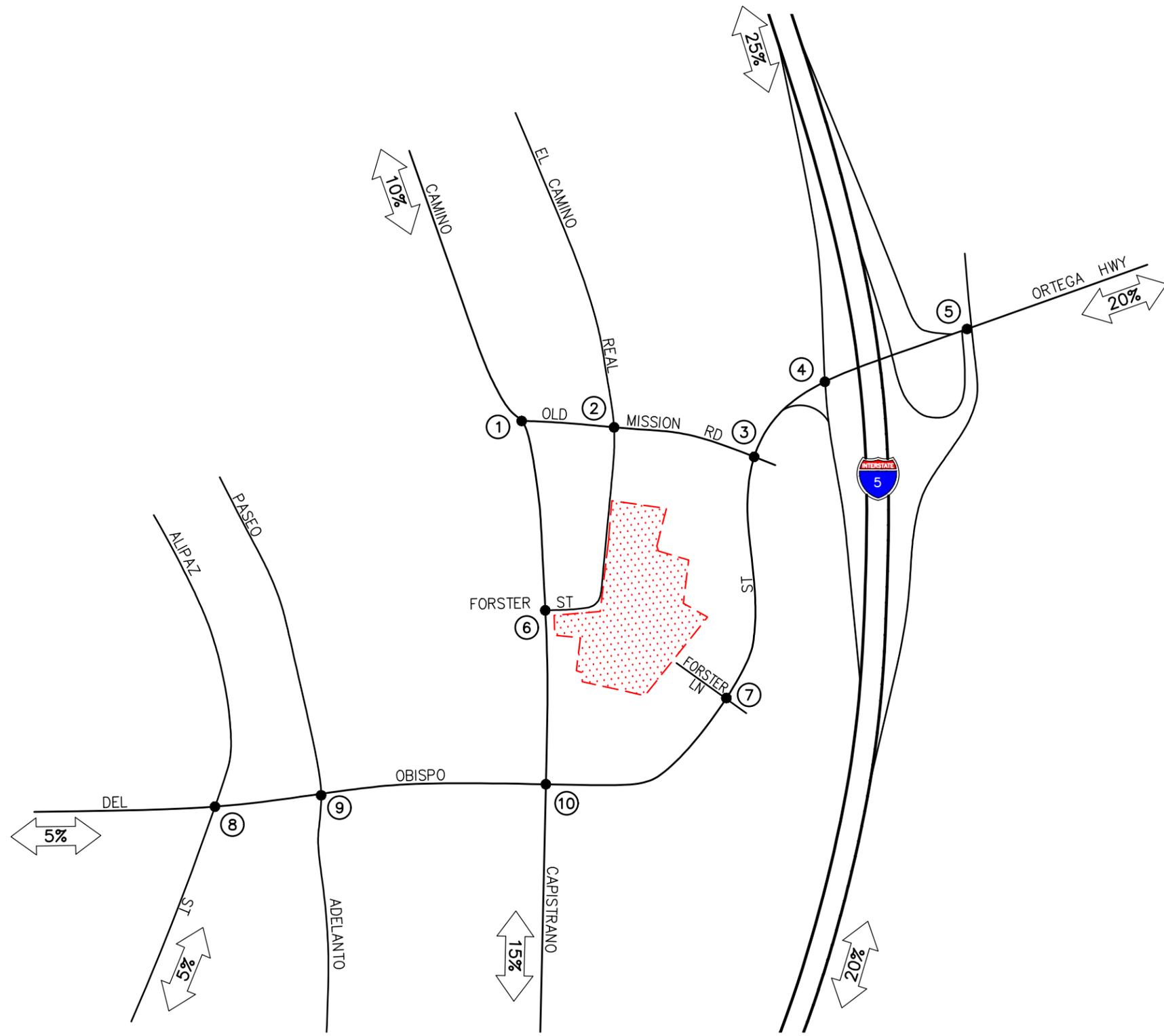
KEY

- ⊕ = STUDY INTERSECTION
- ← = INBOUND PERCENTAGE
- = OUTBOUND PERCENTAGE
- ▨ = PROJECT SITE



FIGURE 5-2

**PROJECT TRIP DISTRIBUTION - RESIDENTIAL
(WITHOUT FORSTER LANE)**
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

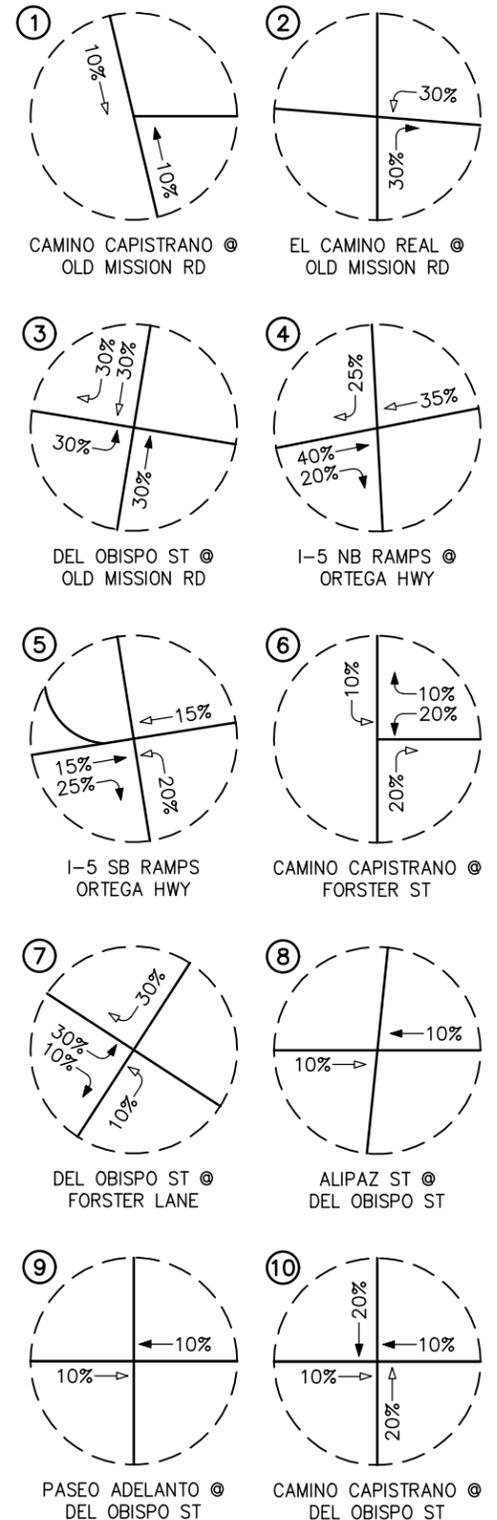
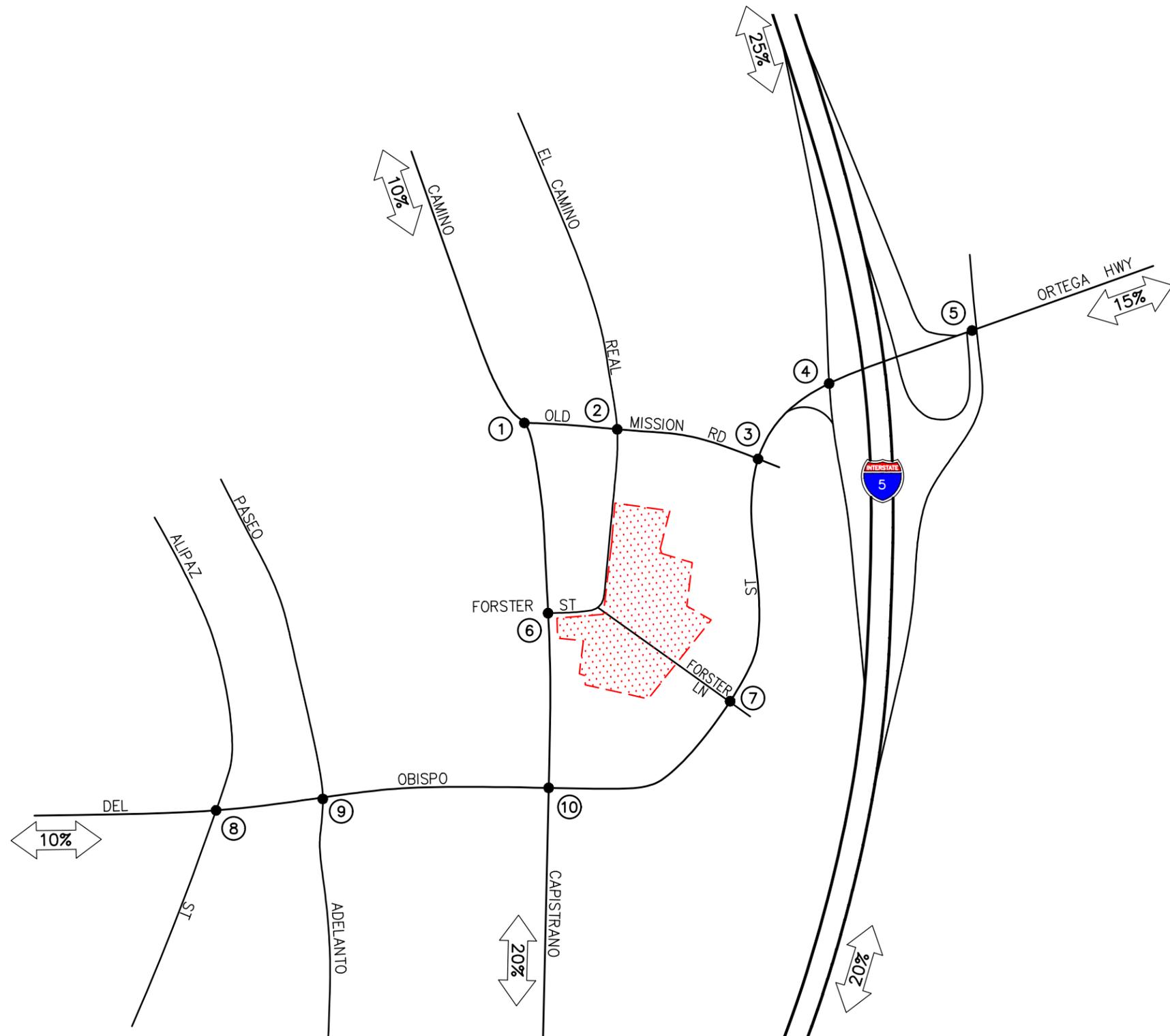


KEY

- ⊙ = STUDY INTERSECTION
- ← = INBOUND PERCENTAGE
- = OUTBOUND PERCENTAGE
- ▨ = PROJECT SITE

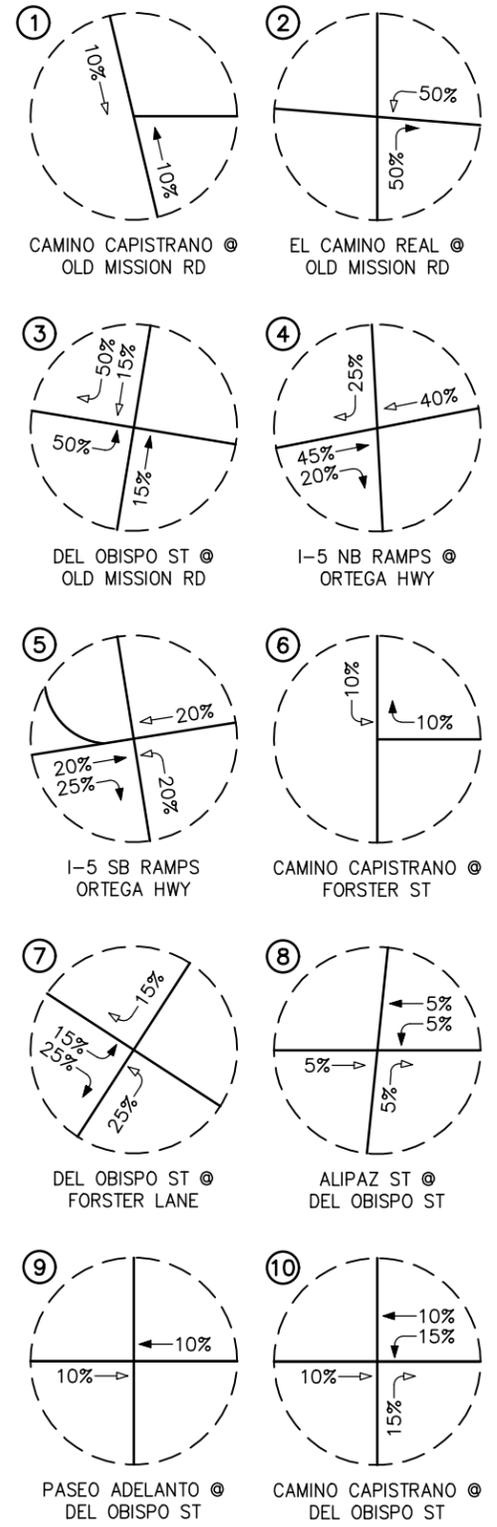
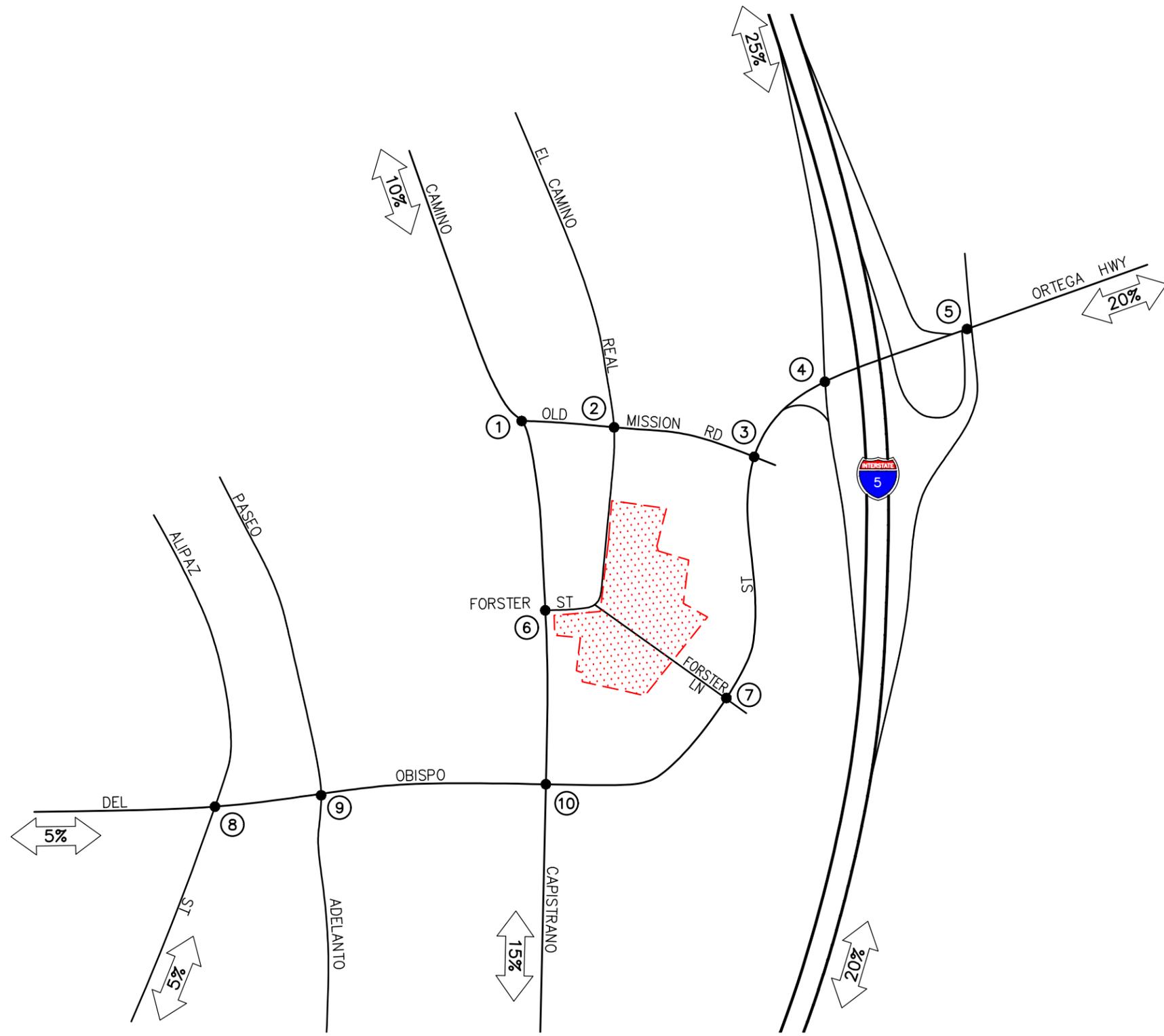


FIGURE 5-3
PROJECT TRIP DISTRIBUTION - PERFORMING ARTS CENTER
(WITHOUT FORSTER LANE)
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY
 # = STUDY INTERSECTION
 ← = INBOUND PERCENTAGE
 → = OUTBOUND PERCENTAGE
 = PROJECT SITE

FIGURE 5-4
PROJECT TRIP DISTRIBUTION - RESIDENTIAL
(WITH FORSTER LANE)
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

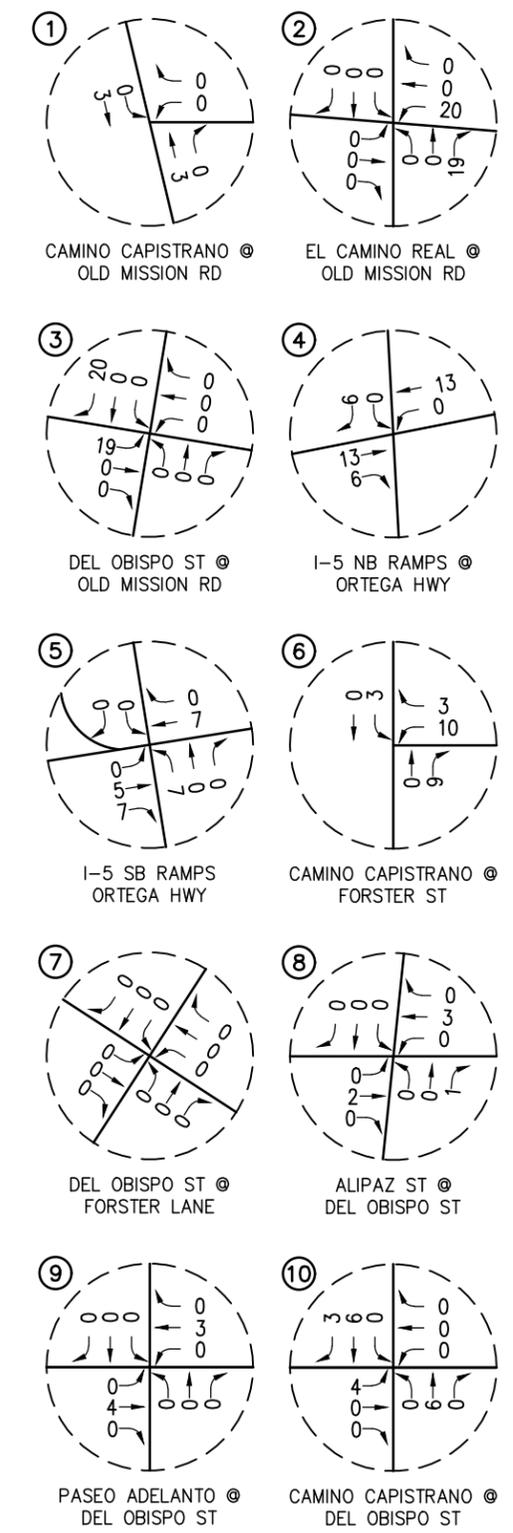
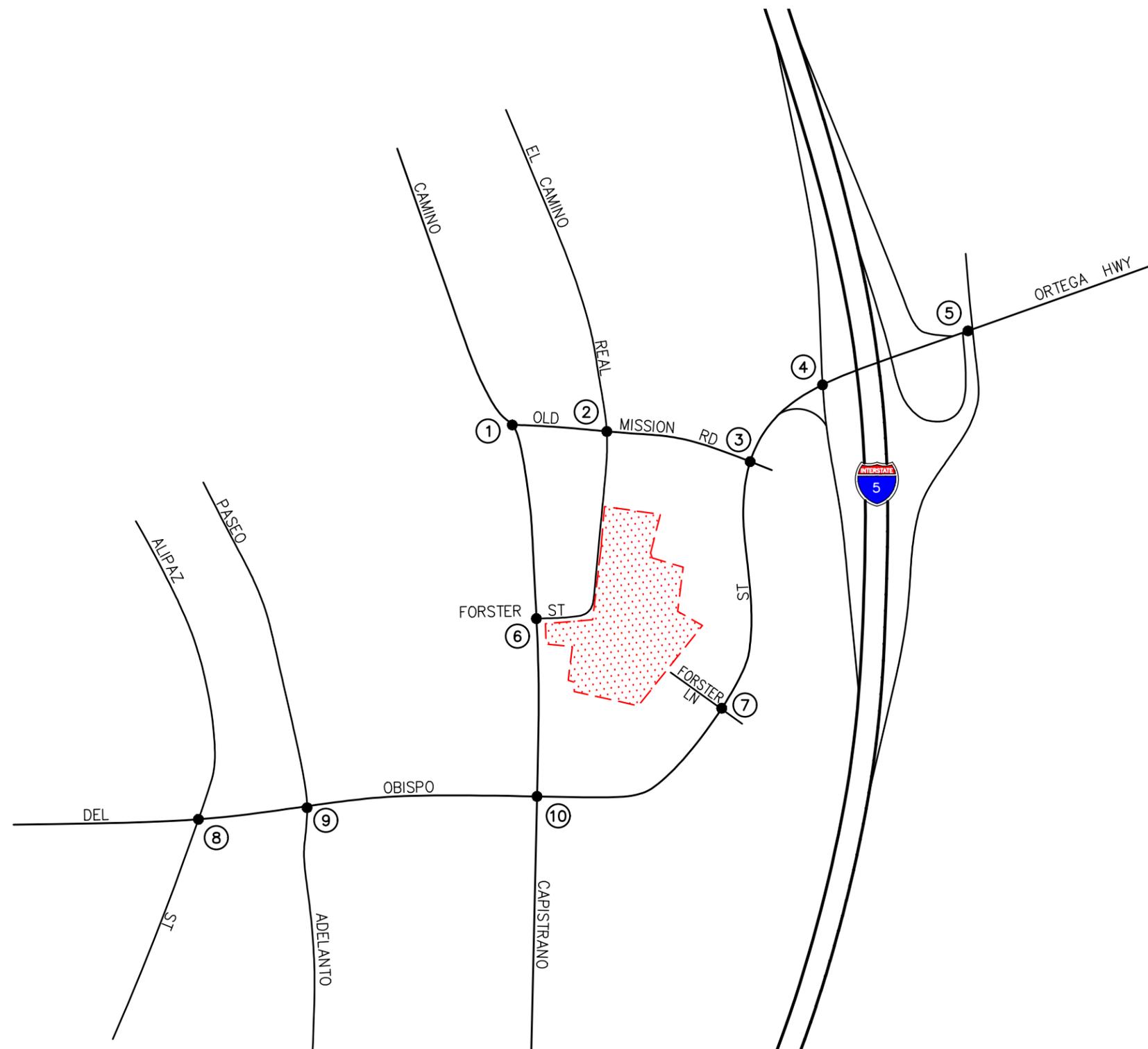


KEY

- ⊙ = STUDY INTERSECTION
- ← = INBOUND PERCENTAGE
- = OUTBOUND PERCENTAGE
- ▨ = PROJECT SITE

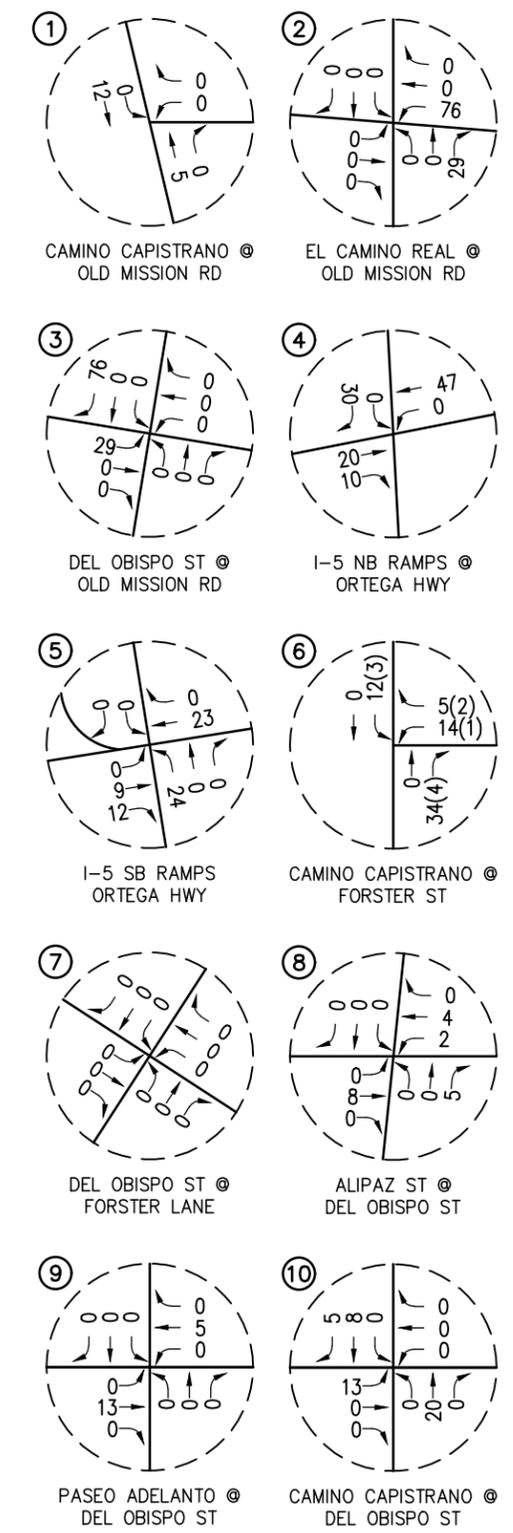
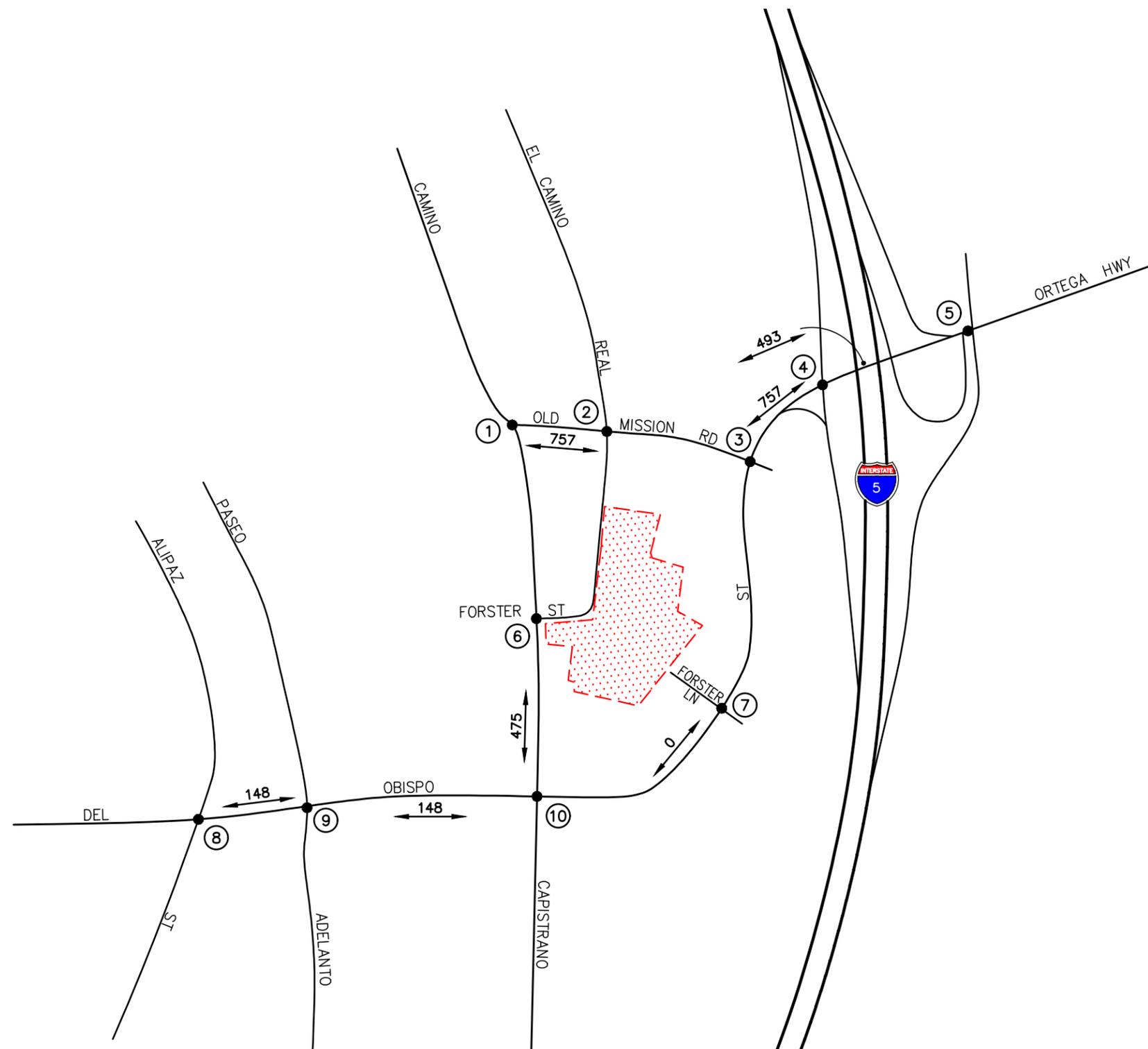


FIGURE 5-5
PROJECT TRIP DISTRIBUTION - PERFORMING ARTS CENTER
(WITH FORSTER LANE)
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 5-6
AM PEAK HOUR PROJECT (WITHOUT FORSTER)
ONLY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



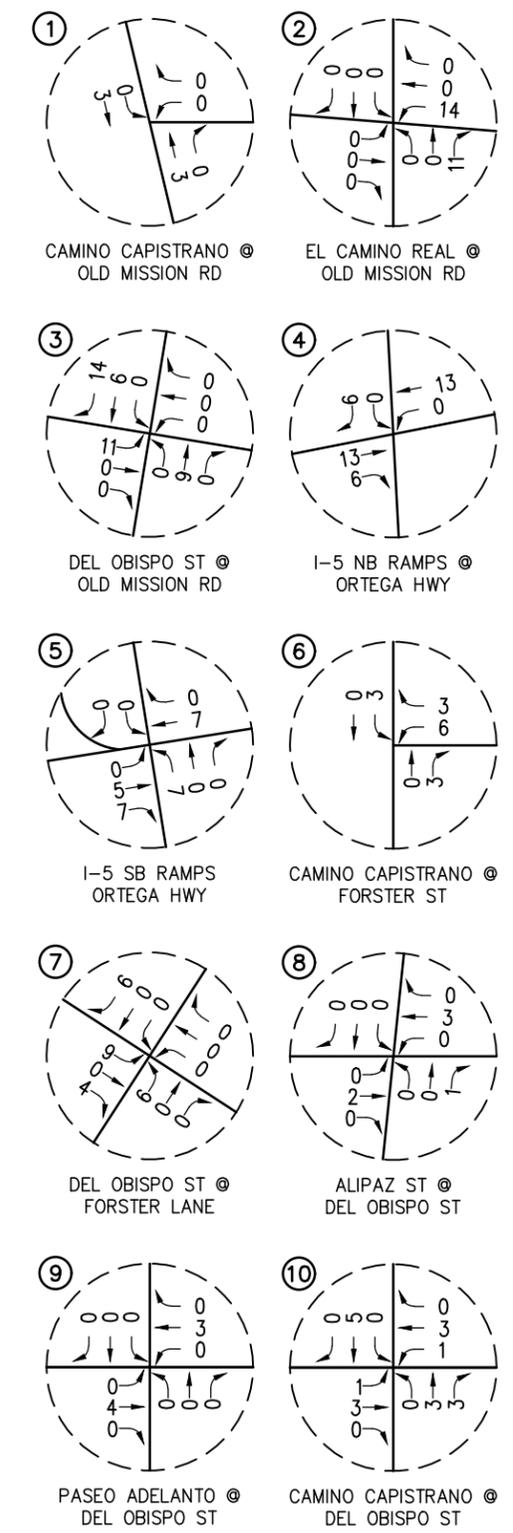
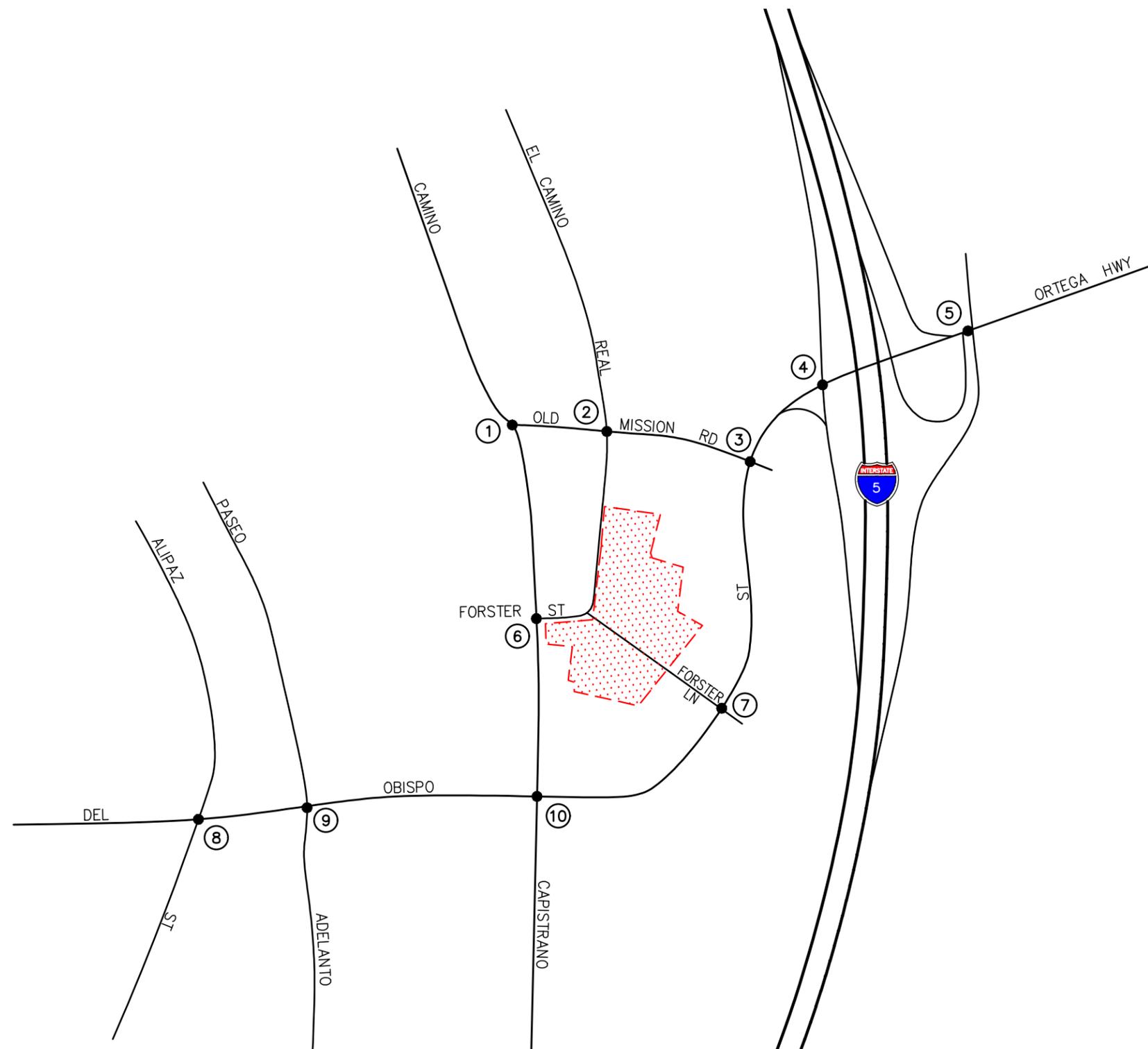
KEY

- ⊕ = STUDY INTERSECTION
- ▨ = PROJECT SITE
- (XX) = PASS-BY TRIPS



FIGURE 5-7
PM PEAK HOUR AND DAILY PROJECT
(WITHOUT FORSTER) ONLY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

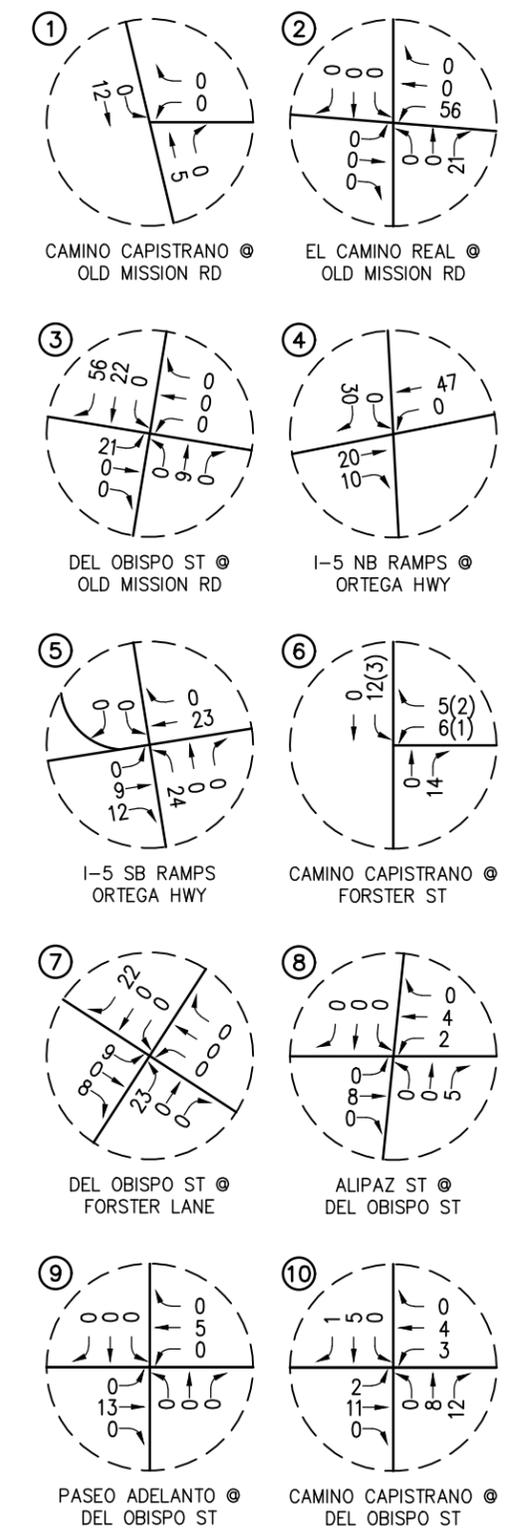
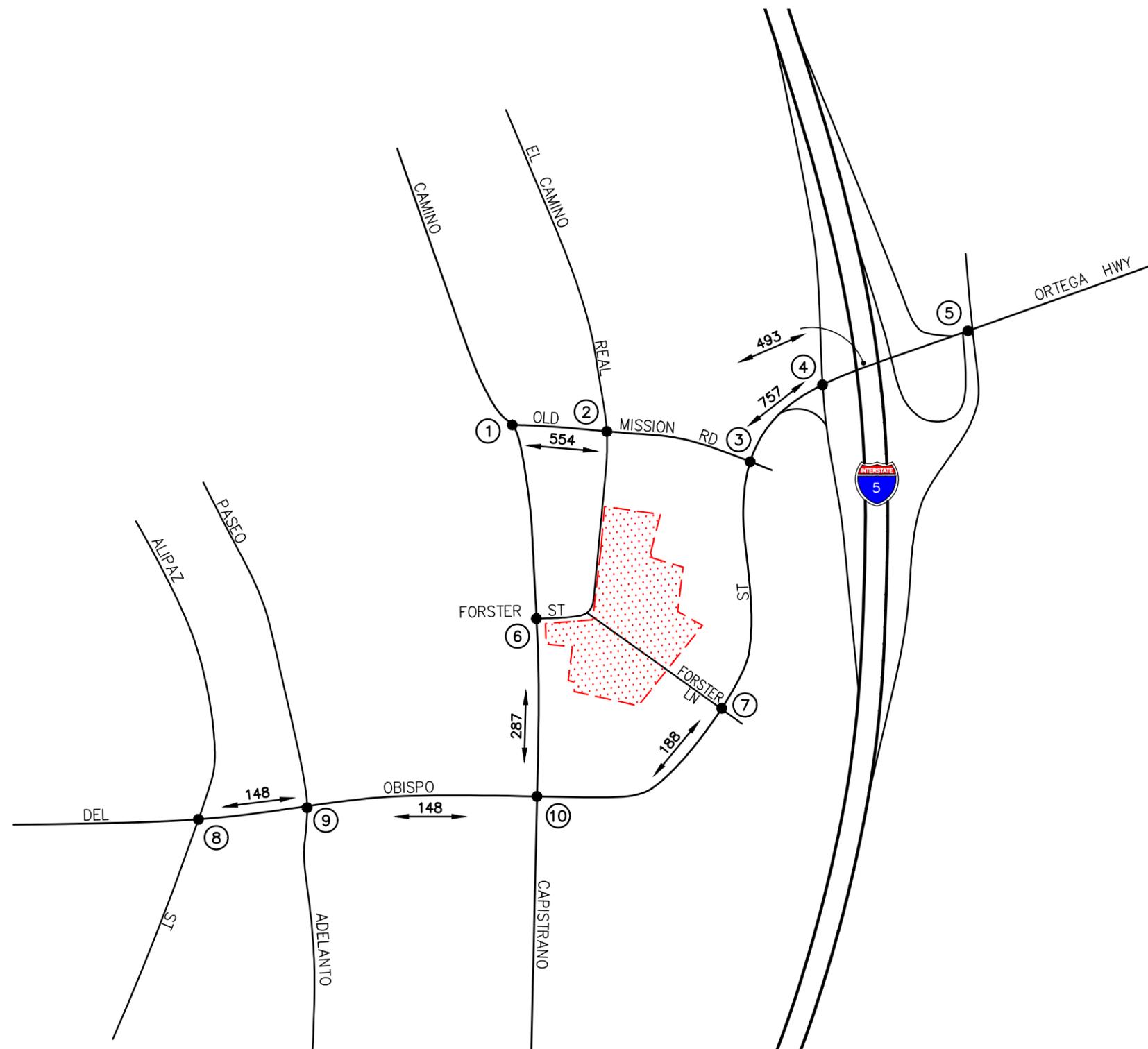
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KEY
 (#) = STUDY INTERSECTION
 [Red Hatched Box] = PROJECT SITE

FIGURE 5-8
AM PEAK HOUR PROJECT (WITH FORSTER)
ONLY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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KEY

- Ⓝ = STUDY INTERSECTION
- ▨ = PROJECT SITE
- (XX) = PASS-BY TRIPS



FIGURE 5-9
PM PEAK HOUR AND DAILY PROJECT (WITH FORSTER) ONLY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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6.0 FUTURE TRAFFIC CONDITIONS (NEAR-TERM)

6.1 Cumulative (Year 2028) Traffic Volumes

6.1.1 Year 2028 Ambient Growth Traffic

For the horizon year (Year 2028), background traffic growth estimates have been calculated using an ambient growth factor. The ambient traffic growth factor is intended to include unknown and future related projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. Background traffic in the study area has been estimated to increase at a rate of approximately 0.5% per year. The future growth in traffic volumes has been calculated at one-half a percent (0.5%) per year up to the Horizon Year 2028. Applied to the Year 2023 existing traffic volumes, this factor results in a 2.5% growth in existing volumes to the near-term horizon Year 2028.

