
Appendix B-1

Local Mobility Analysis

**Paseo Montril (55 Multi-Family Homes)
City of San Diego (PTS 658273)
Paseo Montril East End Cul-De-Sac
San Diego, California**

Local Mobility Analysis Report

**September 25, 2020
Revised March 14, 2022**

Prepared for:

Tri Pointe Homes
13400 Sabre Springs Pkwy #200
San Diego, CA 92128

Prepared by Justin Rasas (TR 2135) a principal with:



LOS Engineering, Inc.

11622 El Camino Real, Suite 100, San Diego, CA 92130
Phone 619-890-1253

Job #1730



Stilled on 3/14/2022

Table of Contents

Executive Summary	v
1.0 Introduction.....	1
2.0 Local Mobility Analysis Methodology	4
3.0 Pedestrian Analysis.....	7
4.0 Bicycle Analysis	9
5.0 Transit Analysis	10
6.0 Systemic Safety Analysis	11
7.0 Vehicular Analysis	12
7.1 Study Scenarios	12
7.2 Traffic Analysis Methodology.....	12
7.2.1 Intersections.....	12
7.2.2 Street Segments	13
7.2.3 Project Traffic Effects.....	14
7.3 Existing Conditions	15
7.3.1 Existing Street System	15
7.3.2 Existing Traffic Volumes and LOS Analyses	17
7.4 Project	20
7.4.1 Project Trip Generation and Distribution.....	20
7.4.2 Project Construction Traffic	23
7.4.3 Parking.....	24
7.5 Near-Term Opening Day (Year 2024) without Project Conditions.....	26
7.6 Near-Term Opening Day (Year 2024) with Project Conditions	33
7.7 Near-Term Opening Day (Year 2024) with Project Construction Traffic Conditions	35
7.8 Horizon Year 2050 without Project Conditions.....	37
7.9 Horizon Year 2050 with Project Conditions.....	40
8.0 Conclusions.....	42

List of Figures

Figure 1: Project Location.....	2
Figure 2: Site Plan	3
Figure 3: LMA Study Area	6
Figure 4: Existing Conditions	16
Figure 5: Existing Volumes	18
Figure 6: Project Distribution	21
Figure 7: Project Assignment	22
Figure 8: Project Construction Traffic Assignment.....	25
Figure 9: Cumulative Project Locations.....	28
Figure 10: Cumulative Project Volumes.....	29
Figure 11: Near-Term Opening Day (Year 2024) Volumes (without Cumulative Projects)	30
Figure 12: Near-Term Opening Day (Year 2024) +Cumulative without Project Volumes	31
Figure 13: Near-Term Opening Day (Year 2024) with Project Volumes	34
Figure 14: Near-Term Opening Day (Year 2024) with Project Construction Volumes.....	36
Figure 15: Horizon Year 2050 without Project Volumes.....	38
Figure 16: Horizon Year 2050 with Project Volumes.....	41

List of Tables

Table 1: Weekday Bus Service Operations and Frequency	10
Table 2: Weekend Bus Service Operations and Frequency	10
Table 3: Systemic Hotspot Summary	11
Table 4: Intersection Level of Service Definitions (6 th Edition HCM)	13
Table 5: Street Segment Daily Capacity and LOS (City of San Diego).....	13
Table 6: City of San Diego Traffic Effect Triggers for Potential Roadway Improvements.....	14
Table 7: Growth Factor Calculations	17
Table 8: Existing Intersection LOS	19
Table 9: Existing Segment ADT Volumes and LOS.....	19
Table 10: Project Trip Generation	20
Table 11: Construction Trip Generation	24
Table 12: Project Parking Summary.....	24
Table 13: Cumulative Projects Trip Generation	27
Table 14: Near-Term Opening Day (Year 2024) without Project Intersection Level of Service	32
Table 15: Near-Term Opening Day (Year 2024) without Project Segment Volumes and Level of Service	32
Table 16: Near-Term Opening Day (Year 2024) with Project Intersection LOS	33
Table 17: Near-Term Opening Day (Year 2024) with Project Segment ADT Volumes and LOS	33
Table 18: Near-Term Opening Day (Year 2024) with Project Construction Intersection LOS.....	35
Table 19: Near-Term Opening Day (Year 2024) with Project Construction Segment ADT Volumes and LOS.....	35
Table 20: Horizon Year 2050 Segment ADT Volume Comparison.....	37
Table 21: Horizon Year 2050 Intersection Volume Comparison	37
Table 22: Horizon Year 2050 without Project Intersection Level of Service	39
Table 23: Horizon Year 2050 without Project Segment Volumes and Level of Service	39
Table 24: Horizon Year 2050 with Project Intersection Level of Service.....	40
Table 25: Horizon Year 2050 with Project Segment Volumes and Level of Service	40

Appendices

Appendix A.....	Local Mobility Analysis ½ Mile Study Area Extent
Appendix B.....	Excerpts from City of San Diego Bicycle Master Plan Update and Community Plan
Appendix C.....	Transit Map and Schedules
Appendix D.....	City of San Diego Roadway Segment Capacity Table
Appendix E.....	Excerpts from City of San Diego TSM for Roadway Improvement Criteria
Appendix F.....	Rancho Penasquitos Community Plan Roadway Classifications
Appendix G.....	Historical and Existing Count Data
Appendix H.....	Signal Timing Sheets
Appendix I.....	Existing LOS
Appendix J.....	Project Distribution Calculation
Appendix K.....	Cumulative Project Information
Appendix L.....	Opening Year 2024 without Project LOS
Appendix M.....	Opening Year 2024 with Project LOS
Appendix N.....	Opening Year 2024 with Project Construction Traffic LOS

Appendix O..... Horizon Year 2050 Volumes
Appendix P Horizon Year 2050 without project LOS
Appendix Q..... Horizon Year 2050 with Project LOS

Executive Summary

Paseo Montril 55 Multi-Family Homes (PTS 658273)

The proposed project is 55 multi-family units located at the eastern terminus of Paseo Montril east of Rancho Penasquitos Blvd in the Rancho Penasquitos Community of San Diego, California. The project site is currently vacant. The project is anticipated to open in the year 2024. Project access is from one driveway at the Paseo Montril eastern terminus cul-de-sac. The following discretionary approvals are required as part of the project:

- 1) Community Plan Amendment/Rezone
- 2) Vesting Tentative Map
- 3) Site Development Permit
- 4) Planned Development Permit

This Local Mobility Analysis (LMA) determines if there are any traffic effects caused by the project traffic that would trigger roadway and other multi-modal improvements or a fair share participation. The LMA is based on the City of San Diego *Transportation Study Manual*, September 29, 2020 and includes the analysis of pedestrian, bicycle, transit, and vehicular facilities.

Pedestrian facilities within a ½ mile walking shed along the study roadways did not have any observed missing sidewalk sections, curb ramps, or significant obstructions, except for approximately 450 feet along the north side of Paseo Montril from the easterly cul-de-sac to approximately 150 feet east of Rancho Penasquitos Blvd, and about 10 feet on the southside of Paseo Montril that is heavily overgrown and not traversable just east of the commercial driveway that is about 150 ft east of Rancho Penasquitos Blvd. The City of San Diego *Street Design Manual*, March 2017 notes under Section 2.1.2 that a sidewalk width shall be 5 feet. This criterion is satisfied along the study section of Rancho Penasquitos Blvd and only along a short portion of Paseo Montril (about 150 between Rancho Penasquitos Blvd and the commercial driveways east of Rancho Penasquitos Blvd). The available sidewalks within ½ mile walking shed along the study roadways generally meet this criterion except for the non-traversable section of sidewalk on the southside of Paseo Montril between Rancho Penasquitos Blvd and the proposed project driveway. The Owner/Permittee does not propose to complete the missing section of sidewalk along the north side of Paseo Montril because: 1) there is an alternative option of using the sidewalk on the southside of Paseo Montril that provides access to the adjacent commercial shopping center, 2) the southside sidewalk provides the most direct route to the nearby bus stops on Rancho Penasquitos Blvd just south of Paseo Montril, 3) the Owner/Permittee does not have project frontage along the portion of the missing northside sidewalk, and 4) an initial cost estimate of \$30,000 may not account for potential need of removing or blasting the existing rock wall and replacing the existing rock fencing with rock bolts for a northside sidewalk. It is recommended that the Owner/Permittee clear the vegetation overgrowth along the south sidewalk along Paseo Montril, repair or replace any missing sidewalk segments along the south sidewalk on Paseo Montril, and install a sidewalk around the cul-de-sac along the project frontage.

Bicycle facilities within a ½ mile bicycling distance along the study roadways of Rancho Penasquitos Blvd between Calle De Las Rosas and I-15 or on Paseo Montril did not have marked

bike lanes nor bike route signs. No bicycle lane improvements are recommended as part of this project on Rancho Penasquitos Blvd where Class II bike lanes are proposed in the *Rancho Penasquitos Community Plan* because there is insufficient pavement available for both on-street parking and a bike lane resulting in the need to remove on-street parking to accommodate a Class II bike lane. Also, it is not recommended to install a piecemeal bike facility defined by the bicycle study area limits along Rancho Penasquitos Blvd that would not connect with an existing bike lane network. The closest bike network is at Rancho Penasquitos Blvd/SR-56, which is about 800 feet beyond the ½ mile bicycle study area; however, adding a Class II bike lane to this 800-foot section would also require the removal of on-street parking.

Transit facilities within a ½ mile walking shed included six bus stops along Rancho Penasquitos Blvd that are served by Metropolitan Transit System (MTS) Route 20. The weekday service frequency is 30 minutes during the AM and PM peak hours while the off-peak frequency ranges between 30 and 60 minutes. The bus stop on the east side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 700 feet from the project driveway and includes two benches in good condition. The bus stop on the west side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 875 feet from the project driveway and includes two benches in good condition. The Owner/Permittee will be improving the sidewalk on the southside of Paseo Montril that will improve the walking path to the nearby bus stops to and from the project site.

Systemic Safety review included the analysis of Rancho Penasquitos Blvd at Paseo Montril and Rancho Penasquitos Blvd at I-15 SB Ramps. Two criteria were found to be possible candidates for countermeasures at the intersection of Rancho Penasquitos Blvd at Paseo Montril; however, the potential messaging campaign and awareness campaign are beyond the scope of this project.

Vehicular facilities included the analysis of two (2) intersections, and four (4) segments:

- Intersection of Rancho Penasquitos Blvd at Paseo Montril
- Intersection of Rancho Penasquitos Blvd at I-15 SB Ramps
- Segment of Rancho Penasquitos Blvd from Via Del Sud to Paseo Montril
- Segment of Rancho Penasquitos Blvd from Paseo Montril to I-15 SB Ramps
- Segment of Paseo Montril from Rancho Penasquitos Blvd to the Commercial Driveways about 150 feet east of Rancho Penasquitos Blvd
- Segment of Paseo Montril from the noted Commercial Driveways to the eastern cul-de-sac

The project trip generation based on the City of San Diego *Trip Generation Manual*, May 2003 is calculated at approximately 440 ADT with 35 AM peak hour trips (7 inbound and 28 outbound) and 44 PM peak hour trips (31 inbound and 13 outbound). The study scenarios included Existing, Opening Year 2024, Opening Year 2024 with project, Opening Year 2024 with project construction traffic, Horizon Year 2050, and Horizon Year 2050 with project conditions. A Horizon Year 2050 analysis is required because the project requires a Community Plan Amendment and Rezone. Nine reasonably foreseeable cumulative projects were incorporated into the analysis. The operations by study scenario included:

- 1) Under Existing conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).

- 2) Under Opening Year 2024 without Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).
- 3) Under Opening Year 2024 with Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS E segment that is built-out to the community plan classification; therefore, no improvements are proposed.
- 4) Under Opening Year 2024 with Project Construction traffic conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification and the worst-case construction traffic will be a temporary condition for approximately 20 months; therefore, no improvements are proposed.
- 5) Under Horizon Year 2050 conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F).
- 6) Under Horizon Year 2050 with Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification; therefore, no improvements are proposed.

1.0 Introduction

The proposed project is 55 multi-family units located at the eastern terminus of Paseo Montril east of Rancho Penasquitos Blvd in the Rancho Penasquitos Community of San Diego, California. The project site of approximately 15.2 acres is currently vacant. The project is anticipated to open in the year 2024. Project access is from one driveway at the Paseo Montril eastern terminus cul-de-sac. The overall project site will also be divided into two parcels: 1) a multi-family parcel of about 4.9 acres, and 2) a remainder parcel of approximately 10.3 acres that will be open space. The location of the project is shown in **Figure 1** with a site plan showing on-site circulation included as **Figure 2**.

The project applicant is processing a Community Plan Amendment to change the land use designation from Open Space to Medium Density Residential (5-10 DU/acre), and Rezone from RS-1-14 and RM-2-5 to RM-1-1. The following discretionary approvals are required as part of the project:

- 1) Community Plan Amendment/Rezone
- 2) Vesting Tentative Map
- 3) Site Development Permit
- 4) Planned Development Permit

This Local Mobility Analysis (LMA) determines if there are any traffic effects caused by the project traffic that would trigger roadway and other multi-modal improvements or a fair share participation. The format of this study includes the following chapters:

- 1.0 Introduction
- 2.0 Local Mobility Analysis Methodology
- 3.0 Pedestrian Analysis
- 4.0 Bicycle Analysis
- 5.0 Transit Analysis
- 6.0 Systemic Safety Analysis
- 7.0 Vehicular Analysis
- 8.0 Conclusions

Figure 1: Project Location

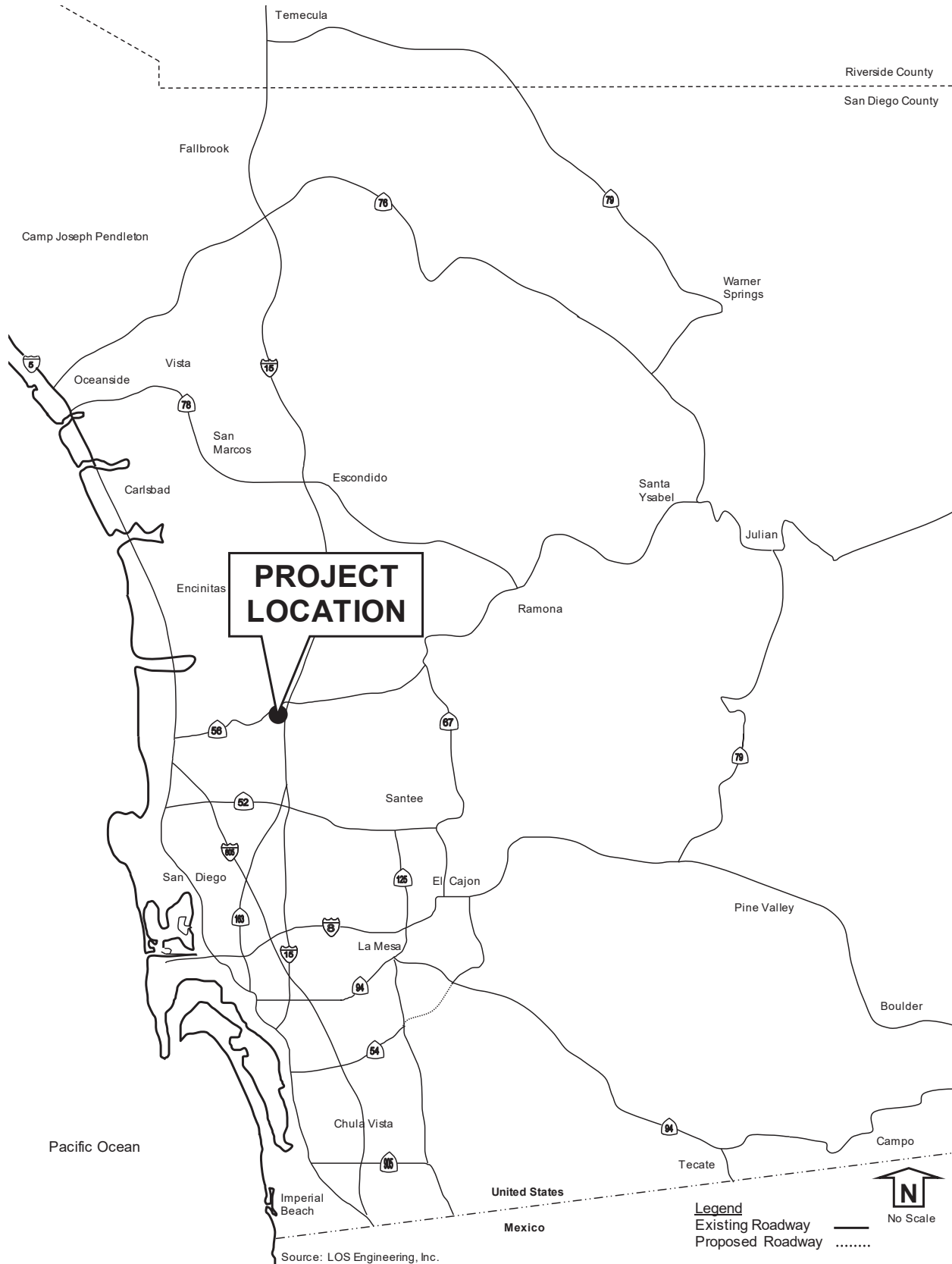
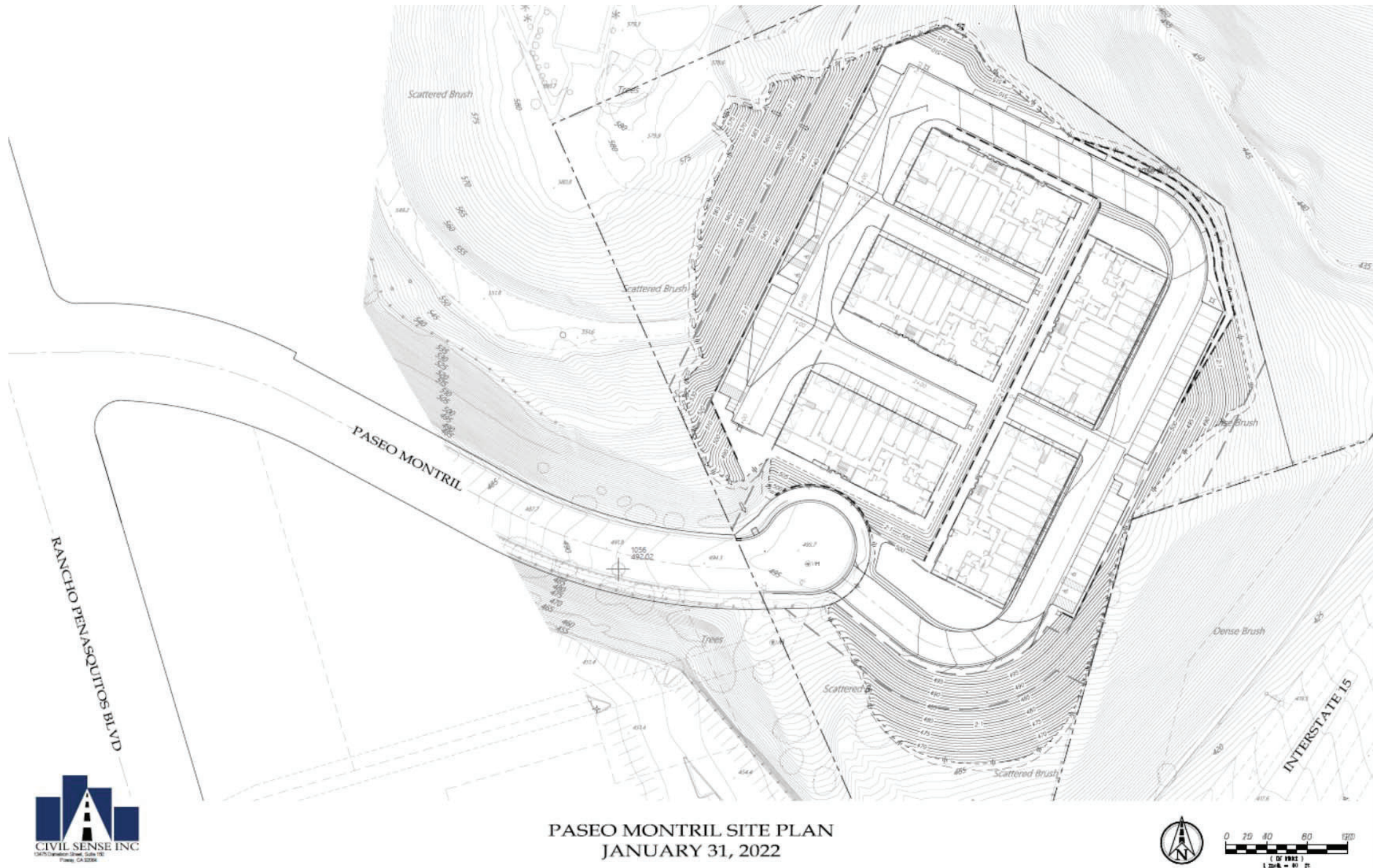
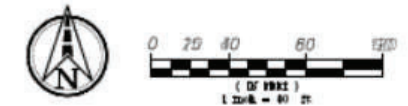