6.1.2 Related Projects Traffic

In order to make a realistic estimate of future on-street conditions prior to implementation of the Project, the status of other known development projects (related projects) in the area has been researched. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. Based on information provided by the City, there are fourteen (14) planned and/or approved, related projects within the Project vicinity that have either been built, but not yet fully occupied, have received approvals or are being processed for approval.

Thus, because the City used both a list of related projects approach and an ambient growth rate to analyze cumulative impacts, this traffic impact analysis is highly conservative and likely overstates Project impacts.

Table 6-1 provides the location and a brief description for each of the fourteen (14) related projects. *Figure 6-1* graphically illustrates the location of the related projects. These related projects are expected to generate vehicular traffic, which may affect the operating conditions of the key study intersections.

Table 6-2 presents the development totals and resultant trip generation for the related projects. As shown in *Table 6-2*, the related projects are expected to generate a combined total of 22,831 daily trips on a “typical” weekday, with 1,844 trips (1,003 inbound and 841 outbound) forecast during the AM peak hour and 1,660 trips (830 inbound and 830 outbound) during the PM peak hour. It should be noted that the higher AM peak hour related project trips are due to the nature of the related projects, such as the J. Serra Catholic High School that has a high morning trip generation due to school drop off time.

The AM and PM peak hour traffic volumes associated with the fourteen (14) related projects considered in this traffic analysis are presented in *Figures 6-2* and *6-3*, respectively. *Figure 6-3* also illustrates the daily related project traffic volumes on the key roadway segments.

TABLE 6-1
LOCATION AND DESCRIPTION OF RELATED PROJECTS²⁶

No.	Related Project	Location/Address	Description	Status
1.	J. Serra Catholic High School	North and south of J. Serra Road west of I-5.	2,000 student private high school	Partially occupied
2.	Distrito La Novia-San Juan Meadows	North and south sides of La Novia Avenue east of Valle Road	75,100 SF retail; 16,000 SF general office building; 85 Condominium DU; 45 Apartment DU; 94 Single Family DU; 500 horse equestrian center	Construction to commence
3.	The River Street Project	North of Del Obispo Street on Paseo Adelanto through to Los Rios	59,067 SF Commercial	Under construction
4.	The Farm Specific Plan	32382 Del Obispo Street	169 Single Family DU	Under construction
5.	Petra Avelina	Terminus of Calle Arroyo	89 Townhomes DU; 43 Single Family DU	Under construction
6.	Ganahl Lumber	North of Stonehill Drive, between San Juan Creek and the Railroad	6,000 SF Restaurant, 161,385 SF Lumber Store, and 400 Space Vehicle Storage	Under construction
7.	El Camino Specific Plan – Ortega Hwy at El Camino Mixed Use	26874 Old Mission Road / 31776 El Camino Real	27,457 SF of mixed use, with 7,391 SF of retail, 7,586 SF of restaurant space, 5,436 SF of medical office use and 7,044 SF of office space, and 216 parking spaces.	Entitled
8.	In-N-Out Burger	31791 Del Obispo Street	3,879 SF Fast Food Restaurant With Drive Through	Under construction
9.	City Hall	32400 Paseo Adelanto	50 Multifamily DU, 16,021 SF Municipal Office	Under construction
10.	Swallows Creek	30700 Rancho Viejo Road	122,308 SF Warehouse, 14,000 SF Automobile Showroom	Under construction
11.	St. John Church	29742 Rosenbaum Road	21,358 SF Church	Under review
12.	Camino Capistrano Mixed-Use	31841, 31843, 31861, and 31871 Camino Capistrano	81 Room Hotel	Under review
13.	Compass Energy Storage	29343 Camino Capistrano	Battery Energy Storage System on 15 acres with a unmanned substation with facilities operated remotely, year round, 24 hours a day	Under review
14.	Juliana Farms Lot 13 Subdivision	31495 Juliana Farms Road	6 Single Family DU	Under review

Notes:

- SF = Square Footage
- DU = Dwelling Unit

²⁶ “Cumulative Projects” List, dated September 2023, provided by the *City of San Juan Capistrano*.

TABLE 6-2
RELATED PROJECTS TRIP GENERATION FORECAST²⁷

No.	Related Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
1.	J. Serra Catholic High School	2,062	370	257	627	71	110	181
2.	Distrito La Novia - San Juan Meadows	6,786	166	155	321	249	245	494
3.	The River Street Project ²⁸	2,382	82	50	132	89	61	150
4.	The Farm Specific Plan	1,594	31	87	118	100	59	159
5.	Petra Avelina	809	16	47	63	46	29	75
6.	Ganahl Lumber ²⁹	4,597	173	150	323	98	112	210
7.	El Camino Specific Plan – Ortega Hwy at El Camino Mixed Use	932	52	29	81	30	36	66
8.	In-N-Out Burger ³⁰	1,418	0	0	0	68	74	142
9.	City Hall	699	46	28	74	23	30	53
10.	Swallows Creek ³¹	686	41	16	57	24	42	66
11.	St. John Church	162	4	3	7	4	6	10
12.	Camino Capistrano Mixed-Use	647	21	16	37	24	24	48
13.	Compass Energy Storage ³²	Nom	Nom	Nom	Nom	Nom	Nom	Nom
14.	Juliana Farms Lot 13 Subdivision	57	1	3	4	4	2	6
Related Projects Trip Generation Forecast		22,831	1,003	841	1,844	830	830	1,660

²⁷ Based on *Trip Generation, 11th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2021)], unless otherwise noted.

²⁸ Source: *Trip Generation Analysis and Parking Study Addendum River Street Development Project*, prepared by LLG Engineers, dated September 19, 2019.

²⁹ Source: *Revised Traffic Impact Analysis for Ganahl Lumber Development Project*, prepared by LSA, dated April 2020.

³⁰ Source: *Traffic Impact Analysis for In-N-Out Burger*, prepared by LLG Engineers, dated December 21, 2022.

³¹ Source: *30700 Rancho Viejo Road Redevelopment*, prepared by Environment Planning Development Solutions, Inc., dated May 11, 2022.

³² The Compass Energy Storage project is an unmanned battery storage facility that is operated remotely year round, 24 hours a day. As such trips generated by this related are expected to be nominal on a daily basis.

6.2 Existing Plus Project Traffic Volumes

The Existing Plus Project traffic conditions have been generated based upon existing conditions and the estimated Project traffic. These forecast traffic conditions have been prepared pursuant to the City's requirement, which requires that the potential impacts of a Project be evaluated upon the circulation system, as it currently exists. This traffic volume scenario and the related intersection and roadway segment capacity analyses will identify the roadway improvements necessary to mitigate the direct traffic impacts of the Project, if any.

6.2.1 Existing Plus Project (Without Forster) Traffic Volumes

Figures 6-4 and *6-5* present the projected AM and PM peak hour traffic volumes at the ten (10) key intersections with the addition of the trips generated by the proposed Project (Without Forster) to existing peak hour traffic volumes. *Figure 6-5* also presents the Existing Plus Project (Without Forster) daily traffic volumes at the seven (7) key roadway segments.

6.2.2 Existing Plus Project (With Forster) Traffic Volumes

Figures 6-6 and *6-7* present the projected AM and PM peak hour traffic volumes at the ten (10) key intersections with the addition of the trips generated by the proposed Project (With Forster) to existing peak hour traffic volumes. *Figure 6-7* also presents the Existing Plus Project (With Forster) daily traffic volumes at the seven (7) key roadway segments.

6.3 Existing Plus Project Plus Cumulative (Year 2028) Traffic Volumes

6.3.1 Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Volumes

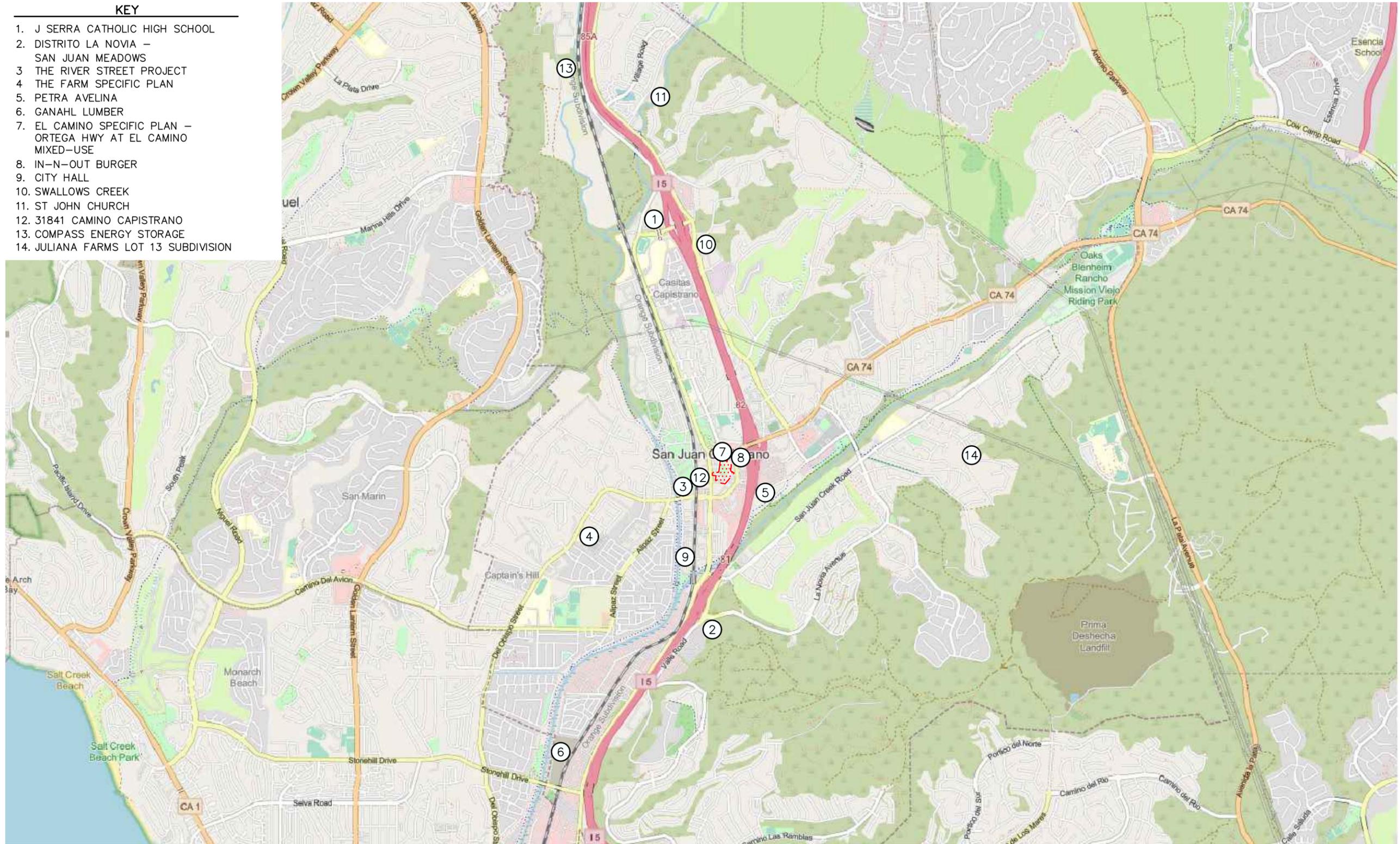
Figures 6-8 and *6-9* present the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) traffic volumes at the ten (10) key study intersections during the AM and PM peak hour, respectively. *Figure 6-9* also presents the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) daily traffic volumes at the seven (7) key roadway segments.

6.3.2 Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Volumes

Figures 6-10 and *6-11* present the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) traffic volumes at the ten (10) key study intersections during the AM and PM peak hour, respectively. *Figure 6-11* also presents the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) daily traffic volumes at the seven (7) key roadway segments.

KEY

1. J SERRA CATHOLIC HIGH SCHOOL
2. DISTRITO LA NOVA – SAN JUAN MEADOWS
3. THE RIVER STREET PROJECT
4. THE FARM SPECIFIC PLAN
5. PETRA AVELINA
6. GANAHL LUMBER
7. EL CAMINO SPECIFIC PLAN – ORTEGA HWY AT EL CAMINO MIXED-USE
8. IN-N-OUT BURGER
9. CITY HALL
10. SWALLOWS CREEK
11. ST JOHN CHURCH
12. 31841 CAMINO CAPISTRANO
13. COMPASS ENERGY STORAGE
14. JULIANA FARMS LOT 13 SUBDIVISION



SOURCE: GOOGLE

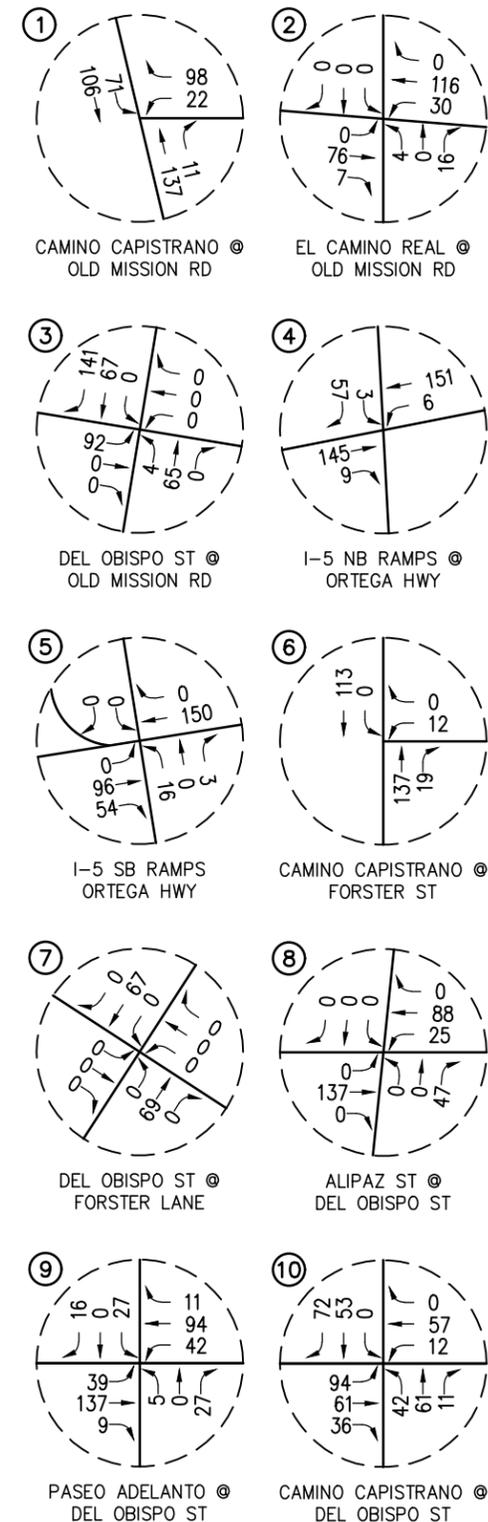
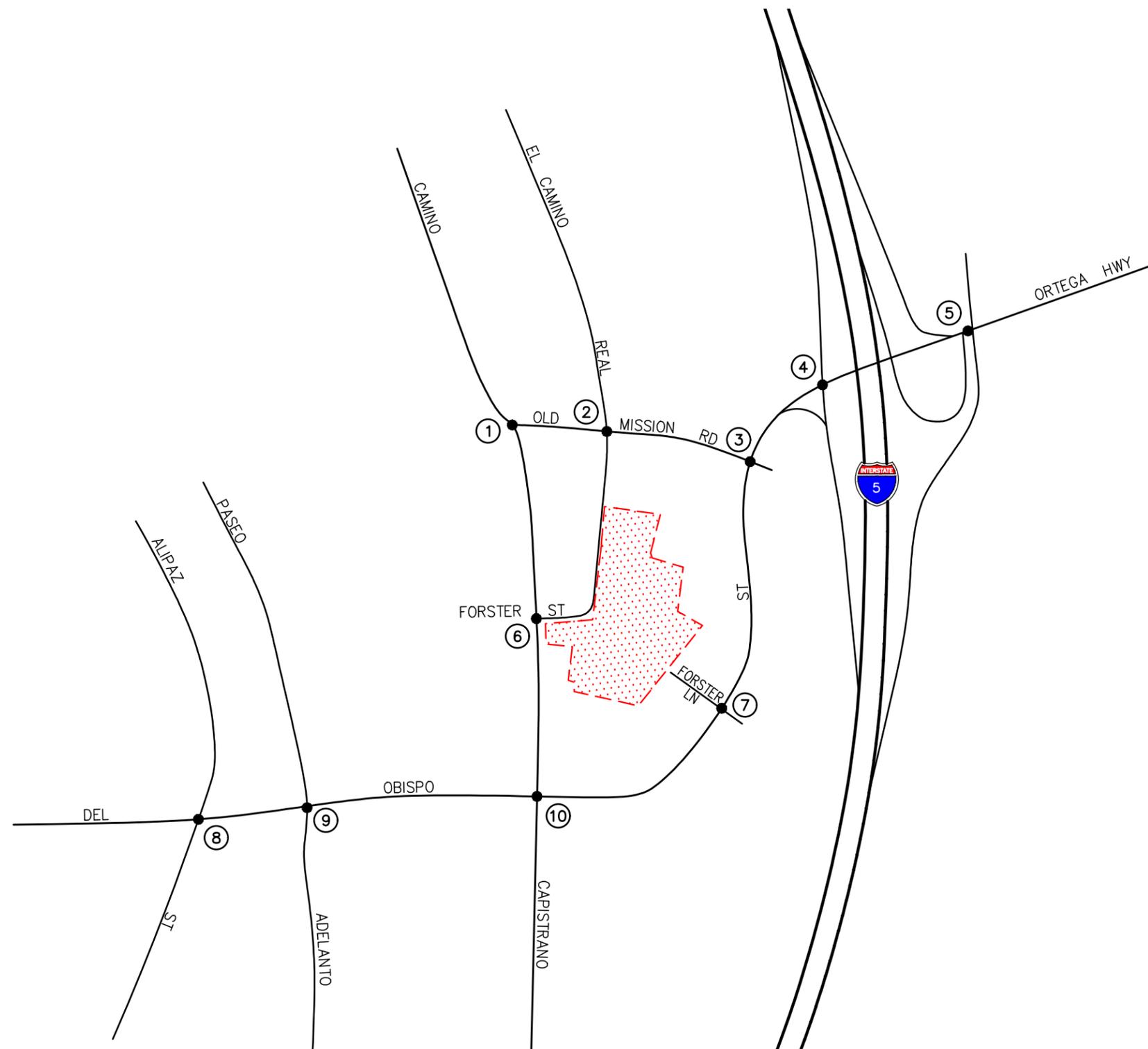
KEY

- # = RELATED PROJECTS LOCATION
- [Red Dotted Box] = PROJECT SITE



FIGURE 6-1

LOCATION OF RELATED PROJECTS
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

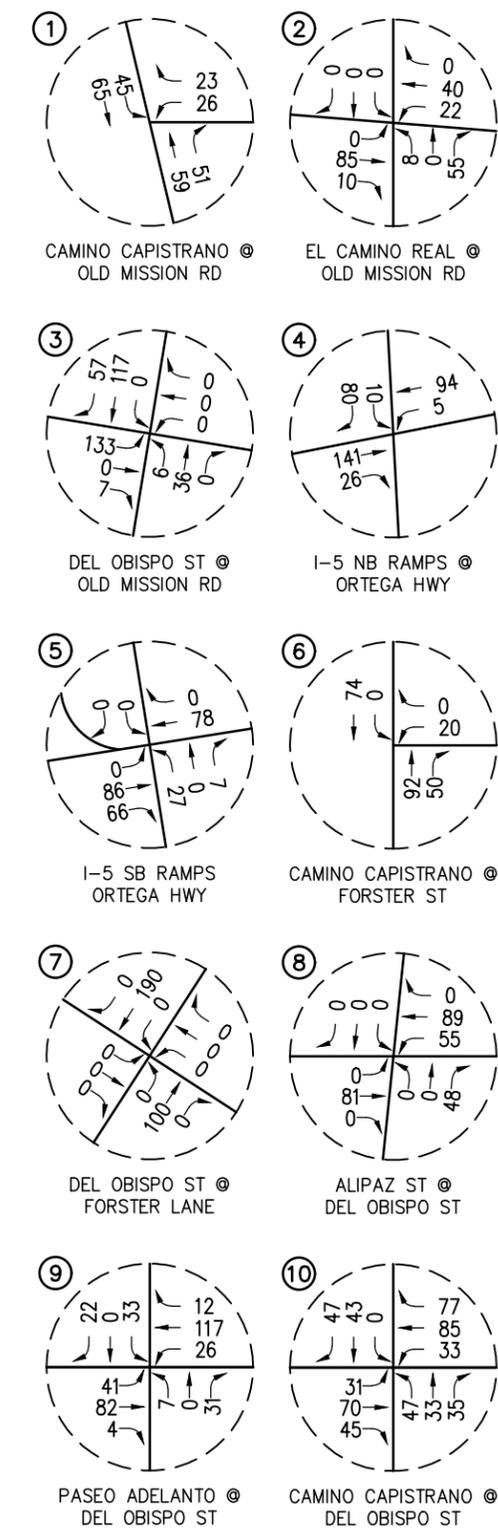
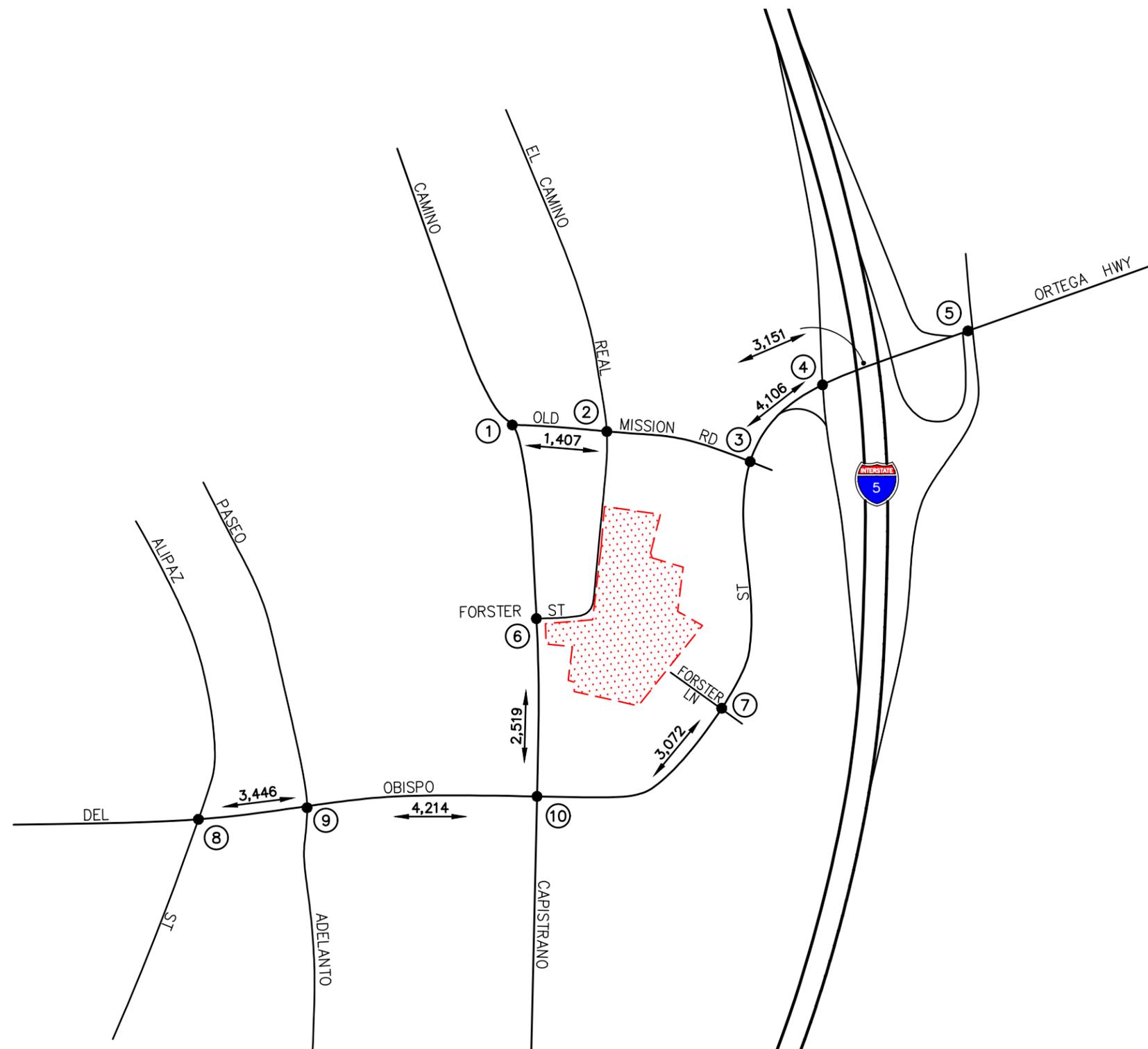


KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 6-2

AM PEAK HOUR RELATED PROJECTS ONLY TRAFFIC VOLUMES

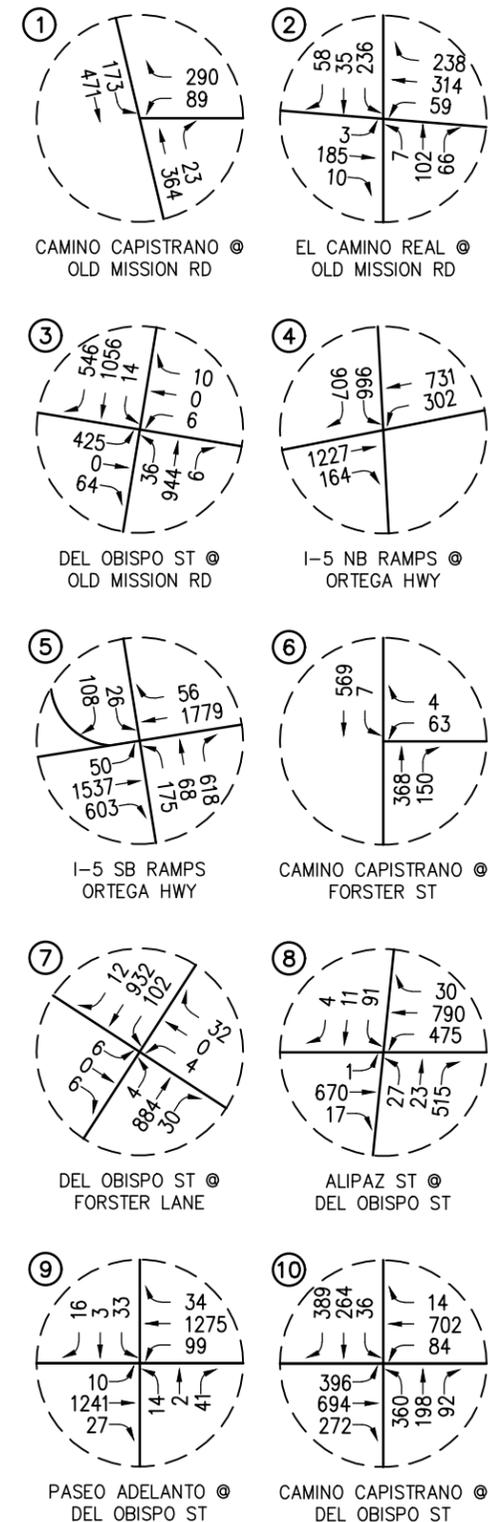
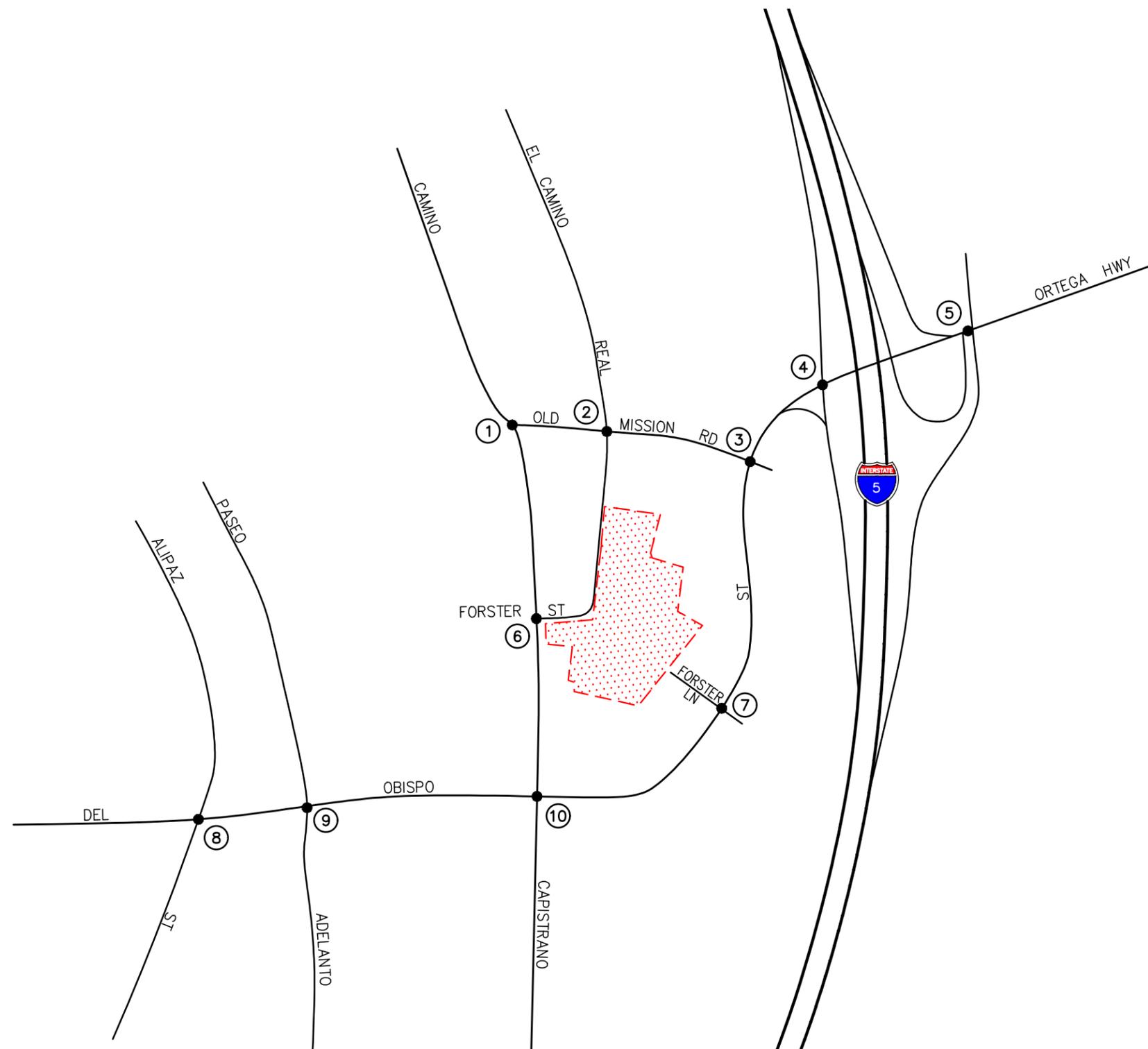
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

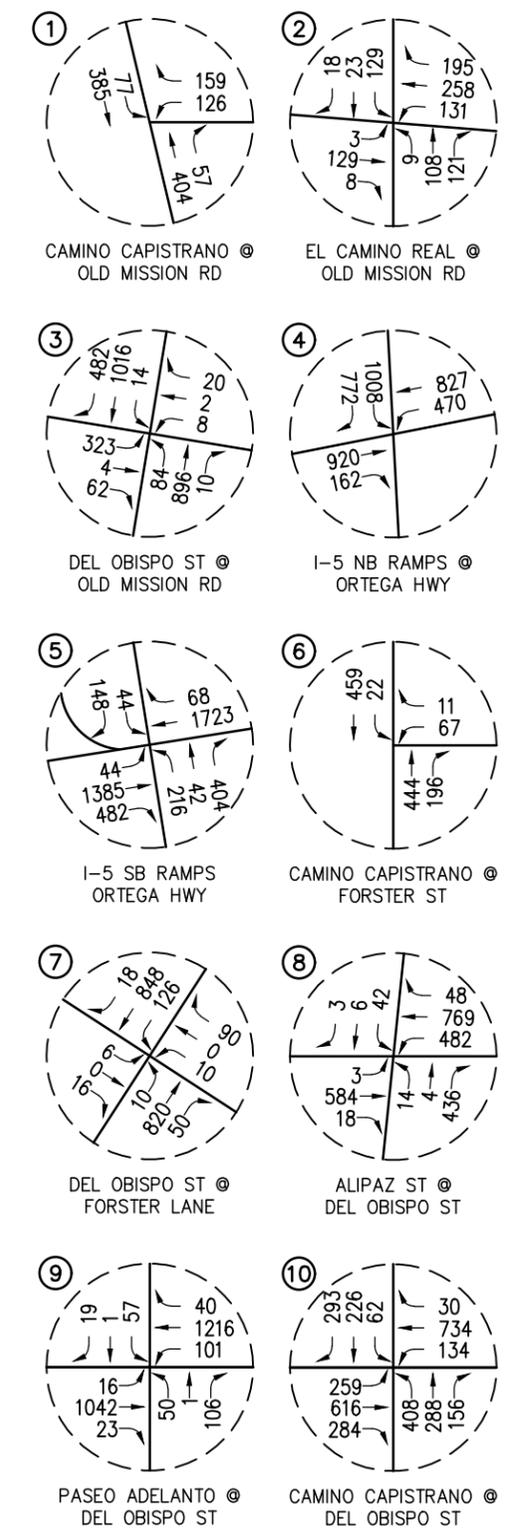
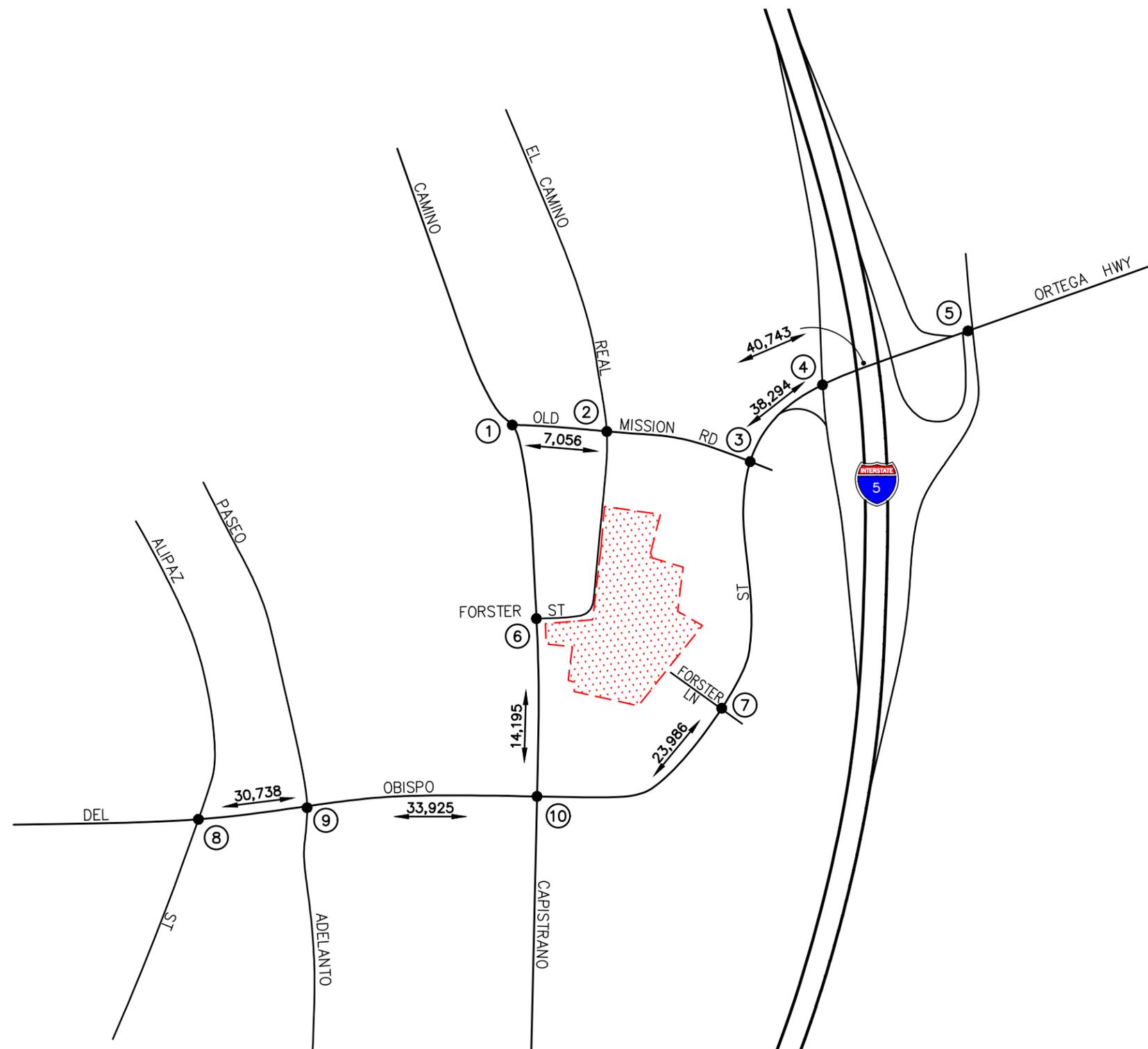
FIGURE 6-3

PM PEAK HOUR AND DAILY RELATED PROJECTS ONLY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 6-4
 EXISTING PLUS PROJECT (WITHOUT FORSTER)
 AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY

⊕ = STUDY INTERSECTION

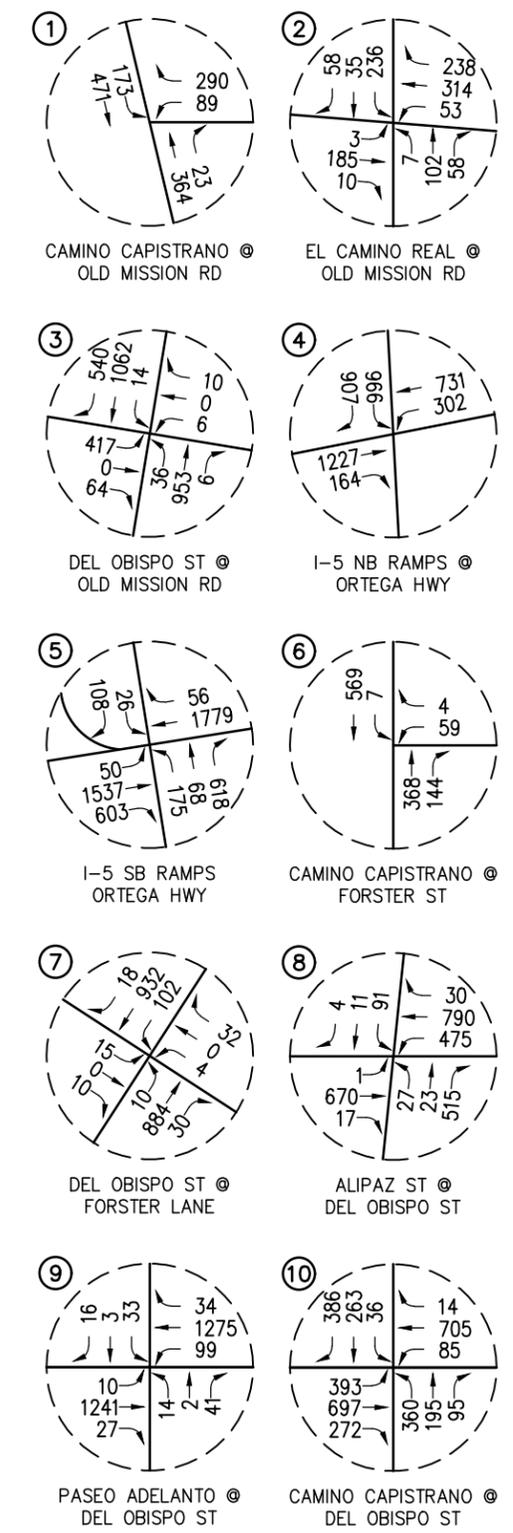
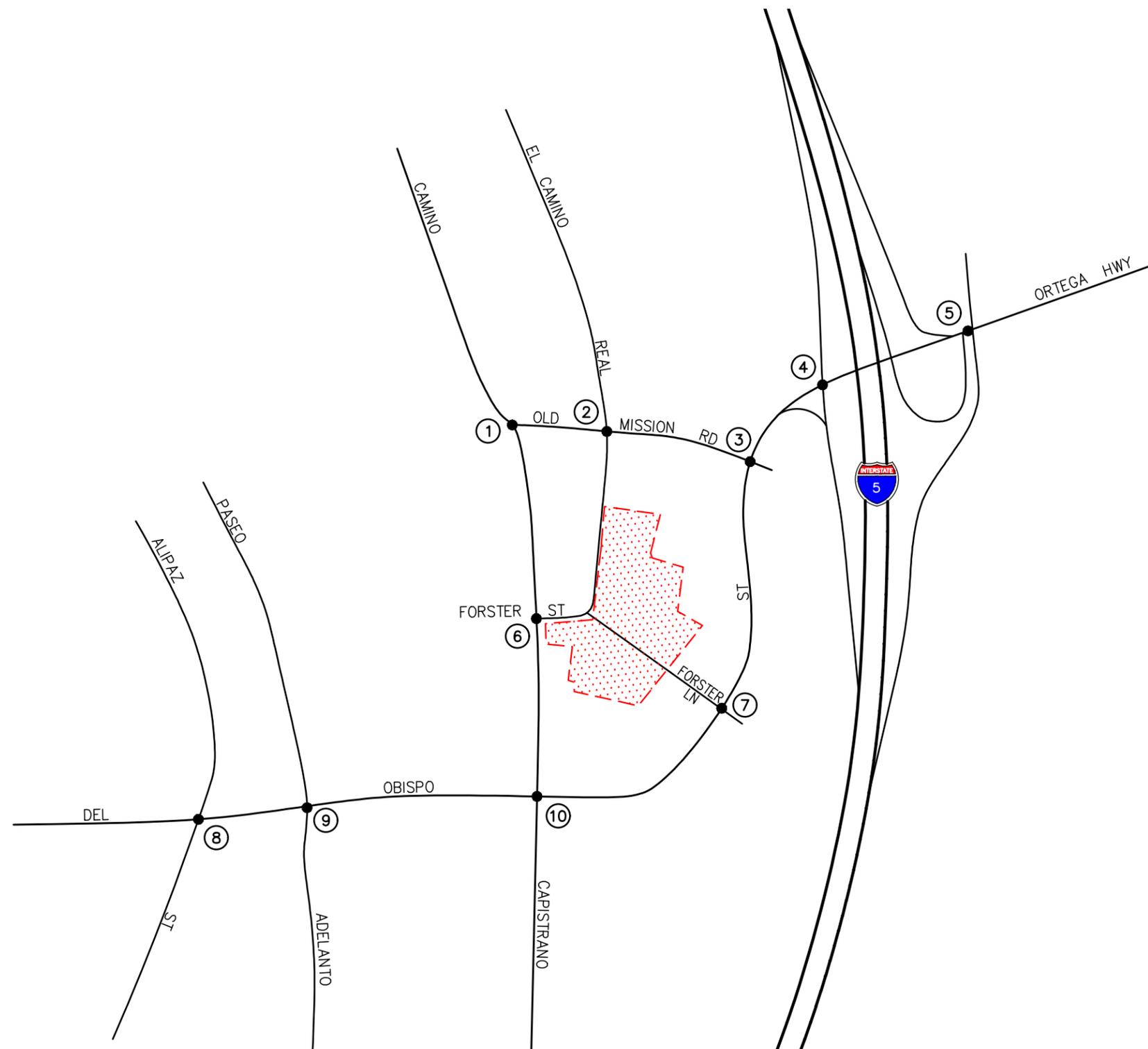
▨ = PROJECT SITE



FIGURE 6-5

EXISTING PLUS PROJECT (WITHOUT FORSTER)
 PM PEAK HOUR AND DAILY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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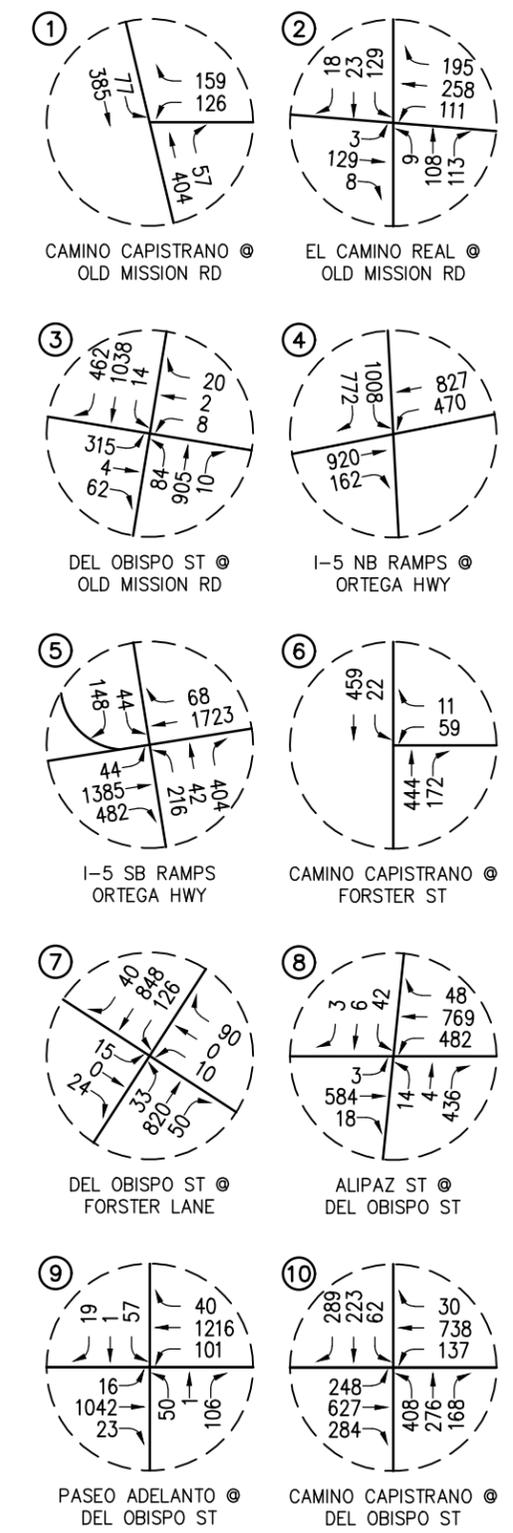
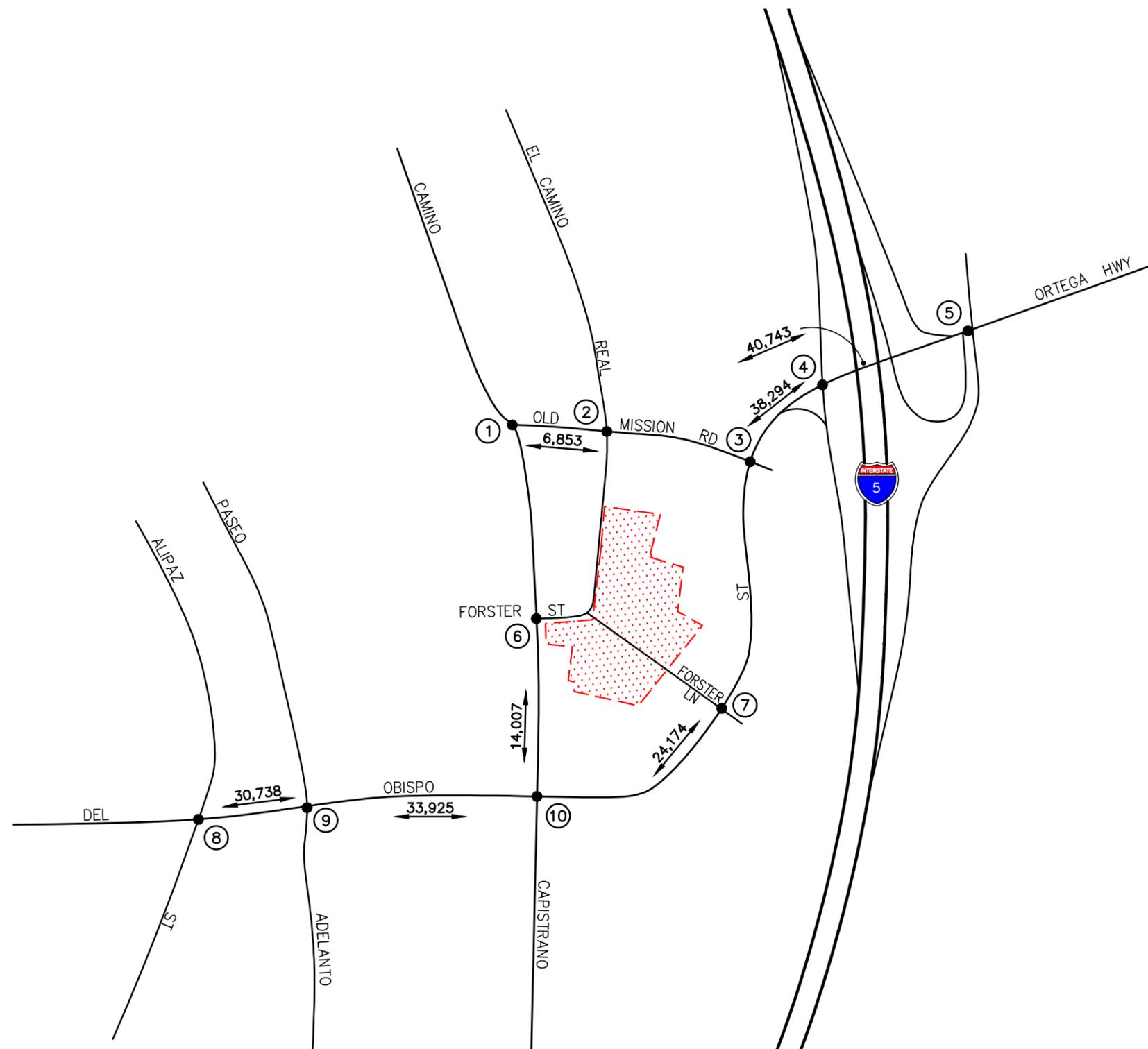


KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 6-6
 EXISTING PLUS PROJECT (WITH FORSTER)
 AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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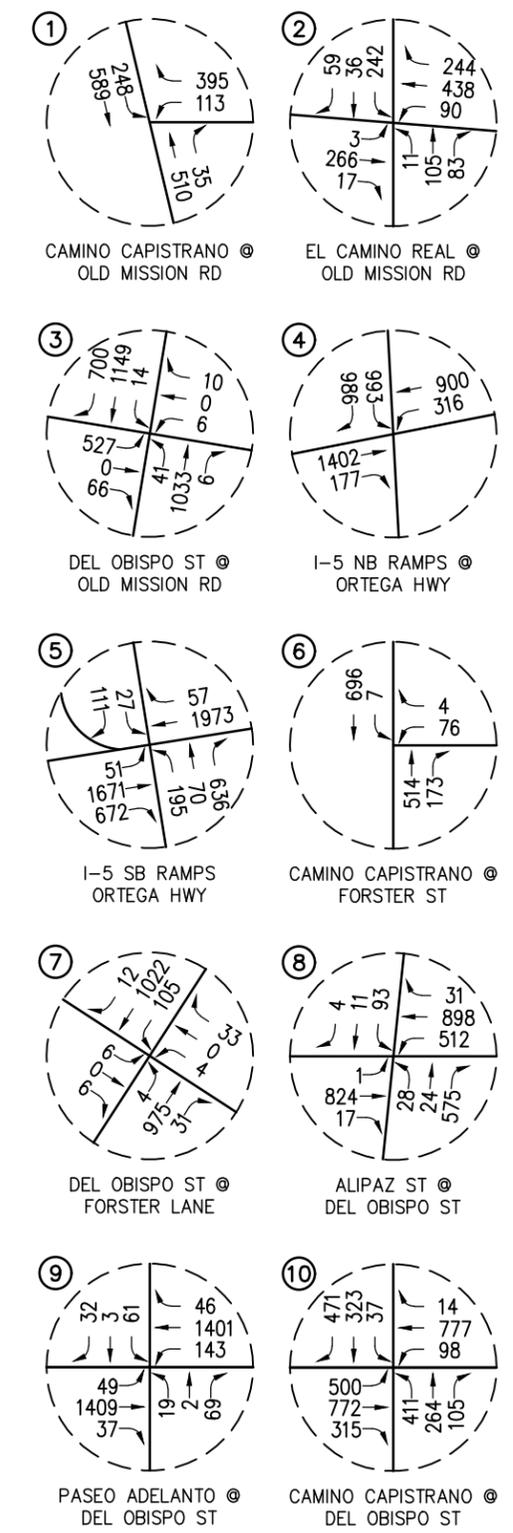
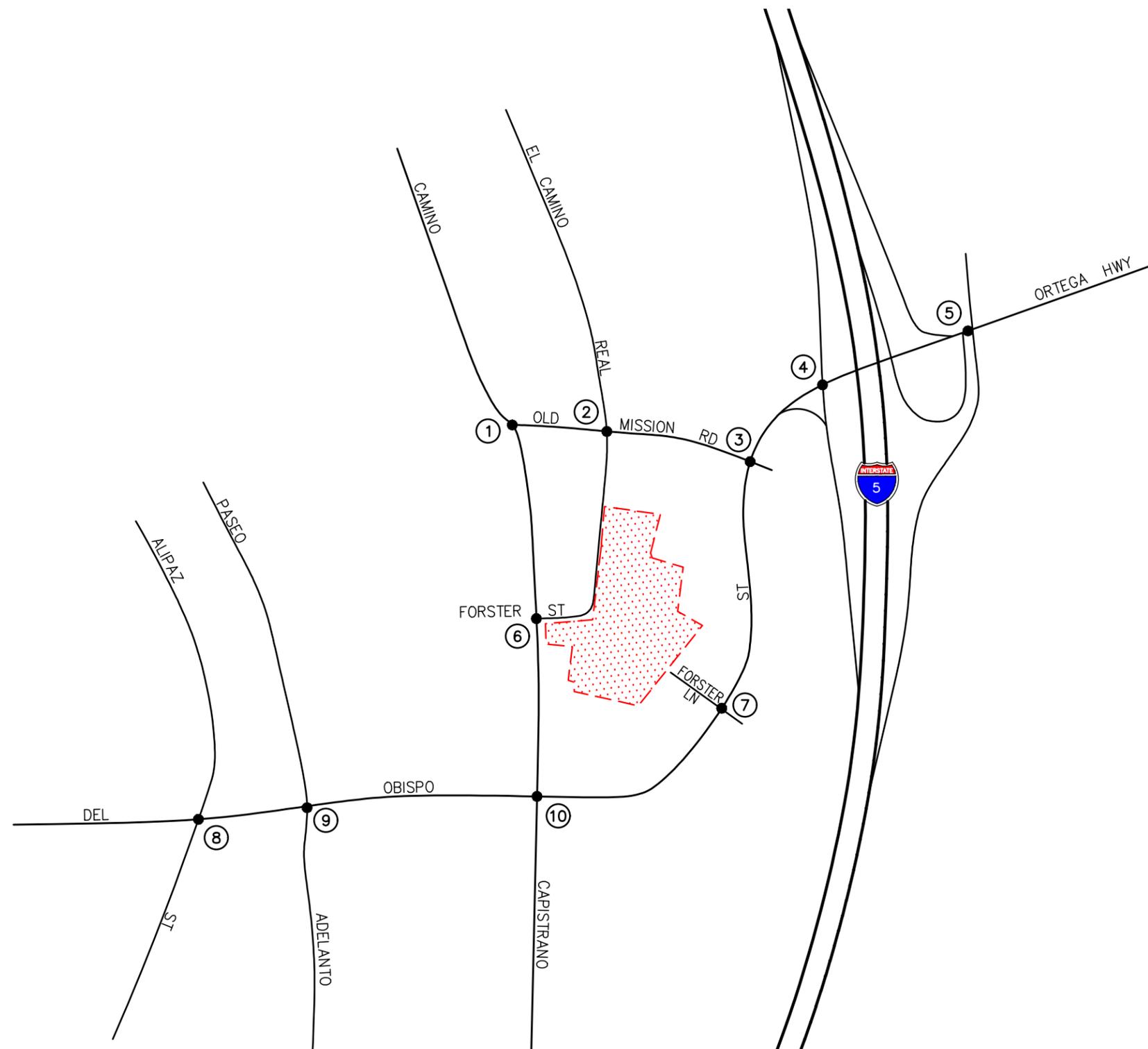
KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 6-7

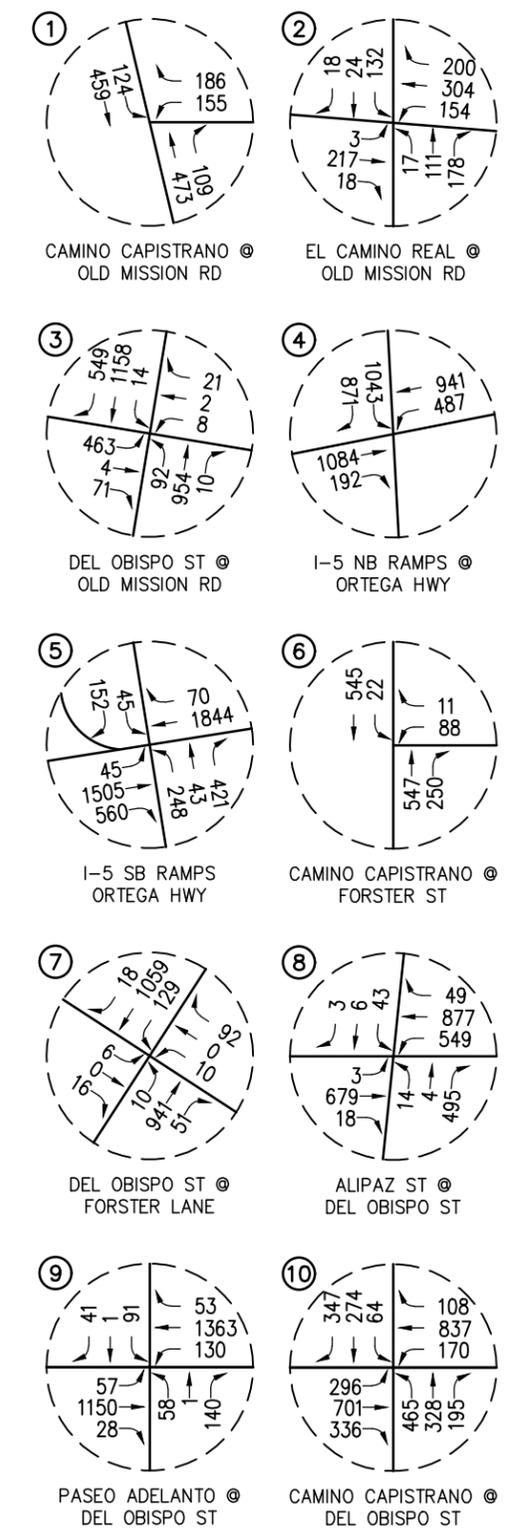
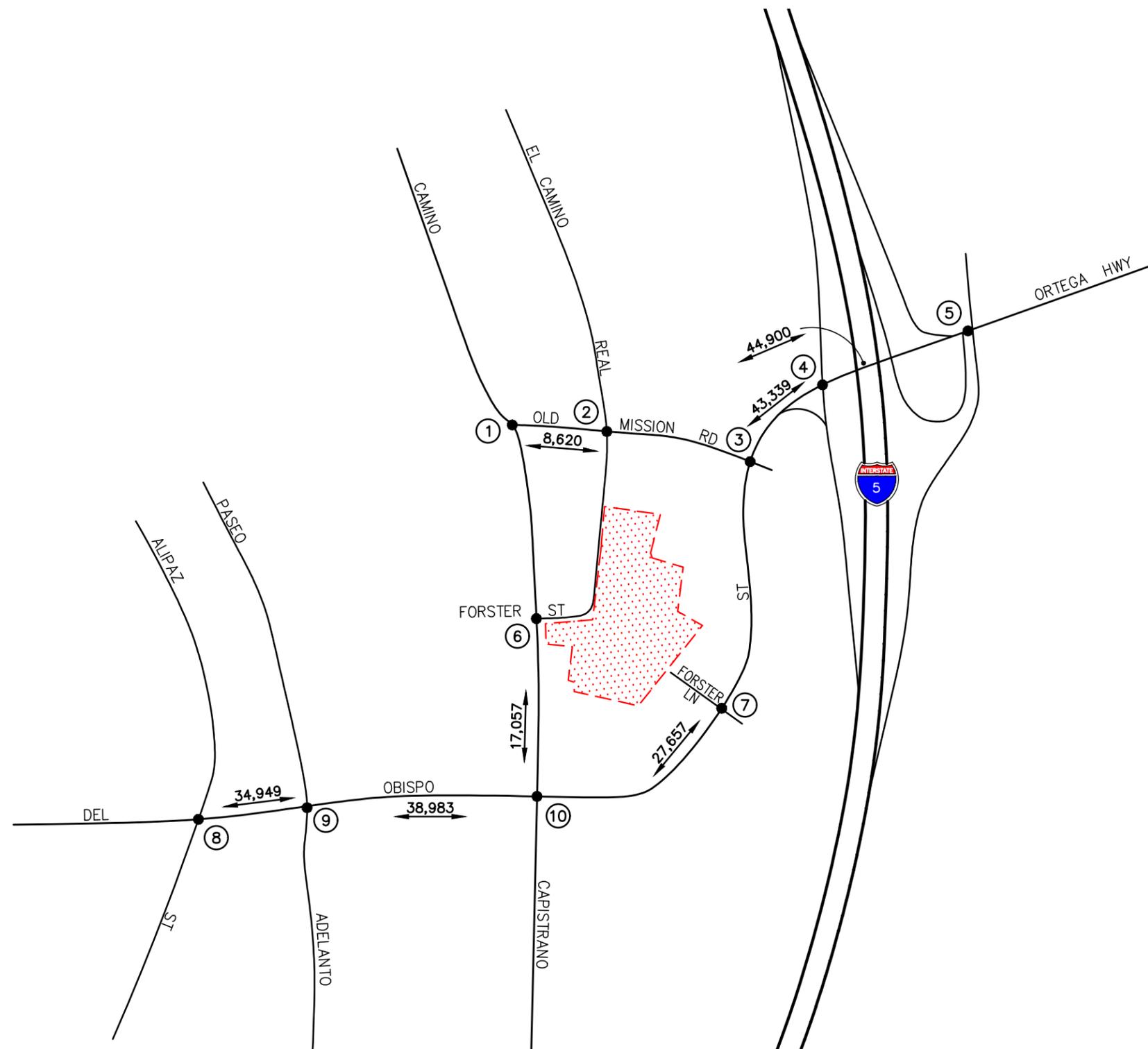
**EXISTING PLUS PROJECT (WITH FORSTER)
 PM PEAK HOUR AND DAILY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO**

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KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 6-8
 EXISTING PLUS PROJECT PLUS (WITHOUT FORSTER) CUMULATIVE
 (YEAR 2028) AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



KEY

⊕ = STUDY INTERSECTION

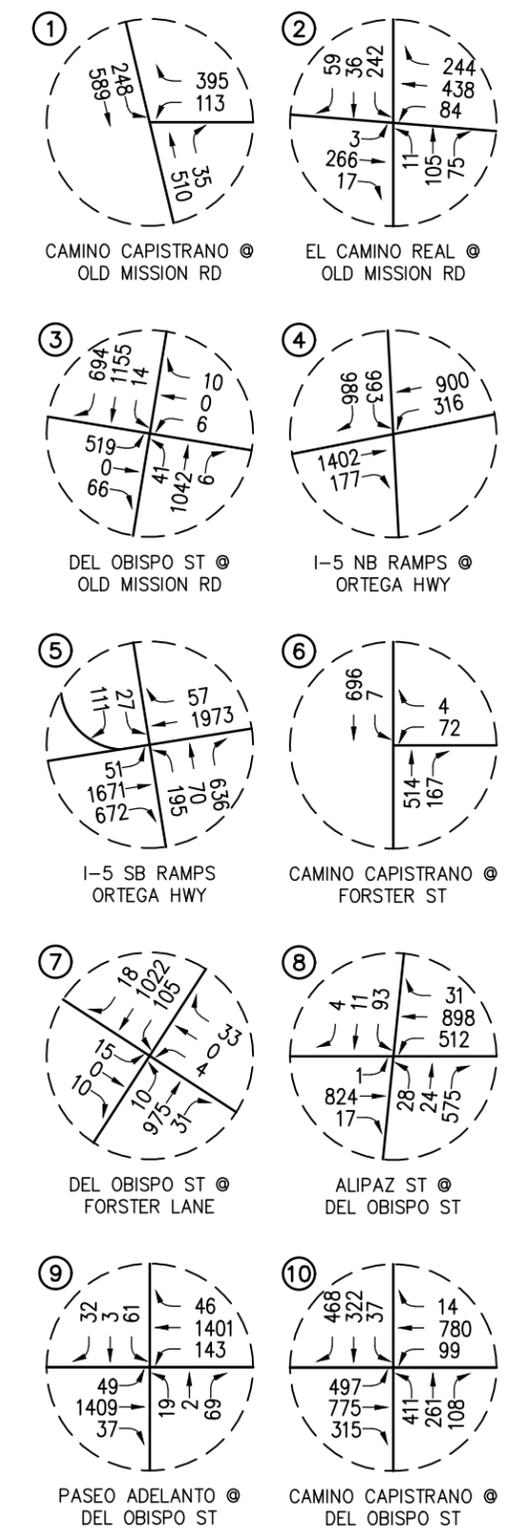
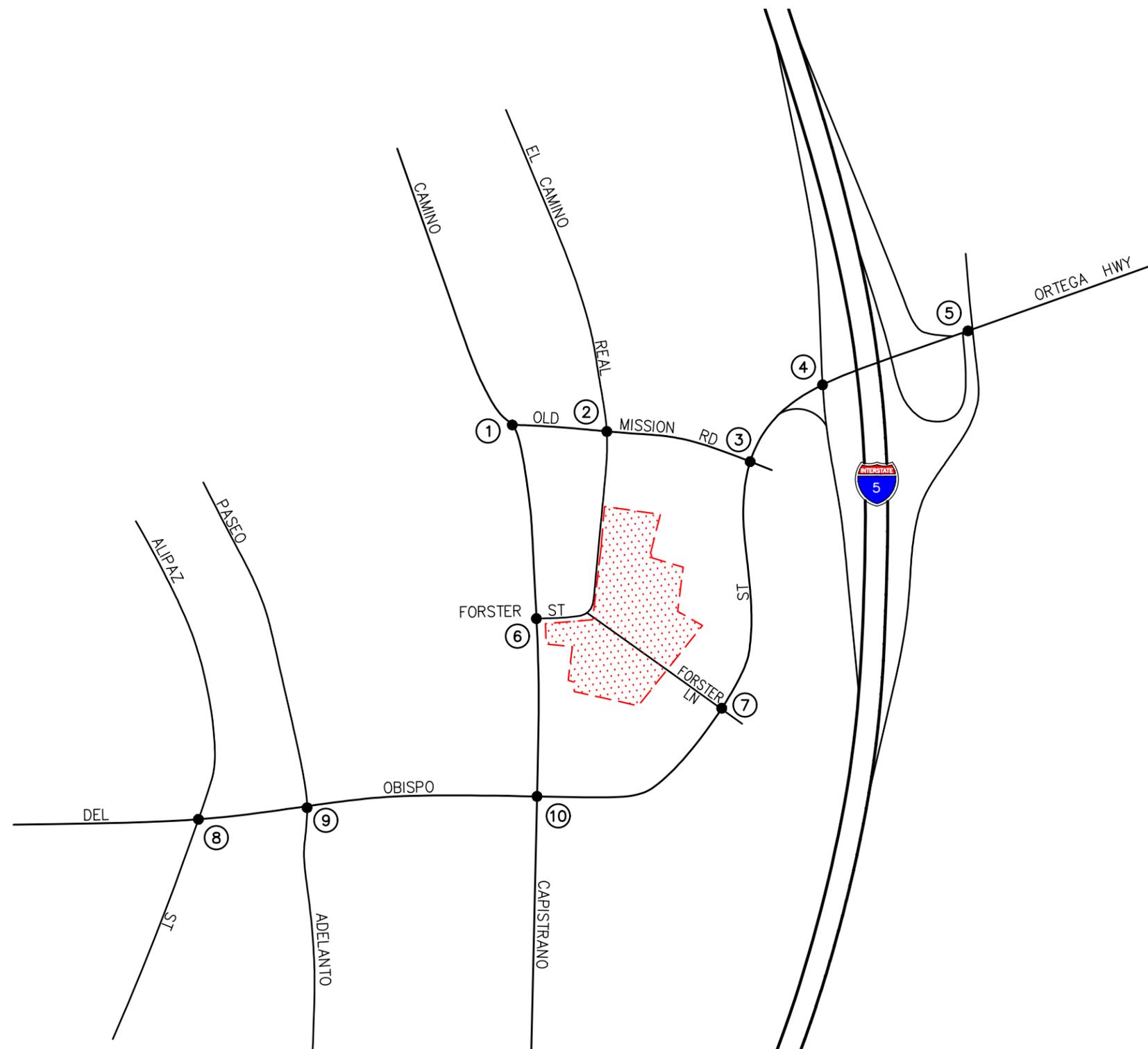
▨ = PROJECT SITE