Figure 2: Site Plan



PASEO MONTRIL SITE PLAN
JANUARY 31, 2022



2.0 Local Mobility Analysis Methodology

The extent of the study area for this LMA is generally based on each mode as follows:

- 1) Pedestrian: Documentation of pedestrian facilities and basic deficiencies (missing sidewalk, curb ramps, and major obstructions) within ½ walking distance measures from each pedestrian access point to a public street.
- 2) Bicycle: Documentation of bicycle facilities and basic deficiencies (bike lane gaps, obstructions) within ½ mile bicycling distance measured from the center of the intersection formed by each project driveway.
- 3) Transit: Identification of the closest transit routes and stops to the project. If the transit stops are within ½ mile walking distance of each pedestrian access point, the condition of the stop amenities must be described/evaluated.
- 4) Intersection Operations (projects with < 2,400 daily final driveway trips):
 - a. Signalized intersections within ½ mile path of travel from the project driveway AND the project adds 50 or more peak hour trips to any TURNING movement.
 - b. Un-signalized intersections within ½ mile path of travel from the project driveway AND the project will add 50 or more peak hour trips in EITHER direction.
 - c. Freeway ramp intersections where a project adds 50 or more peak hour trips regardless of their distance from the project site.
- 5) Roadway Segments: The study area should include any roadway segments where the project adds > 1,000 daily final driveway trips if consistent with the Community Plan, or > 500 daily final driveway trips if inconsistent with the Community Plan AND: the segment has improvements identified in the Community Plan; OR the segment is not built to the Community Plan ultimate classification (including planned new circulation element roadways).

The project study area is generally based on a ½ mile walking, biking, or driving distance from the project driveway on Paseo Montril. The limit of the ½ mile extent is included in **Appendix A**. The project is not consistent with the community plan. The study area for the following elements included:

Pedestrian Facilities

- 1) Rancho Penasquitos Blvd from approximately 150 feet north of Calle De Las Rosas down to the I-15 NB Ramps with Rancho Penasquitos Blvd/Poway Rd.
- 2) Paseo Montril from the easterly cul-de-sac terminus to approximately 0.4 miles west of Rancho Penasquitos Blvd.

Bicycle Facilities

- 1) Rancho Penasquitos Blvd from approximately 150 feet north of Calle De Las Rosas down to the I-15 NB Ramps with Rancho Penasquitos Blvd/Poway Rd.
- 2) Paseo Montril from the easterly cul-de-sac terminus to approximately 0.4 miles west of Rancho Penasquitos Blvd.

Transit Facilities

- 1) Rancho Penasquitos Blvd from approximately 150 feet north of Calle De Las Rosas down to the I-15 NB Ramps with Rancho Penasquitos Blvd/Poway Rd.

Systemic Safety Review Facilities

The study area included the following intersections:

- 1) Rancho Penasquitos Blvd/Paseo Montril
- 2) Rancho Penasquitos Blvd/I-15 SB Ramps

Vehicular Facilities

The study area included the following intersections:

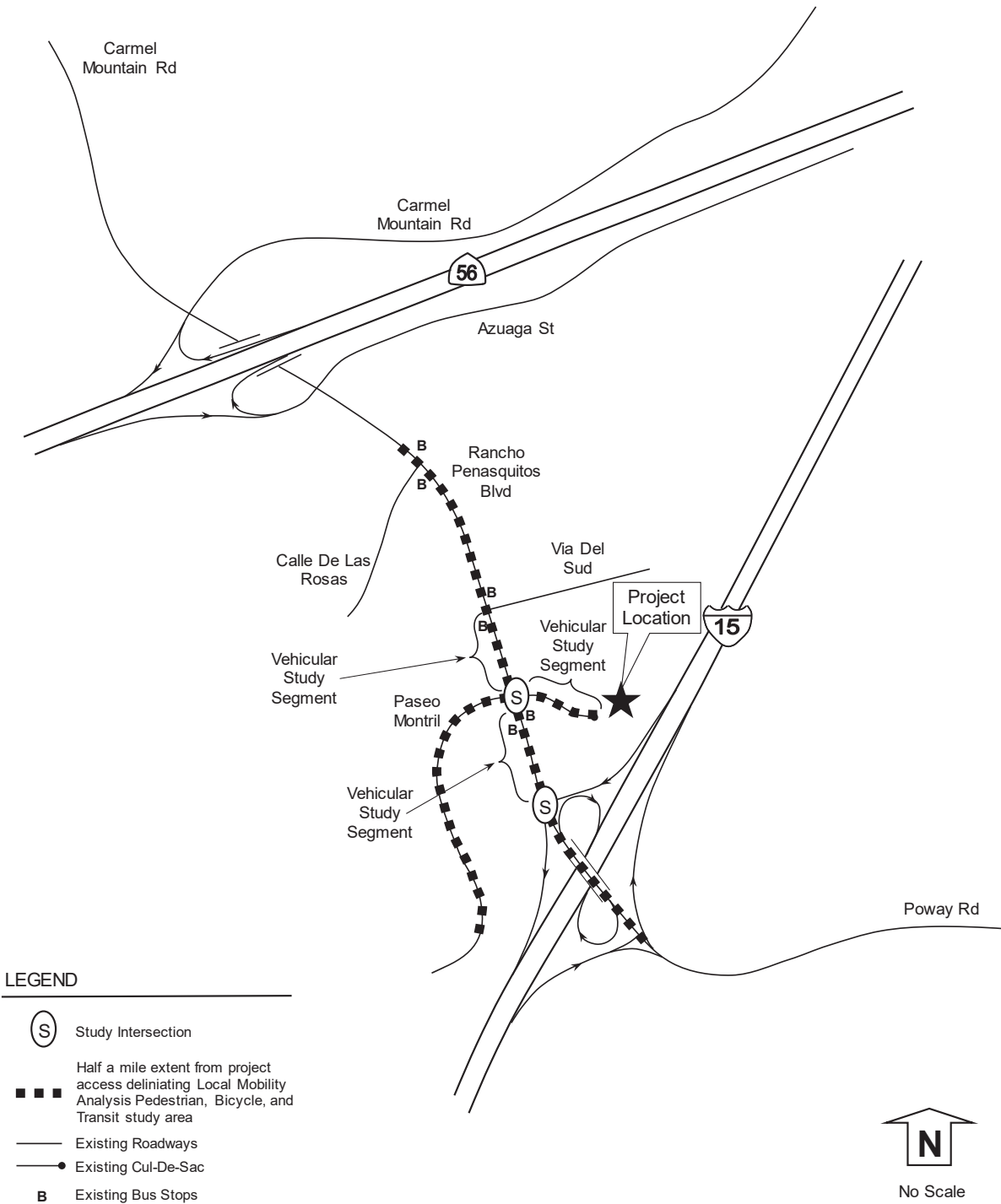
- 1) Rancho Penasquitos Blvd/Paseo Montril
- 2) Rancho Penasquitos Blvd/I-15 SB Ramps

The study area included the following street segments:






- 1) Rancho Penasquitos Blvd from Via Del Sud to Paseo Montril
- 2) Rancho Penasquitos Blvd from Paseo Montril to I-15
- 3) Paseo Montril from Rancho Penasquitos Blvd to the Commercial Driveways approximately 150 feet east of Rancho Penasquitos Blvd
- 4) Paseo Montril from the Commercial Driveways approximately 150 feet east of Rancho Penasquitos Blvd to the eastern cul-de-sac

The LMA study area is shown in **Figure 3**.

Figure 3: LMA Study Area



LEGEND

-  Study Intersection
-  Half a mile extent from project access delineating Local Mobility Analysis Pedestrian, Bicycle, and Transit study area
-  Existing Roadways
-  Existing Cul-De-Sac
-  Existing Bus Stops



3.0 Pedestrian Analysis

The pedestrian analysis consists of documenting existing pedestrian facilities and basic deficiencies such as missing sidewalk sections, curb ramps, and major obstructions within ½ mile walking distance from the project access along the study roadways.

Rancho Penasquitos Blvd from approximately 150 feet north of Calle De Las Rosas down to the I-15 NB Ramps with Poway Rd currently has contiguous sidewalks with at least 5 feet of width on both sides of the roadway. There were no observed missing sidewalk sections nor significant obstructions along this study segment; however, several areas had vegetation overgrowth reducing the usable width to about 4 feet. There are pedestrian curb ramps on each corner of the intersections along this study segment at each of the following intersections:

- 1) Rancho Penasquitos Blvd/Calle De Las Rosas
- 2) Rancho Penasquitos Blvd/Via Del Sud
- 3) Rancho Penasquitos Blvd/Paseo Montril
- 4) Rancho Penasquitos Blvd/I-15 SB Ramps
- 5) Rancho Penasquitos Blvd/I-15 NB Ramps

While none of the above locations had dual pedestrian curb ramps, dual ramps are noted in the City standards for new construction of an intersection.

Paseo Montril from the easterly cul-de-sac terminus to approximately 150 east of Rancho Penasquitos Blvd (delineated by commercial driveways on the north and south sides of Paseo Montril) currently has a 4 foot wide non-contiguous sidewalk on the southside of the roadway and no sidewalk on the north side of the roadway. The non-contiguous sidewalk on south side of the roadway is mostly overgrown by vegetation and has a segment of about 10 feet that is heavily overgrown and not traversable just east of the commercial driveway that is about 150 ft east of Rancho Penasquitos Blvd. Extending about 75 feet west of the cul-de-sac, the south side of Paseo Montril has a contiguous sidewalk with at least 5 feet of width.

Paseo Montril from approximately 150 east of Rancho Penasquitos Blvd (at the commercial driveways) to approximately 0.4 miles west of Rancho Penasquitos Blvd, Paseo Montril currently has a contiguous sidewalk of at least 4½ feet of width on both sides of the roadway. There were no observed significant obstructions along this study section.

The City of San Diego *Street Design Manual*, March 2017 notes under Section 2.1.2 that a sidewalk width shall be 5 feet. This criterion is satisfied along the study section of Rancho Penasquitos Blvd and only along a short portion of Paseo Montril (about 150 ft between Rancho Penasquitos Blvd and the commercial driveways east of Rancho Penasquitos Blvd).

The pedestrian facilities within the ½ mile walking shed along the study roadways did not have any observed missing sidewalk sections, curb ramps, or significant obstructions, except for approximately 450 feet along the north side of Paseo Montril from the easterly cul-de-sac to approximately 150 feet east of Rancho Penasquitos Blvd, and about 10 feet that is heavily overgrown and not traversable section just east of the commercial driveway that is about 150 ft east of Rancho Penasquitos Blvd.

The Owner/Permittee does not propose to complete the missing section of sidewalk along the north side of Paseo Montril because:

- 1) There is an alternative option of using the sidewalk on the southside of Paseo Montril that provides access to the adjacent commercial shopping center,
- 2) The southside sidewalk provides the most direct route to the nearby bus stops on Rancho Penasquitos Blvd just south of Paseo Montril,
- 3) The Owner/Permittee does not have project frontage along the portion of the missing northside sidewalk, and
- 4) An initial cost estimate of \$30,000 may not account for potential need of removing or blasting the existing rock wall and replacing the existing rock fencing with rock bolts for a northside sidewalk.

It is recommended that the Owner/Permittee clear the vegetation overgrowth along the south sidewalk along Paseo Montril, repair or replace any missing sidewalk segments along the south sidewalk on Paseo Montril, and install a sidewalk around the cul-de-sac along the project frontage.

4.0 Bicycle Analysis

The bicycle analysis consists of documenting existing bicycle facilities and basic deficiencies such as bike lane gaps or obstructions within a ½ mile bicycling distance from the project access along the study roadways.

The City of San Diego *Bicycle Master Plan*, December 2013 shows a Class III bike route along Rancho Penasquitos Blvd between Calle De Las Rosas and I-15. The *Rancho Penasquitos Community Plan* calls for a Class II bike lanes on Rancho Penasquitos Blvd between SR-56 and I-15 and a Class III bike route on Paseo Montril west of Rancho Penasquitos Blvd. Excerpts from the City of San Diego *Bicycle Master Plan Update* and the *Rancho Penasquitos Communities Plan* are included in **Appendix B**.

No marked bike lanes were observed on Rancho Penasquitos Blvd between SR-56 and I-15 or on Paseo Montril.

No bicycle lane improvements are recommended as part of this project on Rancho Penasquitos Blvd where Class II bike lanes are proposed in the *Rancho Penasquitos Community Plan* because there is insufficient pavement available for both on-street parking and a bike lane resulting in the need to remove on-street parking to accommodate a Class II bike lane. Also, it is not recommended to install a piecemeal bike facility defined by the bicycle study area limits along Rancho Penasquitos Blvd that would not connect with an existing bike lane network. The closest bike network is at Rancho Penasquitos Blvd/SR-56, which is about 800 feet beyond the ½ mile bicycle study area; however, adding a Class II bike lane to this 800-foot section would also require the removal of on-street parking.

5.0 Transit Analysis

The transit analysis includes identifying the closest transit routes and stops to the project. If the stops are within ½ mile walking distance of the project access, the condition of the stop amenities must be described/evaluated.

Metropolitan Transit System (MTS) provides bus service as Route 20 on Rancho Penasquitos Blvd near the project site. The closest bus stops are located on Rancho Penasquitos Blvd just south of Paseo Montril. A route map and specific service times and frequency are outlined in the bus schedule included in **Appendix C**. A summary of the service times is shown in **Table 1** for weekdays and **Table 2** for weekend days.

TABLE 1: WEEKDAY BUS SERVICE OPERATIONS AND FREQUENCY

Bus Route	Weekday (Mon-Fri) Service Operations (Off-Peak Service Frequency Range)	7-9 AM Peak Hour Service Frequency	4-6 PM Peak Hour Service Frequency
Route 20	≈ 5:00 AM to ≈ 10:00 PM (≈ 30-60 minutes)	30 minutes	30 minutes

TABLE 2: WEEKEND BUS SERVICE OPERATIONS AND FREQUENCY

Bus Route	Saturday Service Operations (Service Frequency Range)	Sunday Service Operations (Service Frequency Range)
Route 20	≈ 5:40 AM to ≈ 9:00 PM (≈ 30-60 min.)	≈ 6:10 AM to ≈ 8:20 PM (≈ 60 min.)

The bus stop on the east side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 700 feet from the project driveway and includes two benches in good condition. The bus stop on the west side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 875 feet from the project driveway and includes two benches in good condition.

The Owner/Permittee will be improving the sidewalk on the southside of Paseo Montril that will improve the walking path to the nearby bus stops to and from the project site.

6.0 Systemic Safety Analysis

The City of San Diego Vision Zero policy promotes safe roadway design with a goal toward preventing collisions. As part of that goal, a systemic safety review provides an assessment of hotspots and possible countermeasures to align with Vision Zero. Two study intersections were reviewed against eight systemic hotspot criteria. Two criteria were found to be possible candidates for countermeasures; however, the potential messaging campaign and awareness campaign are beyond the scope of this project. The systemic hotspot analysis is shown in **Table 3**.

TABLE 3: SYSTEMIC HOTSPOT SUMMARY

Intersection Criteria for Analysis	Rancho Penasquitos at Paseo Montril	Rancho Penasquitos at I-15 SB Ramps
<u>Pedestrian Matrix Footprint #1</u> Signalized One-way 3 In with two-way 4 In One-way 3 In with one-way 3 In Primary Rd 7,001-15,000 ADT	Not Applicable as primary road is >15,000 ADT	Not Applicable as primary road is >15,000 ADT
<u>Pedestrian Matrix Footprint #2</u> Signalized Two-way 4 In with two-way 2 In Primary Rd 7,001-15,000 ADT	Not Applicable as primary road is >15,000 ADT	Not Applicable as primary road is >15,000 ADT
<u>Pedestrian Matrix Footprint #3</u> Signalized Two-way 4 In with two-way 2 In Primary Rd 15,001-25,000 ADT	Not Applicable as primary road is >25,000 ADT	Not Applicable as primary road is >25,000 ADT
<u>Bicycle Matrix Footprint #1</u> Signalized Two-way 4 In with two-way 2 In Two-way 4 In with two-way 4 In	Possible Countermeasures: Public Safety Messaging Campaign; however, beyond the scope of this project	Not Applicable as minor street is one-way
<u>Bicycle Matrix Footprint #2</u> Side-Street Stop Two-way 2 In with two-way 2 In	Not Applicable as intersection is signalized	Not Applicable as intersection is signalized
<u>Vehicle Matrix Footprint #1</u> Signalized Two-way 4 In with two-way 2 In Primary Road: >15,000 ADT Secondary Road: ≤7,000 ADT	Not Applicable as primary road is >15,000 ADT	Not Applicable as primary road is >15,000 ADT
<u>Vehicle Matrix Footprint #2</u> Signalized Two-way 6 In with two-way 4 In Primary Road: >15,000 ADT Secondary Road: >7,000 ADT	Not Applicable as primary road is >15,000 ADT	Not Applicable as primary road is >15,000 ADT
<u>Vehicle Matrix Footprint #2</u> Signalized Two-way 4 In with two-way 4 In Secondary Road: >7,000 ADT	Possible Countermeasures: Intersection Control Awareness Campaign; however, beyond the scope of this project	Not Applicable as minor street is one-way

7.0 Vehicular Analysis

The Local Mobility Analysis includes the analysis of specific study scenarios, methodology for the analysis of roadway operations, and determination of potential off-site improvements. Details for each of these parameters are include herein.

7.1 Study Scenarios

The number of study scenarios is dependent on the required discretionary approvals. For this project, the following scenarios were analyzed:

- 1) Existing Conditions
- 2) Near-Term Opening Day (Year 2024) without Project Conditions
- 3) Near-Term Opening Day (Year 2024) with Project Conditions
- 4) Near-Term Opening Day (Year 2024) with Project Construction Traffic Conditions
- 5) Horizon Year 2050 without Project Conditions
- 6) Horizon Year 2050 with Project Conditions

A Horizon Year 2050 scenario is required because the project requires a Community Plan Amendment and Rezone.

7.2 Traffic Analysis Methodology

The traffic analysis prepared for this study was based on the *6th Edition Highway Capacity Manual* (HCM) operations analysis using Level of Service (LOS) evaluation criteria. The operating conditions of the study intersections, and street segments were measured using the HCM LOS designations, which ranges from A through F. LOS A represents the best operating condition and LOS F denotes the worst operating condition. The individual LOS criteria for each roadway component are described below.

7.2.1 Intersections

The study intersections were analyzed based on the **operational analysis** outlined in the 6th Edition HCM. This process defines LOS in terms of **average control delay** per vehicle, which is measured in seconds. LOS at the intersections were calculated using the computer software program Synchro 10 (Trafficware Corporation). The 6th Edition HCM LOS for the range of delay by seconds for intersections is shown in **Table 4**.

TABLE 4: INTERSECTION LEVEL OF SERVICE DEFINITIONS (6TH EDITION HCM)

Level of Service	Un-Signalized Control Delay for TWSC, AWSC, and Roundabout (sec/veh where v/c ≤ 1)	Signalized Control Delay (sec/veh where v/c ≤ 1)
A	0-10	≤ 10
B	> 10-15	> 10-20
C	> 15-25	> 20-35
D	> 25-35	> 35-55
E	> 35-50	> 55-80
F	> 50	> 80

Source: 6th Edition HCM. TWSC: Two Way Stop Control. AWSC: All Way Stop Control. For unsignalized intersections, the control delay reported is the worst movement delay in seconds/vehicle.

7.2.2 Street Segments

The street segments were analyzed based on the functional classification of the roadway using the City of San Diego *Roadway Segment LOS by Classification and Average Daily Traffic* capacity lookup table (**Appendix D**). The roadway segment capacity and LOS standards used to analyze street segments are summarized in **Table 5**.

TABLE 5: STREET SEGMENT DAILY CAPACITY AND LOS (CITY OF SAN DIEGO)

Circulation Element Road Classification	LOS A	LOS B	LOS C	LOS D	LOS E
Prime Arterial – 6 Lanes	<25,000	<35,000	<50,000	<55,000	<60,000
Prime Arterial – 5 Lanes	<20,000	<28,000	<40,000	<45,000	<50,000
Prime Arterial – 4 Lanes	<17,500	<24,500	<35,000	<40,000	<45,000
Major Arterial – 6 Lanes	<20,000	<28,000	<40,000	<45,000	<50,000
Major Arterial – 5 Lanes	<17,500	<24,500	<35,000	<40,000	<45,000
Major Arterial – 4 Lanes	<15,000	<21,000	<30,000	<35,000	<40,000
Collector (with TWLTL) – 5 Lanes	<12,500	<17,500	<25,000	<30,750	<37,500
Collector (with TWLTL) – 4 Lanes	<10,000	<14,000	<20,000	<25,000	<30,000
Collector (without TWLTL) – 4 Lanes	<5,000	<7,000	<10,000	<13,000	<15,000
Collector (with TWLTL) – 2 Lanes					
Collector – 2 Lanes (no fronting property)	<4,000	<5,500	<7,500	<9,000	<10,000
Collector (without TWLTL) – 2 Lanes	<2,500	<3,500	<5,000	<6,500	<8,000
Sub-Collector – 2 Lanes (Single-family)	-	-	<2,200	-	-

Source: City of San Diego *Transportation Study Manual* 9/29/2020.

7.2.3 Project Traffic Effects

A project Owner/Permittee should consider an improvement if the project traffic effect triggers the need for an improvement per the City of San Diego *Transportation Study Manual* (TSM) defined triggers as shown in **Table 6** (TSM excerpts included in **Appendix E**).

TABLE 6: CITY OF SAN DIEGO TRAFFIC EFFECT TRIGGERS FOR POTENTIAL ROADWAY IMPROVEMENTS

Facility	Triggers for Considering an Improvement
Signalized Intersection	<p>No Existing Left-Turn Lane: If the project adds traffic to an individual left turn movement causing the total number of peak hour left turns to exceed 100, consider adding a left turn lane.</p> <p>Existing Single Left-Turn Lane: If the project adds traffic to an individual left turn movement causing the total number of peak hour left turns to exceed 300, consider adding a second left turn lane.</p> <p>No Existing Right Turn-Lane: If the addition of a right turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, AND the project adds traffic to an individual right turn movement causing the total number of peak hour right turns to exceed 500, consider adding a right turn lane.</p> <p>Existing Single Right-Turn Lane: If the addition of a right turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, AND the project adds traffic to an individual right turn movement causing the total number of peak hour right turns to exceed 800, consider adding a second right turn lane.</p> <p>Lengthening a Turn Pocket: If the project adds traffic to a turning movement and causes the 95th percentile queue to exceed the available turn pocket length, consider lengthening the turn pocket.</p>
Un-Signalized Intersection	<p>An Intersection Control Evaluation should be prepared if:</p> <p>All Way Stop Control: Within a ½ mile path of travel of a Major Transit Stop, if the project causes intersection to degrade to LOS F, or if the project adds traffic to an intersection already operating at LOS F.</p> <p>All Way Stop Control: Outside of a ½ mile path of travel of a Major Transit Stop, if the project causes intersection to degrade to LOS E or F, or if the project adds traffic to an intersection already operating at LOS E or F.</p> <p>Side Street Stop Control: Within a ½ mile path of travel of a Major Transit Stop, if the project causes the worst movement to degrade to LOS F, or if the project adds traffic to an intersection already operating at LOS F.</p> <p>Side Street Stop Control: Outside a ½ mile path of travel of a Major Transit Stop, if the project causes the worst movement to degrade to LOS E or F, or if the project adds traffic to an intersection already operating at LOS E or F.</p>
Roadway Segment	<p>If the project adds greater than 50% of total daily vehicle trips on the segment, the project should consider implementing the improvements as identified in the community plan.</p> <p>If the project adds less than or equal to 50% of total daily vehicle trips on the segment, the project should evaluate its fair share toward the improvement.</p>

Source: City of San Diego Transportation Study Manual, 9/29/2020.

7.3 Existing Conditions

This section describes the study area street system, peak hour intersection volumes, daily roadway volumes, and existing vehicular LOS.

7.3.1 Existing Street System

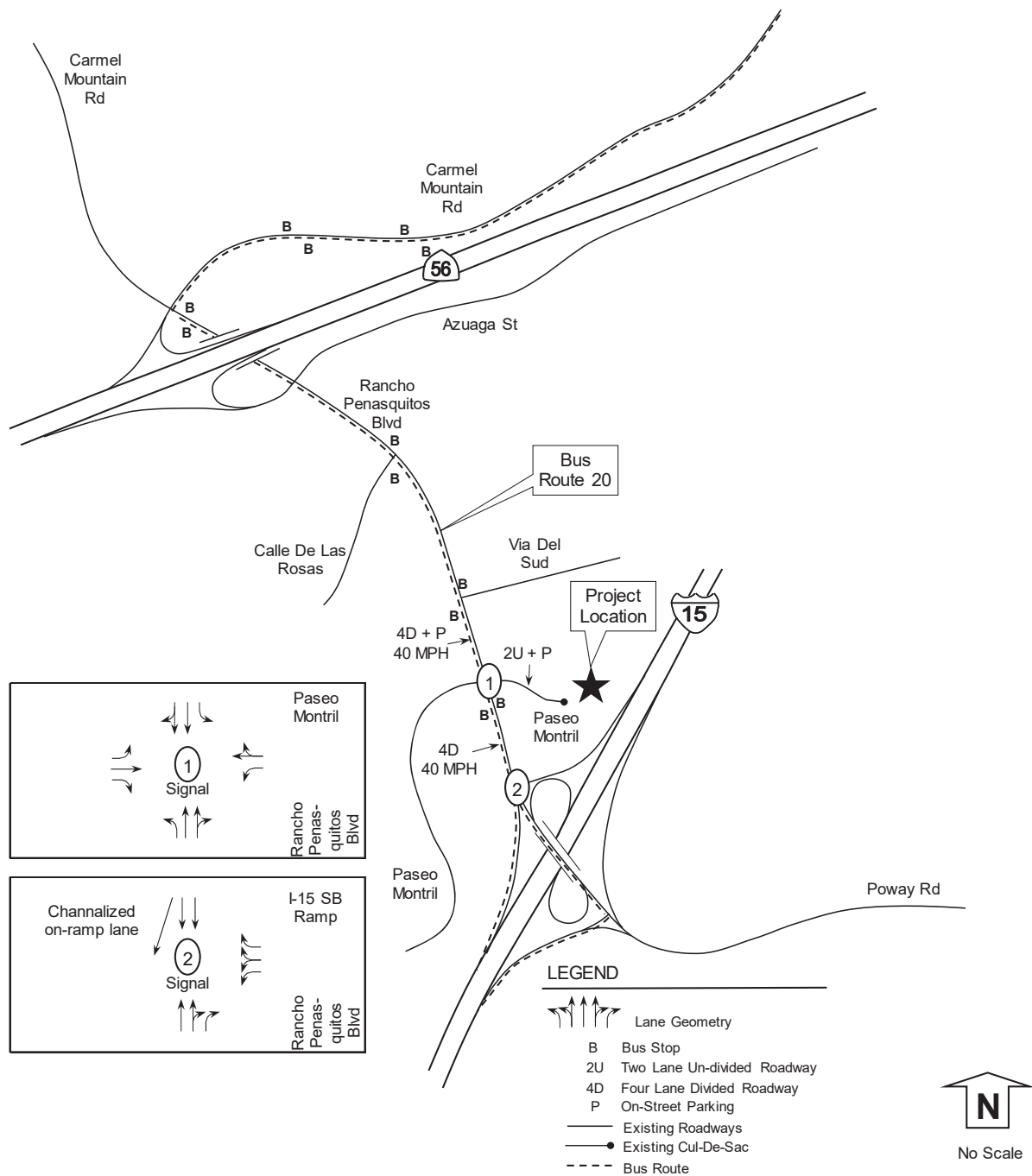
Within the LMA study area, the following roadways were analyzed as part of this study.

Rancho Penasquitos Boulevard from Via Del Sud to I-15 is classified as a 4-Lane Major in the *Rancho Penasquitos Community Plan* (excerpts included in **Appendix F**). A functional capacity of 40,000 ADT (LOS E) was applied to this study segment to match the current roadway conditions. From Via Del Sud to I-15, Rancho Penasquitos Blvd is constructed as a 4-lane roadway with a raised median and 2 travel lanes in each direction. On-street parking is generally permitted on both sides of the roadway and the posted speed limit is 40 Miles per Hour (MPH). This street segment has no marked bike lanes. Sidewalk details are included in Section 3.

Paseo Montril east of Rancho Penasquitos Blvd is not classified in the *Rancho Penasquitos Community Plan*. Paseo Montril east of Rancho Penasquitos Blvd is generally constructed as a 2 lane un-divided roadway with on-street parking generally allowed on both sides of the roadway starting approximately 200 east of Rancho Penasquitos Blvd. A functional capacity of 8,000 ADT (LOS E) was applied to this segment of Paseo Montril based on the adjacent commercial land uses and proposed land use of multi-family by the project. Additionally, the cross section adjacent to the commercial uses is approximately 50 feet (curb to curb) from Rancho Penasquitos Blvd to the commercial driveways about 150 feet east of Rancho Penasquitos Blvd and then approximately 38 feet (curb to curb) from the commercial driveways to the eastern cul-de-sac terminus. This street segment has no marked bike lanes. Sidewalk details are included in Section 3.

The existing conditions are shown in **Figure 4**.

Figure 4: Existing Conditions



7.3.2 Existing Traffic Volumes and LOS Analyses

Intersection counts were collected between 7:00 AM to 9:00 AM for the AM commuter period and from 4:00 PM to 6:00 PM for the PM commuter period on Tuesday, November 7, 2017 at:

- 1) Rancho Penasquitos Blvd/Paseo Montril
- 2) Rancho Penasquitos Blvd/I-15 SB Ramps

The following street segment volumes were collected on Tuesday, December 3, 2019 (except #4):

- 1) Rancho Penasquitos Blvd from Via Del Sud to Paseo Montril
- 2) Rancho Penasquitos Blvd from Paseo Montril to I-15
- 3) Paseo Montril between Rancho Penasquitos Blvd and Commercial Driveways about 150 feet east of Rancho Penasquitos Blvd
- 4) Paseo Montril between Commercial Driveways and eastern cul-de-sac (estimated at 10 ADT due to on-street parking with no business access and no driveways on this dead-end street).