FIGURE 6-9

EXISTING PLUS PROJECT PLUS (WITHOUT FORSTER) CUMULATIVE (YEAR 2028) PM PEAK HOUR AND DAILY TRAFFIC VOLUMES

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

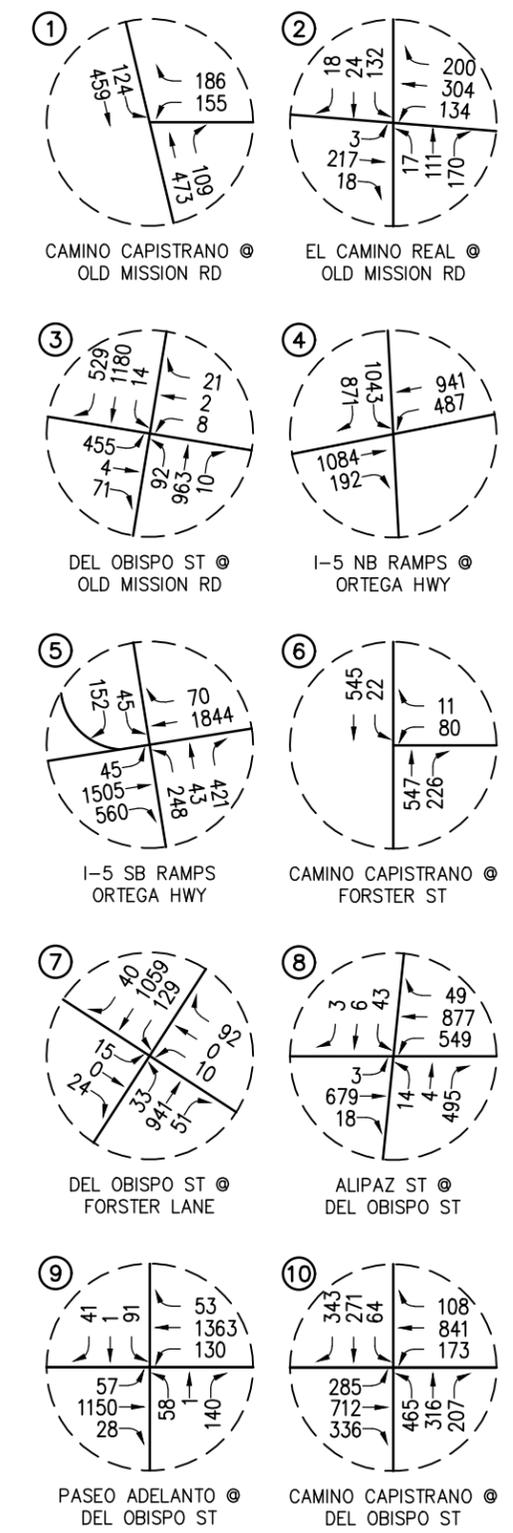
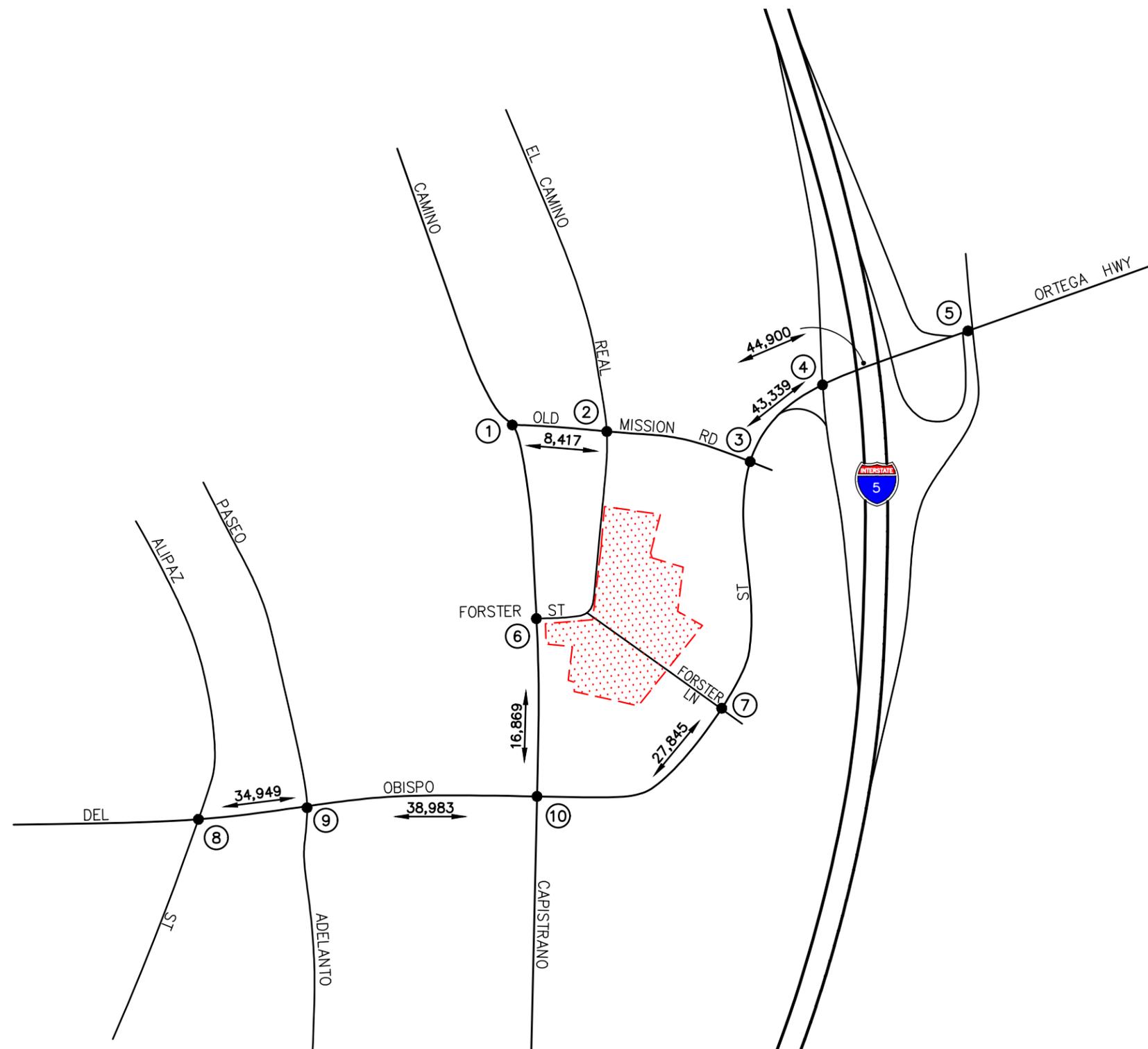


KEY
 (1-10) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 6-10
 EXISTING PLUS PROJECT PLUS (WITH FORSTER) CUMULATIVE
 (YEAR 2028) AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 6-11
 EXISTING PLUS PROJECT PLUS (WITH FORSTER) CUMULATIVE
 (YEAR 2028) PM PEAK HOUR AND DAILY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

7.1 Traffic Impact Analysis Scenarios

The following scenarios are those for which LOS calculations have been performed for key intersections and roadway study segments:

- A. Existing Traffic Conditions,
- B. Existing Plus Project Traffic Conditions,
- C. Scenario (B) with Improvements, if necessary,
- D. Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions,
- E. Scenario (D) with Improvements, if necessary,
- F. General Plan Buildout Traffic Conditions, and
- G. Scenario (F) with Improvements, if necessary.

7.2 Significance of Impacts

7.2.1 Impact Criteria and Thresholds

The relative impact of the added traffic volumes generated by the Project was evaluated based on analysis of future operating conditions at the key study intersections and key roadway segments with the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future delay, volume-to-capacity relationships and service level characteristics at each study intersection and roadway segment. The significance of the potential impacts of the project at each key intersection and roadway segment was then evaluated using the City's LOS standards and significant transportation impact criteria.

7.2.1.1 ICU Method of Analysis (Intersections)

Per the City of San Juan Capistrano criteria, as presented in the City of San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, LOS "D" (ICU = 0.801 - 0.900) is the LOS goal that the City strives to maintain during the AM and PM peak hour for all non "Hot Spot" intersections. With respect to "Hot Spot" intersections the goal is to maintain an LOS "E" (ICU = 0.901 - 1.000) as the minimum acceptable condition during the AM and PM peak hours.

Per the City's guidelines, a Project's impact (*Direct Impact*) on the existing street system is considered "significant" if the Project's ICU increase is 0.010 or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "E" or "F" (ICU > 0.900). For "Hot Spot" intersections, a Project's impact (*Direct Impact*) on the existing street system is considered "significant" if the Project's ICU increase is 0.010 or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "F" (ICU > 1.000).

Within a cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related ICU increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions is 0.010 or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" or "D" (ICU ≤ 0.900) **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS is "E" or "F" (ICU > 0.900). For "Hot Spot" intersections, within a

cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related ICU increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions is 0.010 or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" "D" or "E" ($ICU \leq 1.000$) **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "F" ($ICU > 1.000$).

7.2.1.2 HCM Method of Analysis (Intersections)

Per the City of San Juan Capistrano criteria, as presented in the City of San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, LOS "D" (Delay "> 25.0 s/v and ≤ 35.0 s/v" or "> 35.0 s/v and ≤ 55.0 s/v" for unsignalized and signalized intersections, respectively) is the LOS goal that the City strives to maintain during the AM and PM peak hour for all non "Hot Spot" intersections. With respect to "Hot Spot" intersections, the City's goal is to maintain an LOS "E" (Delay "> 35.0 s/v and ≤ 50.0 s/v" or "> 55.0 s/v and ≤ 80.0 s/v") during the AM and PM peak hours.

Per the City's guidelines, a Project's impact (*Direct Impact*) on the existing street system is considered "significant" if the Project's delay increase is 1.0 second or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "E" or "F" (Delay "> 35.0 s/v" or "> 55.0 s/v"). For "Hot Spot" intersections, a Project's impact (*Direct Impact*) on the existing street system is considered "significant" if the Project's HCM increase is 1.0 second or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "F" (Delay "> 50.0 s/v" or "> 80.0 s/v").

Within a cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related delay increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions is 1.0 seconds or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" or "D" (Delay " ≤ 35.0 s/v" or " ≤ 55.0 s/v") **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "E" or "F" (Delay "> 35.0 s/v" or "> 55.0 s/v"). For "Hot Spot" intersections, within a cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related Delay increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions is 1.0 second or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" "D" or "E" (Delay " ≤ 50.0 s/v" or " ≤ 80.0 s/v") **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "F" (Delay "> 50.0 s/v" or "> 80.0 s/v").

For those intersections evaluated using the Synchro software and HCM method of analysis, the Delay thresholds are increased to 2.0 second per vehicles, except at "Hot Spot" intersections.

7.2.1.3 V/C Ratio Method of Analysis (Roadway Segments)

Per the City of San Juan Capistrano criteria, as presented in the City of San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, LOS "D" ($V/C = 0.801 - 0.900$) is the service performance goal for major, primary, secondary and limited secondary arterials and LOS "C" ($V/C = 0.701 - 0.800$) for local residential arterials within the City. It has also established "E" ($V/C = 0.901 - 1.000$) as the LOS goal for "Hot Spot" locations within the City.

Per the City's guidelines, a Project's impact (*Direct Impact*) on the existing street system (major, primary, secondary or limited secondary arterials) is considered "significant" if the Project's V/C ratio increase is 0.010 or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "E" or "F" ($V/C > 0.900$). A Project's impact (*Direct Impact*) on the existing street system (local residential arterials) is considered "significant" if the Project's V/C ratio increase is 0.010 or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "D", "E" or "F" ($V/C > 0.800$). For "Hot Spot" roadway segments, a Project's impact (*Direct Impact*) on the existing street system is considered "significant" if the Project's ICU increase is 0.010 or greater **and** the resulting Existing plus Project Traffic Conditions LOS is "F" ($V/C > 1.000$).

Within a cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related V/C ratio increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions for major, primary, secondary or limited secondary arterials is 0.010 or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" or "D" ($V/C \leq 0.900$) **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "E" or "F" ($V/C > 0.900$). A Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related V/C ratio increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions for local residential arterials is 0.010 or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B" or "C" ($V/C \leq 0.800$) **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "D", "E" or "F" ($V/C > 0.800$). For "Hot Spot" roadway segments, within a cumulative traffic setting, a Project's impact (*Cumulative Impact*) is considered "significant" if the Project-related V/C ratio increment for Existing Plus Project Traffic conditions minus Existing Traffic conditions is 0.010 or greater **and** the Existing Plus Project Traffic conditions LOS is "A", "B", "C" "D" or "E" ($V/C \leq 1.000$) **and** the Existing Plus Project Plus Cumulative (Year 2028) Traffic conditions LOS" is "F" ($V/C > 1.000$).

8.0 EXISTING PLUS PROJECT PLUS CUMULATIVE (YEAR 2028) CAPACITY ANALYSIS (NEAR-TERM)

8.1 ICU Method of Analysis (Intersections)

8.1.1 Project (Without Forster) ICU Analysis

Table 8-1 summarizes the near-term peak hour Level of Service results at the key study intersections based on the ICU Method of Analysis for Project (Without Forster). The first column (1) in *Table 8-1* states the intersections' "Hot Spot" classification, followed by column (2) which shows the LOS goal based on the intersections' "Hot Spot" classification, if any. The third column (3) presents the time period. The ICU values of column (4) in *Table 8-1* presents a summary of Existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-6*). The fifth column (5) lists Existing plus Project (Without Forster) traffic conditions based on existing intersection geometry. The sixth column (6) lists Existing plus Project (Without Forster) plus Cumulative (Year 2028) traffic conditions based on existing intersection geometry. The seventh column (7) shows the increase in ICU value due to the added peak hour Project (Without Forster) trips and indicates whether the traffic associated with the Project (Without Forster) will have a Project and/or cumulative significant impact based on the LOS standards and the significance impact criteria defined in this report. The eighth column (8) of *Table 8-1* presents the anticipated operating conditions with implementation of recommended improvements to mitigate the Project (Without Forster) traffic impact (*Direct Impact*) and/or achieve an acceptable Level of Service for Project (Without Forster) impacts (*Direct Impact*). The ninth column (9) of *Table 8-1* indicates the anticipated operating conditions with implementation of recommended improvements to mitigate cumulative traffic impacts (*Cumulative Impact*) and/or achieve an acceptable Level of Service for cumulative impacts (*Cumulative Impact*).

8.1.1.1 Existing Peak Hour Traffic Conditions

Review of column (4) of *Table 8-1* indicates that all the signalized intersections under Existing traffic conditions are currently operating at acceptable LOS based on the City's LOS criteria.

8.1.1.2 Existing Plus Project (Without Forster) Traffic Conditions

Review of column (5) of *Table 8-1* shows that with the addition of Project (Without Forster) traffic, all the key study intersections are expected to continue to operate at the acceptable LOS based on the City's LOS criteria for the Existing Plus Project (Without Forster) traffic conditions. Further, column (7) of *Table 8-1* indicates that the proposed Project (Without Forster) will not have any direct project impacts at any of the intersections.

8.1.1.3 Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (6) of *Table 8-1* indicates that under the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) traffic conditions, all the key study intersections are expected to continue to operate at the acceptable LOS based on the City's LOS criteria. Further, a review of column (7) of *Table 8-1* indicates that the proposed Project (Without Forster) will not have any

cumulative traffic impacts at any of the intersections during the AM and PM peak hours based on the City's LOS standards and impact criteria.

Appendix E contains the ICU/LOS calculation worksheets for the key signalized study intersections for the AM and PM peak hours for the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions.

8.1.2 Project (With Forster) ICU Analysis

Table 8-2 is similar in setup to *Table 8-1* and summarizes the near-term peak hour Level of Service results at the key study intersections based on the ICU Method of Analysis for Project (With Forster).

8.1.2.1 Existing Peak Hour Traffic Conditions

Review of column (4) of *Table 8-2* indicates that all the signalized intersections under Existing traffic conditions are currently operating at acceptable LOS based on the City's LOS criteria. The values are the same as the values previously reported in *Table 8-1*.

8.1.2.2 Existing Plus Project (With Forster) Traffic Conditions

Review of column (5) of *Table 8-2* shows that with the addition of Project (With Forster) traffic, all the key study intersections are expected to continue to operate at the acceptable LOS based on the City's LOS criteria for the Existing Plus Project (With Forster) traffic conditions. Further, column (7) of *Table 8-2* indicates that the proposed Project (With Forster) will not have any direct project impacts at any of the intersections.

8.1.2.3 Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (6) of *Table 8-2* indicates that under the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) traffic conditions, all the key study intersections are expected to continue to operate at the acceptable LOS based on the City's LOS criteria. Further, a review of column (7) of *Table 8-2* indicates that the proposed Project (With Forster) will not have any cumulative traffic impacts at any of the intersections during the AM and PM peak hours based on the City's LOS standards and impact criteria.

Appendix E contains the ICU/LOS calculation worksheets for the key signalized study intersections for the AM and PM peak hours for the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions.

**TABLE 8-1
EXISTING PLUS PROJECT (WITHOUT FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – ICU METHOD OF ANALYSIS³³**

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ³⁴	LOS ³⁵ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (Without Forster) Traffic Conditions		Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ³⁶		With Cumulative Recommended Improvements ³⁷	
				ICU	LOS	ICU	LOS	ICU	LOS	ICU Increase ³⁸	Project Impact ^{39,40}	Cumulative Impact ^{41,42}	ICU	LOS	ICU	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	0.535 0.424	A A	0.536 0.426	A A	0.728 0.511	C A	0.001 0.002	No No	No No	-- --	-- --	-- --	-- --
2. El Camino Real at Old Mission Road	--	D	AM PM	0.456 0.400	A A	0.473 0.439	A A	0.538 0.503	A A	0.017 0.039	No No	No No	-- --	-- --	-- --	-- --
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	0.507 0.499	A A	0.513 0.507	A A	0.573 0.596	A A	0.006 0.008	No No	No No	-- --	-- --	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.661 0.661	B B	0.664 0.665	B B	0.710 0.713	C C	0.003 0.004	No No	No No	-- --	-- --	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.753 0.697	C B	0.756 0.709	C C	0.808 0.751	D C	0.003 0.012	No No	No No	-- --	-- --	-- --	-- --
6. Camino Capistrano at Forster Street ⁴³	--	D	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
7. Del Obispo Street at Forster Lane ⁴³	Traffic Operation	E	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	0.461 0.399	A A	0.461 0.402	A A	0.521 0.450	A A	0.000 0.003	No No	No No	-- --	-- --	-- --	-- --
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	0.480 0.482	A A	0.481 0.483	A A	0.566 0.582	A A	0.001 0.001	No No	No No	-- --	-- --	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	0.634 0.595	B A	0.638 0.604	B B	0.741 0.713	C C	0.004 0.009	No No	No No	-- --	-- --	-- --	-- --

Notes:

- ICU = Intersection Capacity Utilization.
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

³³ Appendices B and D contain the ICU/LOS calculation worksheets for all signalized study intersections.

³⁴ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

³⁵ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

³⁶ Recommended Improvements for Project Impacts.

³⁷ Recommended Improvements for Cumulative Impacts.

³⁸ ICU Increase = Column (5) minus Column (4).

³⁹ Project Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “E” or “F”.

⁴⁰ “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “F”.

⁴¹ Cumulative Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

⁴² “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

⁴³ Unsignalized Intersection. ICU Method of Analysis does not apply.

**TABLE 8-2
EXISTING PLUS PROJECT (WITH FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – ICU METHOD OF ANALYSIS⁴⁴**

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ⁴⁵	LOS ⁴⁶ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (With Forster) Traffic Conditions		Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ⁴⁷		With Cumulative Recommended Improvements ⁴⁸	
				ICU	LOS	ICU	LOS	ICU	LOS	ICU Increase ⁴⁹	Project Impact ^{50,51}	Cumulative Impact ^{52,53}	ICU	LOS	ICU	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	0.535 0.424	A A	0.536 0.426	A A	0.728 0.511	C A	0.001 0.002	No No	No No	-- --	-- --	-- --	-- --
2. El Camino Real at Old Mission Road	--	D	AM PM	0.456 0.400	A A	0.467 0.429	A A	0.532 0.492	A A	0.011 0.029	No No	No No	-- --	-- --	-- --	-- --
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	0.507 0.499	A A	0.512 0.511	A A	0.572 0.600	A A	0.005 0.012	No No	No No	-- --	-- --	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.661 0.661	B B	0.664 0.665	B B	0.710 0.713	C C	0.003 0.004	No No	No No	-- --	-- --	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.753 0.697	C B	0.756 0.709	C C	0.808 0.751	D C	0.003 0.012	No No	No No	-- --	-- --	-- --	-- --
6. Camino Capistrano at Forster Street ⁵⁴	--	D	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
7. Del Obispo Street at Forster Lane ⁵³	Traffic Operation	E	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	0.461 0.399	A A	0.461 0.402	A A	0.521 0.450	A A	0.000 0.003	No No	No No	-- --	-- --	-- --	-- --
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	0.480 0.482	A A	0.481 0.483	A A	0.566 0.582	A A	0.001 0.001	No No	No No	-- --	-- --	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	0.634 0.595	B A	0.638 0.600	B B	0.740 0.709	C C	0.004 0.005	No No	No No	-- --	-- --	-- --	-- --

Notes:

- ICU = Intersection Capacity Utilization.
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁴⁴ Appendices B and D contain the ICU/LOS calculation worksheets for all signalized study intersections.

⁴⁵ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

⁴⁶ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

⁴⁷ Recommended Improvements for Project Impacts.

⁴⁸ Recommended Improvements for Cumulative Impacts.

⁴⁹ ICU Increase = Column (5) minus Column (4).

⁵⁰ Project Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “E” or “F”.

⁵¹ “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “F”.

⁵² Cumulative Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

⁵³ “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

⁵⁴ Unsignalized Intersection. ICU Method of Analysis does not apply.

8.2 HCM Method of Analysis (Intersections)

8.2.1 Project (Without Forster) HCM Analysis

Table 8-3, which is similar in structure to that of *Tables 8-1* and *8-2*, summarizes the peak hour Level of Service results at the key study intersections based on the HCM Method of Analysis for Project (Without Forster).

8.2.1.1 Existing Peak Hour Traffic Conditions

Review of column (4) of *Table 8-3* indicates that all the intersections, except El Camino Real at Ortega Highway and Del Obispo Street at Forster Lane, under Existing traffic conditions are currently operating at acceptable LOS based on the City's LOS criteria. The intersection of El Camino Real at Ortega Highway currently operates at unacceptable LOS F during the AM peak hour. It should be noted that this intersection is close to San Juan Elementary School, Mission School, and Pre-College Prep School and the existing unacceptable LOS F during the AM peak hour is associated with the school drop off time. The intersection of Del Obispo Street at Forster Lane also currently operates at unacceptable LOS F during the AM peak hour. This intersection is located along Del Obispo Street, which has a high volume of commuter traffic in the AM peak hour and therefore makes the movements from the side street experience high delays.

8.2.1.2 Existing Plus Project (Without Forster) Traffic Conditions

Review of column (5) of *Table 8-3* shows that with the addition of Project (Without Forster) traffic, all the key study intersections, except El Camino Real at Old Mission Road and Del Obispo Street at Forster Lane, are expected to continue to operate at the acceptable LOS based on the City's LOS criteria for the Existing Plus Project (Without Forster) traffic conditions.

The intersections of El Camino Real at Ortega Highway and Del Obispo Street at Forster Lane are expected to continue to operate at unacceptable LOS F during the AM peak hour. As shown in column (7) of *Table 8-3*, the proposed Project (Without Forster) will have a direct project impact at El Camino Real at Ortega Highway. Although the intersection of Del Obispo Street at Forster Lane is forecast to operate at unacceptable LOS F during the AM and PM peak hours with the addition of ambient growth and cumulative traffic, the delay increase is below the 1.0 second threshold as outlined in the impact criteria. Improvements recommended for the significantly impacted intersections under the Existing Plus Project (Without Forster) conditions will offset the adverse impact of Project traffic (See column (8) of *Table 8-3*). A description of the improvements necessary to mitigate the Project traffic impacts is detailed later in this report.

8.2.1.3 Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (6) of *Table 8-3* indicates that under the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) traffic conditions, three (3) of the key study intersections are forecast to operate at LOS E and/or LOS F during the AM and/or PM peak hours. Although the intersection of Del Obispo Street at Forster Lane is forecast to operate at unacceptable LOS F during the AM and PM peak hours with the addition of ambient growth and cumulative traffic, the delay increase is below the 1.0 second threshold as outlined in the impact criteria. As shown in column (7) of *Table 8-*

4, the Project will have a cumulative impact at the intersection of El Camino Real at Ortega Highway and Camino Capistrano at Forster Street during the AM and/or PM peak hours based on the City's LOS standards and impact criteria. However, recommended improvements at these two locations will offset the adverse impact of Project and/or cumulative traffic (See column (9) of *Table 8-3*).

Recommended improvements for the intersection of El Camino Real at Old Mission Road will consist of modifying the existing traffic signal with north-south split phasing. This improvement will assist pedestrians associated with the nearby schools crossing Old Mission Road by removing conflicts with left-turning vehicles from El Camino Real.

Recommended improvements for the intersection of Camino Capistrano at Forster Street will consist of the restriction of the westbound left-turn. With this restriction, vehicles wanting to travel southbound on Camino Capistrano will be required to make a northbound left-turn at the intersection El Camino Real at Old Mission Road and a westbound left-turn at the intersection of Camino Capistrano at Old Mission Road. Column (9) of *Table 8-3* also shows the respective level of service results for the intersections of Camino Capistrano at Old Mission Road and El Camino Real at Old Mission Road with the additional re-routed traffic.

Appendix F contains the HCM Delay/LOS calculation worksheets for the key study intersections for the AM and PM peak hours for the Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions.

8.2.2 Project (With Forster) HCM Analysis

Table 8-4, which is similar in structure to that of *Tables 8-1*, *8-2* and *8-3*, summarizes the peak hour Level of Service results at the key study intersections based on the HCM Method of Analysis for Project (With Forster).

8.2.2.1 Existing Plus Project (With Forster) Traffic Conditions

Review of column (5) of *Table 8-4* shows that with the addition of Project (With Forster) traffic, all the key study intersections except El Camino Real at Ortega Highway and Del Obispo Street Capistrano at Forster Lane, are expected to continue to operate at the acceptable LOS based on the City's LOS criteria for the Existing Plus Project (With Forster) traffic conditions.

The intersection of El Camino Real at Ortega Highway is expected to continue to operate at unacceptable LOS F during the AM peak hour, whereas Del Obispo Street at Forster Lane is expected to continue to operate at LOS F during the AM and PM peak hours. As shown in column (7) of *Table 8-4*, the proposed Project (With Forster) will have a direct project impact on both of these intersections. Improvements recommended for the significantly impacted intersections under the Existing Plus Project (With Forster) conditions will offset the adverse impact of Project traffic (See column (8) of *Table 8-4*).

Recommended improvements for the intersection of El Camino Real at Old Mission Road will consist of modifying the existing traffic signal with north-south split phasing. This improvement will

assist pedestrians associated with the nearby schools crossing Old Mission Road by removing conflicts with left-turning vehicles from El Camino Real.

Recommended improvements for the intersection of Del Obispo Street at Forster Lane will consist of the restriction of the westbound left-turn, as the delay associated with this movement is adverse. The northbound left-turn and southbound left-turn are not recommended to be restricted as the levels of service for these movements are acceptable. Further, the eastbound left-turn movement has restricted sight distance given the bend of Del Obispo Street. With this restriction, vehicles wanting to travel northbound on Del Obispo Street will be required to make a northbound right-turn at the intersection El Camino Real at Old Mission Road and a westbound left-turn at the intersection of Del Obispo Street at Old Mission Road. Column (8) of *Table 8-4* also shows the respective level of service results for the intersections of El Camino Real at Old Mission Road and Del Obispo Street at Old Mission Road with the additional re-routed traffic.

8.2.2.2 Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (6) of *Table 8-4* indicates that under the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) traffic conditions, three (3) of the key study intersections are forecast to operate at LOS E and/or LOS F during the AM and/or PM peak hours. As shown in column (7) of *Table 8-4*, the Project will have a cumulative impact at the intersections of El Camino Real at Ortega Highway, Camino Capistrano at Forster Street, and Del Obispo Street at Forster Lane during the AM and/or PM peak hour based on the City's LOS standards and impact criteria. However, recommended improvements at these three locations will offset the adverse impact of Project and/or cumulative traffic (See column (9) of *Table 8-4*).

Recommended improvements for the intersection of El Camino Real at Old Mission Road will consist of modifying the existing traffic signal with north-south split phasing. This improvement will assist pedestrians associated with the nearby schools crossing Old Mission Road by removing conflicts with left-turning vehicles from El Camino Real.

Recommended improvements for the intersection of Camino Capistrano at Forster Street will consist of the restriction of the westbound left-turn. With this restriction, vehicles wanting to travel southbound on Camino Capistrano will be required to make a northbound left-turn at the intersection El Camino Real at Old Mission Road and a westbound left-turn at the intersection of Camino Capistrano at Old Mission Road. Column (9) of *Table 8-4* also shows the respective level of service results for the intersection of Camino Capistrano at Old Mission Road and El Camino Real at Old Mission Road with the additional re-routed traffic.

Recommended improvements for the intersection of Del Obispo Street at Forster Lane will consist of the restriction of the eastbound left-turn, as the delay associated with this movement is adverse. The northbound left-turn and southbound left-turn are not recommended to be restricted as the levels of service for these movements are acceptable. Further, the eastbound left-turn movement has restricted sight distance given the bend of Del Obispo Street. With this restriction, vehicles wanting to travel northbound on Del Obispo Street will be required to make a northbound right-turn at the intersection

El Camino Real at Old Mission Road and an eastbound left-turn at the intersection of Del Obispo Street at Old Mission Road. Column (9) of *Table 8-4* also shows the respective level of service results for the intersections of El Camino Real at Old Mission Road and Del Obispo Street at Old Mission Road with the additional re-routed traffic.

Appendix F contains the HCM Delay/LOS calculation worksheets for the key study intersections for the AM and PM peak hours for the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions.

**TABLE 8-3
EXISTING PLUS PROJECT (WITHOUT FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – HCM METHOD OF ANALYSIS⁵⁵**

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ⁵⁶	LOS ⁵⁷ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (Without Forster) Traffic Conditions		Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ⁵⁸		With Cumulative Recommended Improvements ⁵⁹	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ⁶⁰	Project Impact ^{61,62}	Cumulative Impact ^{63,64}	Delay (s/v)	LOS	Delay (s/v)	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	20.7 15.9	C B	20.7 15.7	C B	27.1 16.9	C B	0.0 0.0 ⁶⁵	No No	No No	-- --	-- --	27.1 18.5	C B
2. El Camino Real at Old Mission Road	--	D	AM PM	90.1 28.3	F C	101.5 30.5	F C	134.1 34.2	F C	11.4 2.2	Yes No	Yes No	23.2 22.5	C C	27.3 23.1	C C
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	13.8 14.0	B B	14.0 14.3	B B	15.6 17.1	B B	0.2 0.3	No No	No No	-- --	-- --	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	34.0 28.9	C C	34.2 29.1	C C	37.0 34.3	D C	0.2 0.2	No No	No No	-- --	-- --	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	39.3 30.7	D C	40.0 31.8	D C	51.6 36.4	D D	0.7 1.1	No No	No No	-- --	-- --	-- --	-- --
6. Camino Capistrano at Forster Street	--	D	AM PM	23.9 23.1	C C	25.1 26.5	D D	48.4 50.3	E F	1.2 3.4	No No	Yes Yes	-- --	-- --	12.6 13.5	B B
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	50.5 34.5	F D	50.5 34.5	F D	67.7 60.1	F F	0.0 0.0	No No	No No	-- --	-- --	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	24.6 22.2	C C	24.6 22.3	C C	25.7 23.2	C C	0.0 0.1	No No	No No	-- --	-- --	-- --	-- --
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	11.0 13.1	B B	11.0 13.1	B B	15.3 16.9	B B	0.0 0.0	No No	No No	-- --	-- --	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	30.7 32.3	C C	30.9 32.6	C C	35.2 35.3	D D	0.2 0.3	No No	No No	-- --	-- --	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁵⁵ *Appendices C and E* contain the HCM/LOS calculation worksheets for all study intersections.

⁵⁶ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

⁵⁷ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

⁵⁸ Recommended Improvements for Project Impacts.

⁵⁹ Recommended Improvements for Cumulative Impacts.

⁶⁰ Delay (s/v) Increase = Column (5) minus Column (4).

⁶¹ Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “E” or “F”.

⁶² “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “F”.

⁶³ Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

⁶⁴ “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

⁶⁵ Theoretical negative Project “increases” (that can result with the HCM method of analysis) reported as 0.0.

**TABLE 8-4
EXISTING PLUS PROJECT (WITH FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – HCM METHOD OF ANALYSIS⁶⁶**

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ⁶⁷	LOS ⁶⁸ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (With Forster) Traffic Conditions		Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ⁶⁹		With Cumulative Recommended Improvements ⁷⁰	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ⁷¹	Project Impact ^{72,73}	Cumulative Impact ^{74,75}	Delay (s/v)	LOS	Delay (s/v)	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	20.7 15.9	C B	20.7 15.7	C B	27.1 16.9	C B	0.0 0.0 ⁷⁶	No No	No No	-- --	-- --	27.1 18.3	C B
2. El Camino Real at Old Mission Road	--	D	AM PM	90.1 28.3	F C	97.8 30.5	F C	127.5 34.2	F C	7.7 2.2	Yes No	Yes No	23.5 22.8	C C	25.8 26.2	C C
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	13.8 14.0	B B	13.9 14.3	B B	15.5 17.1	B B	0.1 0.3	No No	No No	14.2 14.6	B B	15.7 17.3	B B
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	34.0 28.9	C C	34.2 29.1	C C	37.0 34.3	D C	0.2 0.2	No No	No No	-- --	-- --	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	39.3 30.7	D C	40.0 31.8	D C	51.6 36.4	D D	0.7 1.1	No No	No No	-- --	-- --	-- --	-- --
6. Camino Capistrano at Forster Street	--	D	AM PM	23.9 23.1	C C	24.5 24.6	C C	46.2 44.4	E E	0.6 1.5	No No	No Yes	-- --	-- --	12.5 13.4	B B
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	50.5 34.5	F D	75.9 68.5	F F	113.4 168.9	F F	25.4 34.0	Yes Yes	Yes Yes	20.2 26.6	C D	24.0 43.6	C E
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	24.6 22.2	C C	24.6 22.3	C C	25.7 23.2	C C	0.0 0.1	No No	No No	-- --	-- --	-- --	-- --
9. Paseo Adelanto at Del Obispo Street	Traffic Operation	E	AM PM	11.0 13.1	B B	11.0 13.1	B B	15.3 16.9	B B	0.0 0.0	No No	No No	-- --	-- --	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	30.7 32.3	C C	30.9 32.5	C C	37.7 35.3	D D	0.2 0.2	No No	No No	-- --	-- --	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁶⁶ Appendices C and E contain the HCM/LOS calculation worksheets for all study intersections.

⁶⁷ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

⁶⁸ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

⁶⁹ Recommended Improvements for Project Impacts.

⁷⁰ Recommended Improvements for Cumulative Impacts.

⁷¹ Delay (s/v) Increase = Column (5) minus Column (4).

⁷² Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “E” or “F”.

⁷³ “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “F”.

⁷⁴ Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

⁷⁵ “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

⁷⁶ Theoretical negative Project “increases” (that can result with the HCM method of analysis) reported as 0.0.

8.3 Daily V/C Ratio Method of Analysis (Roadway Segments)

8.3.1 Project (Without Forster) Daily V/C Roadway Segment Capacity Analysis

Table 8-5 summarizes the roadway segment Level of Service results at the key study roadway segments based on the Daily V/C Ratio Method of Analysis for Project (Without Forster). The first column (1) in *Table 8-5* states the number of lanes of each segment. The second column (2) states the roadway segment's "Hot Spot" classification, followed by column (3) which shows the LOS goal based on the segments "Hot Spot" classification, if any. The fourth column (4) states the LOS "E" capacity of each segment that is utilized as the denominator (capacity) in calculating the V/C ratio of the key roadway segment. The daily V/C values of column (5) in *Table 8-5* present a summary of existing daily traffic conditions (which were also presented in *Table 3-8*). The sixth column (6) lists Existing plus Project (Without Forster) daily traffic conditions based on existing roadway characteristics. The seventh column (7) lists Existing plus Project (Without Forster) plus Cumulative (Year 2028) daily traffic conditions based on existing roadway characteristics. The eighth column (8) shows the increase in the V/C value due to the added daily Project (Without Forster) trips and indicates whether the traffic associated with the Project (Without Forster) will have a Project or cumulative significant impact based on the LOS standards and the significance impact criteria defined in this report.

8.3.1.1 Existing Peak Hour Traffic Conditions

Review of column (5) of *Table 8-5* indicates that all of the roadway segments currently operate at acceptable service levels based on the City's LOS criteria.

8.3.1.2 Existing Plus Project (Without Forster) Traffic Conditions

Review of column (6) of *Table 8-5* indicates that all of the roadway segments are forecast to operate at acceptable service levels based on the City's LOS criteria for the Existing Plus Project (Without Forster) traffic conditions. Further, as presented in column (8) of *Table 8-5*, the proposed Project (Without Forster) will not have any Project significant impacts at the roadway segments.

8.3.1.3 Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (7) of *Table 8-5* indicates that under Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) traffic conditions, one (1) of the key study roadway segments will operate at adverse LOS. Although the roadway segment of Del Obispo Street between Paseo Adelanto and Camino Capistrano is forecast to operate at unacceptable LOS F, the V/C increase is below the 0.010 threshold as outlined in the impact criteria. As presented in column (8) of *Table 8-3*, the proposed Project will not have a cumulative traffic impact at the roadway segments.

8.3.2 Project (With Forster) Daily V/C Roadway Segment Capacity Analysis

Table 8-6, which is similar in structure to that of *Table 8-5*, summarizes the roadway segment Level of Service results at the key study roadway segments based on the Daily V/C Ratio Method of Analysis for Project (With Forster).

8.3.2.1 Existing Peak Hour Traffic Conditions

Review of column (5) of *Table 8-6* indicates that all of the roadway segments currently operate at acceptable service levels based on the City's LOS criteria. The values are the same as the values previously reported in *Table 8-5*.

8.3.2.2 Existing Plus Project (With Forster) Traffic Conditions

Review of column (6) of *Table 8-6* indicates that all of the roadway segments are forecast to operate at acceptable service levels based on the City's LOS criteria for the Existing Plus Project (With Forster) traffic conditions. Further, as presented in column (8) of *Table 8-6*, the proposed Project (With Forster) will not have any Project significant impacts at the roadway segments.

8.3.2.3 Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions

Review of column (7) of *Table 8-6* indicates that under Existing Plus Project (With Forster) Plus Cumulative (Year 2028) traffic conditions, one (1) of the key study roadway segments will operate at adverse LOS. Although the roadway segment of Del Obispo Street between Paseo Adelanto and Camino Capistrano is forecast to operate at unacceptable LOS F, the V/C increase is below the 0.010 threshold as outlined in the impact criteria. As presented in column (8) of *Table 8-3*, the proposed Project will not have a cumulative traffic impact at the roadway segments.