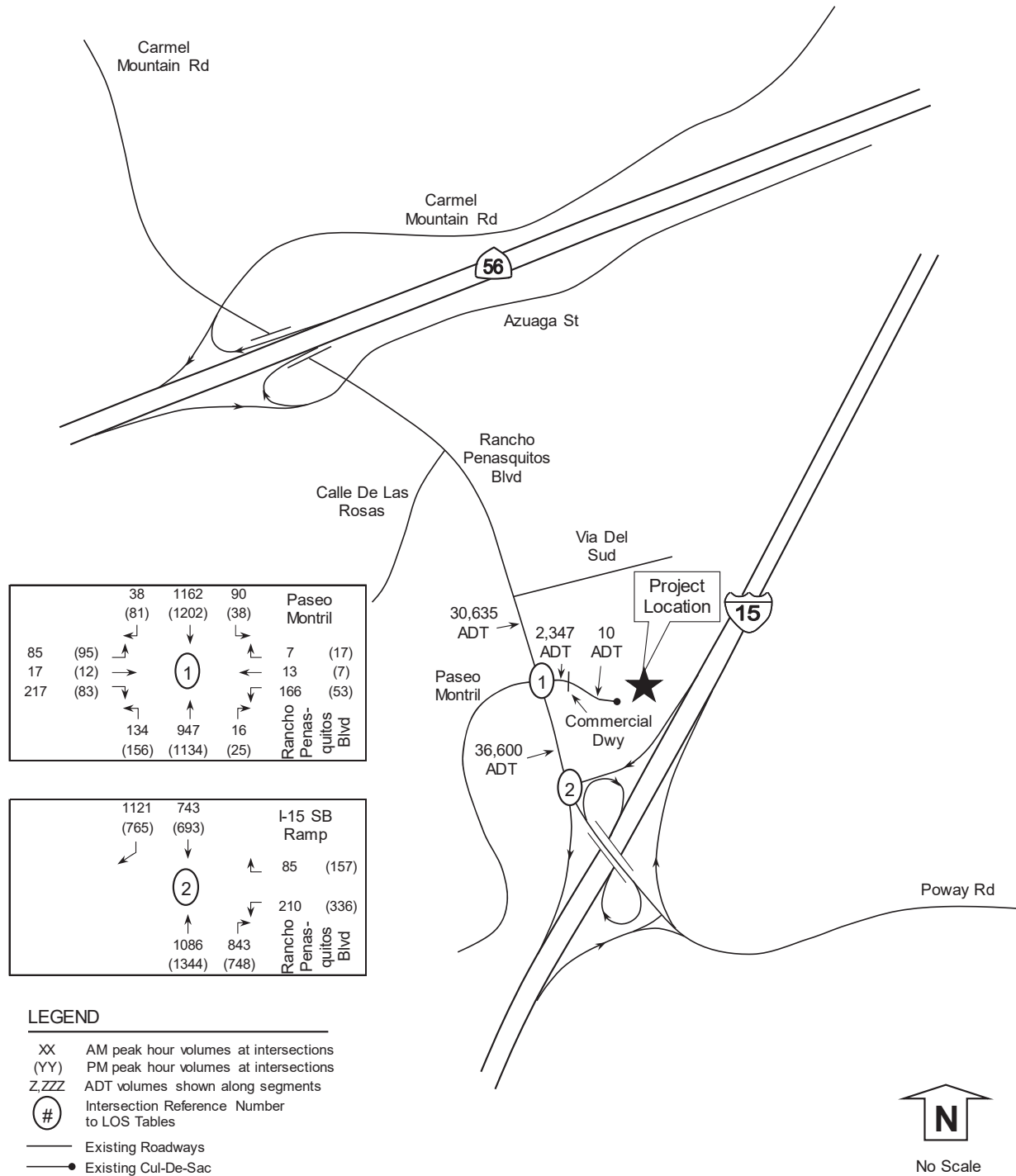
Due to COVID-19, the above counts represent Pre-COVID conditions without the current reduction in traffic volumes due to extensive telecommuting and remote school learning environments. The year 2017 counts were increased by a growth factor of **1.1% per year** (2.2% for 2 years) to represent year 2019 conditions. The growth factor was calculated using historical daily volumes (**Appendix G**) along Rancho Penasquitos Blvd as shown in **Table 7**.

TABLE 7: GROWTH FACTOR CALCULATIONS

Segment	Year 2014 Daily Volume	Year 2019 Daily Volume	5 yr change 2014-2019
Rancho Penasquitos Blvd			
Via Del Sud to Paseo Montril	29,778	30,635	2.8%
Paseo Montril to I-15 SB Ramp	33,568	36,600	8.3%
		Average	5.5%
		Avg/Year	1.1%

The existing volumes are shown in **Figure 5**.

Figure 5: Existing Volumes



The existing intersection LOS is shown in **Table 8**. The intersections were analyzed based on existing signal timing. The signal timing sheets are included in **Appendix H**. The intersection LOS are included in **Appendix I**. The existing segment LOS is shown in **Table 9**.

TABLE 8: EXISTING INTERSECTION LOS

Intersection and (Analysis) ¹	Movement	Study Period	Existing	
			Delay ²	LOS ³
1) Rancho Penasquitos	All	AM	26.6	C
Paseo Montril (S)	All	PM	19.4	B
2) Rancho Penasquitos	All	AM	7.3	A
I-15 SB Ramps (S)	All	PM	9.1	A

Notes: 1) Intersection Analysis - (S) Signalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service.

TABLE 9: EXISTING SEGMENT ADT VOLUMES AND LOS

Segment	Functional Classification	LOS E Capacity	Existing		
			Daily Volume	V/C	LOS
<u>Rancho Penasquitos Blvd</u>					
Via Del Sud to Paseo Montril	4 Ln Major	40,000	30,635	0.766	D
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	36,600	0.915	E
<u>Paseo Montril</u>					
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,347	0.293	A
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Existing conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).

7.4 Project

The proposed project is 55 multi-family units located at the eastern terminus of Paseo Montril east of Rancho Penasquitos Blvd in the Rancho Penasquitos Community of San Diego, California. The project site of approximately 15.2 acres is currently vacant. The overall project site will also be divided into two parcels: 1) a multi-family parcel of about 4.9 acres, and 2) a remainder parcel of approximately 10.3 acres that will be open space. The project is anticipated to open in the year 2024. Project access is from one driveway at the Paseo Montril eastern terminus cul-de-sac.

The project applicant is processing a Community Plan Amendment for the proposed land use designation change from Open Space to Medium Density Residential (5-10 DU/acre), and Rezone from RS-1-14 and RM-2-5 to RM-1-1 (Community Plan excerpts are included in Appendix F).

7.4.1 Project Trip Generation and Distribution

The trip generation for the project was calculated using trip rates from the City of San Diego *Trip Generation Manual*, May 2003. The project is calculated to generate 440 ADT with 35 AM peak hour trips (7 inbound and 28 outbound) and 44 PM peak hour trips (31 inbound and 13 outbound) as shown in **Table 10**.

TABLE 10: PROJECT TRIP GENERATION

Proposed Land Use	Rate	Size & Units	ADT	%	Split	AM			PM		
						IN	OUT	%	Split	IN	OUT
Residential - Multi Family	8 /DU	55 DU	440	8%	0.2 0.8	7	28	10%	0.7 0.3	31	13
AM Total:						35	PM Total:		44		

Source: City of San Diego *Trip Generation Manual*, May 2003. DU: Dwelling Unit. ADT-Average Daily Traffic.

The distribution was based on surrounding traffic patterns, proximity of freeway interchanges, and the location of surrounding schools and businesses. A regional distribution of 70% was assigned to the adjacent freeways and 30% was assigned to the local roadways. The primary north-south directional split on Rancho Penasquitos Blvd from Paseo Montril was based on the existing north-south directional split of peak hour traffic from the residential area of Via Del Sud on the east side of Rancho Penasquitos Blvd that yielded a distribution of 45% to/from the north and 55% to/from the south. The eastbound/southbound travel from Rancho Penasquitos Blvd to southbound I-15 was based on the peak hour traffic split at the Rancho Penasquitos Blvd/I-15 SB Ramp intersection to which 30% of the project is forecasted to travel south on I-15. The calculations for these splits are included in **Appendix J**. The remaining distribution patterns are based on the location of surrounding schools and businesses. The project distribution is shown in **Figure 6** while the trip assignment is shown in **Figure 7**.

Figure 6: Project Distribution

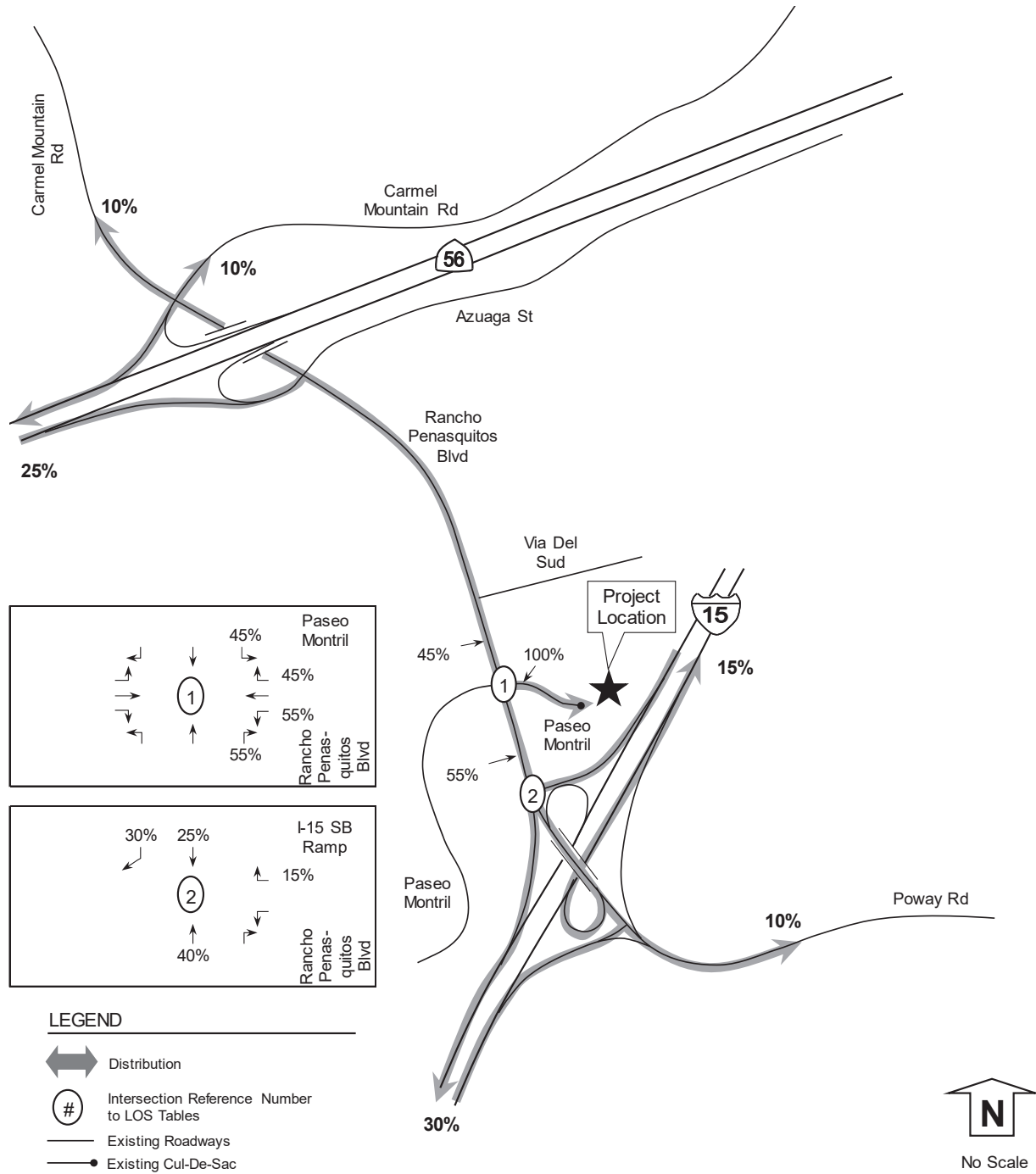
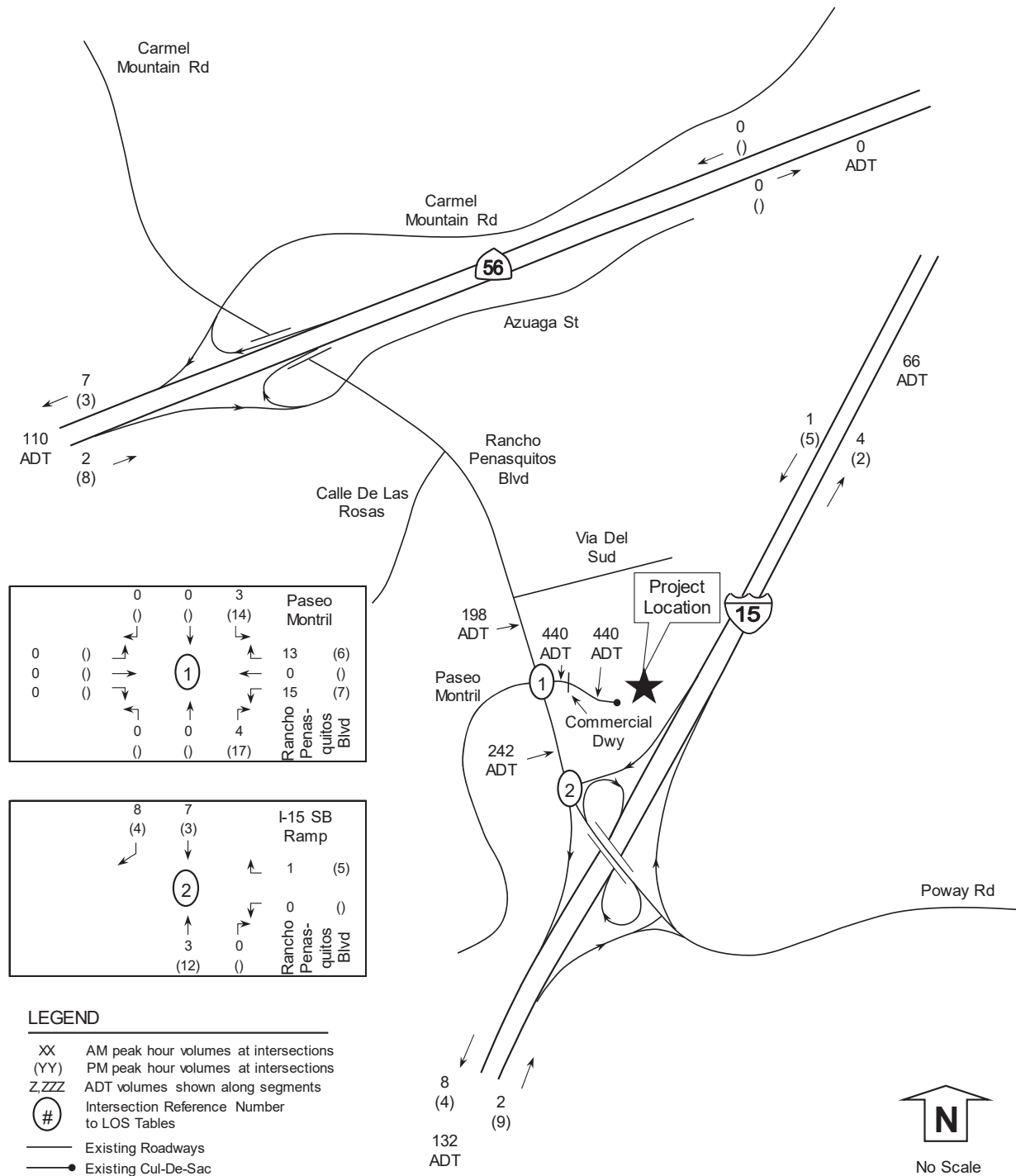


Figure 7: Project Assignment



7.4.2 Project Construction Traffic

Project construction traffic was based on applicant provided data forecasted for the project site based on experience at similar construction sites. Construction traffic includes soil export, deliveries, and workers based on the different phases of construction activities.

Soil export accounts for the removal of soil and rock for the estimated 45,100 cubic yards of export. The destination of material export is currently unknown; however, the haul routes may use I-15 and SR-56. Therefore, the same distribution split as documented for the completed project is applied for the export. This phase is forecasted to require between 4 and 6 weeks (this incorporates weather and/or construction sequencing delays) based on an average of 110 trucks per day from approximately 7:00 AM to 3:30 PM. The export truck ADT is calculated by multiplying 110 trucks by 2 for a round trip of 220 ADT. A Passenger Car Equivalent (PCE) is used to convert a mixed stream of cars and trucks to a single uniform PCE stream for analysis. However, a PCE is only applied to the segment analysis and not the intersection peak hour analysis because the intersection analysis already incorporates a heavy vehicle factor. According to the HCM, adding a PCE to a simulation analysis that already accounts for heavy vehicles (such as the intersection analysis) would result in duplicative adjustments. An HCM PCE of 3.0 was applied to the segment analysis based on the “Rolling Terrain” characteristics of Rancho Penasquitos Blvd. The 220 daily truck trips multiplied by a 3.0 PCE would result in 660 ADT equivalent. The 110 trucks per day over an 8.5-hour day results in approximately 13 trucks per hour (13 AM inbound, 13 AM outbound, and 0 PM peak hour truck trips because the export phase is completed by 3:30 PM). In addition to the truck trips, there may be up to 10 construction workers on-site during the export phase resulting in 20 ADT. While all the material export and workers typically finish by 3:30 PM, an estimate of 5 workers (based on applicant experience) may stay beyond 3:30 PM (for unforeseen construction elements) and are added to the 4-6 PM commuter peak period. Therefore, the construction worker peak hour trips are forecasted at 10 AM inbound with 0 AM outbound and 0 PM inbound with 5 PM outbound trips. The combination of truck export and construction workers for the soil export phase results in a forecasted daily trip total of 680 ADT (660 truck ADT + 20 worker ADT), an AM peak hour of 36 trips (23 inbound and 13 outbound) and 5 PM trips (0 inbound and 5 outbound). Construction workers are anticipated to park on-site or along Paseo Montril near the project site during the export phase. Construction staging locations will be defined and submitted as part of obtaining a traffic control permit from the City. Staging of trucks is anticipated to occur along Paseo Montril just east of the commercial driveways that are located approximately 150 feet east of Rancho Penasquitos Blvd.

Site construction covers the initial foundation to the final finish work that may take from 18 to 20 months. The highest concentration is up to 100 construction workers for about 5 months. The remaining phases will have fewer construction workers. Deliveries are forecasted with an average of 10 trucks per day for an ADT of 20 that converts to 60 ADT with a 3.0 PCE. Peak hour deliveries are anticipated at 1 AM inbound and 1 AM outbound and no PM peak hour deliveries because the workday is typically from 7:00 AM to 3:30 PM. These workers typically leave around 3:30 PM; however, to account for unforeseen construction elements, the applicant estimates about 5 construction workers may stay beyond 3:30 PM and are added to the 4-6 PM commuter peak period. The highest site construction phase has a forecasted daily trip total of 240 ADT (200 worker ADT + 60 truck ADT), with 126 AM peak hour trips (100 inbound and 26 outbound) and 5 PM trips

(0 inbound and 5 outbound). Construction workers are anticipated to park on-site or along Paseo Montril near the project site. Construction staging locations will be defined and submitted as part of obtaining a traffic control permit from the City.

As shown in **Table 11**, the expected peak construction trip generation is 680 ADT, 114 AM peak hour trips (101 inbound and 13 outbound), and 5 PM peak hour trips (0 inbound and 5 outbound). The PM peak hour volumes are minimal because construction work typically finish by 3:30 PM.

TABLE 11: CONSTRUCTION TRIP GENERATION

Construction Trip Generation by Phase	Approximate Duration by Phase	Construction Workers by Phase	Daily Trucks or Deliveries by Phase	Truck PCE Conversion	ADT	AM Pk Hr		PM Pk Hr	
						1hr btw 7-9 IN	1hr btw 7-9 OUT	1hr btw 4-6 IN	1hr btw 4-6 OUT
Soil Export	4 to 6 weeks	up to 10	110	660	680	23	13	0	5
Site Construction	18 to 20 months	up to 100	10	60	260	101	1	0	5
Maximum:					680	101	13	0	5

Daily and peak hour data based on client provided data based on similar facilities. PCE: Passenger Car Equivalent of 3.0 applied to daily truck trips. ADT: Average Daily Traffic.

Construction traffic (workers and deliveries) is anticipated to use both I-15 and SR-56. Therefore, the construction distribution shown in **Figure 8** based on the project distribution shown in Figure 7.

7.4.3 Parking

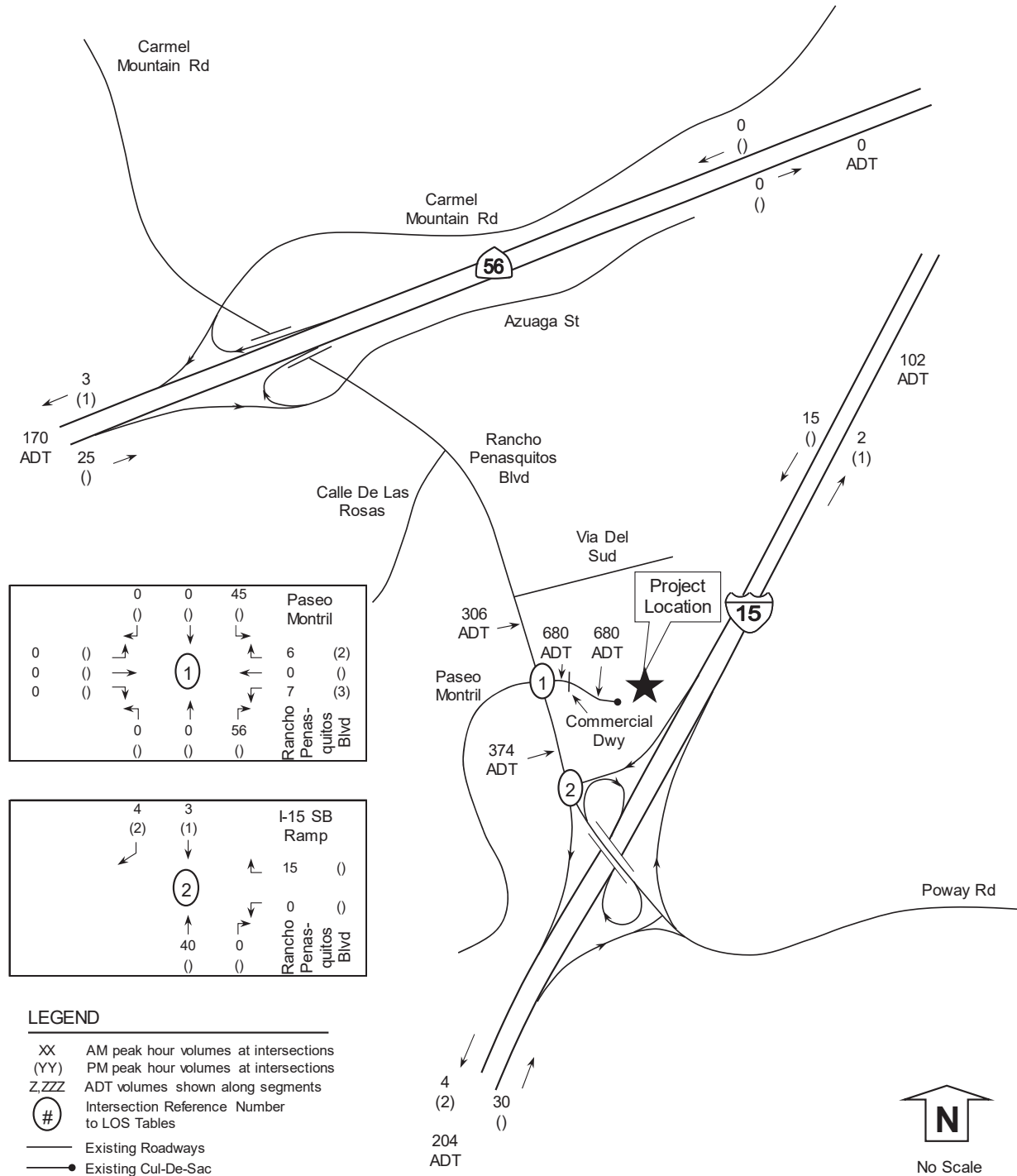
The City minimum required parking for the project is 132 automobile, 6 motorcycle, 5 accessible spaces, and 29 bicycle spaces. The residential parking requirements are based on Muni Code 142-05C using the number of bedrooms by unit. The provided parking is 142 spaces (95 garage, 42 open, and 5 open accessible), 6 motorcycle spaces, 10 bicycle rack spaces, and additional bicycle storage to be located within the garages. A parking summary is shown in **Table 12**.

TABLE 12: PROJECT PARKING SUMMARY

<u>Project Component</u>	<u>Minimum Required Parking By Code</u>	
Residential (10 one bedroom units)	15 spaces	
Residential (25 two bedroom units)	50 spaces	
Residential (20 three bedroom units)	45 spaces	
Residential Subtotal:	Residential Subtotal = 110 spaces	
Common Area Parking (110 x 20%)	22 spaces	
Accessible Parking Spaces	<u>5 spaces (as part of total required)</u>	
TOTAL	132 Spaces	
<u>Project Component</u>	<u>Provided Parking</u>	
Residential Garages	95 Spaces	
Open Parking	42 spaces	
Accessible Spaces	<u>5 spaces</u>	
	Total = 142 Spaces	
<u>Other</u>	<u>Minimum Required</u>	<u>Provided</u>
Motorcycle Parking	5.5 motorcycle spaces	6 motorcycle spaces
Bicycle Parking	29 bicycle spaces	10 space in bike racks and additional within garages

Source: Civil Sense, Inc.

Figure 8: Project Construction Traffic Assignment



7.5 Near-Term Opening Day (Year 2024) without Project Conditions

Near-Term Opening Day (Year 2024) without project conditions describe the anticipated roadway operations for opening day anticipated to occur in year 2024. The following cumulative projects anticipated to add traffic to the project study area were identified based on coordination with City of San Diego engineering staff and a review of known nearby development:

- 1) *Merge 56* is a mixed-use project with 242 residential units and 525,000 square feet of commercial, office, theater and hotel uses calculated to generate approximately 19,468 ADT with 1,192 AM peak hour trips and 2,095 PM peak hour trips. This cumulative project is generally located south of SR-56 in the vicinity of Camino Del Sur and Torrey Santa Fe Road. Approved not yet constructed.
- 2) *Pacific Village* is a redevelopment project with a net increase of 277 apartments and is generally located on the southeast corner of Carmel Mountain Road and Penasquitos Drive. This cumulative project is calculated to generate 1,796 ADT with 144 AM peak hour trips and 163 PM peak hour trips. Under construction.
- 3) *The Preserve at Torrey Highlands* includes 450,000 square feet of commercial office space generally located south of Torrey Santa Fe Road and west of Camino Del Sur. This cumulative project is calculated to generate approximately 5,264 ADT with 684 AM peak hour trips and 736 PM peak hour trips. Approved not yet constructed.
- 4) *Watermark* is a commercial project with 151,369 square feet of multi-tenant office, 316,000 square feet of regional shopping center, a 43,917 square foot movie theater, and a 130 room hotel with a combined cumulative ADT of 18,552 with 582 AM peak hour trips and 1,726 PM peak hour trips. This cumulative project is located on the southeast corner of the Scripps Poway Parkway/I-15 interchange. Under construction.
- 5) *Sunridge Vista RV & Mini Storage* is an outdoor storage facility for 69 Recreational Vehicles and 139,587 square feet of mini warehouse building. This cumulative project is calculated to generate 281 ADT with 16 AM peak hour trips and 26 PM peak hour trips. This project is generally located on the southwest corner of I-15 and SR-56 (beyond the eastern terminus of Azuaga Street). Approved not yet constructed.
- 6) *Alante Project* is a 50-unit residential project proposed on an existing two-level Park & Ride parking facility. This cumulative project is calculated to generate 300 ADT with 24 AM peak hour trips and 27 PM peak hour trips. Approved not yet constructed.

The following cumulative projects are located far enough away to be expected to add a negligible amount of traffic to the study area roadways:

- 7) *3 Roots* is a proposed mixed-use project with 1,800 residential units, 16,000 sf ground floor retail, 86,400 sf food/beverage uses, 30,300 sf commercial retail, 23,460 sf office and 4,000 sf of mobility hub commercial generally located on the northeast corner of Camino Santa Fe and Carroll Canyon Rd. Phase 1 opening year is anticipated to be 2021 with a trip generation of 11,788 ADT. Phase 2 is anticipated to be in the year 2025 with an additional 19,224 ADT. Due to the distance from the project to this cumulative project (about 5.5 miles as a crow flies), no cumulative project traffic is anticipated be added to the project study area under near-term year 2024 conditions. Approved not yet constructed.

- 8) *Black Mountain Road* is a proposed reclassification project that would reclassify Black Mountain Road in the Rancho Penasquitos Community Plan from a 6-Lane Primary Arterial to a 4-Lane Major between Twin Trails Drive just north of SR-56 to the southern community boundary. This reclassification project does not generate any new trips in the opening year; however, it would change the traffic patterns in the horizon year and is incorporated in the horizon year analysis within this report. Approved.
- 9) *Stone Creek* is a proposed mixed-use project with multiple phases and a final product with approximately 4,445 residential dwelling units, 174,000 square-feet of retail uses, 200,000 square-feet of office space, 850,000 square-feet of industrial/business park use, 175 room hotel, and 26.2 acres of neighborhood park space. This cumulative project is calculated to generate a combined cumulative ADT of 42,466 with 3,521 AM peak hour trips and 4,770 PM peak hour trips. This project is located west of I-15 between Camino Ruiz and Black Mountain Road on both the north and south sides of Carroll Canyon Road (about 4.5 miles from the project site as a crow flies). No cumulative project traffic is anticipated be added to the project study area under near-term 2024 conditions due to the distance from the project. Under review.

Individual cumulative project assignments that are anticipated to add traffic to the study area roadways are included in **Appendix K**. The cumulative projects trip generation summary is shown in **Table 13**.

TABLE 13: CUMULATIVE PROJECTS TRIP GENERATION

Cumulative Project	PTS	Status	Daily Trips	AM in	AM out	PM in	PM out
1) Merge 56	360009	Approved	19,468	806	386	929	1,166
2) Pacific Village	470158	Under Construction	1,796	29	115	114	49
3) The Preserve at Torrey Highlands	442880	Approved	5,264	616	68	147	589
4) Watermark	443731	Under Construction	18,552	455	127	838	888
5) Sunridge Vista RV & Mini Storage	534380	Approved	281	8	8	13	13
6) Alante Project	648597	Approved	300	5	19	19	8
7) 3 Roots	587128	Approved	20,602	397	950	1,237	772
8) Black Mountain Rd reclassification	357262	Approved	NA	NA	NA	NA	NA
9) Stone Creek	67943	Under Review	42,466	1,834	1,687	2,254	2,516
Cumulative Volumes:			108,729	4,150	3,360	5,551	6,001

Notes: NA Not Applicable because project is a roadway reclassification resulting in a shift of traffic.

The cumulative project locations are shown in **Figure 9** while the cumulative project volumes are shown in **Figure 10**.

The existing (year 2019) volumes were increased by 5.5% (5 years x 1.1% per year) to represent forecasted year 2024 volumes as shown on **Figure 11**.

Near-Term Opening Day (Year 2024) without Project volumes are shown in **Figure 12**.