**TABLE 8-5
EXISTING PLUS PROJECT (WITHOUT FORSTER) PLUS CUMULATIVE (YEAR 2028) DAILY V/C ROADWAY SEGMENT ANALYSIS**

Key Roadway Segment	(1) No. of Lanes ⁷⁷	(2) “ Hot Spot” Classification ⁷⁸	(3) LOS ⁷⁹ Goal	(4) LOS “E” Capacity (VPD) ⁸⁰	(5) Existing Traffic Conditions			(6) Existing Plus Project (Without Forster) Traffic Conditions			(7) Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions			(8) Significant Impact		
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Increase ⁸¹	Project Impact ^{82, 83, 84}	Cumulative Impact ^{85, 86, 87}
					A. Old Mission Road, <i>between</i> Camino Capistrano and Del Obispo Street	4U	--	D	25,000	6,299	0.252	A	7,056	0.282	A	8,620
B. Ortega Highway, <i>between</i> Del Obispo Street and I-5 SB Ramps	5D	Traffic Operation	E	46,900	37,537	0.800	D	38,294	0.817	D	43,339	0.924	E	0.016	No	No
C. Ortega Highway, <i>between</i> I-5 SB Ramps and I-5 NB Ramps	8D	Traffic Operation	E	75,000	40,250	0.537	A	40,743	0.543	A	44,900	0.599	A	0.007	No	No
D. Camino Capistrano, <i>between</i> Old Mission Road and Del Obispo Street	2D	--	D	22,000	13,720	0.624	B	14,195	0.645	B	17,057	0.775	C	0.021	No	No
E. Del Obispo Street, <i>between</i> Old Mission Road and Camino Capistrano	4D	Traffic Operation	E	37,500	23,986	0.640	B	23,986	0.640	B	27,657	0.738	C	0.000	No	No
F. Del Obispo Street, <i>between</i> Alipaz Street and Paseo Adelanto	4D	Traffic Operation	E	37,500	30,590	0.816	D	30,738	0.820	D	34,949	0.932	E	0.004	No	No
G. Del Obispo Street, <i>between</i> Paseo Adelanto and Camino Capistrano	4D	Traffic Operation	E	37,500	33,777	0.901	E	33,925	0.905	E	38,983	1.040	F	0.004	No	No

Notes:

- VPD = Vehicles per Day
- V/C = Volume over Capacity
- LOS = Level of Service, please refer to *Table 3-4* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁷⁷ D = Divided, U = Undivided

⁷⁸ Source: *San Juan Capistrano General Plan Circulation Element*.

⁷⁹ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023*.

⁸⁰ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*.

⁸¹ V/C Increase = Column (6) minus Column (5).

⁸² Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “E” or “F” for major, primary, secondary or limited secondary arterials.

⁸³ Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “D”, “E” or “F” for local residential arterials.

⁸⁴ “Hot Spot” Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “F”.

⁸⁵ Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C” or “D” and “LOS” Column (7) is “E” or “F” for major, primary, secondary or limited secondary arterials.

⁸⁶ Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B” or “C” and “LOS” Column (7) is “D”, “E” or “F” for local residential arterials.

⁸⁷ “Hot Spot” Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (7) is “F”.

**TABLE 8-6
EXISTING PLUS PROJECT (WITH FORSTER) PLUS CUMULATIVE (YEAR 2028) DAILY V/C ROADWAY SEGMENT ANALYSIS**

Key Roadway Segment	(1) No. of Lanes ⁸⁸	(2) “ Hot Spot” Classification ⁸⁹	(3) LOS ⁹⁰ Goal	(4) LOS “E” Capacity (VPD) ⁹¹	(5) Existing Traffic Conditions			(6) Existing Plus Project (With Forster) Traffic Conditions			(7) Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions			(8) Significant Impact		
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Increase ⁹²	Project Impact ^{93, 94, 95}	Cumulative Impact ^{96, 97, 98}
A. Old Mission Road, <i>between</i> Camino Capistrano and Del Obispo Street	4U	--	D	25,000	6,299	0.252	A	6,853	0.274	A	8,417	0.337	A	0.022	No	No
B. Ortega Highway, <i>between</i> Del Obispo Street and I-5 SB Ramps	5D	Traffic Operation	E	46,900	37,537	0.800	D	38,294	0.817	D	43,339	0.924	E	0.016	No	No
C. Ortega Highway, <i>between</i> I-5 SB Ramps and I-5 NB Ramps	8D	Traffic Operation	E	75,000	40,250	0.537	A	40,743	0.543	A	44,900	0.599	A	0.007	No	No
D. Camino Capistrano, <i>between</i> Old Mission Road and Del Obispo Street	2D	--	D	22,000	13,720	0.624	B	14,007	0.637	B	16,869	0.767	C	0.013	No	No
E. Del Obispo Street, <i>between</i> Old Mission Road and Camino Capistrano	4D	Traffic Operation	E	37,500	23,986	0.640	B	24,174	0.645	B	27,845	0.743	C	0.005	No	No
F. Del Obispo Street, <i>between</i> Alipaz Street and Paseo Adelanto	4D	Traffic Operation	E	37,500	30,590	0.816	D	30,738	0.820	D	34,949	0.932	E	0.004	No	No
G. Del Obispo Street, <i>between</i> Paseo Adelanto and Camino Capistrano	4D	Traffic Operation	E	37,500	33,777	0.901	E	33,925	0.905	E	38,983	1.040	F	0.004	No	No

Notes:

- VPD = Vehicles per Day
- V/C = Volume over Capacity
- LOS = Level of Service, please refer to *Table 3-4* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁸⁸ D = Divided, U = Undivided

⁸⁹ Source: *San Juan Capistrano General Plan Circulation Element*.

⁹⁰ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023*.

⁹¹ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*.

⁹² V/C Increase = Column (6) minus Column (5).

⁹³ Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “E” or “F” for major, primary, secondary or limited secondary arterials.

⁹⁴ Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “D”, “E” or “F” for local residential arterials.

⁹⁵ “Hot Spot” Project Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “F”.

⁹⁶ Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C” or “D” and “LOS” Column (7) is “E” or “F” for major, primary, secondary or limited secondary arterials.

⁹⁷ Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B” or “C” and “LOS” Column (7) is “D”, “E” or “F” for local residential arterials.

⁹⁸ “Hot Spot” Cumulative Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (7) is “F”.

9.0 SYNCHRO 11.0 METHOD OF ANALYSIS (NEAR-TERM)

Per the City of San Juan Capistrano requirements, a *Synchro 11.0* analysis has been performed for three (3) key intersections along Del Obispo Street. The segment along Del Obispo Street may create substantial queuing and backup as a result of their proximity to each other, especially in consideration of the potential of extension of Forster Lane from El Camino Real to Del Obispo Street.

The *Synchro 11.0* software program is used to analyze closely spaced intersections to determine the operating impact and potential queue. Similar to the prior analyses, *Synchro 11.0* analyses were performed for the following scenarios to determine the potential traffic impact that the proposed Project and cumulative traffic may have on the traffic operations along this segment of Del Obispo Street:

- A. Existing Traffic Conditions,
- B. Existing Plus Project Traffic Conditions,
- C. Scenario (B) with Improvements, if necessary,
- D. Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions,
- E. Scenario (D) with Improvements, if necessary.

9.1 Project (Without Forster) Level of Service Summary

Table 9-1 presents a summary of the peak hour Service Levels at the three (3) study intersections located along Del Obispo Street that have been evaluated using the *Synchro 11.0* software program. The results of the Synchro analyses are similar to those summarized in **Table 8-3** and are based on the HCM Delay/LOS Method of Analysis. The potential traffic impact of the proposed Project (Without Forster) was assessed based on the City's LOS standards and significance impact criteria defined in this report.

Review of **Table 9-1** shows that the proposed Project (Without Forster) will not directly or cumulatively impact the three (3) study intersections on Del Obispo Street. Although the intersection of Del Obispo Street at Forster Lane is forecast to operate at unacceptable LOS F during the AM and PM peak hours with the addition of ambient growth and cumulative traffic, the delay increase is below the 1.0 second threshold as outlined in the impact criteria. As such, no improvements are required of the Project (Without Forster).

Appendix G contains the *Synchro 11.0* LOS calculation worksheets for AM and PM peak hour near-term traffic conditions.

9.2 Project (With Forster) Level of Service Summary

Table 9-2 presents a summary of the peak hour Service Levels at the three (3) study intersections located along Del Obispo Street that have been evaluated using the *Synchro 11.0* software program. The results of the Synchro analyses are similar to those summarized in **Table 8-4** and are based on the HCM Delay/LOS Method of Analysis. The potential traffic impact of the proposed Project (With

Forster) was assessed based on the City's LOS standards and significance impact criteria defined in this report.

Review of *Table 9-2* shows that the proposed Project (With Forster) Del Obispo Street at Forster Lane is expected to operate at LOS F during the AM peak hour and PM peak hour. As shown in column (7) of *Table 9-2*, the proposed Project (With Forster) will have a direct and cumulative project impact at this intersection. Improvements recommended for the significantly impacted intersection will offset the adverse impact of Project traffic (See column (8) and (9) of *Table 9-2*).

Recommended improvements for the intersection of Del Obispo Street at Forster Lane will consist of the restriction of the eastbound left-turn, as the delay associated with this movement is adverse. The northbound left-turn and southbound left-turn are not recommended to be restricted as the levels of service for these movements are acceptable. Further, the eastbound left-turn movement has restricted sight distance given the bend of Del Obispo Street. With this restriction, vehicles wanting to travel northbound on Del Obispo Street will be required to make a northbound right-turn at the intersection El Camino Real at Old Mission Road and an eastbound left-turn at the intersection of Del Obispo Street at Old Mission Road. Column (8) and (9) of *Table 9-2* also shows the respective level of service results for the intersection of Del Obispo Street at Old Mission Road with the additional re-routed traffic.

Appendix G contains the *Synchro 11.0* LOS calculation worksheets for AM and PM peak hour near-term traffic conditions.

TABLE 9-1

EXISTING PLUS PROJECT (WITHOUT FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – SYNCHRO OPERATIONS METHOD OF ANALYSIS⁹⁹

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ¹⁰⁰	LOS ¹⁰¹ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (Without Forster) Traffic Conditions		Existing Plus Project (Without Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ¹⁰²		With Cumulative Recommended Improvements ¹⁰³	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹⁰⁴	Project Impact ^{105,106}	Cumulative Impact ^{107,108}	Delay (s/v)	LOS	Delay (s/v)	LOS
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	31.2 32.3	C C	31.2 32.3	C C	32.7 34.1	C C	0.0 0.0	No No	No No	-- --	-- --	-- --	-- --
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	48.6 34.3	E D	48.6 34.3	E D	65.4 57.6	F F	0.0 0.0	No No	No No	-- --	-- --	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	32.6 35.0	C C	32.7 35.1	C D	38.4 42.2	D D	0.1 0.1	No No	No No	-- --	-- --	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

⁹⁹ Appendix F contains Synchro Operations/LOS calculation worksheets for these key study intersections.

¹⁰⁰ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹⁰¹ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

¹⁰² Recommended Improvements for Project Impacts.

¹⁰³ Recommended Improvements for Cumulative Impacts.

¹⁰⁴ Delay (s/v) Increase = Column (5) minus Column (4).

¹⁰⁵ Project Impact considered “significant” if Column (5) minus Column (4) is 2.0 or greater and “LOS” Column (5) is “E” or “F”.

¹⁰⁶ “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “F”.

¹⁰⁷ Cumulative Impact considered “significant” if Column (5) minus Column (4) is 2.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹⁰⁸ “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

TABLE 9-2

EXISTING PLUS PROJECT (WITH FORSTER) PLUS CUMULATIVE (YEAR 2028) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – SYNCHRO OPERATIONS METHOD OF ANALYSIS¹⁰⁹

Key Intersection	(1)	(2)	(3)	(4)		(5)		(6)		(7)			(8)		(9)	
	“Hot Spot” Designation ¹¹⁰	LOS ¹¹¹ Goal	Time Period	Existing Traffic Conditions		Existing Plus Project (With Forster) Traffic Conditions		Existing Plus Project (With Forster) Plus Cumulative (Year 2028) Traffic Conditions		Significant Impact			With Project Recommended Improvements ¹¹²		With Cumulative Recommended Improvements ¹¹³	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹¹⁴	Project Impact ^{115,116}	Cumulative Impact ^{117,118}	Delay (s/v)	LOS	Delay (s/v)	LOS
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	31.2 32.3	C C	31.3 32.5	C C	32.8 34.7	C C	0.1 0.2	No No	No No	31.1 32.4	C C	32.7 34.6	C C
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	48.6 34.3	E D	73.0 60.6	F F	105.4 147.3	F F	24.4 26.3	Yes Yes	No No	20.3 24.7	C C	24.1 38.2	C E
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	32.6 35.0	C C	32.8 35.1	C D	38.5 42.3	D D	0.2 0.1	No No	No No	-- --	-- --	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁰⁹ Appendix F contains Synchro Operations/LOS calculation worksheets for these key study intersections.

¹¹⁰ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹¹¹ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

¹¹² Recommended Improvements for Project Impacts.

¹¹³ Recommended Improvements for Cumulative Impacts.

¹¹⁴ Delay (s/v) Increase = Column (5) minus Column (4).

¹¹⁵ Project Impact considered “significant” if Column (5) minus Column (4) is 2.0 or greater and “LOS” Column (5) is “E” or “F”.

¹¹⁶ “Hot Spot” Project Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “F”.

¹¹⁷ Cumulative Impact considered “significant” if Column (5) minus Column (4) is 2.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹¹⁸ “Hot Spot” Cumulative Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

9.3 Del Obispo Street Queue

Existing conditions along Del Obispo Street include queues during peak hours that may cause temporary blockage along the Fire Station 7 site. However, the Project is expected to add nominal length to the existing queues along Del Obispo Street. It should be noted that “Keep Clear” pavement markings are currently located along the Fire Station 7 frontage and fire trucks can still exit onto Del Obispo Street even with the existing congestion.

10.0 AREA-WIDE TRAFFIC IMPROVEMENTS (NEAR-TERM)

For those intersections and roadway segments where projected traffic volumes are expected to result in significant impacts, this report recommends traffic improvements that change the intersection and/or roadway segments geometry to increase capacity. These capacity improvements involve roadway widening and/or re-striping to reconfigure (add lanes) roadways to specific approaches of a key intersection and/or roadway segment. The identified improvements are expected to:

- Address the impact of existing traffic, Project traffic and future non-project (ambient traffic growth and related projects) traffic and
- Improve Levels of Service to an acceptable range and/or to pre-project conditions.

10.1 Intersection Recommended Improvements

10.1.1 ICU Method of Analysis (Intersections)

10.1.1.1 Existing Plus Project Traffic Conditions

Since none of the intersections are impacted by the Project (Without Forster) or Project (With Forster), directly or cumulatively, under the Existing Plus Project traffic conditions, no improvements are recommended or required.

10.1.1.2 Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions

Since none of the intersections are impacted by the Project (Without Forster) or Project (With Forster), directly or cumulatively, under the Existing Plus Project Plus Cumulative (Year 2028) traffic conditions, no improvements are recommended or required.

10.1.2 HCM Method of Analysis (Intersections)

10.1.2.1 Existing Plus Project Traffic Conditions (Without Forster)

The improvements recommended at the one intersection impacted by Project traffic (without Forster) based on the HCM Method of Analysis as presented in *Table 8-3* is as follows:

- 2 – El Camino Real at Old Mission Road: Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

10.1.2.2 Existing Plus Project Traffic Conditions (With Forster)

The improvements recommended at the two intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis as presented in *Table 8-4* are as follows:

- 2 – El Camino Real at Old Mission Road: Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).
- 7 – Del Obispo Street at Forster Lane: Subject to review and approval of the City, restrict the eastbound approach to eastbound right-turn only through the construction of a half porkchop

median to limit access to left-in/right-in/right-out at Forster Lane. There is an existing “Keep Clear” striping in front of the Fire Station on the southwest corner of the intersection. To maintain the existing northbound left-turn movement during peak commute hours that may have an excessive southbound queue through the intersection, it is recommended that the “Keep Clear” zone be extended through the intersection. Further, it is recommended that “Watch for Oncoming Traffic” and “Watch for Turning Traffic” warning signs be installed facing northbound left-turning traffic and southbound through and right-turning traffic on Del Obispo Street at Forster Lane, respectively, be installed as a part of this improvement. All improvements, inclusive of half porkchop median, need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

10.1.2.3 Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (Without Forster)

The improvements recommended at the two intersections impacted by Project traffic (without Forster) based on the HCM Method of Analysis as presented in *Table 8-3* are as follows:

- 2 - El Camino Real at Old Mission Road: same as Existing Plus Project (Without Forster).
- 6 – Camino Capistrano at Forster Street: Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

10.1.2.4 Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (With Forster)

The improvements recommended at the three intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis as presented in *Table 8-4* are as follows:

- 2 - El Camino Real at Old Mission Road: same as Existing Plus Project (With Forster).
- 6 – Camino Capistrano at Forster Street: Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).
- 7 – Del Obispo Street at Forster Lane: same as Existing Plus Project (With Forster).

10.1.3 Synchro Operations Method of Analysis (Intersections)

10.1.3.1 Existing Plus Project Traffic Conditions (Without Forster)

Since none of the intersections are impacted by the Project (Without Forster), directly or cumulatively, based on the Synchro Operations Method of Analysis for Del Obispo Street, no improvements are recommended or required.

10.1.3.2 Existing Plus Project Traffic Conditions (With Forster)

The improvements recommended at the one intersection impacted by Project traffic (with Forster) based on the HCM Method of Analysis as presented in *Table 9-2* is as follows:

- 7 – Del Obispo Street at Forster Lane: Subject to review and approval of the City, restrict the eastbound approach to eastbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

10.1.3.3 Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (Without Forster)

Since none of the intersections are impacted by the Project (Without Forster), directly or cumulatively, based on the Synchro Operations Method of Analysis for Del Obispo Street, no improvements are recommended or required.

10.1.3.4 Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions (With Forster)

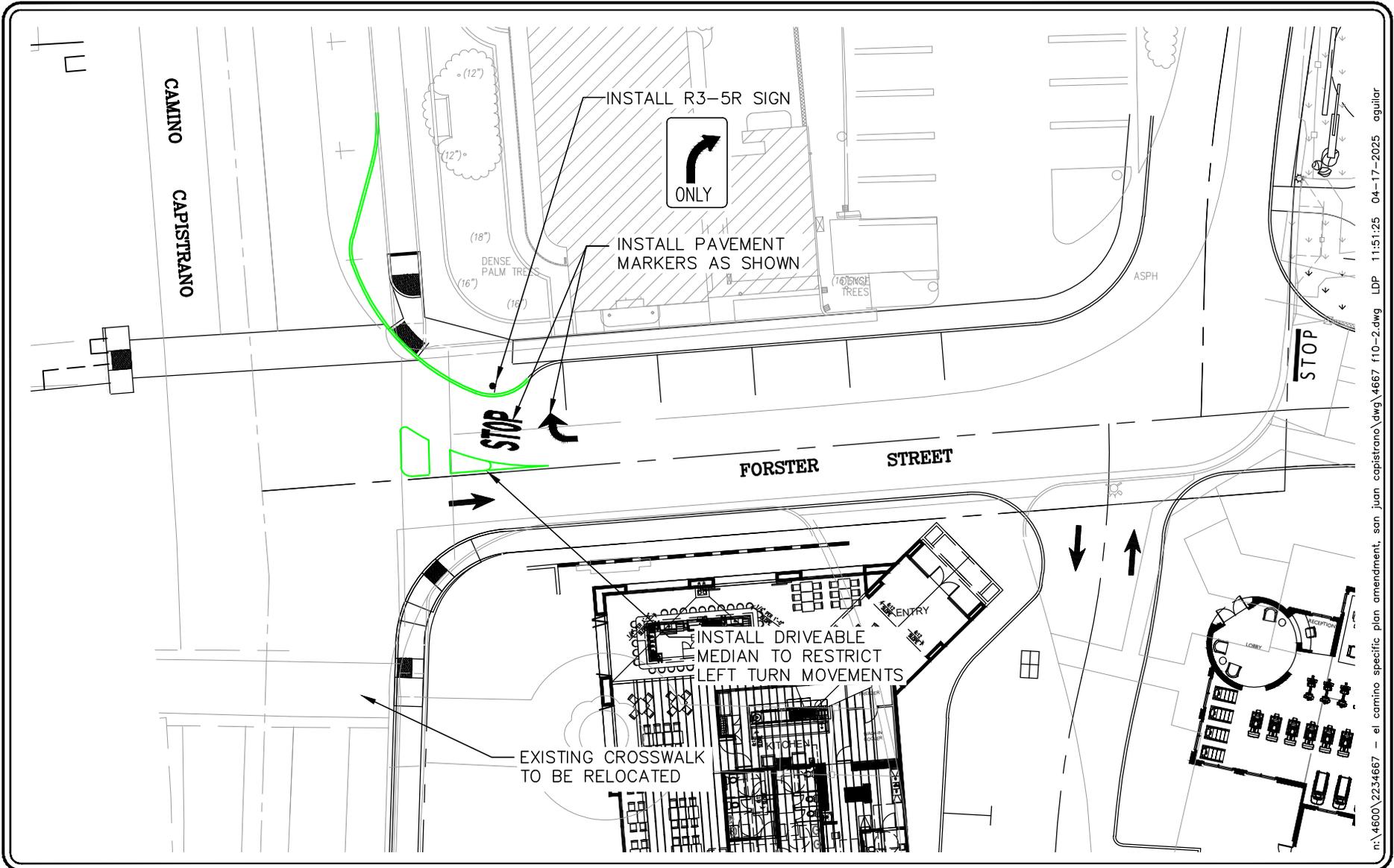
The improvements recommended at the one intersection impacted by Project traffic (with Forster) based on the HCM Method of Analysis as presented in *Table 9-2* is as follows:

- 7 – Del Obispo Street at Forster Lane: *same as Existing Plus Project (With Forster)*.

10.2 Roadway Segment Recommended Improvements

Since none of the roadway segments are impacted by the Project (Without Forster) or Project (With Forster), directly or cumulatively, no improvements are recommended or required.

Figure 10-1 presents the recommended improvements. *Figures 10-2* through *10-4* show the conceptual improvement plans for the intersections as described above.

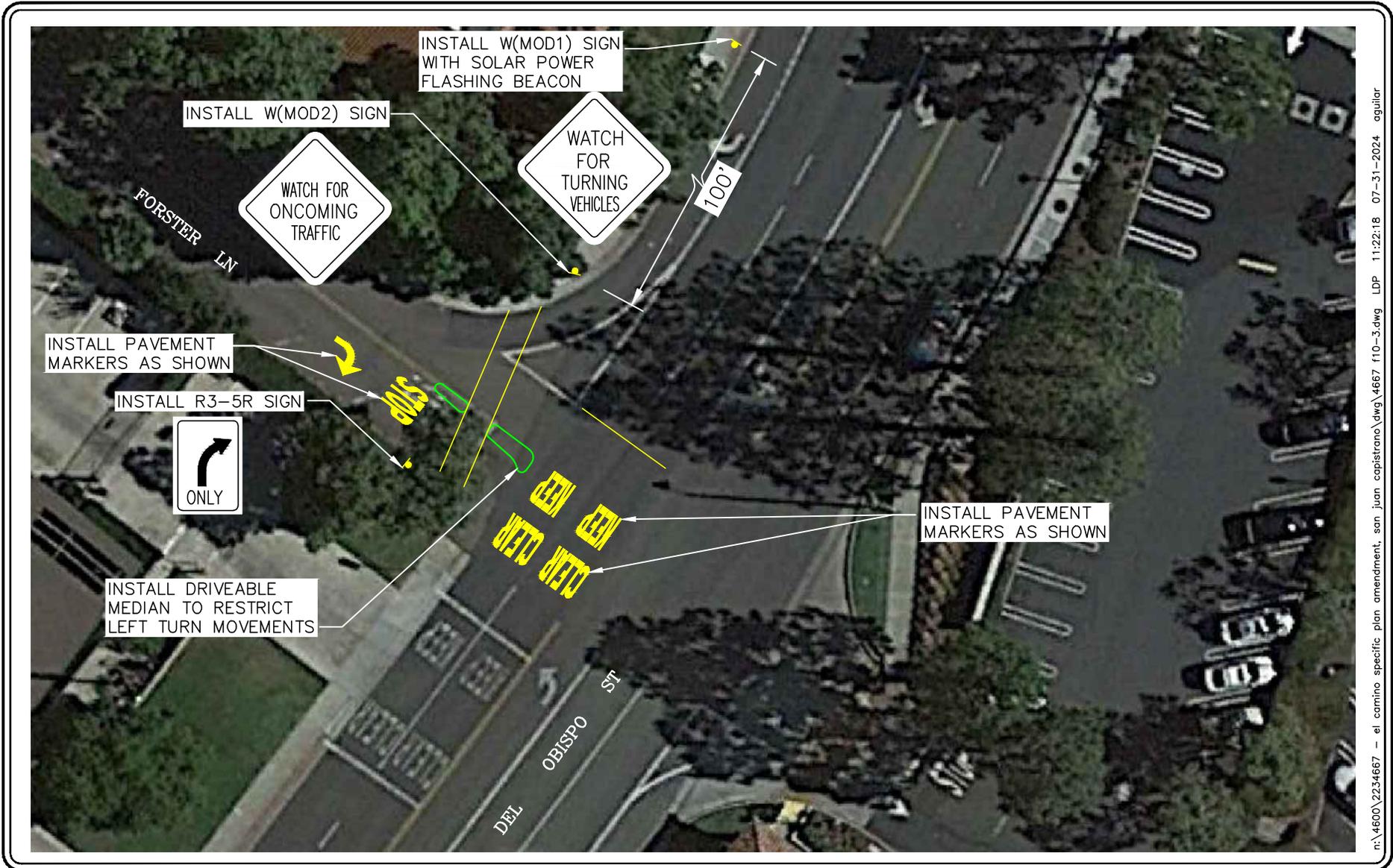


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FIGURE 10-2

CONCEPTUAL IMPROVEMENT PLAN
 CAMINO CAPISTRANO AND FORSTER STREET
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO





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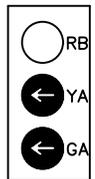
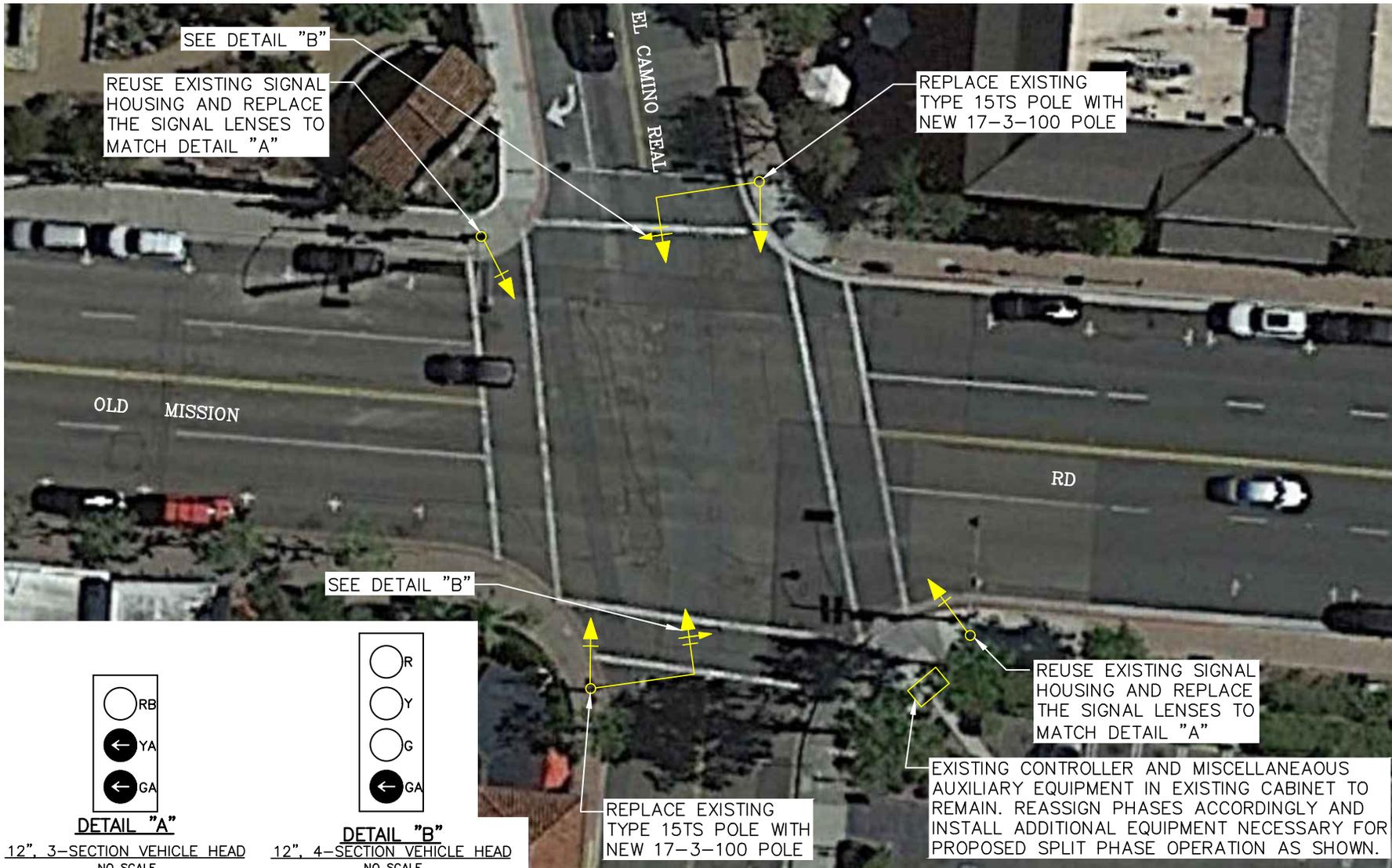


FIGURE 10-3

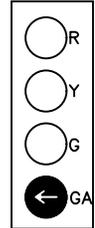
CONCEPTUAL IMPROVEMENT PLAN
DEL OBISPO ST AND FORSTER LN

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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DETAIL "A"
12", 3-SECTION VEHICLE HEAD
NO SCALE



DETAIL "B"
12", 4-SECTION VEHICLE HEAD
NO SCALE

SOURCE: GOOGLE

FIGURE 10-4

CONCEPTUAL IMPROVEMENT PLAN SPLIT PHASE SIGNAL MODIFICATIONS

EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

11.0 FUTURE TRAFFIC CONDITIONS (LONG-TERM)

11.1 General Plan Buildout Traffic Conditions

The General Plan Buildout traffic volume forecasts were obtained through utilization of the OCTAM 5.0 Year 2045 traffic model provided by OCTA. Specifically, daily, AM peak period and PM peak period link traffic volumes were provided by OCTA for the existing base year (i.e. Year 2016) and for the buildout year (i.e. Year 2045). The AM peak period corresponds to a three-hour morning commute period while the PM peak period corresponds to a four-hour afternoon commute period. Using the peak period model runs and the OCTA approved peak hour factors (i.e. AM = 0.3566 and PM = 0.2662), the one-hour peak hour link traffic volumes were determined. These future year 2045 link traffic volumes were post-processed based on the relationship of the base year validation model run output to the base year ground traffic counts resulting in General Plan Buildout AM peak hour and PM peak hour turning movements for the key study intersections. It should be noted that each projected volume was reviewed carefully for reasonableness and adjustments were applied as warranted based on local conditions and professional judgment.

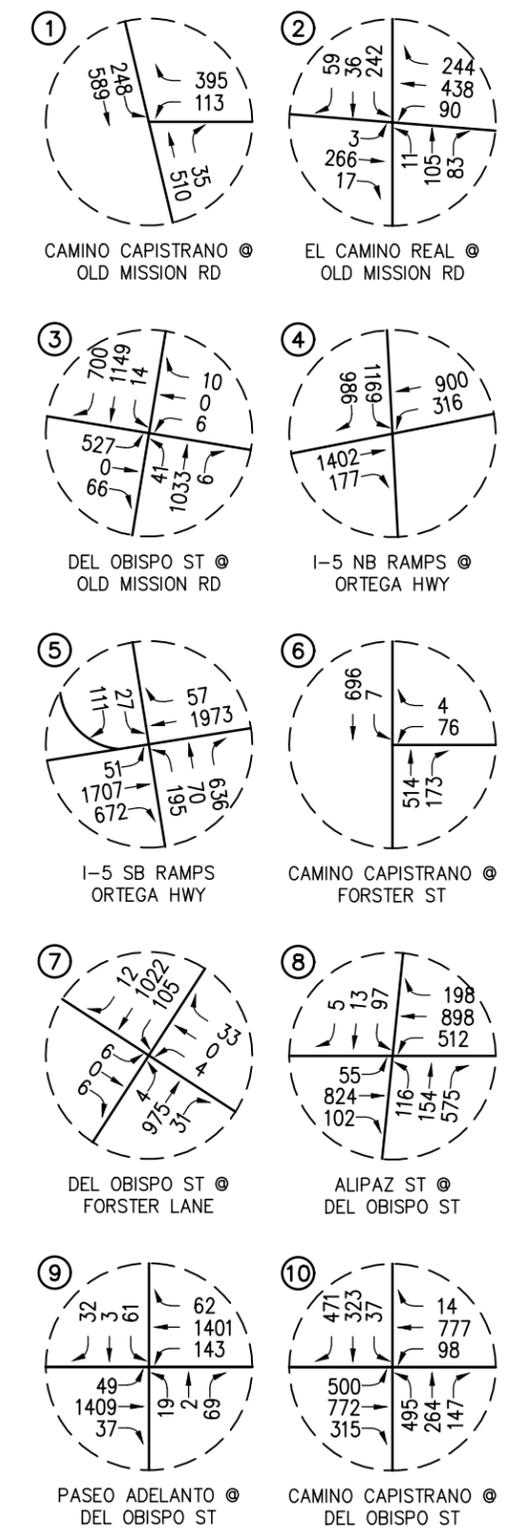
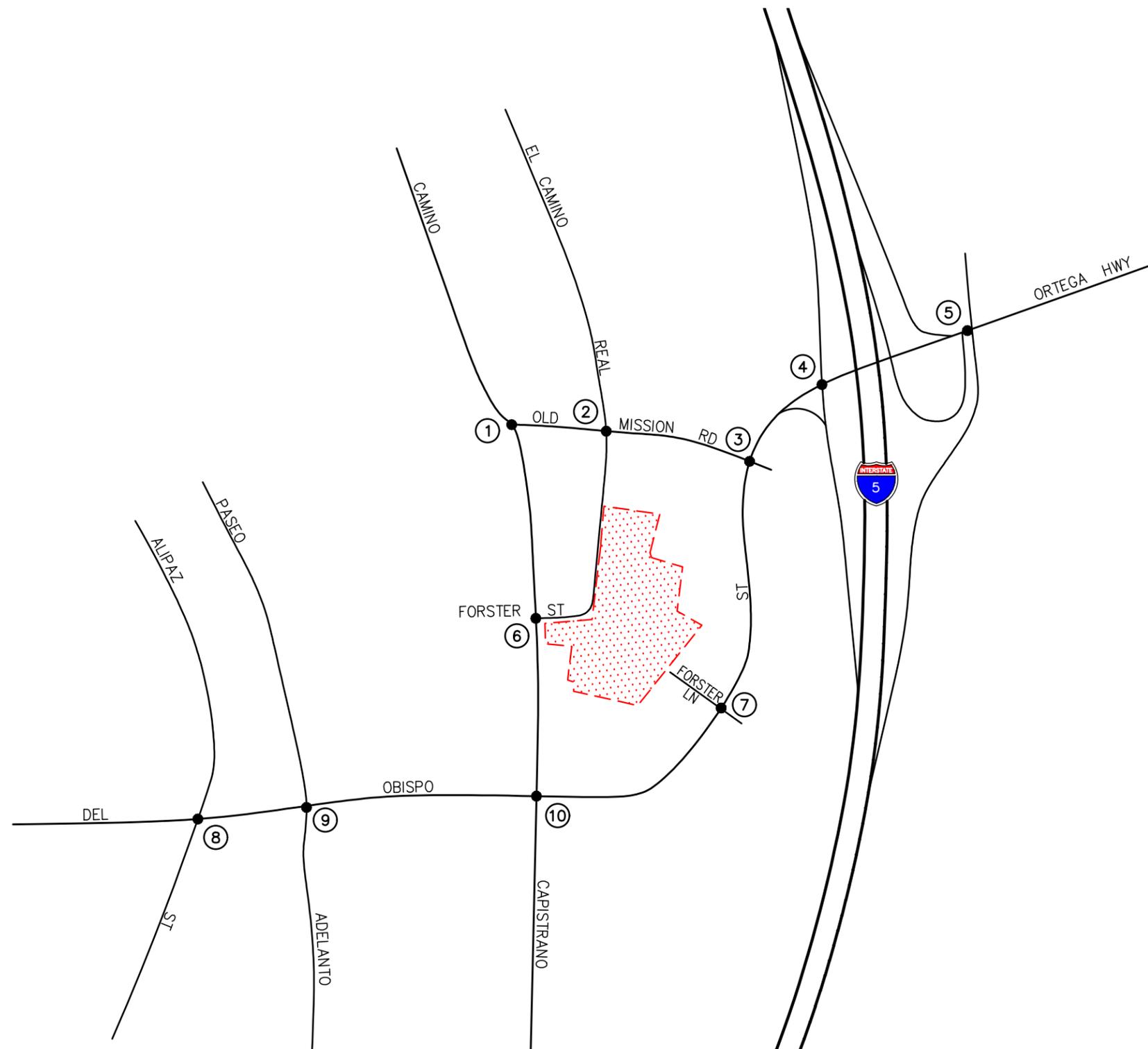
11.2 General Plan Buildout Traffic Volumes

11.2.1 General Plan Buildout (Without Forster)

Figures 11-1 and *11-2* present the General Plan Buildout traffic volumes at the key study intersections during the AM and PM peak hours, respectively. *Figure 11-2* also presents the General Plan Buildout daily traffic volumes at the key roadway segments. It should be noted that the traffic volume projections reflect the trips generated by the proposed Project (Without Forster).

11.2.2 General Plan Buildout (With Forster)

Figures 11-3 and *11-4* present the General Plan Buildout traffic volumes at the key study intersections during the AM and PM peak hours, respectively. *Figure 11-4* also presents the General Plan Buildout daily traffic volumes at the key roadway segments. It should be noted that the traffic volume projections reflect the trips generated by the proposed Project (With Forster).

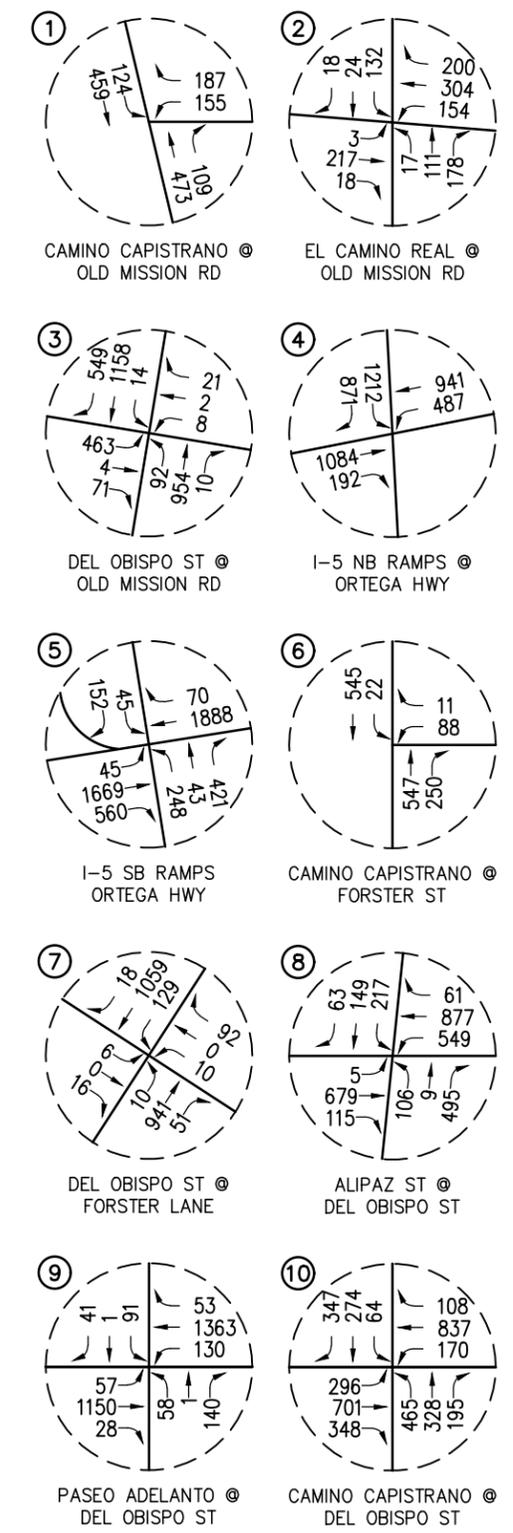
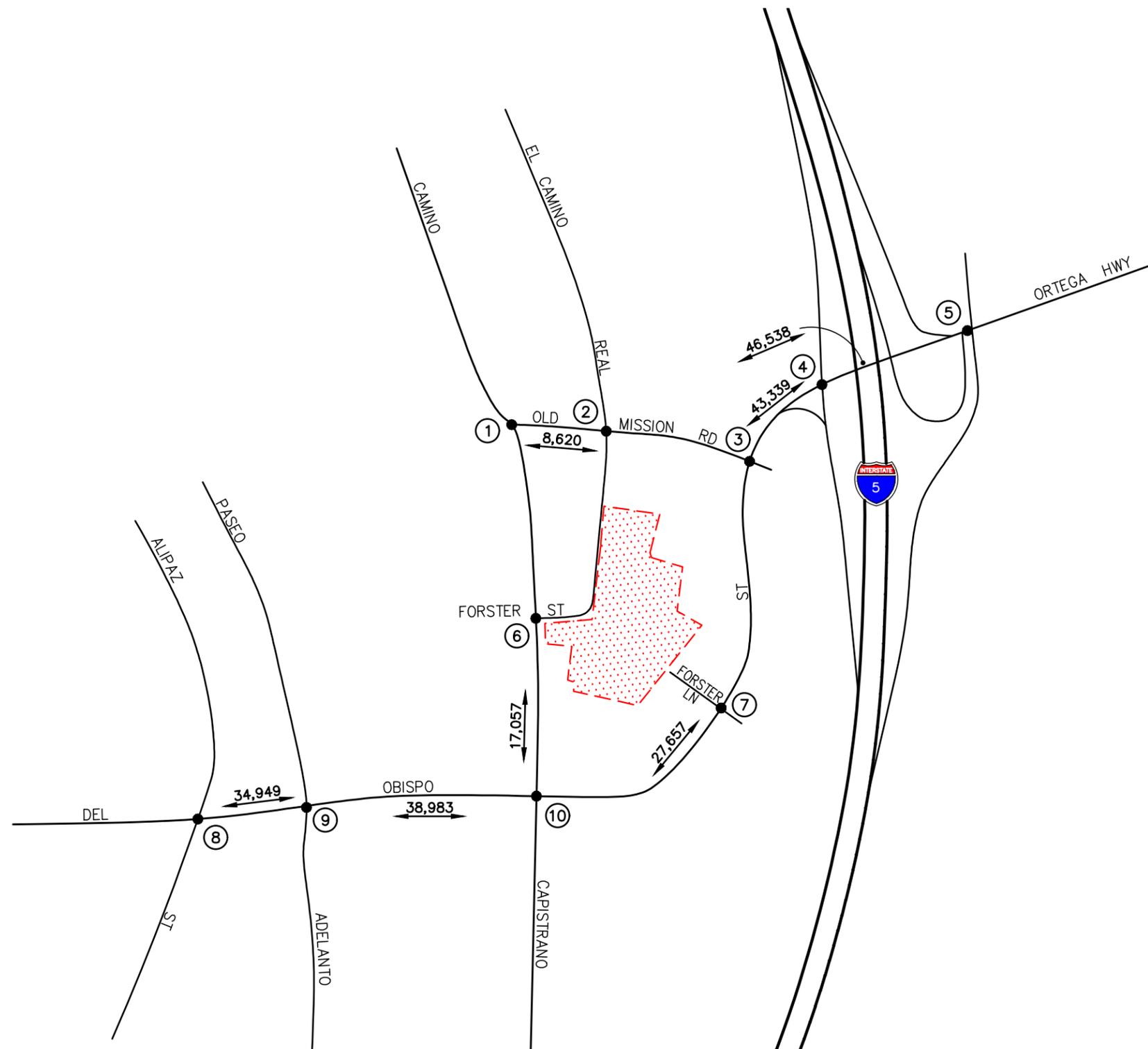


KEY
 (10) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 11-1
GENERAL PLAN BUILDOUT (WITHOUT FORSTER)
AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

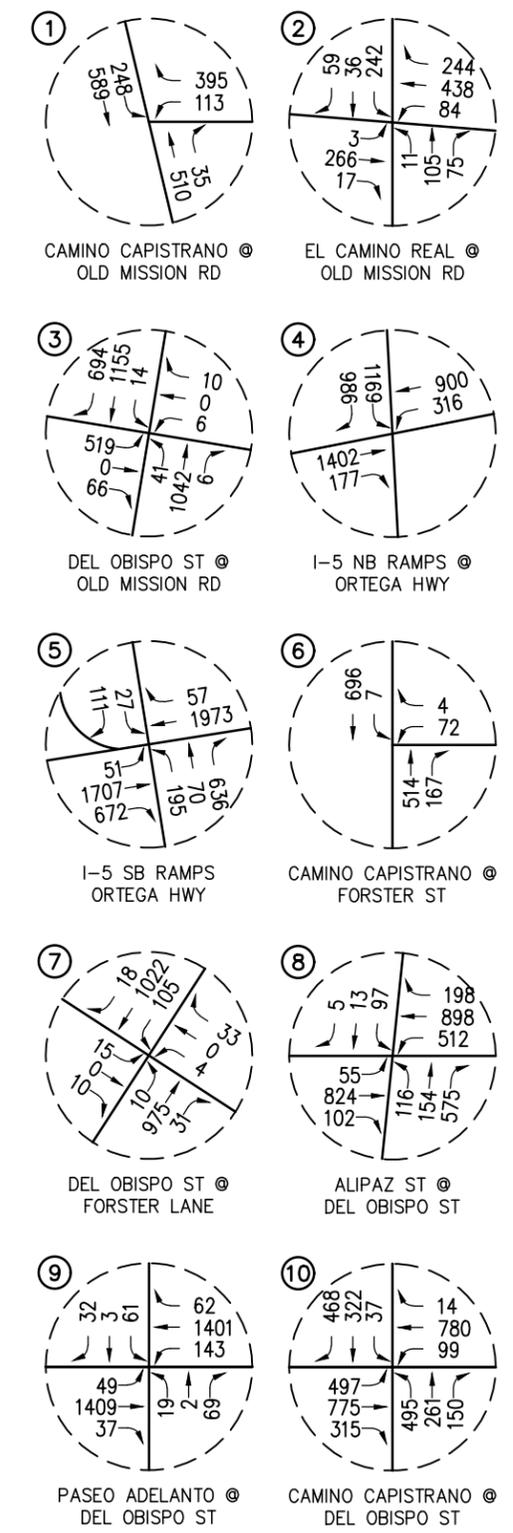
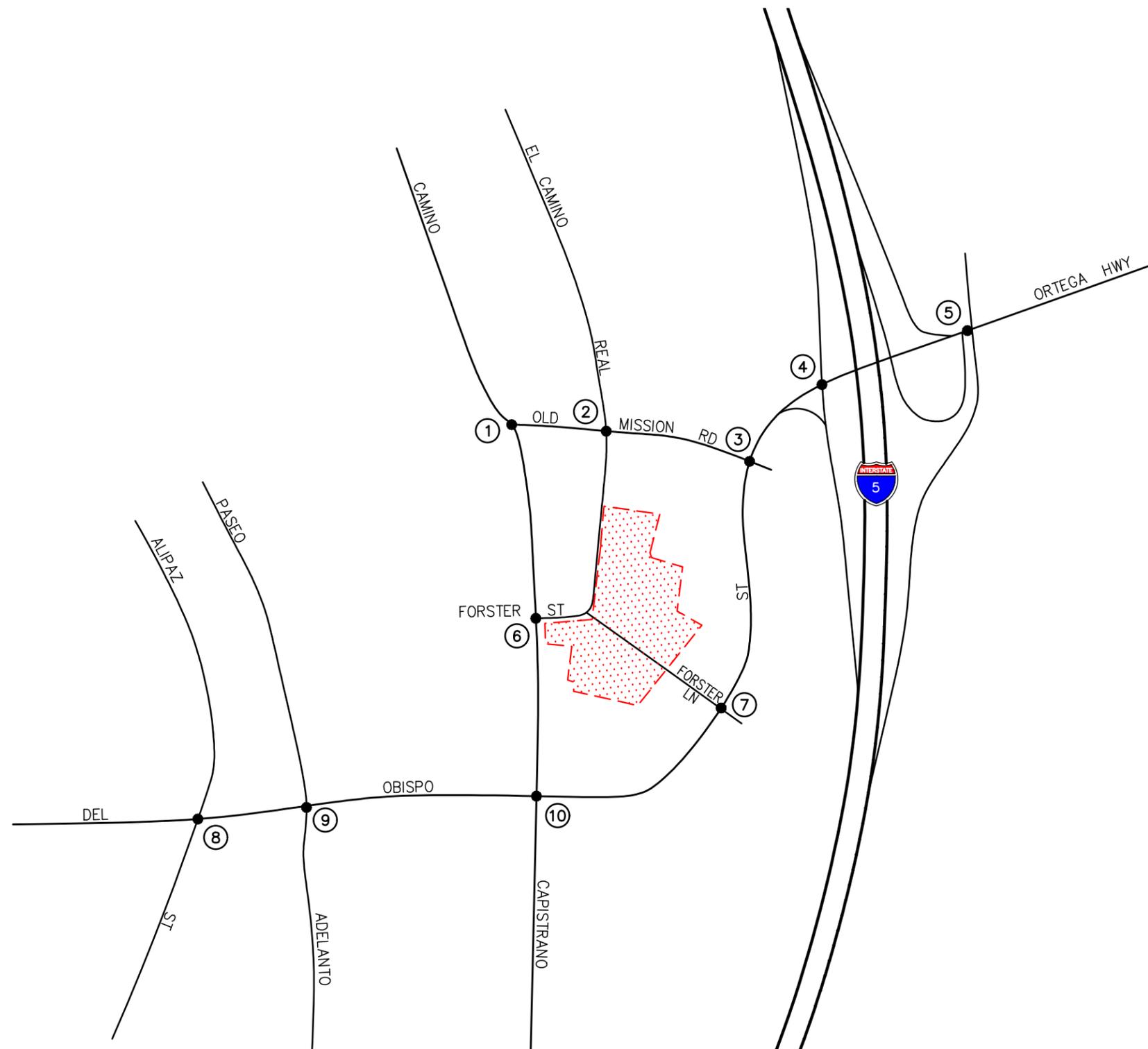
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KEY
 (1) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE

FIGURE 11-2
GENERAL PLAN BUILDOUT (WITHOUT FORSTER)
PM PEAK HOUR AND DAILY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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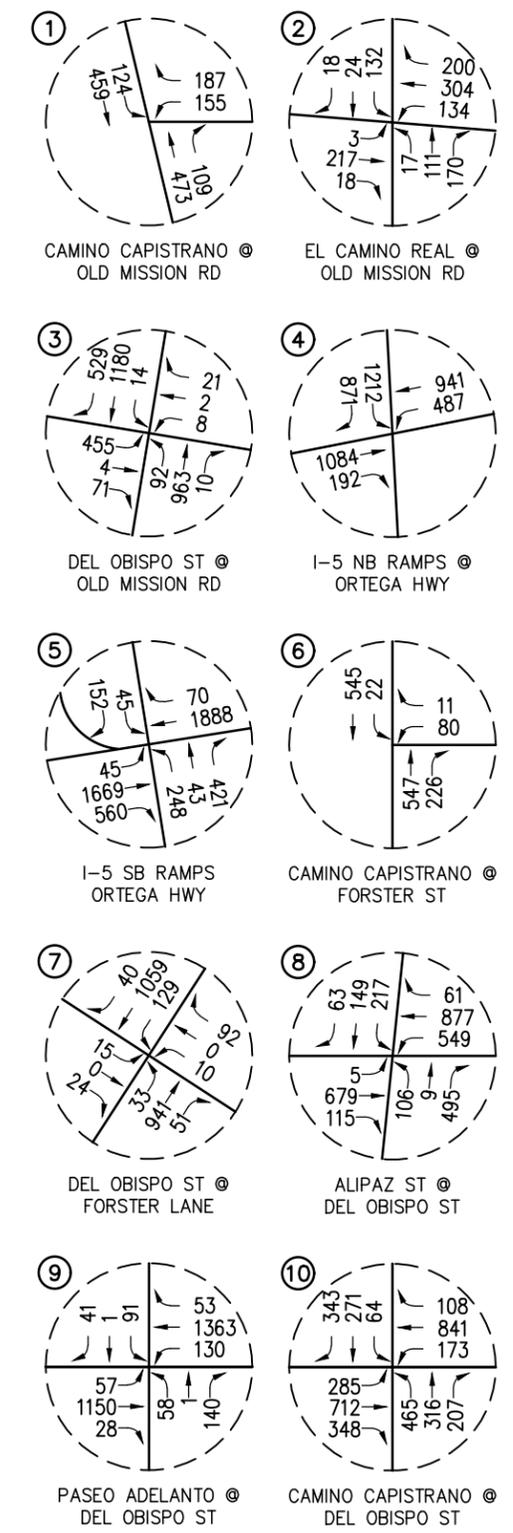
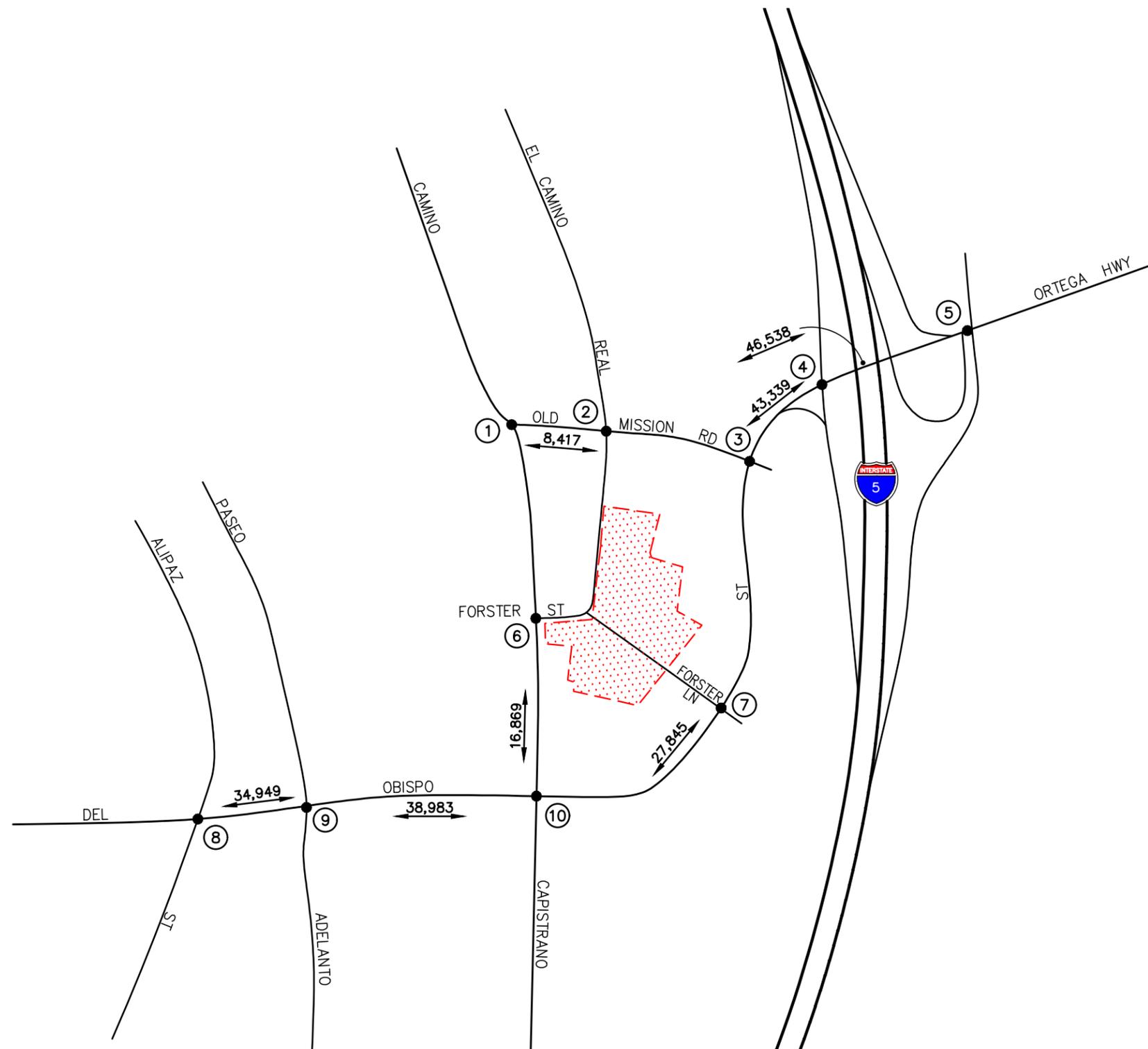


KEY
 (10) = STUDY INTERSECTION
 [Red Dotted Area] = PROJECT SITE



FIGURE 11-3
GENERAL PLAN BUILDOUT (WITH FORSTER)
AM PEAK HOUR TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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KEY
 (1) = STUDY INTERSECTION
 [Red Hatched] = PROJECT SITE



FIGURE 11-4
GENERAL PLAN BUILDOUT (WITH FORSTER)
PM PEAK HOUR AND DAILY TRAFFIC VOLUMES
 EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

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12.0 GENERAL PLAN BUILDOUT CAPACITY ANALYSIS (LONG-TERM)

This section of the traffic study evaluates the potential traffic impacts of the proposed Project to the City's currently adopted Circulation Element for the long-term (buildout) traffic conditions.

12.1 ICU Method of Analysis (Intersections)

12.1.1 *Project (Without Forster) ICU Analysis*

Table 12-1 summarizes the long-term peak hour Level of Service results at the key study intersections based on the ICU method of analysis. The structure of this table is similar to that of *Table 8-1* with the exception that this table summarizes the proposed Project (Without Forster)'s traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.1.1.1 *General Plan Buildout (Without Forster) Traffic Conditions*

Review of column (6) of *Table 12-1* indicates that under General Plan Buildout traffic conditions, all key signalized intersections are forecast to operate acceptable LOS based on the ICU method and the City's LOS criteria.

Appendix H contains the General Plan Buildout with Project (Without Forster) ICU/LOS calculation worksheets for the key study intersections for the AM and PM peak hours.

12.1.2 *Project (With Forster) ICU Analysis*

Table 12-2 summarizes the long-term peak hour Level of Service results at the key study intersections based on the ICU method of analysis. The structure of this table is similar to that of *Table 12-1* with the exception that this table summarizes the proposed Project (With Forster)'s traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.1.2.1 *General Plan Buildout (With Forster) Traffic Conditions*

Review of column (6) of *Table 12-2* indicates that under General Plan Buildout traffic conditions, all key signalized intersections are forecast to operate acceptable LOS based ICU method and the City's LOS criteria.

Appendix H contains the General Plan Buildout with Project (With Forster) ICU/LOS calculation worksheets for the key study intersections for the AM and PM peak hours.

**TABLE 12-1
GENERAL PLAN BUILDOUT (WITHOUT FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – ICU METHOD OF ANALYSIS¹¹⁹**

Key Intersection	(1) “Hot Spot” Designation ¹²⁰	(2) LOS ¹²¹ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (Without Forster) Traffic Conditions		(6) General Plan Buildout (Without Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹²²	
				ICU	LOS	ICU	LOS	ICU	LOS	ICU Increase ¹²³	Buildout Impact ^{124,125}	ICU	LOS
				1. Camino Capistrano at Old Mission Road	--	D	AM PM	0.535 0.424	A A	0.536 0.426	A A	0.728 0.511	C A
2. El Camino Real at Old Mission Road	--	D	AM PM	0.456 0.400	A A	0.473 0.439	A A	0.538 0.503	A A	0.017 0.039	No No	-- --	-- --
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	0.507 0.499	A A	0.513 0.507	A A	0.573 0.596	A A	0.006 0.008	No No	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.661 0.661	B B	0.664 0.665	B B	0.762 0.762	C C	0.003 0.004	No No	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.753 0.697	C B	0.756 0.709	C C	0.808 0.759	D C	0.003 0.012	No No	-- --	-- --
6. Camino Capistrano at Forster Street ¹²⁶	--	D	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
7. Del Obispo Street at Forster Lane ¹²⁶	Traffic Operation	E	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	0.461 0.399	A A	0.461 0.402	A A	0.621 0.635	B B	0.000 0.003	No No	-- --	-- --
9. Paseo Adelanto Del Obispo Street	Traffic Operation	E	AM PM	0.480 0.482	A A	0.481 0.483	A A	0.566 0.582	A A	0.001 0.001	No No	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	0.634 0.595	B A	0.638 0.604	B B	0.765 0.713	C C	0.004 0.009	No No	-- --	-- --

Notes:

- ICU = Intersection Capacity Utilization.
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹¹⁹ Appendices B, D and I contain the ICU/LOS calculation worksheets for all signalized study intersections.

¹²⁰ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹²¹ Source: *San Juan Capistrano Administrative Policy, Preparation and Use of Traffic Studies, June 21, 2023.*

¹²² Recommended Improvements for Buildout Impacts.

¹²³ ICU Increase = Column (5) minus Column (4).

¹²⁴ Buildout Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹²⁵ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

¹²⁶ Unsignalized Intersection. ICU Method of Analysis does not apply.

**TABLE 12-2
GENERAL PLAN BUILDOUT (WITH FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – ICU METHOD OF ANALYSIS¹²⁷**

Key Intersection	(1) “Hot Spot” Designation ¹²⁸	(2) LOS ¹²⁹ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (With Forster) Traffic Conditions		(6) General Plan Buildout (With Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹³⁰	
				ICU	LOS	ICU	LOS	ICU	LOS	ICU Increase ¹³¹	Buildout Impact ^{132,133}	ICU	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	0.535 0.424	A A	0.536 0.426	A A	0.728 0.511	C A	0.001 0.002	No No	-- --	-- --
2. El Camino Real at Old Mission Road	--	D	AM PM	0.456 0.400	A A	0.467 0.429	A A	0.532 0.492	A A	0.011 0.029	No No	-- --	-- --
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	0.507 0.499	A A	0.512 0.511	A A	0.572 0.600	A A	0.005 0.012	No No	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.661 0.661	B B	0.664 0.665	B B	0.762 0.762	C C	0.003 0.004	No No	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	0.753 0.697	C B	0.756 0.709	C C	0.808 0.759	D C	0.003 0.012	No No	-- --	-- --
6. Camino Capistrano at Forster Street ¹³⁴	--	D	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
7. Del Obispo Street at Forster Lane ¹³⁴	Traffic Operation	E	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	0.461 0.399	A A	0.461 0.402	A A	0.621 0.635	B B	0.000 0.003	No No	-- --	-- --
9. Paseo Adelanto Del Obispo Street	Traffic Operation	E	AM PM	0.480 0.482	A A	0.481 0.483	A A	0.566 0.582	A A	0.001 0.001	No No	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	0.634 0.595	B A	0.638 0.600	B B	0.765 0.709	C C	0.004 0.005	No No	-- --	-- --

Notes:

- ICU = Intersection Capacity Utilization.
- LOS = Level of Service, please refer to *Table 3-1* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹²⁷ Appendices B, D and I contain the ICU/LOS calculation worksheets for all signalized study intersections.

¹²⁸ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹²⁹ Source: *San Juan Capistrano Administrative Policy, Preparation and Use of Traffic Studies, June 21, 2023.*

¹³⁰ Recommended Improvements for Buildout Impacts.

¹³¹ ICU Increase = Column (5) minus Column (4).

¹³² Buildout Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹³³ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 0.010 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

¹³⁴ Unsignalized Intersection. ICU Method of Analysis does not apply.

12.2 HCM Method of Analysis (Intersections)

12.2.1 Project (Without Forster) HCM Analysis

Table 12-3 summarizes the long-term peak hour Level of Service results at the key study intersections based on the HCM Method of Analysis. The structure of this table is similar to that of *Table 8-3* with the exception that this table summarizes the proposed Project (Without Forster)'s traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.2.1.1 General Plan Buildout (Without Forster) Traffic Conditions

Review of column (6) of *Table 12-3* indicates that under the General Plan Buildout traffic conditions, three (3) of the key study intersections are forecast to operate at LOS E and/or LOS F during the AM and/or PM peak hours. Although the intersection of Del Obispo Street at Forster Lane is forecast to operate at unacceptable LOS F during the AM and PM peak hours with the addition of ambient growth and cumulative traffic, the delay increase is below the 1.0 second threshold as outlined in the impact criteria. As shown in column (7) of *Table 12-3*, the proposed Project (Without Forster) will have cumulative Buildout traffic impacts at the intersections of El Camino Real at Ortega Highway and Camino Capistrano at Forster Street during the AM peak hour and/or PM peak hour based on the City's LOS standards and impact criteria. However, recommended improvements at the two locations will offset the adverse cumulative impact of Project (See column (8) of *Table 12-3*).

Recommended improvements for the intersection of El Camino Real at Old Mission Road will consist of modifying the existing traffic signal with north-south split phasing. This improvement will assist pedestrians associated with the nearby schools crossing Old Mission Road by removing conflicts with left-turning vehicles from El Camino Real.

Recommended improvements for the intersection of Camino Capistrano at Forster Street will consist of the restriction of the westbound left-turn. With this restriction, vehicles wanting to travel southbound on Camino Capistrano will be required to make a northbound left-turn at the intersection El Camino Real at Old Mission Road and a westbound left-turn at the intersection of Camino Capistrano at Old Mission Road. Column (8) of *Table 12-3* also shows the respective level of service results for the intersection of Camino Capistrano at Old Mission Road and El Camino Real at Old Mission Road with the additional re-routed traffic.

Appendix I contains the General Plan Buildout with Project (Without Forster) HCM Delay/LOS calculation worksheets for the key study intersections for the AM and PM peak hours.

12.2.2 Project (With Forster) HCM Analysis

Table 12-4 summarizes the long-term peak hour Level of Service results at the key study intersections based on the HCM Method of Analysis. The structure of this table is similar to that of *Table 12-3* with the exception that this table summarizes the proposed Project (With Forster)'s traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.2.2.1 General Plan Buildout (With Forster) Traffic Conditions

Review of column (6) of *Table 12-4* indicates that under the Existing Plus Project (With Forster) Plus Cumulative (Year 2028) traffic conditions, three (3) of the key study intersections are forecast to operate at LOS E and/or LOS F during the AM and/or PM peak hours. As shown in column (7) of *Table 12-4*, the Project will have a cumulative impact at the intersections of El Camino Real at Ortega Highway, Camino Capistrano at Forster Street, and Del Obispo Street at Forster Lane during the AM and/or PM peak hour based on the City's LOS standards and impact criteria. However, recommended improvements at the four locations will offset the adverse cumulative impact of Project (See column (8) of *Table 12-4*).

Recommended improvements for the intersection of El Camino Real at Old Mission Road will consist of modifying the existing traffic signal with north-south split phasing. This improvement will assist pedestrians associated with the nearby schools crossing Old Mission Road by removing conflicts with left-turning vehicles from El Camino Real.

Recommended improvements for the intersection of Camino Capistrano at Forster Street will consist of the restriction of the westbound left-turn. With this restriction, vehicles wanting to travel southbound on Camino Capistrano will be required to make a northbound left-turn at the intersection El Camino Real at Old Mission Road and a westbound left-turn at the intersection of Camino Capistrano at Old Mission Road. Column (8) of *Table 12-4* also shows the respective level of service results for the intersection of Camino Capistrano at Old Mission Road and El Camino Real at Old Mission Road with the additional re-routed traffic.

Recommended improvements for the intersection of Del Obispo Street at Forster Lane will consist of the restriction of the eastbound left-turn, as the delay associated with this movement is adverse. The northbound left-turn and southbound left-turn are not recommended to be restricted as the levels of service for these movements are acceptable. Further, the eastbound left-turn movement has restricted sight distance given the bend of Del Obispo Street. With this restriction, vehicles wanting to travel northbound on Del Obispo Street will be required to make a northbound right-turn at the intersection El Camino Real at Old Mission Road and an eastbound left-turn at the intersection of Del Obispo Street at Old Mission Road. Column (8) of *Table 12-4* also shows the respective level of service results for the intersections of El Camino Real at Old Mission Road and Del Obispo Street at Old Mission Road with the additional re-routed traffic.

Appendix I contains the General Plan Buildout with Project (With Forster) HCM Delay/LOS calculation worksheets for the key study intersections for the AM and PM peak hours.

**TABLE 12-3
GENERAL PLAN BUILDOUT (WITHOUT FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – HCM METHOD OF ANALYSIS¹³⁵**

Key Intersection	(1) “Hot Spot” Designation ¹³⁶	(2) LOS ¹³⁷ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (Without Forster) Traffic Conditions		(6) General Plan Buildout (Without Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹³⁸	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹³⁹	Buildout Impact ^{140,141}	Delay (s/v)	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	20.7 15.9	C B	20.7 15.7	C B	25.5 16.7	C B	0.0 0.0 ¹⁴²	No No	25.5 18.2	C B
2. El Camino Real at Old Mission Road	--	D	AM PM	90.1 28.3	F C	101.5 30.5	F C	113.4 32.0	F C	11.4 2.2	Yes No	22.6 25.6	C C
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	13.8 14.0	B B	14.0 14.3	B B	15.0 16.5	B B	0.2 0.3	No No	-- --	-- --
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	34.0 28.9	C C	34.2 29.1	C C	35.8 34.9	D C	0.2 0.2	No No	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	39.3 30.7	D C	40.0 31.8	D C	41.3 33.0	D C	0.7 1.1	No No	-- --	-- --
6. Camino Capistrano at Forster Street	--	D	AM PM	23.9 23.1	C C	25.1 26.5	D D	40.1 40.8	E E	1.2 3.4	Yes Yes	12.3 13.1	B B
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	50.5 34.5	F D	50.5 34.5	F D	56.0 49.6	F E	0.0 0.0	No No	-- --	-- --
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	24.6 22.2	C C	24.6 22.3	C C	27.8 29.4	C C	0.0 0.1	No No	-- --	-- --
9. Paseo Adelanto Del Obispo Street	Traffic Operation	E	AM PM	11.0 13.1	B B	11.0 13.1	B B	14.5 16.1	B B	0.0 0.0	No No	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	30.7 32.3	C C	30.9 32.6	C C	40.6 37.4	D D	0.2 0.3	No No	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹³⁵ *Appendices C, E and J* contain the HCM/LOS calculation worksheets for all study intersections.

¹³⁶ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹³⁷ Source: *San Juan Capistrano Administrative Policy, Preparation and Use of Traffic Studies, June 21, 2023.*

¹³⁸ Recommended Improvements for Buildout Impacts.

¹³⁹ ICU Increase = Column (5) minus Column (4).

¹⁴⁰ Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹⁴¹ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

¹⁴² Theoretical negative Project “increases” (that can result with the HCM method of analysis) reported as 0.0.

**TABLE 12-4
GENERAL PLAN BUILDOUT (WITH FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – HCM METHOD OF ANALYSIS¹⁴³**

Key Intersection	(1) “Hot Spot” Designation ¹⁴⁴	(2) LOS ¹⁴⁵ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (With Forster) Traffic Conditions		(6) General Plan Buildout (With Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹⁴⁶	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹⁴⁷	Buildout Impact ^{148,149}	Delay (s/v)	LOS
1. Camino Capistrano at Old Mission Road	--	D	AM PM	20.7 15.9	C B	20.7 15.7	C B	25.5 16.7	C B	0.0 0.0 ¹⁵⁰	No No	25.5 16.7	C B
2. El Camino Real at Old Mission Road	--	D	AM PM	90.1 28.3	F C	97.8 30.5	F C	122.9 29.1	F C	7.7 2.2	Yes No	22.3 22.9	C C
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	13.8 14.0	B B	13.9 14.3	B B	14.9 16.4	B B	0.1 0.3	No No	14.9 16.4	B B
4. I-5 SB Ramps at Ortega Highway	Traffic Operation	E	AM PM	34.0 28.9	C C	34.2 29.1	C C	35.8 34.9	D C	0.2 0.2	No No	-- --	-- --
5. I-5 NB Ramps at Ortega Highway	Traffic Operation	E	AM PM	39.3 30.7	D C	40.0 31.8	D C	41.3 33.0	D C	0.7 1.1	No No	-- --	-- --
6. Camino Capistrano at Forster Street	--	D	AM PM	23.9 23.1	C C	24.5 24.6	C C	38.6 37.1	E E	0.6 1.5	No Yes	12.2 13.0	B B
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	50.5 34.5	F D	75.9 68.5	F F	84.9 109.5	F F	25.4 34.0	Yes Yes	21.8 32.2	C D
8. Alipaz Street at Del Obispo Street	Traffic Operation	E	AM PM	24.6 22.2	C C	24.6 22.3	C C	27.8 29.4	C C	0.0 0.1	No No	-- --	-- --
9. Paseo Adelanto Del Obispo Street	Traffic Operation	E	AM PM	11.0 13.1	B B	11.0 13.1	B B	14.5 16.1	B B	0.0 0.0	No No	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	30.7 32.3	C C	30.9 32.5	C C	40.6 37.1	D D	0.2 0.2	No No	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁴³ *Appendices C, E and J* contain the HCM/LOS calculation worksheets for all study intersections.

¹⁴⁴ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹⁴⁵ Source: *San Juan Capistrano Administrative Policy, Preparation and Use of Traffic Studies, June 21, 2023.*

¹⁴⁶ Recommended Improvements for Buildout Impacts.

¹⁴⁷ ICU Increase = Column (5) minus Column (4).

¹⁴⁸ Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹⁴⁹ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

¹⁵⁰ Theoretical negative Project “increases” (that can result with the HCM method of analysis) reported as 0.0.

12.3 Daily V/C Ratio Method of Analysis (Roadway Segments)

12.3.1 Project (Without Forster) Daily V/C Roadway Segment Capacity Analysis

Table 12-5 summarizes the roadway segment Level of Service results at the key study roadway segments based on the Daily V/C Ratio Method of Analysis for Project (Without Forster). The structure of this table is similar to that of *Table 8-5* with the exception that this table summarizes the proposed Project's (Without Forster) traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.3.1.1 General Plan Buildout (Without Forster) Traffic Conditions

Review of column (7) of *Table 12-5* indicates that under General Plan Buildout traffic conditions, one (1) of the key study roadway segments will operate at adverse LOS. However, as presented in column (8) of *Table 12-5*, the proposed Project will not have a cumulative traffic impact at the roadway segments.

12.3.2 Project (With Forster) Daily V/C Roadway Segment Capacity Analysis

Table 12-6 summarizes the roadway segment Level of Service results at the key study roadway segments based on the Daily V/C Ratio Method of Analysis for Project (With Forster). The structure of this table is similar to that of *Table 12-5* with the exception that this table summarizes the proposed Project's (With Forster) traffic impact to the Circulation Element upon build-out of the City's General Plan.

12.3.2.1 General Plan Buildout (With Forster) Traffic Conditions

Review of column (7) of *Table 12-6* indicates that under General Plan Buildout traffic conditions, one (1) of the key study roadway segments will operate at adverse LOS. However, as presented in column (8) of *Table 12-6*, the proposed Project will not have a cumulative traffic impact at the roadway segments.