Figure 9: Cumulative Project Locations

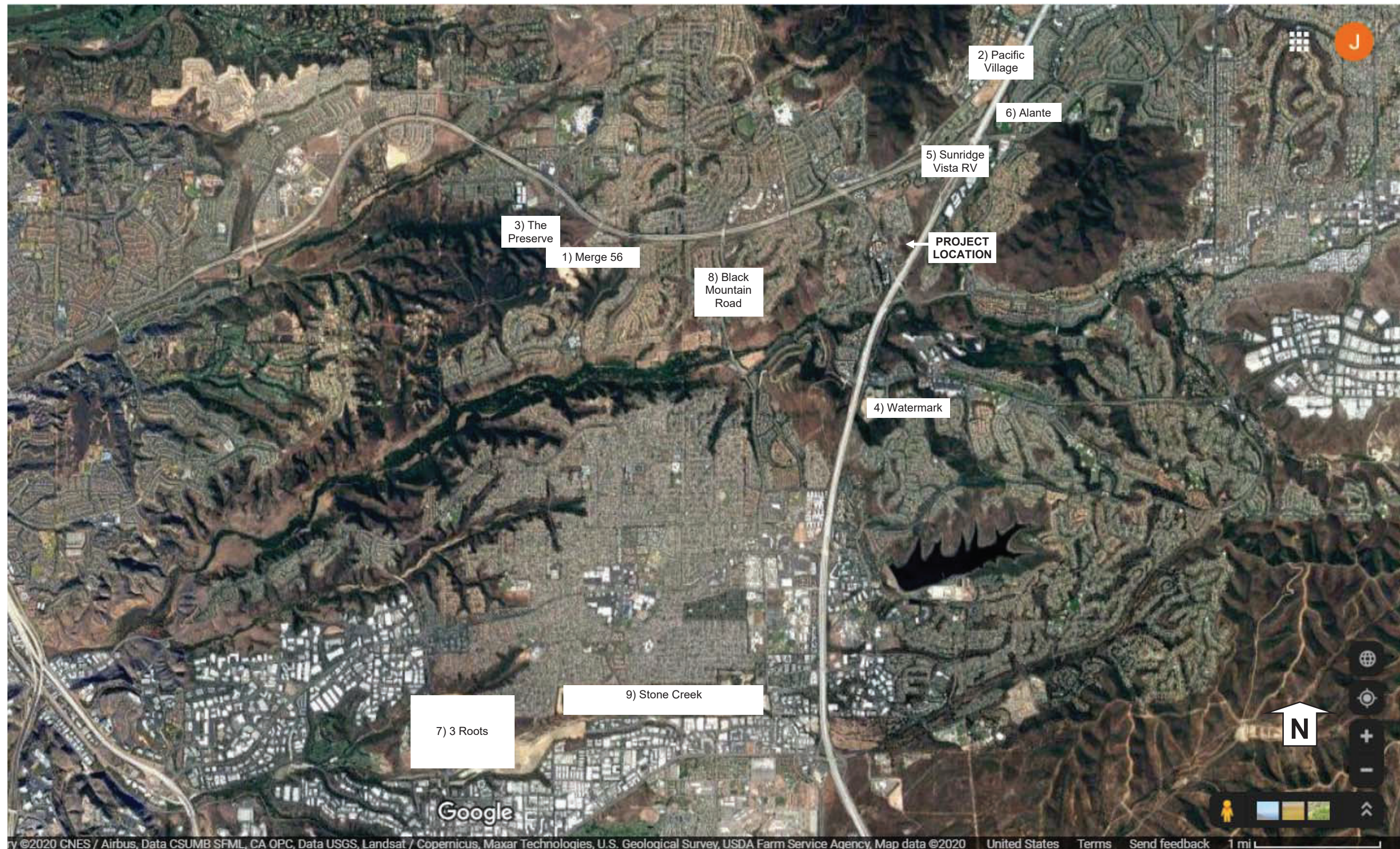


Figure 10: Cumulative Project Volumes

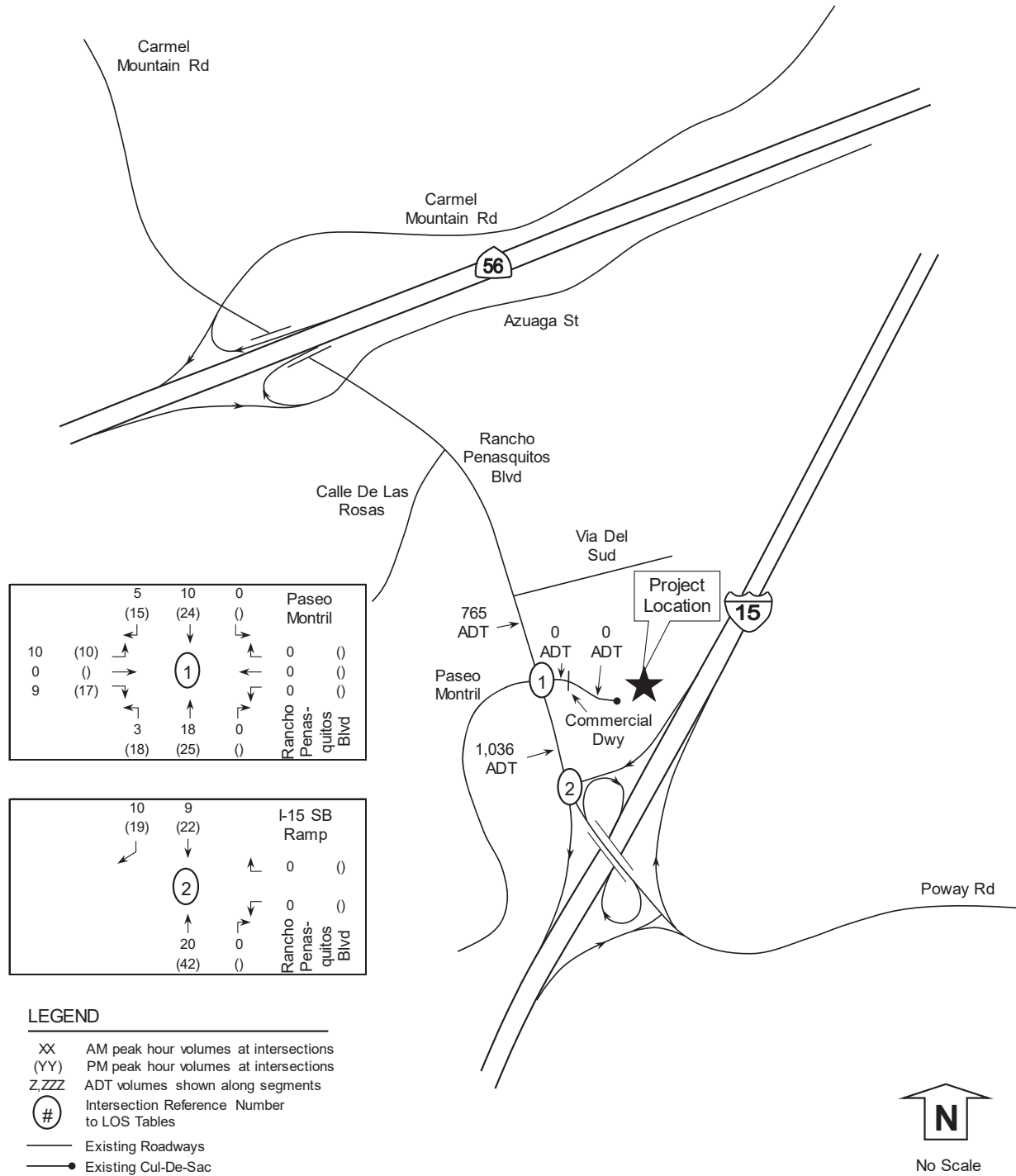


Figure 11: Near-Term Opening Day (Year 2024) Volumes (without Cumulative Projects)

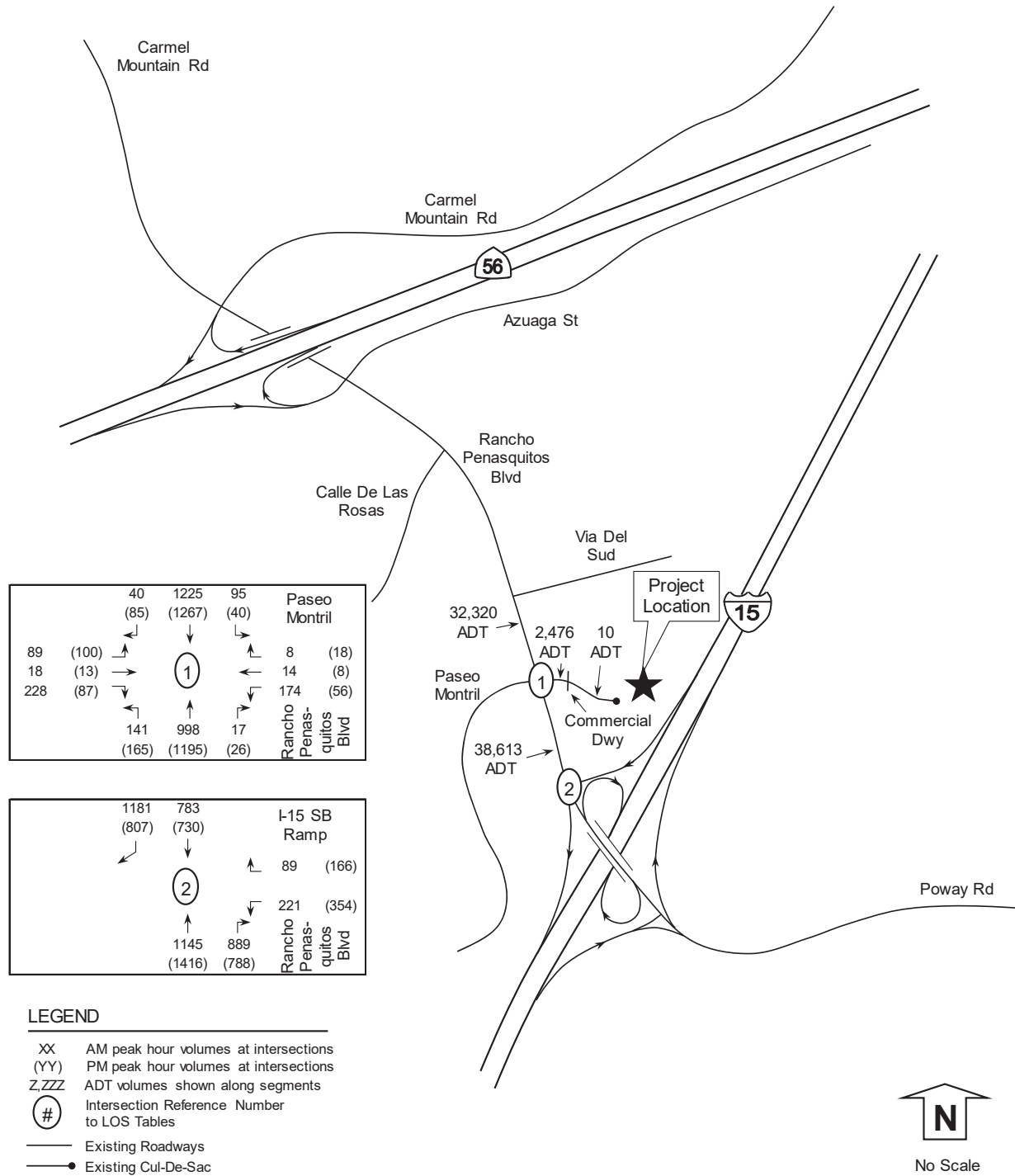
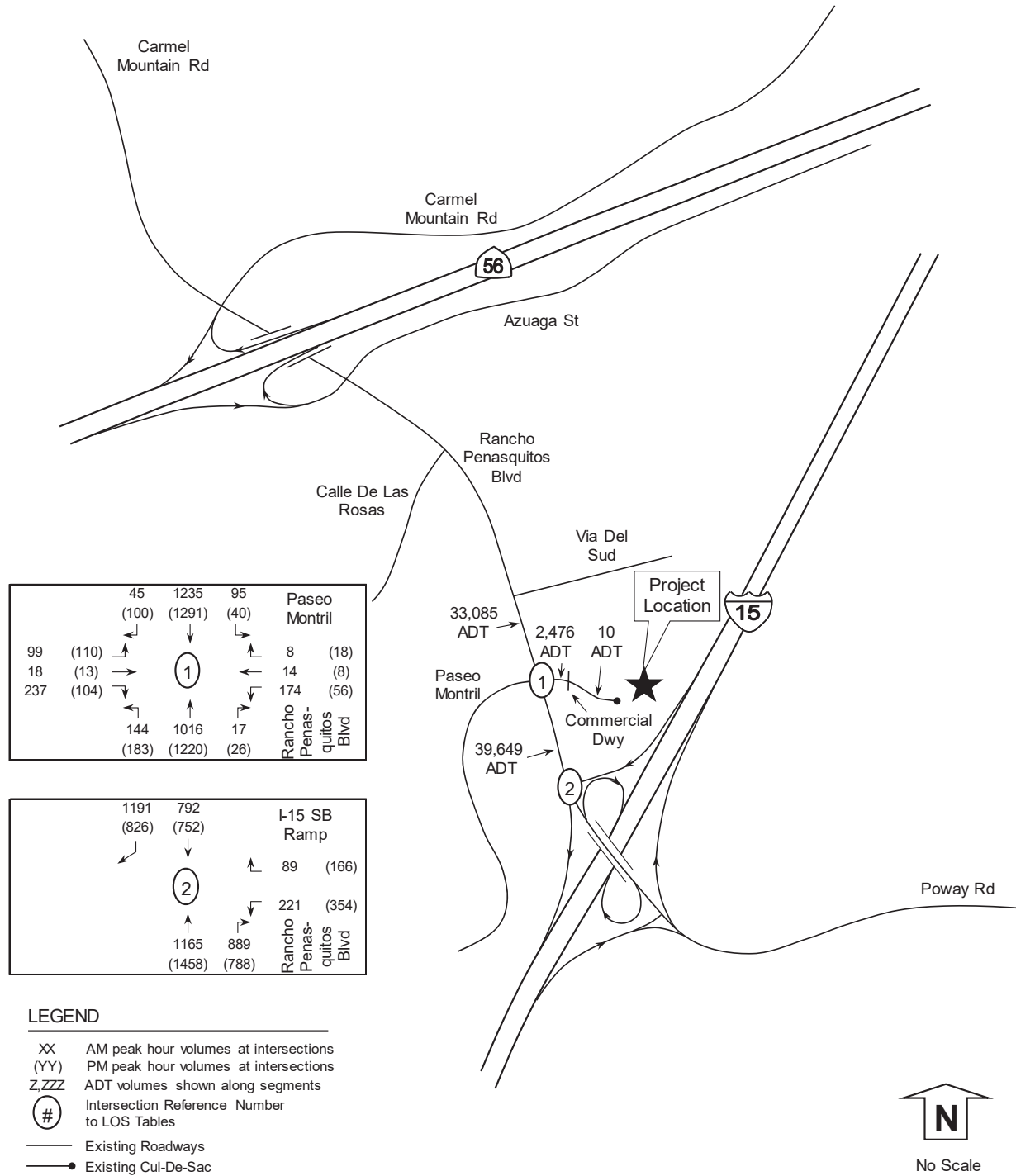


Figure 12: Near-Term Opening Day (Year 2024) + Cumulative without Project Volumes



The LOS calculated for the study intersections and segments are included in **Tables 14 and 15**. Intersection LOS calculations are included in **Appendix L**.

TABLE 14: NEAR-TERM OPENING DAY (YEAR 2024) WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

Intersection and (Analysis) ¹	Movement	Peak Hour	Near-Term	
			Delay ²	LOS ³
1) Rancho Penasquitos	All	AM	29.9	C
Paseo Montril (S)	All	PM	22.0	C
2) Rancho Penasquitos	All	AM	7.7	A
I-15 SB Ramps (S)	All	PM	9.6	A

Notes: 1) Intersection Analysis - (S) Signalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service.

TABLE 15: NEAR-TERM OPENING DAY (YEAR 2024) WITHOUT PROJECT SEGMENT VOLUMES AND LEVEL OF SERVICE

Segment	Functional Classification	LOS E Capacity	Near-Term		
			Daily Volume	V/C	LOS
<u>Rancho Penasquitos Blvd</u>					
Via Del Sud to Paseo Montril	4 Ln Major	40,000	33,085	0.827	D
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	39,649	0.991	E
<u>Paseo Montril</u>					
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,476	0.310	A
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Near-Term Opening Day (Year 2024) conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).

7.6 Near-Term Opening Day (Year 2024) with Project Conditions

This scenario documents the addition of project traffic onto Near-Term Opening Day (Year 2024) conditions as shown in **Figure 13**. The intersection LOS is shown in **Table 16**. The segment LOS is shown in **Table 17**. The intersection LOS are included in **Appendix M**.

TABLE 16: NEAR-TERM OPENING DAY (YEAR 2024) WITH PROJECT INTERSECTION LOS

Intersection and (Analysis) ¹	Movement	Peak Hour	Near-Term		Near-Term + Project		
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴
1) Rancho Penasquitos	All	AM	29.9	C	31.7	C	1.8
Paseo Montril (S)	All	PM	22.0	C	22.7	C	0.7
2) Rancho Penasquitos	All	AM	7.7	A	7.7	A	0.0
I-15 SB Ramps (S)	All	PM	9.6	A	9.6	A	0.0

Notes: 1) Intersection Analysis - (S) Signalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service.

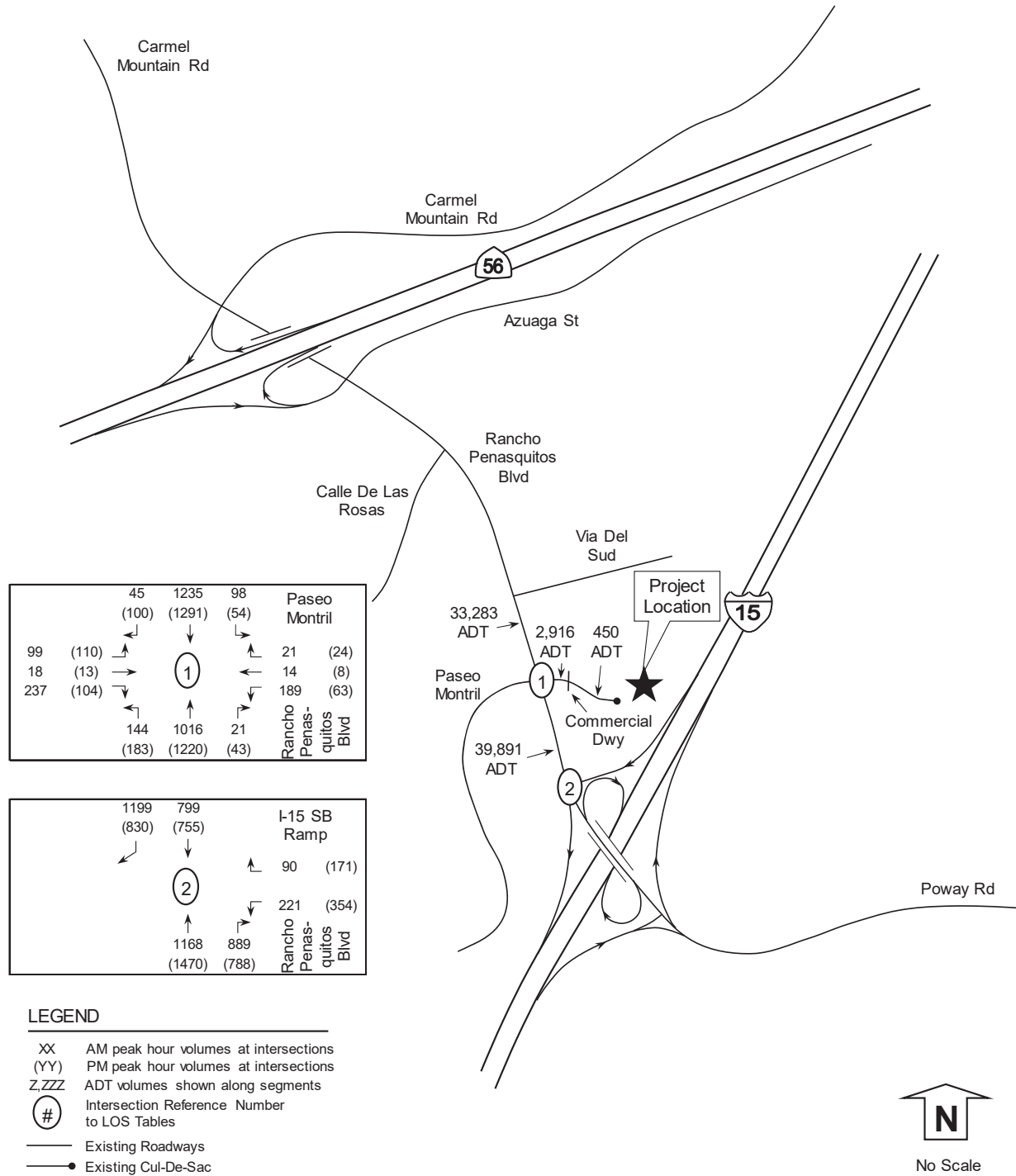
TABLE 17: NEAR-TERM OPENING DAY (YEAR 2024) WITH PROJECT SEGMENT ADT VOLUMES AND LOS

Segment	Functional Classification	Near-Term			Project	Near-Term + Project					
		LOS E Capacity	Daily Volume	V/C	Daily LOS	Daily Volume	Daily V/C	Change in V/C			
<u>Rancho Penasquitos Blvd</u>											
Via Del Sud to Paseo Montril	4 Ln Major	40,000	33,085	0.827	D	198	33,283	0.832	D	0.005	
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	39,649	0.991	E	242	39,891	0.997	E	0.006	
<u>Paseo Montril</u>											
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,476	0.310	A	440	2,916	0.365	B	0.055	
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A	440	450	0.056	A	0.055	

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Near-Term Opening Day (Year 2024) with Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS E segment that is built-out to the community plan classification; therefore, no improvements are proposed.