**TABLE 12-5
GENERAL PLAN BUILDOUT (WITHOUT FORSTER) DAILY V/C ROADWAY SEGMENT ANALYSIS**

Key Roadway Segment	(1) No. of Lanes ¹⁵¹	(2) “ Hot Spot” Classification ¹⁵²	(3) LOS ¹⁵³ Goal	(4) LOS “E” Capacity (VPD) ¹⁵⁴	(5) Existing Traffic Conditions			(6) Existing Plus Project (Without Forster) Traffic Conditions			(7) General Plan Buildout (Without Forster) Traffic Conditions			(8) Significant Impact	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Increase ¹⁵⁵	Buildout Impact ^{156, 157}
A. Old Mission Road, <i>between</i> Camino Capistrano and Del Obispo Street	4U	--	D	25,000	6,299	0.252	A	7,056	0.282	A	8,620	0.345	A	0.030	No
B. Ortega Highway, <i>between</i> Del Obispo Street and I-5 SB Ramps	5D	Traffic Operation	E	46,900	37,537	0.800	D	38,294	0.817	D	43,339	0.924	E	0.016	No
C. Ortega Highway, <i>between</i> I-5 SB Ramps and I-5 NB Ramps	8D	Traffic Operation	E	75,000	40,250	0.537	A	40,743	0.543	A	46,538	0.621	B	0.007	No
D. Camino Capistrano, <i>between</i> Old Mission Road and Del Obispo Street	2D	--	D	22,000	13,720	0.624	B	14,195	0.645	B	17,057	0.775	C	0.021	No
E. Del Obispo Street, <i>between</i> Old Mission Road and Camino Capistrano	4D	Traffic Operation	E	37,500	23,986	0.640	B	23,986	0.640	B	27,657	0.738	C	0.000	No
F. Del Obispo Street, <i>between</i> Alipaz Street and Paseo Adelanto	4D	Traffic Operation	E	37,500	30,590	0.816	D	30,738	0.820	D	34,949	0.932	E	0.004	No
G. Del Obispo Street, <i>between</i> Paseo Adelanto and Camino Capistrano	4D	Traffic Operation	E	37,500	33,777	0.901	E	33,925	0.905	E	38,983	1.040	F	0.004	No

Notes:

- VPD = Vehicles per Day
- V/C = Volume over Capacity
- LOS = Level of Service, please refer to *Table 3-4* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁵¹ D = Divided, U = Undivided

¹⁵² Source: *San Juan Capistrano General Plan Circulation Element*.

¹⁵³ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023*.

¹⁵⁴ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*.

¹⁵⁵ V/C Increase = Column (6) minus Column (5).

¹⁵⁶ Buildout Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C” or “D” and “LOS” Column (7) is “E” or “F”.

¹⁵⁷ “Hot Spot” Buildout Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (7) is “F”.

**TABLE 12-6
GENERAL PLAN BUILDOUT (WITH FORSTER) DAILY V/C ROADWAY SEGMENT ANALYSIS**

Key Roadway Segment	(1)	(2)	(3)	(4)	(5)			(6)			(7)			(8)	
	No. of Lanes ¹⁵⁸	“ Hot Spot” Classification ¹⁵⁹	LOS ¹⁶⁰ Goal	LOS “E” Capacity (VPD) ¹⁶¹	Existing Traffic Conditions			Existing Plus Project (With Forster) Traffic Conditions			General Plan Buildout (With Forster) Traffic Conditions			Significant Impact	
					Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	V/C Increase ¹⁶²	Buildout Impact ^{163, 164}
A. Old Mission Road, <i>between</i> Camino Capistrano and Del Obispo Street	4U	--	D	25,000	6,299	0.252	A	6,853	0.274	A	8,417	0.337	A	0.022	No
B. Ortega Highway, <i>between</i> Del Obispo Street and I-5 SB Ramps	5D	Traffic Operation	E	46,900	37,537	0.800	D	38,294	0.817	D	43,339	0.924	E	0.016	No
C. Ortega Highway, <i>between</i> I-5 SB Ramps and I-5 NB Ramps	8D	Traffic Operation	E	75,000	40,250	0.537	A	40,743	0.543	A	46,538	0.621	B	0.007	No
D. Camino Capistrano, <i>between</i> Ortega Highway and Del Obispo Street	2D	--	D	22,000	13,720	0.624	B	14,007	0.637	B	16,869	0.767	C	0.013	No
E. Del Obispo Street, <i>between</i> Ortega Highway and Camino Capistrano	4D	Traffic Operation	E	37,500	23,986	0.640	B	24,174	0.645	B	27,845	0.743	C	0.005	No
F. Del Obispo Street, <i>between</i> Alipaz Street and Paseo Adelanto	4D	Traffic Operation	E	37,500	30,590	0.816	D	30,738	0.820	D	34,949	0.932	E	0.004	No
G. Del Obispo Street, <i>between</i> Paseo Adelanto and Camino Capistrano	4D	Traffic Operation	E	37,500	33,777	0.901	E	33,925	0.905	E	38,983	1.040	F	0.004	No

Notes:

- VPD = Vehicles per Day
- V/C = Volume over Capacity
- LOS = Level of Service, please refer to *Table 3-4* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁵⁸ D = Divided, U = Undivided

¹⁵⁹ Source: *San Juan Capistrano General Plan Circulation Element*.

¹⁶⁰ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023*.

¹⁶¹ Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways, dated November 1995 and Amended April 1998*.

¹⁶² V/C Increase = Column (6) minus Column (5).

¹⁶³ Buildout Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C” or “D” and “LOS” Column (7) is “E” or “F”.

¹⁶⁴ “Hot Spot” Buildout Impact considered “significant” if Column (6) minus Column (5) is 0.010 or greater and “LOS” Column (6) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (7) is “F”.

13.0 SYNCHRO 11.0 METHOD OF ANALYSIS (LONG-TERM)

Similar to *Section 9.0* of this report, *Synchro 11.0* analyses were performed for the long-term (buildout) traffic conditions to determine the potential traffic impact that the proposed Project and long-term (buildout) traffic may have on the traffic operations along Del Obispo Street, especially with the potential of extension of Forster Lane from El Camino Real to Del Obispo Street.

13.1 Project (Without Forster) Level of Service Summary

Table 13-1 presents a summary of the peak hour Service Levels at the three (3) study intersections located along Del Obispo Street that have that have been evaluated using the *Synchro 11.0* software program. The results of the Synchro analyses are similar to those summarized in *Table 12-3* and are based on the HCM Delay/LOS Method of Analysis. The potential traffic impact of the proposed Project (Without Forster) was assessed based on the City's LOS standards and significance impact criteria defined in this report.

Review of *Table 13-1* shows that the proposed Project (Without Forster) will not directly or cumulatively impact the three (3) study intersections on Del Obispo Street. Although the intersection of Del Obispo Street at Forster Lane is forecast to operate at unacceptable LOS F during the AM and PM peak hours with the addition of ambient growth and cumulative traffic, the delay increase is below the 1.0 second threshold as outlined in the impact criteria. As such, no improvements are required of the Project (Without Forster).

Appendix J contains the *Synchro 11.0* LOS calculation worksheets for AM and PM peak hour long-term traffic conditions.

13.2 Project (With Forster) Level of Service Summary

Table 13-2 presents a summary of the peak hour Service Levels at the three (3) study intersections located along Del Obispo Street that have that have been evaluated using the *Synchro 11.0* software program. The results of the Synchro analyses are similar to those summarized in *Table 12-4* and are based on the HCM Delay/LOS Method of Analysis. The potential traffic impact of the proposed Project (With Forster) was assessed based on the City's LOS standards and significance impact criteria defined in this report.

Review of *Table 13-2* shows that the proposed Project (With Forster) Del Obispo Street at Forster Lane is expected to operate at LOS F during the AM peak hour and PM peak hour. As shown in column (7) of *Table 13-2*, the proposed Project (With Forster) will have a direct and cumulative project impact at this intersection. Improvements recommended for the significantly impacted intersection will offset the adverse impact of Project traffic (See column (8) and (9) of *Table 13-2*). A description of the improvements necessary to mitigate the Project traffic impacts is detailed later in this report.

Recommended improvements for the intersection of Del Obispo Street at Forster Lane will consist of the restriction of the eastbound left-turn, as the delay associated with this movement is adverse. The northbound left-turn and southbound left-turn are not recommended to be restricted as the levels of

service for these movements are acceptable. Further, the eastbound left-turn movement has restricted sight distance given the bend of Del Obispo Street. With this restriction, vehicles wanting to travel northbound on Del Obispo Street will be required to make a northbound right-turn at the intersection El Camino Real at Old Mission Road and an eastbound left-turn at the intersection of Del Obispo Street at Old Mission Road. Column (8) and (9) of *Table 13-2* also shows the respective level of service results for the intersection of Del Obispo Street at Old Mission Road with the additional re-routed traffic.

Appendix J contains the *Synchro 11.0* LOS calculation worksheets for AM and PM peak hour long-term traffic conditions.

TABLE 13-1

GENERAL PLAN BUILDOUT (WITHOUT FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – SYNCHRO OPERATIONS METHOD OF ANALYSIS¹⁶⁵

Key Intersection	(1) “Hot Spot” Designation ¹⁶⁶	(2) LOS ¹⁶⁷ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (Without Forster) Traffic Conditions		(6) General Plan Buildout (Without Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹⁶⁸	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹⁶⁹	Buildout Impact ^{170,171}	Delay (s/v)	LOS
				3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM PM	31.2 32.3	C C	31.2 32.3	C C	30.5 36.4	C D
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM PM	48.6 34.3	E D	48.6 34.3	E D	53.5 46.7	F E	0.0 0.0	No No	-- --	-- --
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM PM	32.6 35.0	C C	32.7 35.1	C D	41.9 42.1	D D	0.1 0.1	No No	-- --	-- --

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁶⁵ Appendices F and K contains Synchro Operations/LOS calculation worksheets for these key study intersections.

¹⁶⁶ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹⁶⁷ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

¹⁶⁸ Recommended Improvements for Buildout Impacts.

¹⁶⁹ Delay (s/v) Increase = Column (5) minus Column (4).

¹⁷⁰ Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹⁷¹ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

TABLE 13-2

GENERAL PLAN BUILDOUT (WITH FORSTER) PEAK HOUR INTERSECTION CAPACITY ANALYSIS – DEL OBISPO STREET SYNCHRO OPERATIONS METHOD OF ANALYSIS¹⁷²

Key Intersection	(1) “Hot Spot” Designation ¹⁷³	(2) LOS ¹⁷⁴ Goal	(3) Time Period	(4) Existing Traffic Conditions		(5) Existing Plus Project (With Forster) Traffic Conditions		(6) General Plan Buildout (With Forster) Traffic Conditions		(7) Significant Impact		(8) General Plan Buildout Recommended Improvements ¹⁷⁵	
				Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v)	LOS	Delay (s/v) Increase ¹⁷⁶	Buildout Impact ^{177,178}	Delay (s/v)	LOS
3. Del Obispo Street at Old Mission Road	Traffic Operation	E	AM	31.2	C	31.3	C	30.6	C	0.1	No	30.5	C
			PM	32.3	C	32.5	C	37.6	D	0.2	No	37.4	D
7. Del Obispo Street at Forster Lane	Traffic Operation	E	AM	48.6	E	73.0	F	79.5	F	24.4	Yes	21.2	C
			PM	34.3	D	60.6	F	96.3	F	26.3	Yes	30.3	D
10. Camino Capistrano at Del Obispo Street	Traffic Operation	E	AM	32.6	C	32.8	C	41.9	D	0.2	No	--	--
			PM	35.0	C	35.1	D	42.3	D	0.1	No	--	--

Notes:

- s/v = seconds per vehicle (delay).
- LOS = Level of Service, please refer to *Tables 3-2 and 3-3* for the LOS definitions.
- **Bold LOS values** indicate adverse service levels based on City of San Juan Capistrano LOS standards.

¹⁷² Appendices F and K contains Synchro Operations/LOS calculation worksheets for these key study intersections.

¹⁷³ Source: *San Juan Capistrano General Plan Circulation Element, December 14, 1999.*

¹⁷⁴ Source: *San Juan Capistrano Administrative Policy 310, Preparation and Use of Traffic Studies, June 21, 2023.*

¹⁷⁵ Recommended Improvements for Buildout Impacts.

¹⁷⁶ Delay (s/v) Increase = Column (5) minus Column (4).

¹⁷⁷ Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C” or “D” and “LOS” Column (6) is “E” or “F”.

¹⁷⁸ “Hot Spot” Buildout Impact considered “significant” if Column (5) minus Column (4) is 1.0 or greater and “LOS” Column (5) is “A”, “B”, “C”, “D” or “E” and “LOS” Column (6) is “F”.

14.0 AREA-WIDE TRAFFIC IMPROVEMENTS (LONG-TERM)

For those intersections where projected traffic volumes are expected to result in significant impacts, this report recommends traffic improvements that change the intersection geometry to increase capacity based on the existing lane configuration. These capacity improvements involve roadway widening and/or re-striping to reconfigure (add lanes) roadways to specific approaches of a key intersection. The identified improvements are expected to:

- Address the impact of existing traffic, Project traffic and future non-project (ambient traffic growth and related projects) traffic and
- Improve Levels of Service to an acceptable range and/or to pre-project conditions.

14.1 General Plan Buildout Traffic Conditions

14.1.1 Intersection Recommended Improvements

14.1.1.1 ICU Method of Analysis (Intersections)

Since none of the intersections are cumulatively impacted by the Project (Without Forster) or Project (With Forster), under the General Plan Buildout Traffic Conditions, no improvements are recommended or required.

14.1.1.2 HCM Method of Analysis (Intersections) Without Forster

The improvements recommended at the three intersections impacted by Project traffic (without Forster) based on the HCM Method of Analysis as presented in *Table 12-3* is as follows:

- 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (Without Forster)* Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).
- 6 – Camino Capistrano at Forster Street: *Same as Existing Plus Project Plus Cumulative (Without Forster)* Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

14.1.1.3 HCM Method of Analysis (Intersections) With Forster

The improvements recommended at the four intersections impacted by Project traffic (with Forster) based on the HCM Method of Analysis as presented in *Table 12-4* is as follows:

- 2 – El Camino Real at Old Mission Road: *Same as Existing Plus Project (With Forster)* Subject to review and approval of the City, modify existing traffic signal to operate split-phase in the north-south direction. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

- 6 – Camino Capistrano at Forster Street: Same as Existing Plus Project Plus Cumulative (With Forster) Subject to review and approval of the City, restrict the westbound approach to westbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).
- 7 – Del Obispo Street at Forster Lane: same as Existing Plus Project (With Forster) Subject to review and approval of the City, restrict the eastbound approach to eastbound right-turn only. There is an existing “Keep Clear” striping in front of the Fire Station on the southwest corner of the intersection. To maintain the existing northbound left-turn movement during peak commute hours that may have an excessive southbound queue through the intersection, it is recommended that the “Keep Clear” zone be extended through the intersection. Further, it is recommended that “Watch for Oncoming Traffic” and “Watch for Turning Traffic” warning signs be installed facing northbound left-turning traffic and southbound through and right-turning traffic on Del Obispo Street at Forster Lane, respectively, be installed as a part of this improvement. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

14.1.2 Synchro Operations Method of Analysis (Intersections)

14.1.2.1 Project (Without Forster)

Since none of the intersections are impacted by the Project (Without Forster), directly or cumulatively, based on the Synchro Operations Method of Analysis for Del Obispo Street, no improvements are recommended or required.

14.1.2.2 Project (With Forster)

The improvements recommended at the intersection impacted, direct and cumulatively, by Project traffic (with Forster) based on the Synchro Operations Method of Analysis as presented in *Table 14-2* is as follows:

- 7 – Del Obispo Street at Forster Lane: same as Existing Plus Project (With Forster) Subject to review and approval of the City, restrict the eastbound approach to eastbound right-turn only. All improvements need to conform to the City of San Juan Capistrano Standard Design Guidelines and/or *California Manual on Uniform Traffic Control Devices* (CA MUTCD)

14.1.3 Roadway Segment Recommended Improvements

Since none of the roadway segments are cumulatively impacted by the Project (Without Forster) or Project (With Forster), under the General Plan Buildout Traffic Conditions, no improvements are recommended or required.

Figure 10-1 presents the recommended improvements.

15.0 SITE ACCESS AND INTERNAL CIRCULATION

15.1 Site Access Evaluation

For the proposed Performing Arts Center and the Forster & El Camino Mixed-Use Development, access will be provided via the El Camino Real and Forster Lane intersections as well as the potential future extension of Forster Street to Del Obispo Street. Forster Street within the project site will be constructed to City standards, with a paved width of 26-feet, with on-street diagonal parking along the Project frontage. Forster Street, as designed, is of sufficient width to accommodate vehicles entering and backing out of the diagonal parking spaces on this “internal roadway”. Based on anticipated project driveway volumes, access for the Project is adequate.

15.2 Internal Circulation

The internal circulation was evaluated in terms of vehicle-pedestrian conflicts. Based on our review of the preliminary site plan, the overall layout does not create significant vehicle-pedestrian conflict points and the driveway throat lengths are sufficient such that access to parking spaces is not impacted by internal vehicle queuing/stacking. As noted above, the paved width of Forster Street allows for vehicles to enter and exit the diagonal parking spaces proposed on this internal roadway.

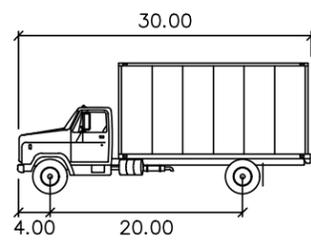
Access for small service/delivery trucks (i.e. UPS, FedEx, and trash trucks) and passenger vehicles for the Project site have also been evaluated. Our evaluation of the on-site circulation shown on the Project site plan was performed using the *Turning Vehicle Templates*, developed by Jack E. Leisch & Associates and *AutoTURN for AutoCAD* computer software that simulates turning maneuvers for various types of vehicles.

Curb return radii within the Project site are adequate for passenger cars, small service vehicles (SU-30), small delivery trucks, fire trucks, and trash trucks. The on-site circulation is acceptable based on our review of the site plan.

Figure 15-1 illustrates the turning movements required of a small delivery truck (SU-30) as it accesses the site from Camino Capistrano. Review of **Figure 15-1** shows overall the turning movements are considered adequate.

Figure 15-2 illustrates the turning movements required of a trash truck as it accesses the site from El Camino Real. Review of **Figure 15-2** shows overall the turning movements are considered adequate.

Figure 15-3 illustrates the turning movements required of a fire truck as it accesses the site from Del Obispo Street. Review of **Figure 15-3** shows overall the turning movements are considered adequate.



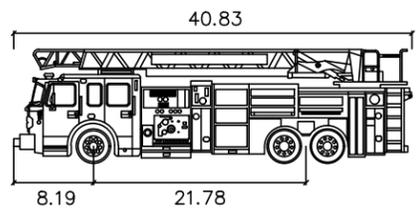
SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



FIGURE 15-1

SU-30 TRUCK TURNING ANALYSIS
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO



Fire Truck	
Width	: 8.25 feet
Track	: 7.87 feet
Lock to Lock Time	: 6.0
Steering Angle	: 46.3



FIGURE 15-3

FIRE TRUCK TURNING ANALYSIS
EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

16.0 STATE OF CALIFORNIA (CALTRANS) METHODOLOGY

16.1 Off-Ramp Vehicle Queuing Analysis

The *Caltrans Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance*, dated July 2020, provides direction on a simplified safety analysis approach that reduces the risk to all road users and that focuses on multi-modal conflict analysis as well as access management issues. District traffic safety staff are encouraged to consider the proposed project's potential influence on safety on state roadways, including the following factors:

- Increased presence of pedestrians and bicyclists
- Degradation of the walking and bicycling environment and experience
- New pedestrian and bicyclist connection desires
- Multimodal conflict points, especially at intersections and project access locations
- Change in traffic mix such as an increase in bicyclists or pedestrians where features such as shoulders or sidewalks may not exist or are inconsistent with facility design (sidewalks, bike and multi-user paths, multimodal roadways, etc.)
- Increased vehicular speeds
- Transition between free flow and metered flow
- Increased traffic volumes
- Queuing at off-ramps resulting in slow or stopped traffic on the mainline or speed differentials between adjacent lanes
- Queuing exceeding turn pocket length that impedes through-traffic

The proposed Project does not take direct access from a State facility; therefore, the project has not been reviewed for factors pertaining to site access or local roadways. However, the proposed project is expected to generate new project trips at the I-5 Freeway ramps along Ortega Highway (i.e. key study intersections #4 and #5). Therefore, an analysis of the project's effect on off-ramp queuing was prepared in order to determine if the project would cause, or contribute towards, slowing or stopped traffic on mainline travel lanes resulting in unsafe speed differentials between adjacent lanes.

Pursuant to prior direction from Caltrans staff, off-ramp queuing was analyzed using the Highway Capacity Manual (HCM) method for signalized intersections. As described in **Section 3.0** above, the off-ramp queuing calculations were prepared utilizing the HCM 7 operational methodology for signalized intersections. The corresponding weekday AM peak hour and PM peak hour HCM 7 worksheets for purposes of determining the 95th percentile vehicle queues are contained in *Appendices D, F, and I*.

The queuing analysis was prepared for Existing, Existing Plus Project, Existing Plus Project Plus Cumulative (Year 2028), and General Plan Buildout traffic conditions. It should be noted that the volumes at both of the freeway off-ramp intersections are the same between Project (Without Forster) and Project (With Forster). Both of the freeway off-ramp intersection approaches were

reviewed in terms of expected maximum vehicle queues (i.e. 95th percentile queues) which represent the maximum back of vehicle queues with 95th percentile traffic volumes. The corresponding maximum vehicle queue lengths were then compared to the total ramp storage lengths (i.e. the available storage length as measured from the applicable off-ramp/frontage road lane striping to the respective off-ramp approach limit lines/merge points).

As shown in *Table 16-1*, adequate storage is provided to accommodate the forecast 95th percentile queues under Existing, Existing Plus Project, Existing Plus Project Plus Cumulative (Year 2028), and General Plan Buildout traffic conditions at the two (2) off-ramp locations. The Project is expected to neither cause nor contribute towards vehicle queuing which extends back into the I-5 Freeway mainline travel lanes for all traffic conditions. Therefore, the proposed project is not anticipated to negatively influence safety on the State Highway System.

TABLE 16-1
PEAK HOUR FREEWAY OFF-RAMP QUEUING ANALYSIS¹⁷⁹

Key Ramp Intersection	Estimated Storage Provided Per Lane (feet)	Existing Traffic Conditions				Existing Plus Project Traffic Conditions				Existing Plus Project Plus Cumulative (Year 2028) Traffic Conditions				General Plan Buildout Traffic Conditions				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Max. Queue (feet)	Adequate Storage (Yes / No)	Max Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	Max. Queue (feet)	Adequate Storage (Yes / No)	
4. I-5 SB Ramps at Ortega Highway																		
	<i>Southbound Left-Turns</i>	630 ¹⁸⁰	443'	Yes	404'	Yes	442'	Yes	403'	Yes	469'	Yes	481'	Yes	540'	Yes	538'	Yes
	<i>Southbound Right-Turns</i>	630 ¹⁸¹	447'	Yes	303'	Yes	452'	Yes	318'	Yes	531'	Yes	424'	Yes	482'	Yes	385'	Yes
5. I-5 NB Ramps at Ortega Highway																		
	<i>Northbound Shared Left-Turn/Through/Right-Turn</i>	1,530'	490'	Yes	369'	Yes	500'	Yes	379'	Yes	534'	Yes	431'	Yes	516'	Yes	387'	Yes
	<i>Northbound Right-Turn</i>	740'	505'	Yes	350'	Yes	519'	Yes	363'	Yes	576'	Yes	414'	Yes	539'	Yes	371'	Yes

¹⁷⁹ Queue is based on the 95th Percentile Queue and is reported in total queue length (feet) per lane for signalized intersections.

¹⁸⁰ The southbound left-turn consists of dual lanes, the storage reported is the average of both lanes.

¹⁸¹ The southbound right-turn consists of dual lanes, the storage reported is the average of both lanes.

17.0 CONGESTION MANAGEMENT PROGRAM (CMP) COMPLIANCE ASSESSMENT

This analysis is consistent with the requirements and procedures outlined in the current *Orange County Congestion Management Program (CMP)*. The CMP requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). As noted in *Section 5.0* of this traffic study, the proposed Project is forecast to generate approximately 1,902 daily trip-ends and thus meets the criteria requiring a CMP TIA.

The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets. Therefore, the CMP TIA analysis requirements relate to the potential impacts only on the specified CMPHS, which in this case includes Ortega Highway. As described in the "Radius of Development Influence" section of the CMP TIA, the study area (i.e. CMP intersections) is recommended to be defined by the CMP links which have a project impact of three percent, or more, of their daily LOS "E" capacity.

There are two (2) CMP intersections in close proximity to the site which are as follows:

<u>Study Intersection</u>	<u>Location</u>
4	I-5 Northbound (NB) Ramps at Ortega Highway
5	I-5 Southbound (SB) Ramps at Ortega Highway

Table 17-1 summarizes the Project percentage impact CMP analysis for key roadway segment on Ortega Highway between the I-5 Northbound ramps and I-5 Southbound ramps, in the vicinity of the proposed Project. Column one (1) of *Table 17-1* shows the CMP LOS "E" Capacity for each roadway segment, column two (2) shows the Project ADT for each roadway segment, column three (3) shows the Project ADT LOS "E" capacity percentages for each roadway segment and column (4) shows whether or not added project traffic meets or exceeds the "three percent" limit.

Review of *Table 17-1* shows that the roadway segment at Ortega Highway between the I-5 Northbound Ramps and I-5 Southbound Ramps does not exceed the three percent (3%) limit, therefore a CMP analysis is not required. The purposes of the "three percent limit" is to serve as a screening tool to determine if a project may contribute a significant impact at a CMP roadway segment. As demonstrated in *Table 17-1*, the Project will not create any significant impacts on the identified CMP roadway segment.

TABLE 17-1
PROJECT PERCENTAGE RADIUS OF INFLUENCE CMP ANALYSIS

Roadway Segment	(1) CMP LOS "E" Capacity	(2) Project ADT	(3) Percentage (3) = (2) ÷ (1)	(4) Radius of Influence (Yes/No)
C. Ortega Highway, <i>between</i> I-5 NB Ramps and I-5 SB Ramps	75,000	493	0.66%	No

18.0 PARKING ANALYSIS

The parking analysis for the proposed Project, in combination with the adopted ECSP (the Ortega Hwy & El Camino Real Mixed-Use development), has been prepared in order to determine that the proposed Project could adequately meet its parking demand needs. This section of the report evaluates the Project's parking needs based on the application of City code, as well as a comparison to LLG's previous field studies of actual parking demand at existing sites with similar characteristics, and in consideration of information published in 5th Edition of *Parking Generation*, published by the Institute of Transportation Engineers (ITE) [Washington, D.C., 2019 and the "shared parking" techniques as published *Shared Parking 3rd Edition* by the Urban Land Institute (ULI).

Because of the "Transit Oriented Development" (TOD) and multimodal setting in Downtown San Juan Capistrano where the Project site is located, the parking study will need to account for these trip making and parking characteristics, which would result in a fewer number of spaces compared to what would be required by City Code, inclusive of those required in *Code Section 9-3.535 - Parking*.

Parking for the Project is regulated by the City of San Juan Capistrano's *Code Section 9-3.535 – Parking* that includes Ordinance No. 980, which is the City adopted shared parking or "Park Once" Program. The Program established shared parking/Park Once standards and land use parking ratios in the Town Center (TC) District, Town Center Edge (TCE) District, and portions of the General Commercial (GC) District and Los Rios Specific Plan for Nonresidential Properties (restaurants, retail, office, service uses) located within a 5-minute walking distance radius (i.e., approximately 1,500 linear feet of the intersection of Camino Capistrano and Forster Street) from City-owned parking lots. This Program, therefore, would allow the Project to apply the shared parking/Park Once concept and non-residential ratios (for restaurant, and health club that is presumed to be included in the service category) in calculating parking requirements for the respective commercial Project components.

18.1 Proposed Parking Supply

Based on information provided for the proposed Project and the adopted ECSP, the Ortega Hwy & El Camino Real Mixed-Use development has a proposed parking supply of 216 spaces. The Forster & El Camino Mixed-Use Development will provide a total of 179 parking spaces, comprised of 83 structured spaces in the garage, and 96 surface spaces on site. Although no on-site parking is proposed for the Performing Arts Center is proposed, parking for this Project use will be provided (shared) at the parking structure to be constructed as part of the Ortega Hwy & El Camino Real Mixed-Use Development, and if necessary, the use of the existing downtown public parking facilities within the vicinity. An inventory of the existing downtown parking facilities is illustrated in *Figure 18-1*. It should be noted that the ECSP development is replacing the current public lot on its site and also providing additional parking beyond its needs to support the public parking for the performing arts center. Performing arts center parking demand will be higher in the evening, complementing the daytime parking use of the retail, restaurant and office uses.



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SOURCE: CITY OF SAN JUAN CAPISTRANO

FIGURE 18-1



NO SCALE

EXISTING DOWNTOWN PARKING FACILITIES EL CAMINO SPECIFIC PLAN AMENDMENT, SAN JUAN CAPISTRANO

18.2 City Code Parking Requirements

The code parking calculation for the proposed Project was calculated using parking code requirements per the *City of San Juan Capistrano Municipal Code Title 9, Chapter 3, Sec. 9-3.535 Parking (g)(3) Off-street parking requirements – Residential uses and (h) Land Use Parking Ratios in the Town Center (TC) District, Town Center Edge (TCE) District, and portions of the General Commercial (GC) District and Los Rios Specific Plan for Nonresidential Properties*. According to *Ordinance No. 980* and set forth by *Exhibit “A”*, the proposed Project is located within the “Five Minute Walking Distance Radius”. **Appendix K** provides documentation of *Ordinance No. 980*. Therefore, the proposed Project is located within the Exhibit A Park Once Area and the following parking ratios were used to determine the required parking:

- **Multi-family Residences** = 2.0 spaces per dwelling unit, at least 1 of which shall be either in a garage or covered, and 0.8 spaces per dwelling unit visitor parking.
- **Restaurants (sit down and take out)** = 1.0 Parking Space per 100 square feet (SF) of dining or drinking area (kitchens, prep areas and storage are excluded from this area).
- **General Retail:** 1.0 Parking Space per 400 square feet (SF) of building area or tenant lease area
- **General Office:** 1.0 Parking Space per 400 square feet (SF) of building area or tenant lease area
- **Service Uses:** (i.e. banks, barbers, salons, spas market, grocery stores, supermarkets and similar uses) 1.0 Parking Space per 300 square feet (SF) of building area or tenant lease area
- **Theaters:** 1.0 Parking Space per each 3 seats.

It is our understanding that the parking ratios identified above already take into account reductions for “walk-in/internal capture” trips attributable to synergy between uses within the Project, and alternative modes of travel (i.e. carpool, vanpool, transit, bicycle, pedestrian).

Table 18-1 summarizes the parking requirements for the proposed Project, as well as the, the Ortega Hwy & El Camino Real Mixed-Use development based on the *City of San Juan Capistrano Municipal Code*. Please note for this analysis it is assumed that 55% of the total square-footage for restaurant uses will be used for dining/drinking area. Therefore, only 55% of the total square-footage for each restaurant use was applied to the code requirement of 1 space per 100 SF of dining/drinking area.

As shown in upper portion of *Table 18-1*, application of the above-referenced parking code ratios to the development totals, which is the gross leasable area of the adopted ECSP development component results in a total code-parking requirement of 102 spaces for the Ortega Hwy & El Camino Real Mixed-Use development. With a proposed on-site parking supply of 216 spaces, a theoretical parking surplus of 114 spaces is forecast.

For the Forster & El Camino Mixed-Use Development, the application of the City Code ratios to the residential component of the Project, and Ordinance No. 980/shared parking/Park Once ratios to the non-residential components (health club and restaurant) results in a Code-based requirement of 238 spaces for the residential (95 covered/garage spaces plus 95 uncovered spaces for residents, and 48 spaces for resident guests), and 29 spaces for the non-residential (5 spaces for the health club, and 24 spaces for the restaurant), totaling 267 spaces.

Comparing the 95-space Code requirement for covered/garage spaces against the proposed supply of 83 spaces in the garage results in a Code-based shortfall of 12 structured spaces. A comparison between the 172-space remainder in Code-required spaces (95 uncovered spaces and 48 guest spaces for residential, plus 29 spaces for the health club and restaurant) and the supply of 96 surface spaces correspond to a Code-based deficiency of 76 uncovered spaces. In the aggregate, the net Code-based deficiency totals 88 spaces for the Forster & El Camino Mixed-Use Development.

CURRENT CODE REQUIREMENTS	
<u>City Code Requirements</u>	
Resident Spaces	190 spaces
Resident Guest Spaces	48 spaces
Non-Residential Spaces	<u>29 spaces</u>
Total Code Requirement	267 spaces
<u>City Code Requirement versus Supply</u>	
Code Requirement in Garage	95 spaces
Proposed Supply in Garage	<u>- 83 spaces</u>
Code Deficiency in Garage	12 spaces
Code Requirement for Uncovered Spaces	172 spaces
Proposed Uncovered Supply	<u>- 96 spaces</u>
Code Deficiency for Uncovered Spaces	76 spaces
Total Code Requirement	267 spaces
Total Proposed On-Site Supply	<u>- 179 spaces</u>
Total Code Deficiency	88 spaces

For the proposed Performing Arts Center, a code-parking requirement of 151 spaces is calculated. When combined with the other Project components, the Project plus the adopted ECSP has a total code-parking requirement of 520 spaces. With a proposed total parking supply of 395 spaces, a theoretical parking deficiency of 125 spaces is forecast.

**TABLE 18-1
CITY OF SAN JUAN CAPISTRANO CODE PARKING REQUIREMENTS**

Project Description	Size	City of San Juan Capistrano Code Parking Ratio	Spaces Required
<u>Ortega Hwy & El Camino Real Mixed-Use Development</u>			
▪ General Office	6,927 SF	1 space per 400 SF	17
▪ Medical Office	5,345 SF	1 space per 200 SF	27
▪ General Retail	7,212 SF	1 space per 400 SF	18
▪ Restaurant	7,302 SF	1 space per 100 SF	40
Parking Requirement:			102
Parking Supply:			216
Parking Surplus/Deficiency (+/-):			+114
<u>Forster & El Camino Real Mixed-Use Community</u>			
▪ Residential – 1 bedroom	50 DU	2.0 spaces per DU	100
▪ Residential – 2 bedrooms	45 DU	2.0 spaces per DU	90
▪ Resident Guest	95 DU	0.80 spaces per DU	48
<i>Residential – Subtotal</i>			<i>238</i>
▪ Restaurant	2,362 SF	1 space per 100 SF of dining area	24
▪ Health/Fitness Club (assumes 50% non-resident use)	3,100 SF	1 space per 300 SF	5
<i>Restaurant/Health Club – Subtotal</i>			<i>29</i>
Parking Requirement:			267
Parking Supply:			179
Parking Surplus/Deficiency (+/-):			-88
<u>Performing Arts Center</u>			
▪ Theater	452 seats	1 space per 3 seats	151
Total Parking Requirement:			151
Total Parking Supply:			0
Parking Surplus/Deficiency (+/-):			-151

18.3 Comparison of Downtown/TOD Parking Ratios

In support of a parking analysis for the residential component of the Forster & El Camino Mixed-Use Development, *Table 18-2* presents a comparison of the parking ratios from the City, plus other sources, including the City of Long Beach *Downtown Plan* (adopted in January 2012) and the *Long Beach Boulevard Infill Analysis and Redevelopment Strategies*, City of San Diego, City of Santa Monica, TCRP Report 128, City of Los Angeles, and the City of Sacramento Zoning Code Parking Regulations for their Traditional District and Urban District.

Table 18-2 also presents the application of the parking ratios from each source to the Project. A “blended” parking ratio (i.e., resident + guest spaces versus the 95 total units) was derived in each column.

Going from the left-hand columns of *Table 18-2* to the right-hand columns, it can be seen that the residential ratios are reduced significantly. This trend is indicative of what more jurisdictions are now doing, which is rethinking minimum parking standards to meet sustainability goals and multimodal/Active Transportation/Park Once strategies, and encourage shared parking, transit use, bicycling, and walking. It embraces the notion that the common practice of requiring a large amount of off-street parking spaces (as what may result from the direct application of city code ratios without considering the actual physical setting, mixed-use nature of a downtown core or hub, and proximity to regional transit and shared parking facilities) leads to inefficient land use and underutilized spaces, while placing unnecessary design and financial burden on new development projects. Households in developments located in or near downtowns, that can easily access transit stations, typically own fewer vehicles, reducing the demand for residential parking in these areas. These context-specific parking demand aspects and potential parking reductions are not well represented in the residential ratios per City Code, based on the comparisons presented in *Table 18-2*.

COMPARISON TO OTHER CITIES
City Code Requirement of 267 spaces for the Project is 80% to 200% greater than in the downtown/TOD areas of other jurisdictions.

**TABLE 18-2
CITY CODE & OTHER DOWNTOWN/TOD PARKING REQUIREMENTS**

Project	Dwelling Units or SF	San Juan Capistrano City Code & Ordinance No. 980		City of Long Beach				City of San Diego		City of Santa Monica (for TODs & Downtown)		TCRP Report 128 for TODs		City of Los Angeles Code for TODs		City of Sacramento (Traditional District)		City of Sacramento (Urban District)	
				Downtown Plan (January 2012)		Long Beach Blvd. Redevelopment		Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces
				Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces	Ratio	Spaces
Multi-Family Residential																			
1-Bedroom	50	2 sp/unit	100	1 sp/unit	50	1 sp/unit	50	1.25 sp/unit	63	0.5 sp/unit	25	1.1 sp/unit	55	1 sp/unit	50	1 sp/unit	50	0.5 sp/unit	25
2-Bedroom	45	2 sp/unit	90	1 sp/unit	45	1.5 sp/unit	68	1.75 sp/unit	79	1 sp/unit	45	1.1 sp/unit	50	1 sp/unit	45	1 sp/unit	45	0.5 sp/unit	23
Total Units:	95		190		95		118		142		70		105		95		95		48
		[at least 1 sp in garage]	[95 garage, 95 surface]																
Resident Guest Parking		0.8 sp/unit	48	0.25 sp/unit	24	0.25 sp/unit	24	none	0	0.067 sp/unit	6	none	0	none	0	none	0	none	0
Residential Spaces Required		--	238	--	119	--	142	--	142	--	76	--	105	--	95	--	95	--	48
<i>Blended Parking Ratio</i>		--	<i>2.51</i>	--	<i>1.25</i>	--	<i>1.49</i>	--	<i>1.49</i>	--	<i>0.80</i>	--	<i>1.11</i>	--	<i>1.00</i>	--	<i>1.00</i>	--	<i>0.51</i>
Health Club (SF)	3,100	1 sp/300 SF building area 1 sp/100 SF dining area	5	projects < 6,000 SF	0	--	--	1 sp/1000 SF GFA	3	1 sp/500 SF GFA	6	--	--	up to 40% redux	7	--	--	--	--
Restaurant (SF)	2,362		24	are exempt	0	--	--	1 sp/1000 SF GFA	2	1 sp/500 SF GFA	5	--	--	up to 40% redux	6	--	--	--	--
Non-Residential Spaces Req'd			--	29	--	0	--	--	--	5	--	11	--	--	--	0	--	--	--
Total Spaces Required		--	267	--	119	--	--	--	147	--	87	--	--	--	95	--	--	--	--
Proposed Supply																			
Garage spaces		--	83																
Surface spaces		--	96																
			179	--	179	--	--	--	179	--	179	--	--	--	179	--	--	--	--
Surplus (+) or Deficiency (-)																			
Garage spaces		--	(12)																
Surface spaces		--	(76)																
			(88)	--	60	--	--	--	32	--	92	--	--	--	84	--	--	--	--

18.4 Comparison of Residential Parking Ratios

Notwithstanding the requirements of City Code, the actual parking requirements for multifamily residential uses have been found to be less than the City's own Code requirement as illustrated by LLG's previous field studies of actual parking demand at existing sites similar to the project, in addition to parking demand/empirical ratio compilations from other sources.