Figure 13: Near-Term Opening Day (Year 2024) with Project Volumes



7.7 Near-Term Opening Day (Year 2024) with Project Construction Traffic Conditions

This scenario documents the addition of project construction traffic onto Near-Term Opening Day (Year 2024) conditions as shown in **Figure 14**. The intersection LOS is shown in **Table 18**. The segment LOS is shown in **Table 19**. The intersection LOS are included in **Appendix N**.

TABLE 18: NEAR-TERM OPENING DAY (YEAR 2024) WITH PROJECT CONSTRUCTION INTERSECTION LOS

Intersection and (Analysis) ¹	Movement	Peak Hour	Near-Term		Near-Term + Construction Traffic		
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴
1) Rancho Penasquitos	All	AM	29.9	C	33.9	C	4.0
Paseo Montril (S)	All	PM	22.0	C	22.1	C	0.1
2) Rancho Penasquitos	All	AM	7.7	A	7.9	A	0.2
I-15 SB Ramps (S)	All	PM	9.6	A	9.6	A	0.0

Notes: 1) Intersection Analysis - (S) Signalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service. 4) Delta is the increase in delay from project.

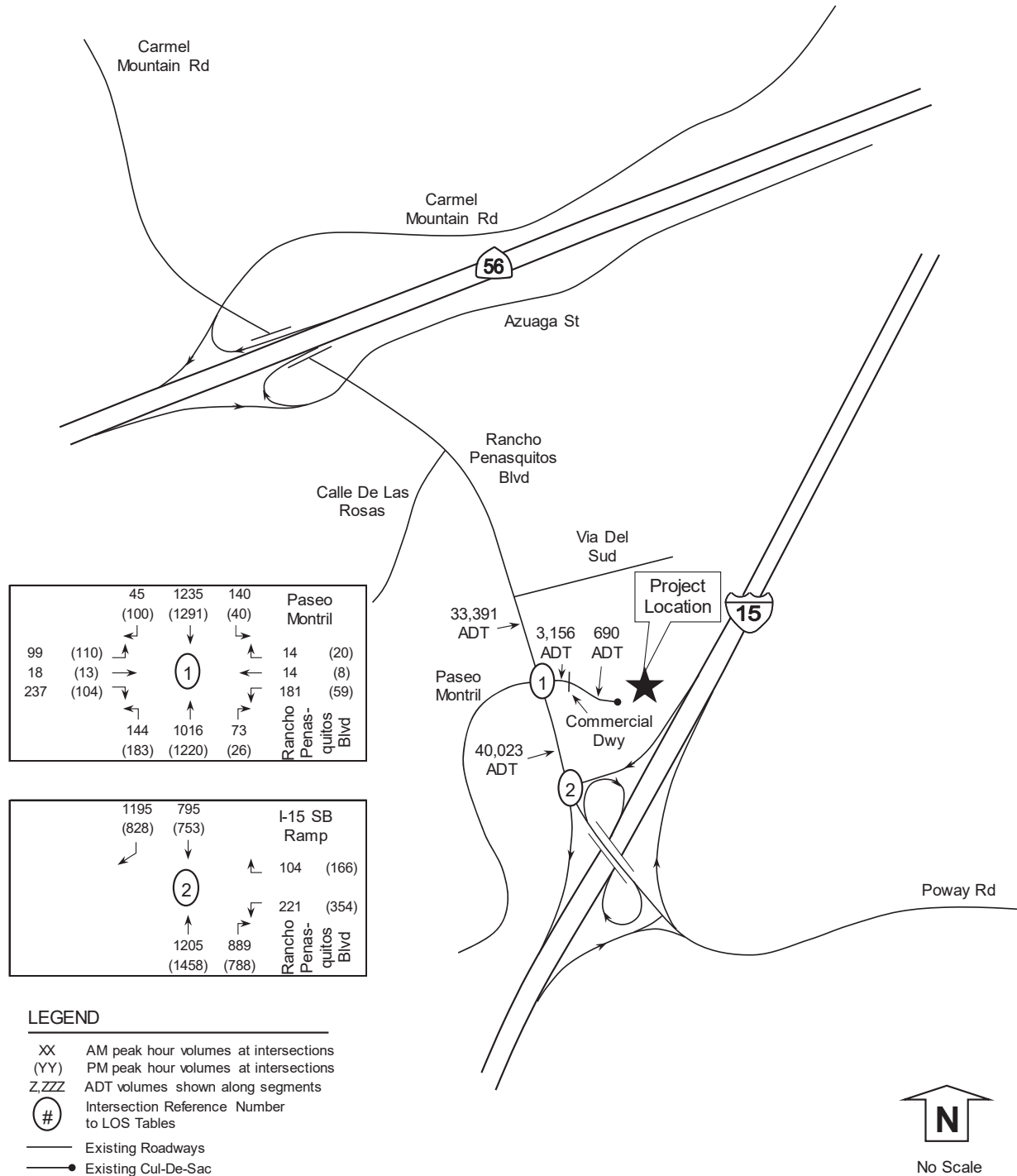
TABLE 19: NEAR-TERM OPENING DAY (YEAR 2024) WITH PROJECT CONSTRUCTION SEGMENT ADT VOLUMES AND LOS

Segment	Functional Classification	LOS	Near-Term				Project				Near-Term + Const. Traffic	
			E	Daily Volume	V/C	LOS	Daily Volume	Daily Volume	V/C	LOS	Change in V/C	
Rancho Penasquitos Blvd												
Via Del Sud to Paseo Montril	4 Ln Major	40,000	33,085	0.827	D	306	33,391	0.835	D	0.008		
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	39,649	0.991	E	374	40,023	1.001	F	0.009		
Paseo Montril												
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,476	0.310	A	680	3,156	0.395	B	0.085		
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A	680	690	0.086	A	0.085		

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Near-Term Opening Day (Year 2024) with Project Construction Traffic conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project construction traffic adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification and the worst-case construction traffic will be a temporary condition for approximately 20 months; therefore, no improvements are proposed.

Figure 14: Near-Term Opening Day (Year 2024) with Project Construction Volumes



7.8 Horizon Year 2050 without Project Conditions

Horizon Year 2050 without project conditions were based on the higher year 2050 segment volumes available between the Black Mountain Road (BMR) EIR (i.e. with Black Mountain Road reclassified to a 4 -Lane Major, thereby shifting some regional traffic over to Rancho Penasquitos Boulevard) and Near-Term volumes. On Rancho Penasquitos Blvd between Via Del Sud and Paseo Montril, the BMR EIR year 2050 volume was higher than the near-term volume. On Rancho Penasquitos Blvd between Paseo Montril and I-15 SB Ramps, the near-term volume was higher than the BMR EIR volume; therefore, the near-term volume was rounded up to nearest thousand to represent a horizon year 2050 volume. Forecasted volumes were not available for Paseo Montril; therefore, the opening year 2024 were rounded up to represent a horizon year 2050 volumes. The 2050 segment volumes used for this analysis are identified under the column “Year 2050 Volume Used in LMA” as shown in **Table 20**.

TABLE 20: HORIZON YEAR 2050 SEGMENT ADT VOLUME COMPARISON

Segment	Opening Day Year 2024	BMR EIR Year 2050	Year 2050 Volume Used in LMA
Rancho Penasquitos Blvd			
Via Del Sud to Paseo Montril	33,085	33,100	33,100
Paseo Montril to I-15 SB Ramps	39,649	33,100	40,000
Paseo Montril			
Rancho Penasquitos to Com. Dwy	2,476	DNE	2,500
Com. Dwy to Project Access	10	DNE	10*

Notes: BMR 2050 = Black Mountain Road EIR year 2050 volumes. DNE: Does Not Exist. * Not rounded up because this segment is a dead-end roadway. LMA: Local Mobility Analysis.

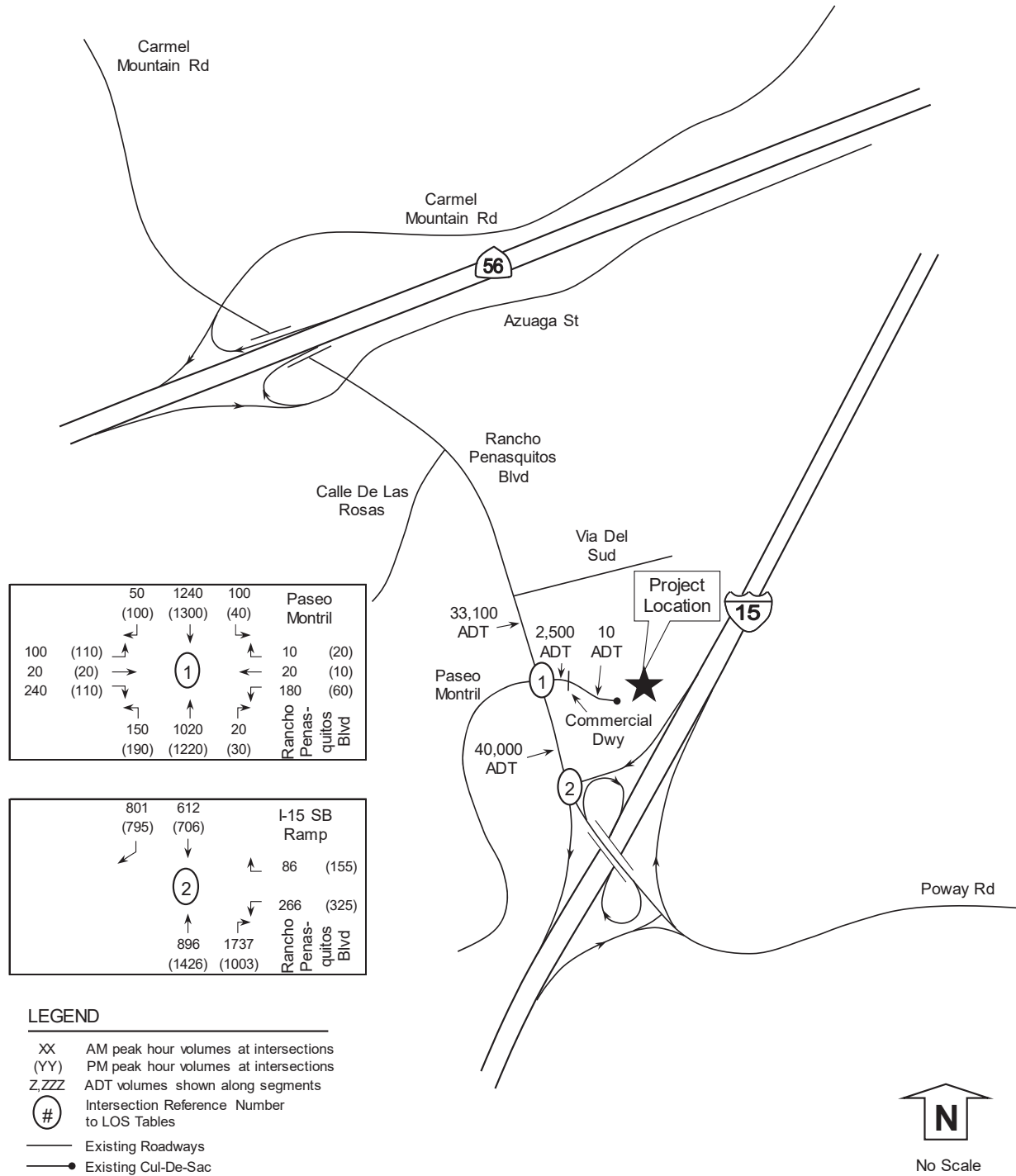
The intersection horizon year 2050 volumes were obtained from the Black Mountain Road EIR. A comparison was made between near-term (2024) and BMR EIR year 2050 volumes as shown in **Table 21**.

TABLE 21: HORIZON YEAR 2050 INTERSECTION VOLUME COMPARISON

Intersection	Peak Hour	Near-Term (2024) Total Intersection Volume	BMR EIR Horizon Year 2050 Total Intersection Volume	Year 2050 Volume Used in LMA
Rancho Penasquitos Blvd at Paseo Montril	AM	3,102	2,273	Near-Term Rounded Up
	PM	3,169	2,828	
Rancho Penasquitos Blvd at I-15 SB Ramps	AM	4,347	4,398	BMR EIR Volumes
	PM	4,344	4,410	

For the intersection of Rancho Penasquitos Blvd at Paseo Montril, the near-term (2024) peak hour volumes were rounded up to the nearest tens to represent higher and more conservative volumes than the BMR EIR year 2050 peak hour volumes. For the intersection of Rancho Penasquitos Blvd at I-15 SB Ramps, the BMR EIR year 2050 peak hour volumes were used as reported because they were higher than the near-term volumes. Copies of the year 2050 SANDAG volumes and BMR year 2050 volumes are included in **Appendix O**. The horizon year 2050 volumes without project traffic are shown in **Figure 15**. The existing local roadway geometric conditions were held constant for the 2050 analysis because the city web source of San Diego *Rancho Penasquitos Public Facilities Financing Plan FY 2014* did not show any planned improvements to the study roadways or segments.

Figure 15: Horizon Year 2050 without Project Volumes



The LOS calculated for the study intersections and segments are included in **Tables 22 and 23**. Intersection LOS calculations are included in **Appendix P**.

TABLE 22: HORIZON YEAR 2050 WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

Intersection and (Analysis) ¹	Movement	Study Period	Horizon Year 2050	
			Delay ²	LOS ³
1) Rancho Penasquitos	All	AM	31.3	C
Paseo Montril (S)	All	PM	23.6	C
2) Rancho Penasquitos	All	AM	10.7	B
I-15 SB Ramps (S)	All	PM	10.2	B

Notes: 1) Intersection Analysis - (S) Signalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service.

TABLE 23: HORIZON YEAR 2050 WITHOUT PROJECT SEGMENT VOLUMES AND LEVEL OF SERVICE

Segment	Functional Classification	LOS E Capacity	Horizon Year 2050		
			Daily Volume	V/C	LOS
<u>Rancho Penasquitos Blvd</u>					
Via Del Sud to Paseo Montril	4 Ln Major	40,000	33,100	0.828	D
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	40,000	1.000	F
<u>Paseo Montril</u>					
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,500	0.313	B
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Horizon Year 2050 conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F).

7.9 Horizon Year 2050 with Project Conditions

The Horizon Year 2050 with project conditions were analyzed by adding project traffic onto horizon year 2050 volumes. The horizon year 2050 volumes with project traffic are shown in **Figure 16**. The LOS calculated for the study intersections and segments are included in **Tables 24 and 25**. LOS calculations are included in **Appendix Q**.

TABLE 24: HORIZON YEAR 2050 WITH PROJECT INTERSECTION LEVEL OF SERVICE

Intersection and (Analysis) ¹	Movement	Study Period	Horizon Year 2050		Horizon Year 2050 with Project		
			Delay ²	LOS ³	Delay ²	LOS ³	Delta ⁴
1) Rancho Penasquitos	All	AM	28.9	C	30.7	C	1.8
Paseo Montril (S)	All	PM	22.4	C	23.1	C	0.7
2) Rancho Penasquitos	All	AM	10.7	B	10.7	B	0.0
I-15 SB Ramps (S)	All	PM	10.2	B	10.3	B	0.1

Notes: 1) Intersection Analysis - (S) Signalized, (U) Unsignalized. 2) Delay - HCM Average Control Delay in seconds. 3) LOS: Level of Service. 4) Delta is the increase in delay from project.