Table 18-3 presents a comparison of site development and parking ratios from various sources. The upper portion of *Table 18-3* presents twelve (12) comparable sites in Fullerton, Orange, Santa Ana, Irvine, Costa Mesa, Monrovia, Laguna Niguel, and Pasadena. Additional detail for the comparable sites is also provided inclusive of the location, development summary, parking facility type, parking supply, presence of ground floor retail, survey period, empirically derived peak parking ratio and peak hour, and the Saturday daytime peak parking ratio and peak hour.

Table 18-3 indicates that the total number of apartments units for each site ranges from 142 units to 481 units and includes a unit mix of studios, one-bedroom units, two-bedroom units, and/or three-bedroom units. Parking facilities at these locations include parking structures, parking garages, and surface lots, with a combined parking supply for residents and the public/guests ranging from 223 spaces to 1,020 spaces. In addition to on-site parking, on-street parking is also available at two (2) of the facilities. More specifically, items 6 and 7 are mixed-use developments and have a retail component within their site similar to that which is proposed as part of the Project.

Table 18-3 further indicates that parking demand surveys/observations were conducted on one to two "typical" weeknights (Tuesday, Wednesday, Thursday) at nine of the comparable sites, and on a Saturday at three of the sites. These survey time periods were selected for analyses because parking needs are the greatest during these times; more specifically, peak demand for residential uses typically occurs during weeknights compared to weekday daytime and weekend conditions. This parking demand characteristic is evident from the hourly parking profiles in the *Shared Parking* (3rd Edition) publication by the Urban Land Institute (ULI) that indicate 90% to 100% parking occupancy between 6:00 PM and 12:00 AM/midnight, and the *Parking Generation* (5th Edition) publication by the Institute of Transportation Engineers (ITE) that reports 92% to 100% parking occupancy between 10:00 PM and 6:00 AM for low/mid-rise apartments (the only residential type with this data), and that parking demand is greater during these weekday overnight hours compared to a Saturday condition. Based on these considerations, the empirical basis for the peak parking ratios reported on *Table 18-3* coincides with, and is representative of, the absolute peak parking condition for each of the surveyed sites.

The tenant and guest peak parking ratio (spaces per DU) for each of the twelve comparable sites under absolute peak conditions (occurring on a weeknight, as explained above) and Saturday daytime conditions (where available) are presented on *Table 18-3*. The array of absolute peak parking rates yields an average ratio of 1.35 spaces per unit, an 85th percentile ratio of 1.48 spaces per unit, and a 95th percentile ratio of 1.61 spaces per unit. Saturday parking ratios are less, and range between 0.97 and 1.13 spaces per unit, occurring from noon to 3:00 PM.

**TABLE 18-3
COMPARABLE SITE DEVELOPMENT AND PARKING RATIO SUMMARY**

Comparable Site	City	Address	Development Summary	Parking Facility	Parking Supply	Retail	Survey Period	Tenant & Guest Peak Parking Ratio - Spaces per DU (Peak Hour)	Tenant & Guest Saturday Daytime Peak Parking Ratio (Peak Hour)	
1	Anton Residential Mid-Rise Building	Costa Mesa	580 Anton Boulevard	250 Unit Luxury Apartments • 80 2 Bedroom Units • 170 Studio/1 Bedroom Units	Structure	438 Spaces • Residents - 330 sp. • Guests - 108 sp.	--	--	1.75 (Peak Hour N/A)	--
2	Main Street Village [a]	Irvine	2555 Main Street	481 Unit Apartments • 265 1 Bedroom Units • 200 2 Bedroom Units • 16 3 Bedroom Units	Structure	1,020 Spaces • Residents - 847 sp. • Public/Guests - 173 sp.	--	Wednesday & Thursday 10PM-12AM	1.42 (@ 12:00 AM)	--
3	279 Unit Complex [b]	Irvine	--	279 Unit Apartments • 2 Studio Units • 162 1 Bedroom Units • 115 2 Bedroom Units	Gated Structure	600 Spaces	--	Tuesday 6PM-1AM	1.36 (Peak Hour N/A)	--
4	403 Unit Complex [b]	Irvine	--	403 Unit Apartments • 326 1 Bedroom Units • 77 2 Bedroom Units	Gated Structure	643 Spaces	--	Tuesday 6PM-1AM	1.29 (Peak Hour N/A)	--
5	460 Unit Complex [b]	Orange	--	460 Unit Apartments • 256 1 Bedroom Units • 204 2 Bedroom Units	Gated Structure, Gated Surface Lot	784 Spaces	--	Tuesday 6PM-1AM	1.4 (Peak Hour N/A)	--
6	183 Unit Complex [b]	Fullerton	--	183 Unit Apartments • 129 1 Bedroom Units • 54 2 Bedroom Units	Gated Residential Structure	223 Residential Spaces	Yes	--	1.1 (Peak Hour N/A)	--
7	250 Unit Complex [b]	Santa Ana	--	250 Unit Apartments • 108 1 Bedroom Units • 145 2-3 Bedroom Units	Gated Residential Structure	453 Residential Spaces	Yes	--	0.94 (Peak Hour N/A)	--
8	Paragon at Old Town [a]	Monrovia	700 S. Myrtle Avenue	163 Unit Apartments • 82 1 Bedroom Units • 81 3 Bedroom Units	Surface Lot, On-Street Parking	404 Spaces • Residents - 329 sp. • Public/Guests - 75 sp.	--	Wednesday & Thursday 6PM-12AM	1.48 (@ 11:00 PM)	--
9	Trio Apartments [a]	Pasadena	44 N. Madison Avenue	304 Unit Apartments • 46 Studio Units • 141 1 Bedroom Units • 117 2 Bedroom Units	Surface Lot, On-Street Parking	480 Spaces • Residents - 450 sp. • Public/Guests - 30 sp.	--	Wednesday & Thursday 10PM-12AM	1.22 (@ 12:00 AM)	--
10	Adagio on the Green [d]	Mission Viejo	2660 Oso Parkway	256 Unit Apartments	Garage, Surface Lot	512 Spaces • Residents - 424 sp. • Public/Guests - 88 sp.	--	Wednesday & Thursday 7PM-2AM Saturday: 12PM-3PM, 7PM-2AM	1.45 (@ 12:00 AM)	0.97 (@ 2:00 PM & 3:00 PM)
11	Skye at Laguna Niguel [d]	Laguna Niguel	28100 Cabot Road	142 Unit Apartments • 97 1 Bedroom Units • 45 2 Bedroom Units	Garage	294 Spaces • Residents - 240 sp. • Public/Guests - 54 sp.	--	Wednesday & Thursday 7PM-2AM Saturday: 12PM-3PM, 7PM-2AM	1.49 (@ 11:00 PM)	1.07 (@ 12:00 PM)
12	Apex Laguna Niguel [d]	Laguna Niguel	27960 Cabot Road	284 Unit Apartments • 32 Studio Units • 161 1 Bedroom Units • 91 2 Bedroom Units	Garage	539 Spaces • Residents - 461 sp. • Public/Guests - 78 sp.	--	Wednesday & Thursday 7PM-2AM Saturday: 12PM-3PM, 7PM-2AM	1.28 (@ 2:00 AM)	1.13 (@ 3:00 PM)
Average:								1.35		
85th Percentile:								1.48		
95th Percentile:								1.61		
Additional Parking Ratio References:										
ITE <i>Parking Generation</i> , 5th Edition (Jan 2019) Mid-Rise Apartment (< 1/2 mile to rail transit)										
Average:								1.15		
85th Percentile:								1.37		
Household Surveys in San Bernardino and Riverside [c]								1.45		
Residential Component of the Project Parking Calculation Using Empirical Rates Above (95 DUs)										
Average Demand (1.35 x 95 DUs):								128		
85th Percentile Demand (1.48 x DUs):								141		
95th Percentile Demand (1.61 x DUs):								153		

Notes:

[a] Source: *Parking Demand Analysis for the Proposed Fifth Avenue/Huntington Drive Mixed-Use Project City of Monrovia, California*, prepared by LLG, Oct. 2012

[b] Source: *Parking Study for AMLI Orange Apartment Project*, prepared by IBI Group, Nov. 2012

[c] Source: *Parking Reform Made Easy*, Richard W. Willson, 2013

[d] Source: Counts collected by LLG on December 2016.

Given that these sites are comparable in terms of apartment unit mix (i.e. one-bedroom, two-bedroom), LLG concludes that the parking ratios derived from the twelve comparable sites are accurate representations for the unique parking characteristics of the proposed Project that are not reflected in the City Code ratios.

ITE's *Parking Generation* publication, as well as other reference materials for San Bernardino County and Riverside County, provide peak parking ratios for apartment complexes, as summarized in the lower portion of *Table 18-3*. These parking ratios range from 1.15 spaces per unit (average ratio per ITE for mid-rise apartments located less than 1/2 miles to/from transit facilities similar to the Project) to 1.45 spaces per unit (household surveys in San Bernardino and Riverside).

In order to provide more context behind the location and parking-related characteristics for sample sites in *Table 18-3*, we have compiled the following information with regards to land use setting, proximity to public transit, and availability of off-site parking (i.e., on-street spaces, nearby off-site parking spaces):

Main Street Village: 2555 Main Street, Irvine (1.42 sp per DU)

There is no on-street parking or other public parking facilities in the immediate vicinity of the site. There are existing bus stops located nearby, specifically at the intersections of Siglo/Main Street and Jamboree Road/Main Street. The nearest Park & Ride lot is located about 1.5 miles to the southeast of Main Street Village, near the intersection of Culver Drive at Sandburg Way. The adjoining land uses to Main Street Village consist of mostly office and residential uses.

Paragon at Old Town: 700 S. Myrtle Avenue, Monrovia (1.48 sp per DU)

On-street parking is generally permitted in the vicinity of the site, most notably along Myrtle Avenue (north of Walnut Avenue), Olive Avenue, Walnut Avenue, and Ivy Avenue. The nearest existing bus stop is located at the intersection of Primrose Avenue/Walnut Avenue. An existing Park & Ride lot and Metro Light Rail station is located about 0.7 miles to the south of Paragon at Old Town, near the intersection of Myrtle Avenue/Duarte Road. The adjoining land uses to Paragon at Old Town consist of shopping/food uses to the north, residential uses to the east, and office/warehouse building to the south and west.

Adagio on the Green: 2660 Oso Parkway, Mission Viejo (1.45 sp per DU)

There is no on-street parking or other public parking facilities in the immediate vicinity of the site. Existing bus stops are located nearby, specifically at the intersections of Country Club Drive/Oso Parkway and Marguerite Parkway/Oso Parkway. There is no Park & Ride facility in the nearby vicinity of Adagio on the Green. The adjoining land uses to Adagio on the Green consist of mostly residential uses, with a golf course to the north and south of Oso Parkway and some commercial uses.

Based on the above descriptions of three existing sites that have peak parking demand ratios corresponding to 1.42, 1.48, and 1.45 spaces per DU, it can be seen that these residential developments are not located in a TOD/Transit-Oriented Development (not within 1/2 miles of regional transit), and there are no off-site parking nearby (which can reduce on-site parking needs).

Trio Apartments: 44 N. Madison Avenue, Pasadena (1.22 sp per DU)

On-street parking is generally permitted in the vicinity of the site, most notably along Madison Avenue, Colorado Boulevard, and Union Street. Further, several paid public parking lots are located nearby, including on the west side of Madison Avenue and a few south of Colorado Boulevard. Existing bus stops are located at the intersection of El Molino Avenue/Union Street, as well as various bus stops located Colorado Boulevard. An existing Park & Ride lot is located about 0.5 miles to the northwest of Trio Apartments, near the intersection of Marengo Avenue/Walnut Street. Further, existing Metro Light Rail stations are located at Lake Street/I-210 Freeway (about 0.5 miles from Trio Apartments) and near Raymond Avenue/Holly Street (about 0.5 miles from Trio Apartments). The adjoining land uses to Trio Apartments consist of mostly office and commercial uses.

Apex Laguna Niguel: 27960 Cabot Road, Laguna Niguel (1.28 sp per DU)

There is no on-street parking or other public parking facilities in the immediate vicinity of the site. The nearest existing bus stop is located at the intersection of Cabot Road/Crown Valley Parkway. An existing Park & Ride lot and Metrolink train station is located about 0.3 miles to the southeast from Apex Laguna Niguel, along Forbes Road. The adjoining land uses to Apex Laguna Niguel consist of mostly residential uses, with commercial uses to the east.

Based on the above descriptions of two existing sites that have peak parking demand ratios corresponding to 1.22 and 1.28 spaces per DU, locational and parking-related characteristics indicate that they are within 1/2 miles of regional transit, but with no off-site parking nearby, which can reduce on-site parking needs.

The bottom portion of *Table 18-3* estimates the project's parking needs based on the application of the average, 85th percentile, and 95th percentile parking rates from comparable sites. For the 95 units as now proposed, it is estimated that the average demand would be 128 spaces, the 85th percentile demand would be 141 spaces, and the 95th percentile demand would be 153 spaces.

The 85th percentile demand ratio of 1.48 spaces per DU is considered to be a solid, context-sensitive/empirical-based factor in estimating the parking needs of the residential component of the Project. Its application is also conservative, given that the three comparable sites (with peak demand ratios of 1.42, 1.48, and 1.45 spaces per DU) are not located in a TOD area, unlike the Project, and that the two sites located within 1/2 miles of transit, like the Project, have peak demand ratios of 1.22 and 1.28 spaces per DU.

Please note that the recommended residential parking ratio of 1.48 spaces per DU is consistent with the parking ratio contained in *Table 2.3: Parking Requirements of the El Camino Specific Plan*.

PARKING RATIO RECOMMENDATION
1.48 spaces per DU recommended based on empirical studies
of comparable sites

18.5 Parking Demand Versus Supply

Table 18-4 presents a comparison between the City Code requirements for the Forster & El Camino Mixed-Use Development, and the application of the empirical (85th percentile) ratio of 1.48 spaces per DU (from *Table 18-3*) for the residential component, plus City Code ratios for the non-residential components (health club, restaurant). As reported on *Table 18-2*, the residential parking ratio in TOD areas/multimodal settings in other jurisdictions for resident guests is 0.25 spaces per DU; therefore, this was applied in the parking demand calculation for the Project as indicated in *Table 18-4*.

The far-right column of *Table 18-4* indicates that the application of the empirical (85th percentile) ratio of 1.48 spaces per DU to the 95 DU results in a total (resident plus guest) residential demand of 141 spaces. The application of Ordinance No. 980/shared parking/Park Once ratios to the non-residential components (health club and restaurant) results in an additional demand of 29 spaces. The overall demand for the Forster & El Camino Mixed-Use Development totals 170 spaces, which corresponds to a surplus of 9 spaces when compared to the proposed supply of 179 spaces.

CODE vs. ACTUAL NEED		
	<u>City Code</u>	<u>Empirical Calculation</u>
Resident Spaces	190 spaces	117 spaces
Resident Guest Spaces	48 spaces	24 spaces
Non-Residential Spaces	<u>29 spaces</u>	<u>29 spaces</u>
Total	267 spaces	170 spaces
Demand vs. 179-space Supply	88-space Deficiency	9-space Surplus

**TABLE 18-4
PARKING SUMMARY FOR FORSTER & EL CAMINO MIXED-USE**

		City Code & Ordinance No. 980		Parking Calculation for the Project	
Project	DU or SF	Parking Ratio	Spaces	Parking Ratio	Spaces
Multi-Family Residential					
1-Bedroom	50 DU	2 sp/unit	100	1.48 spaces per unit	141
2-Bedroom	45 DU	2 sp/unit	90	<i>per Table 17-3 85th percentile demand]</i>	
Total Units:	95 DU		190		
		<i>[at least 1 sp in garage]</i>	<i>[95 garage, 95 surface]</i>	Resident Guest @ 0.25 sp/unit:	24
				Resident Demand (141 sp - 24 sp):	117
Resident Guest Demand					
		0.8 sp/unit	48		
Total Residential Demand					
		--	238		141
Health Club (SF) 3,100 SF (assumes 50% resident use)					
		1 sp/300 SF of building area <i>[per City Ordinance 980]</i>	5	1 sp/300 SF of building area <i>[per City Ordinance 980]</i>	5
Restaurant (SF) 2,362 SF					
		1 sp/100 SF of dining area <i>[per City Ordinance 980]</i>	24	1 sp/100 SF of dining area <i>[per City Ordinance 980]</i>	24
Total Non-Residential Demand					
			29		29
Total Demand					
		--	267		170
Proposed Supply					
Garage spaces		--	83	--	83
Surface spaces		--	96	--	96
			179		179
Surplus (+) or Deficiency (-)					
Garage spaces		--	(12)	--	9
Surface spaces		--	(76)		
			(88)		

18.6 Shared Parking Analysis

To assess the expected parking demands of the Project, in combination with the adopted ECSP (the Ortega Hwy & El Camino Real Mixed-Use development), the shared parking methodology is concluded to be applicable to a mixed-used development such as El Camino Specific Plan Amendment since the proposed individual land use types (i.e., restaurant, office, retail shops, health club, performing arts center, etc.) operate differently and experience peak demands at different times of the day, day of the week and month of the year. As noted earlier, parking for the Performing Arts Center use is expected to be shared with other components of the Project and be provided at the parking structure to be constructed as part of the Project as well as at existing downtown public parking facilities within the vicinity. This use's parking demand will be higher in the evening, complementing the daytime parking use of the retail, restaurant and office uses.

Parking experience indicates that combining different land uses, whose parking demands peak at different times (of the day, week, and year), generally result in a parking demand that is significantly lower than “stand-alone” or “free-standing” facilities. In other words, a mixed-use development results in an overall parking need that is less than the sum of the individual peak parking requirements for each land use (parking ratios/factors specific to each land use, or city parking code rates are typically applied to these “stand-alone” developments).

The City's shared parking/Park Once concept is based on the analytical procedures that are well documented in the Urban Land Institute's (ULI's) *Shared Parking, 3rd Edition* publication. The publication defines Shared Parking as “parking space that can be used to serve two or more individual land uses without conflict or encroachment.” Therefore, Shared Parking calculations recognize that when different uses share a common parking footprint, the total number of spaces needed to support the collective whole is determined by adding the different parking profiles (by time of day or day of week) of each use comprising the mixed-use development. This is done rather than applying individual peak ratios to each land use component.

Key inputs in the shared parking analysis for each land use include:

- Peak parking demand by land use for visitors and employees.
- Adjustments for alternative modes of transportation, if applicable.
- Adjustment for internal capture (captive versus non-captive parking demand), if applicable.
- Hourly variations of parking demand.
- Weekday versus weekend adjustment factors
- Monthly adjustment factors to account for variations of parking demand over the year.
- Applicable parking ratios published in (*City of San Juan Capistrano Municipal Code, Title 9, Chapter 3, Sec. 9-3.535 Parking*)

Please note that for this analysis, no monthly for alternative modes of transportation or adjustment factors to account for variations of parking demand over the year were applied to provide a conservative parking demand forecast.

18.7 Shared Parking Ratios and Profiles

The hourly parking demand profiles (expressed in percent of peak demand) utilized in this analysis and applied to the Project and the adopted ECSP are based on profiles developed by the Urban Land Institute (ULI) and published in *Shared Parking, 3rd Edition*. The ULI publication presents hourly parking demand profiles for several general land uses: office, retail, restaurant, health club, performing arts center, residential (Central Business District: CBD and non-CBD), hotel (consisting of separate factors for guest rooms, restaurant/lounge, conference room, and convention area), etc. These factors present a profile of parking demand over time and have been used directly, by land use type, in the analysis of this project. The ULI profiles of parking demand have been used directly, by land use type, in the analysis of this site and are applied to the City's applicable parking ratio.

The ULI retail use profiles are applied directly. In doing so, there is an intermediate step in expressing ULI profiles as a percentage of the week-long peak, thus arriving at a weekday profile and weekend profile each expressed as a percentage of the baseline parking ratio (ULI actually starts with separate ratios for weekday and weekend day, and develops profiles for each; accordingly, we have found it more convenient to translate both profiles to a percent of expected maximum demand, which, for retail, turns out to be on a Saturday). The resulting profiles represent the most likely hourly parking demand profile and are applied to the City's retail parking ratio of 1 space per 400 SF. Peak demand for retail uses occurs between 12:00 PM–2:00 PM on weekdays, and 1:00 PM–3:00 PM on weekends.

The ULI *Shared Parking* publication includes several categories for restaurants. For this analysis, the parking profile for fine/casual dining restaurant and family restaurant were all utilized as these categories match the proposed restaurant mix for the Project. Like the retail profiles, the restaurant profiles are derived exactly from the ULI baseline. The restaurant-parking ratio utilized in this analysis exactly matches the City code rate of 1 space per 100 SF of floor area of dining area where food consumption is primarily on-site. According to the *Shared Parking* publication, casual/fine dining restaurant uses are shown to experience peak demand between 7:00 PM and 10:00 PM on weekdays, and 8:00 PM and 9:00 PM on weekends, whereas a family restaurant uses peak demand occurs between 12:00 PM and 1:00 PM on weekdays and weekends.

For the office component, profiles were also directly derived from ULI. For office uses peak demand occurs between 10:00 AM and 11:00 AM on weekdays, and again between 2:00 PM and 3:00 PM. Office demand for a weekend peaks between 11:00AM and 12:00PM. The peak-parking ratio for office uses exactly equals the City's Parking Code requirement of 1 space per 400 SF.

The health club profiles were derived from ULI. For health clubs, the peak demand occurs between 6:00 PM – 7:00 PM on weekdays and 5:00 PM – 7:00 PM on weekends. The health club ratio utilized in this analysis matches the City code ratio of 1 space per 300 SF for service uses.

The performing art center profiles were also directly derived from ULI. The peak-parking ratio for this use (1 space per 3 seats) exactly equals the City's Parking Code requirement. Peak demand for

this use occurs between 8:00 PM–10:00 PM on weekdays on weekends. As a part of this evaluation, the concurrent use of the Main Auditorium (352 seats) and the Black Box theater (100 seats) is assumed in this analysis to provide a conservative analysis.

For residential, the parking profile in the ULI publication was used and applied to the empirical (85th percentile) ratio of 1.48 spaces per unit to forecast weekday and weekend hourly demand of the Project's residential component. Please note that the parking profiles are separated based on guest parking and reserved non-guest spaces. Peak demand for residential guests occurs between 7:00 PM–11:00 PM on both weekdays and weekends.

18.8 Application of Shared Parking Methodology – Proposed Project

Tables 18-5 and *18-6* present the overall weekday and weekend parking demand profiles for the adopted ECSP and the Project based on the shared parking methodology, assuming full occupancy, for the hours of 6:00 AM to midnight. Section (1) through (3) of *Tables 18-5* and *18-6* summarizes the parking accumulation characteristics and parking demand for the adopted ECSP (the Ortega Hwy & El Camino Real Mixed-Use development) and the two components of the Project, the Performing Arts Center, and the Forster & El Camino Mixed-Use Development, respectively. Sections (4) and (5) presents the expected joint-use parking demand for the three Project components on an hourly basis and the hourly parking surplus/deficiency compared to total parking supply of 395 spaces.

Based on our experience, the shared parking approach summarized in these tables are believed to be the most appropriate in evaluating the parking supply-demand relationships for the entire Project, especially since parking for the proposed Performing Arts Center is expected shared with the other two components. *Appendix L* contains the shared parking analysis calculation worksheets for the site for a weekday and weekend day parking scenario.

18.9 Shared Parking Analysis Results and Conclusions

Review of Sections (1) of *Tables 18-5* and *18-6* shows that the peak parking demand for the Ortega Hwy & El Camino Real Mixed-Use development total 93 spaces on a weekday and 82 spaces on a weekend, however, when combined with parking demand of the Performing Arts Center, these two Project uses have a peak parking demand of 188 spaces at 9:00 PM during the weekday and weekend (see Section 2 of *Tables 18-5* and *18-6*). Based on a parking supply of 216 spaces, a parking surplus of 28 spaces would result during the weekday and weekend peak hours, respectively. Much greater parking surpluses are forecast during all other hours of a weekday and weekend.

For the Forster & El Camino Real Mixed-Use development, a review of Section 3 of *Table 18-5* indicates a peak demand of 163 spaces (at 8:00 PM) under weekday conditions, which translates to a surplus of 16 spaces in comparison to the 179-space supply. Parking surpluses would be greater during all other hours of a weekday. As shown in *Table 18-6* in Section 3, the peak demand during weekend conditions is forecast to total 165 spaces (at 7:00 PM and 8:00 PM), which is slightly more than weekday conditions. When compared against the future supply of 179 spaces, the 165-space

demand constitutes a surplus of 14 spaces under weekend conditions (parking surpluses would be greater during all other hours of a weekend day).

When the adopted ECSP and the Project's components are evaluated as a whole, the peak parking demand totals 353 spaces at 9:00 PM during the weekend. Based on a total parking supply of 395 spaces, the Project is in balance with a forecast surplus of 42 spaces during the weekend peak hour. Parking surpluses are forecast during all other hours of a weekday and weekend (see Sections 4 and 5 of *Tables 18-5 and 18-6*).

Our findings above indicate that the proposed parking supply for the Project would be adequate in meeting the overall future parking demand of the Project, and that it would be reasonable and enforceable for all Project components to share the parking facilities. Consequently, there is adequate parking on site to accommodate the proposed Project.

Nevertheless, to maintain adequate parking supply at all times, it is recommended that a Parking Management Plan (PMP) be implemented to ensure parking is available for all users, inclusive of patrons of the Performing Arts Center, based on the actual needs of the Project, and when the use of off-site / public parking facilities or implementation of a valet/valet program may be warranted.

**TABLE 18-5
WEEKDAY SHARED PARKING DEMAND SUMMARY [1]**

Land Use	(1) Ortega Highway & El Camino Real Mixed-Use (ADOPTED EL CAMINO SPECIFIC PLAN)						(2) Performing Arts Center (PROPOSED PROJECT)			(3) Forster & El Camino Mixed-Use (PROPOSED PROJECT)								(4) Northern Plus Southern Plus Performing Arts Shared Parking Demand	(5) Comparison w/ Parking Supply 395 Spaces Surplus (Deficiency)
	Retail	Family Restaurant	Medical/Dental Office	Office	Northern Area Shared Parking Demand	Comparison w/ Parking Supply 216 Spaces Surplus (Deficiency)	Performing Arts Center	Performing Arts Plus	Comparison w/ Parking Supply 216 Spaces Surplus (Deficiency)	Fine/Casual Dining	Health Club	Reserved Residential - 1 Bedroom	Unreserved Residential - 1 Bedroom	Reserved Residential - 2 Bedrooms	Unreserved Residential - 2 Bedrooms	Southern Area Shared Parking Demand	Comparison w/ Parking Supply 179 Spaces Surplus (Deficiency)		
Size Pkg Rate[2]	7.212 KSF 2.5 /KSF	4.016 KSF 10 /KSF	5.345 KSF 5.0 /KSF	6.927 KSF 2.5 /KSF			452 Seats 0.33 /Seat	149 Spc.		Northern Area Shared Parking Demand	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces			Number of Spaces	Number of Spaces
Gross Spaces	18 Spc.	40 Spc.	27 Spc.	17 Spc.	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces					
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces					
6:00 AM	0	12	0	0	12	204	0	12	204	0	4	50	5	45	5	109	70	121	274
7:00 AM	1	22	2	2	27	189	3	30	186	1	3	50	6	45	6	111	68	141	254
8:00 AM	3	26	25	8	62	154	3	65	151	1	3	50	7	45	6	112	67	177	218
9:00 AM	6	31	25	15	77	139	6	83	133	2	4	50	7	45	6	114	65	197	198
10:00 AM	10	35	27	17	89	127	6	95	121	5	4	50	6	45	5	115	64	210	185
11:00 AM	13	37	27	16	93	123	6	99	117	9	5	50	6	45	5	120	59	219	176
12:00 PM	17	40	14	14	85	131	9	94	122	16	4	50	6	45	5	126	53	220	175
1:00 PM	17	37	25	14	93	123	9	102	114	16	4	50	6	45	5	126	53	228	167
2:00 PM	16	23	27	16	82	134	9	91	125	14	4	50	6	45	5	124	55	215	180
3:00 PM	15	20	27	15	77	139	9	86	130	9	4	50	6	45	5	119	60	205	190
4:00 PM	15	20	25	14	74	142	9	83	133	11	5	50	6	45	5	122	57	205	190
5:00 PM	15	31	23	10	79	137	9	88	128	17	5	50	9	45	9	135	44	223	172
6:00 PM	15	33	18	4	70	146	27	97	119	20	6	50	14	45	13	148	31	245	150
7:00 PM	14	33	8	2	57	159	54	111	105	21	5	50	21	45	19	161	18	272	123
8:00 PM	11	33	4	1	49	167	139	188	28	21	5	50	22	45	20	163	16	351	44
9:00 PM	8	25	0	0	33	183	139	172	44	21	3	50	22	45	20	161	18	333	62
10:00 PM	3	22	0	0	25	191	8	33	183	20	2	50	23	45	21	161	18	194	201
11:00 PM	2	29	0	0	31	185	3	34	182	16	1	50	19	45	18	149	30	183	212
12:00 AM	0	11	0	0	11	205	1	12	204	6	0	50	14	45	13	128	51	140	255

Notes:
 [1] Source: ULI - Urban Land Institute "Shared Parking," Third Edition, 2020.
 [2] Parking rates for all land uses based on City code.

**TABLE 18-6
WEEKEND SHARED PARKING DEMAND SUMMARY [1]**

Land Use	(1) Ortega Highway & El Camino Real Mixed-Use (ADOPTED EL CAMINO SPECIFIC PLAN)						(2) Performing Arts Center (PROPOSED PROJECT)			(3) Forster & El Camino Mixed-Use (PROPOSED PROJECT)								(4) Northern Plus Southern Plus Performing Arts Shared Parking Demand	(5) Comparison w/ Parking Supply 395 Spaces Surplus (Deficiency)
	Retail	Family Restaurant	Medical/Dental Office	Office	Northern Area Shared Parking Demand	Comparison w/ Parking Supply 216 Spaces Surplus (Deficiency)	Performing Arts Center	Performing Arts Plus Northern Area Shared Parking Demand	Comparison w/ Parking Supply 216 Spaces Surplus (Deficiency)	Fine/Casual Dining	Health Club	Reserved Residential - 1 Bedroom	Unreserved Residential - 1 Bedroom	Reserved Residential - 2 Bedrooms	Unreserved Residential - 2 Bedrooms	Southern Area Shared Parking Demand	Comparison w/ Parking Supply 179 Spaces Surplus (Deficiency)		
Size Pkg Rate[2]	7.212 KSF 2.5 /KSF	4.016 KSF 10 /KSF	5.345 KSF 5.0 /KSF	6.927 KSF 2.5 /KSF			452 Seats 0.33 /Seat	149 Spc.	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces			Number of Spaces	Number of Spaces
Gross Spaces	18 Spc.	40 Spc.	27 Spc.	17 Spc.	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces				
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces				
6:00 AM	0	6	0	0	6	210	0	6	210	0	4	50	5	45	5	109	70	115	280
7:00 AM	2	13	2	0	17	199	3	20	196	1	2	50	9	45	8	115	64	135	260
8:00 AM	6	19	25	1	51	165	3	54	162	1	2	50	8	45	7	113	66	167	228
9:00 AM	10	28	25	1	64	152	6	70	146	2	2	50	8	45	7	114	65	184	211
10:00 AM	13	36	27	1	77	139	6	83	133	2	2	50	8	45	7	114	65	197	198
11:00 AM	17	36	27	2	82	134	6	88	128	5	2	50	8	45	7	117	62	205	190
12:00 PM	17	39	14	1	71	145	9	80	136	13	2	50	7	45	6	123	56	203	192
1:00 PM	18	34	0	1	53	163	47	100	116	14	2	50	7	45	6	124	55	224	171
2:00 PM	18	27	0	1	46	170	108	154	62	11	1	50	7	45	6	120	59	274	121
3:00 PM	17	18	0	1	36	180	108	144	72	11	2	50	7	45	6	121	58	265	130
4:00 PM	17	19	0	0	36	180	9	45	171	11	3	50	8	45	7	124	55	169	226
5:00 PM	15	26	0	0	41	175	9	50	166	16	4	50	12	45	11	138	41	188	207
6:00 PM	14	29	0	0	43	173	27	70	146	22	4	50	15	45	14	150	29	220	175
7:00 PM	13	29	0	0	42	174	57	99	117	23	3	50	23	45	21	165	14	264	131
8:00 PM	12	27	0	0	39	177	149	188	28	24	2	50	23	45	21	165	14	353	42
9:00 PM	10	14	0	0	24	192	149	173	43	22	1	50	23	45	21	162	17	335	60
10:00 PM	6	12	0	0	18	198	8	26	190	22	0	50	23	45	21	161	18	187	208
11:00 PM	2	8	0	0	10	206	3	13	203	22	0	50	20	45	19	156	23	169	226
12:00 AM	0	6	0	0	6	210	1	7	209	13	0	50	15	45	14	137	42	144	251

Notes:
 [1] Source: ULI - Urban Land Institute "Shared Parking," Third Edition, 2020.
 [2] Parking rates for all land uses based on City code.

18.10 Parking Management Plan

To ensure adequate parking is provided for both tenants, patrons/customers, employees and guests of the Project and the adopted ECSP, it is recommended that when the Property Owner and/or Property Management Company deems it necessary, the following key Parking Management Strategies be considered for implementation by the Property Owner and/or Property Management Company:

- The PMP should identify where the retail/commercial employees park within the site.
- The PMP should identify where location of short-term parking spaces for service retail uses and/or food uses (take-out/curb side service, etc.).
- The PMP should restrict residents to park in their assigned spaces and provide parking to accommodate resident guest and unassigned resident parking needs.
- The PMP should restrict vehicles from exceeding the time restriction on the short-term parking.
- The PMP should provide rules of conduct for tenants and guest to abide by. Strict enforcement shall be adhered to.
- Parking information related to the performing arts center should be provided to customers/patrons prior to each event via their website and/or by other means (i.e. email, back of each ticket, etc.).

The PMP should consider the following Parking Goals:

1. Provide all resident and guest parking spaces onsite.
2. Provide flexible onsite parking opportunities for mixed commercial and resident parking that respect both commercial tenants and guest parking needs.
3. Enact policies that promote parking efficiencies and effective communication between Property Management, commercial tenants and project residents.
4. Enact policies of enforcement by Property Management that are sufficiently flexible to meet current and changing parking demands, while imposing penalties, if necessary.

18.10.1 PMP Measures

Although not anticipated, the following measures are available for implementation by the Property Owner and/or Property Management Company of the Project to further mitigate any parking impacts or deficiencies in the event the proposed onsite parking demand is determined to be greater than what is provided.

Retail/Commercial Component

1. The Property Owner/Property Management Company will work with tenants of the retail center to implement an employee parking program, with the goal of providing convenient and accessible shopping experience for the customers of the retail center and to leave the most desirable parking spaces for use by customers. The location of designated employee parking spaces will be developed in collaboration between Property Owner/Property Management

Company and the tenants. The employee parking spaces will be identified with a white or yellow circle. It is noted that these spaces will be open for customer use.

2. The Property Owner/Property Management Company will work with tenants of the retail center to identify the need for “short term/time restricted spaces” on an as need basis, dependent on the needs of the proposed retail and/or food use. These short-term spaces will most likely be designated in close proximity to the use for which it is intended. The short-term spaces may be used for “curbside/take out” and/or for service retail-type users. The number and location of spaces will be determined by Property Owner/Property Management Company and the potential tenants.

Residential Component

3. The Property Owner/Property Management Company shall assign one (1) parking space to every unit. The Property Owner/Property Management Company shall determine the allocation of parking spaces for resident tenants and location of guest parking spaces, inclusive of spaces designated and signed for prospective resident tenants. Resident may not park more than two (2) vehicles in the complex unless authorized by the Project Owner/Project Management Company.
4. Every resident will be required to register their vehicle. The registered owner must be a lease holding resident. No permits will be issued to non-lease holders, or vehicles not registered to a lease holder. This registration will be updated annually at the time of recertification. If valid permit is not obtained from the Property Owner/Property Management Company and is not properly displayed, the vehicle may be towed at the owners’ expense.
5. Vehicles lacking current registration will not be issued a permit. Vehicles that have lapsed registration will be towed by the Property Owner/Property Management Company. The storage of inoperable or unregistered vehicles is prohibited.
6. If you obtain a new vehicle, you must provide new registration, and will be given a new permit (transferring permits is not permissible).
7. Vehicles may not occupy unassigned spaces for more than twenty-four (24) hours, without contacting the leasing office in advance. Violators are subject to towing at the vehicle owner’s expense.
8. Each household will be provided with monthly guest parking permits (amount to be determined) by the Property Owner/Property Management Company, which would reset the 1st of every month. Resident guests will be able to park, on a first come first serve basis, within the spaces designated for guest parking. The resident guest parking permit must always be displayed.
9. Violation of the PMP strategies contained herein may result in the towing of the vehicle at the vehicle owner’s expense.

Performing Art Center

10. The Property Owner/Property Management Company will disseminate wayfinding information directing patrons where to park, and implement, based on actual needs of the Performing Arts Center, a valet/valet operations program when warranted.

Retail/Commercial, Residential & Performing Art Center Components

11. The parking conditions for the Project will be reviewed/monitored on a quarterly basis by the Property Owner/Property Management Company and appropriate actions detailed above will be taken to ensure that the necessary PMP measures are being implemented.

Through this monitoring and cooperation with the residents and tenants as a result of the quarterly review/monitoring, a partnership will be formed to ensure that residential tenants and retail employees and Management Company personnel on the property work together to ensure adequate parking is available.