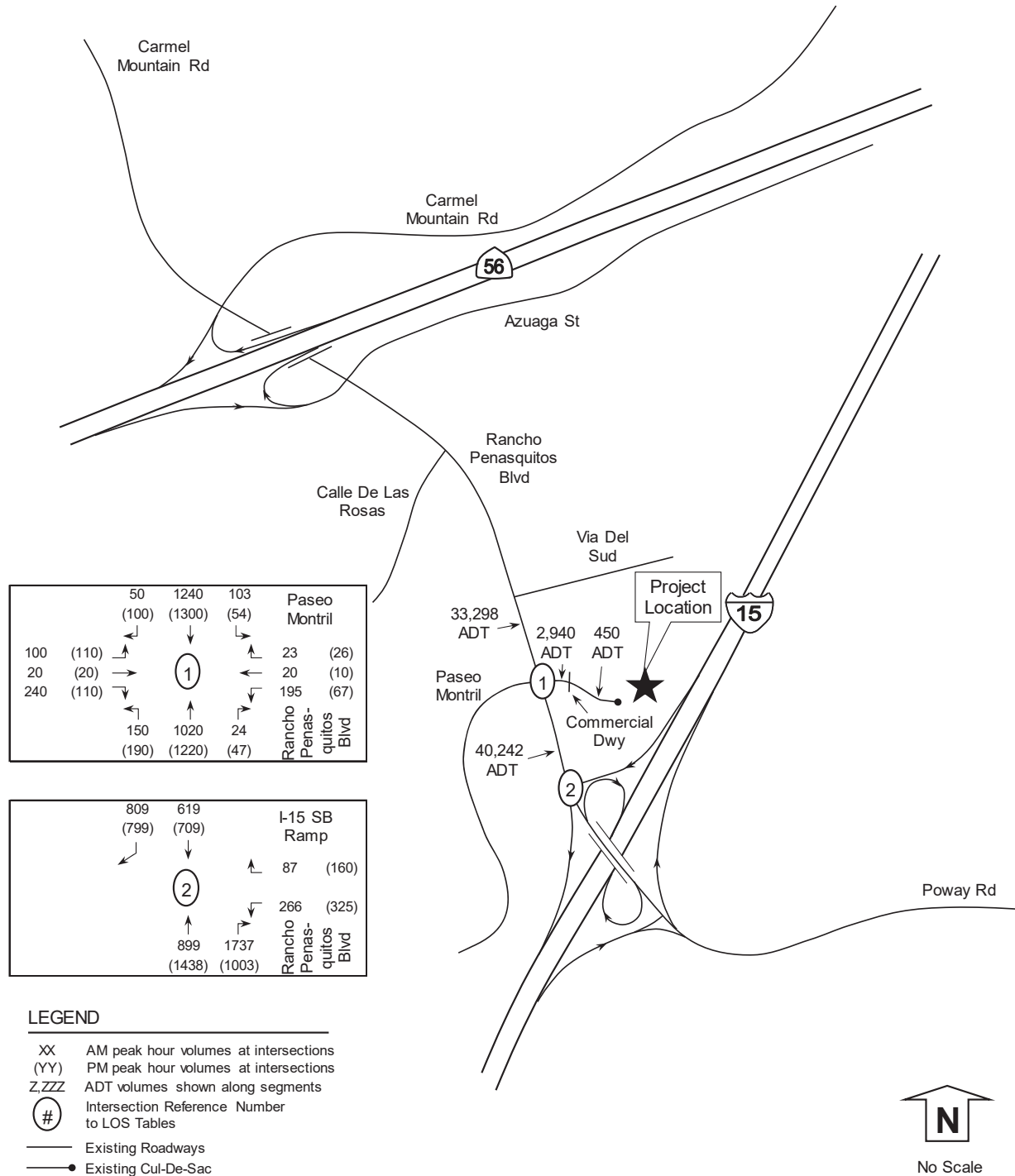
TABLE 25: HORIZON YEAR 2050 WITH PROJECT SEGMENT VOLUMES AND LEVEL OF SERVICE

Segment	Functional Classification	LOS E	Horizon Year 2050		Project Daily Volume	Horizon Year 2050 with Project			Change In V/C	
			Daily Capacity	V/C		Daily Volume	Daily Volume	V/C		LOS
Rancho Penasquitos Blvd										
Via Del Sud to Paseo Montril	4 Ln Major	40,000	33,100	0.828	D	198	33,298	0.832	D	0.005
Paseo Montril to I-15 SB Ramps	4 Ln Major	40,000	40,000	1.000	F	242	40,242	1.006	F	0.006
Paseo Montril										
Rancho Penasquitos to Com. Dwy	2 Ln Collector	8,000	2,500	0.313	B	440	2,940	0.368	B	0.055
Com. Dwy to Project Access	2 Ln Collector	8,000	10	0.001	A	440	450	0.056	A	0.055

Notes: Daily volume is a 24 hour volume. LOS: Level of Service. V/C: Vol to Capacity Ratio. Bold indicates unacceptable LOS. Com. Dwy = Commercial Driveway

Under Horizon Year 2050 with project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification; therefore, no improvements are proposed.

Figure 16: Horizon Year 2050 with Project Volumes



8.0 Conclusions

The proposed project is 55 multi-family units located at the eastern terminus of Paseo Montril east of Rancho Penasquitos Blvd in the Rancho Penasquitos Community of San Diego, California. The project site is currently vacant. The project is anticipated to open in the year 2024. Project access is from one driveway at the Paseo Montril eastern terminus cul-de-sac. The following discretionary approvals are required as part of the project:

- 1) Community Plan Amendment/Rezone
- 2) Vesting Tentative Map
- 3) Site Development Permit
- 4) Planned Development Permit

This Local Mobility Analysis (LMA) determines if there are any traffic effects caused by the project traffic that would trigger roadway and other multi-modal improvements or a fair share participation. The LMA is based on the City of San Diego *Transportation Study Manual*, September 29, 2020 and includes the analysis of pedestrian, bicycle, transit, and vehicular facilities.

Pedestrian facilities within a ½ mile walking shed along the study roadways did not have any observed missing sidewalk sections, curb ramps, or significant obstructions, except for approximately 450 feet along the north side of Paseo Montril from the easterly cul-de-sac to approximately 150 feet east of Rancho Penasquitos Blvd, and about 10 feet on the southside of Paseo Montril that is heavily overgrown and not traversable just east of the commercial driveway that is about 150 ft east of Rancho Penasquitos Blvd. The City of San Diego *Street Design Manual*, March 2017 notes under Section 2.1.2 that a sidewalk width shall be 5 feet. This criterion is satisfied along the study section of Rancho Penasquitos Blvd and only along a short portion of Paseo Montril (about 150 between Rancho Penasquitos Blvd and the commercial driveways east of Rancho Penasquitos Blvd). The available sidewalks within ½ mile walking shed along the study roadways generally meet this criterion except for the non-traversable section of sidewalk on the southside of Paseo Montril between Rancho Penasquitos Blvd and the proposed project driveway. The Owner/Permittee does not propose to complete the missing section of sidewalk along the north side of Paseo Montril because: 1) there is an alternative option of using the sidewalk on the southside of Paseo Montril that provides access to the adjacent commercial shopping center, 2) the southside sidewalk provides the most direct route to the nearby bus stops on Rancho Penasquitos Blvd just south of Paseo Montril, 3) the Owner/Permittee does not have project frontage along the portion of the missing northside sidewalk, and 4) an initial cost estimate of \$30,000 may not account for potential need of removing or blasting the existing rock wall and replacing the existing rock fencing with rock bolts for a northside sidewalk. It is recommended that the Owner/Permittee clear the vegetation overgrowth along the south sidewalk along Paseo Montril, repair or replace any missing sidewalk segments along the south sidewalk on Paseo Montril, and install a sidewalk around the cul-de-sac along the project frontage.

Bicycle facilities within a ½ mile bicycling distance along the study roadways of Rancho Penasquitos Blvd between Calle De Las Rosas and I-15 or on Paseo Montril did not have marked bike lanes nor bike route signs. No bicycle lane improvements are recommended as part of this project on Rancho Penasquitos Blvd where Class II bike lanes are proposed in the *Rancho*

Penasquitos Community Plan because there is insufficient pavement available for both on-street parking and a bike lane resulting in the need to remove on-street parking to accommodate a Class II bike lane. Also, it is not recommended to install a piecemeal bike facility defined by the bicycle study area limits along Rancho Penasquitos Blvd that would not connect with an existing bike lane network. The closest bike network is at Rancho Penasquitos Blvd/SR-56, which is about 800 feet beyond the ½ mile bicycle study area; however, adding a Class II bike lane to this 800-foot section would also require the removal of on-street parking.

Transit facilities within a ½ mile walking shed included six bus stops along Rancho Penasquitos Blvd that are served by Metropolitan Transit System (MTS) Route 20. The weekday service frequency is 30 minutes during the AM and PM peak hours while the off-peak frequency ranges between 30 and 60 minutes. The bus stop on the east side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 700 feet from the project driveway and includes two benches in good condition. The bus stop on the west side of Rancho Penasquitos Blvd just south of Paseo Montril is approximately 875 feet from the project driveway and includes two benches in good condition. The Owner/Permittee will be improving the sidewalk on the southside of Paseo Montril that will improve the walking path to the nearby bus stops to and from the project site.

Systemic Safety review included the analysis of Rancho Penasquitos Blvd at Paseo Montril and Rancho Penasquitos Blvd at I-15 SB Ramps. Two criteria were found to be possible candidates for countermeasures at the intersection of Rancho Penasquitos Blvd at Paseo Montril; however, the potential messaging campaign and awareness campaign are beyond the scope of this project.

Vehicular facilities included the analysis of two (2) intersections, and four (4) segments:

- Intersection of Rancho Penasquitos Blvd at Paseo Montril
- Intersection of Rancho Penasquitos Blvd at I-15 SB Ramps
- Segment of Rancho Penasquitos Blvd from Via Del Sud to Paseo Montril
- Segment of Rancho Penasquitos Blvd from Paseo Montril to I-15 SB Ramps
- Segment of Paseo Montril from Rancho Penasquitos Blvd to the Commercial Driveways about 150 feet east of Rancho Penasquitos Blvd
- Segment of Paseo Montril from the noted Commercial Driveways to the eastern cul-de-sac

The project trip generation based on the City of San Diego *Trip Generation Manual*, May 2003 is calculated at approximately 440 ADT with 35 AM peak hour trips (7 inbound and 28 outbound) and 44 PM peak hour trips (31 inbound and 13 outbound). The study scenarios included Existing, Opening Year 2024, Opening Year 2024 with project, Opening Year 2024 with project construction traffic, Horizon Year 2050, and Horizon Year 2050 with project conditions. A Horizon Year 2050 analysis is required because the project requires a Community Plan Amendment and Rezone. Nine reasonably foreseeable cumulative projects were incorporated into the analysis. The operations by study scenario included:

- 1) Under Existing conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).

- 2) Under Opening Year 2024 without Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E).
- 3) Under Opening Year 2024 with Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS E). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS E segment that is built-out to the community plan classification; therefore, no improvements are proposed.
- 4) Under Opening Year 2024 with Project Construction traffic conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification and the worst-case construction traffic will be a temporary condition for approximately 20 months; therefore, no improvements are proposed.
- 5) Under Horizon Year 2050 conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F).
- 6) Under Horizon Year 2050 with Project conditions, the study intersections and segments were calculated to operate at acceptable LOS except for the segment of Rancho Penasquitos Blvd between Paseo Montril and I-15 (LOS F). The project adds less than 50% of the total daily vehicle trips on the above forecasted LOS F segment that is built-out to the community plan classification; therefore, no improvements are proposed.

###

Appendix B

Excerpts from City of San Diego Bicycle Master Plan Update and Community Plan

Existing Bicycle Routes

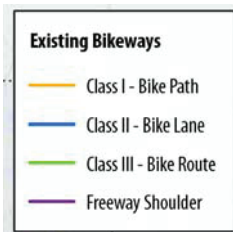
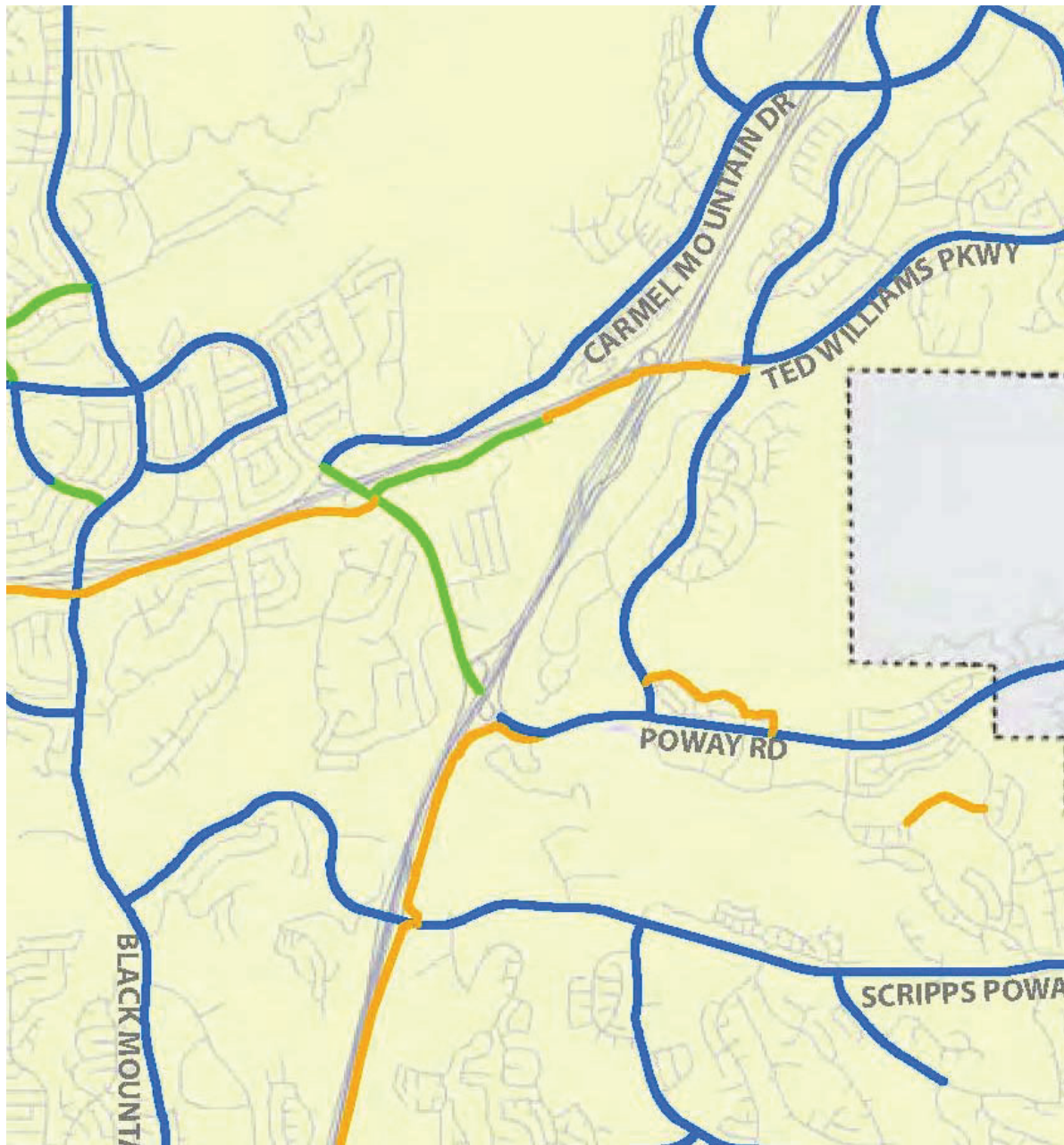
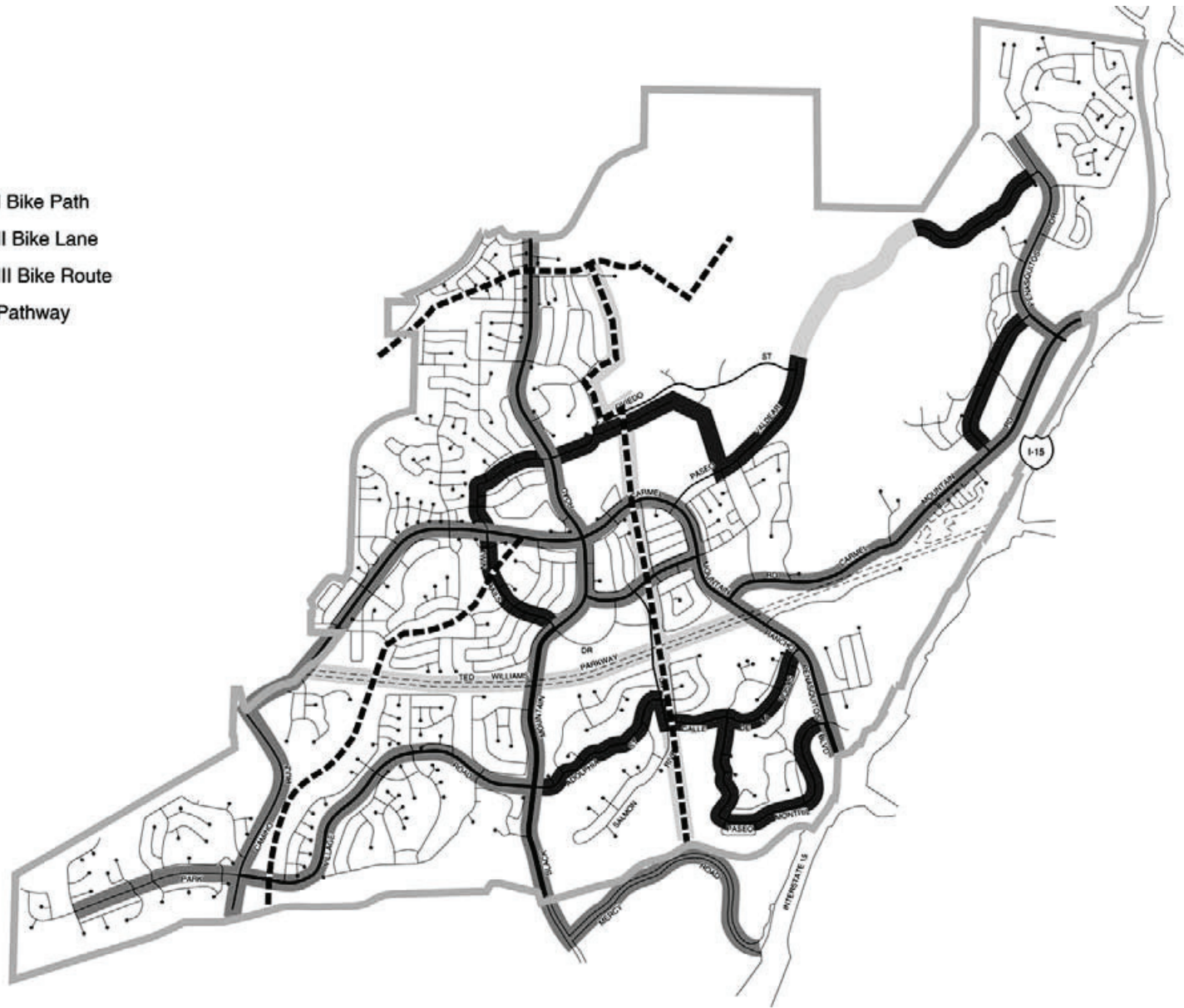


Figure 3-3:
San Diego Existing Bikeways (North)

-  Class I Bike Path
-  Class II Bike Lane
-  Class III Bike Route
-  Major Pathway



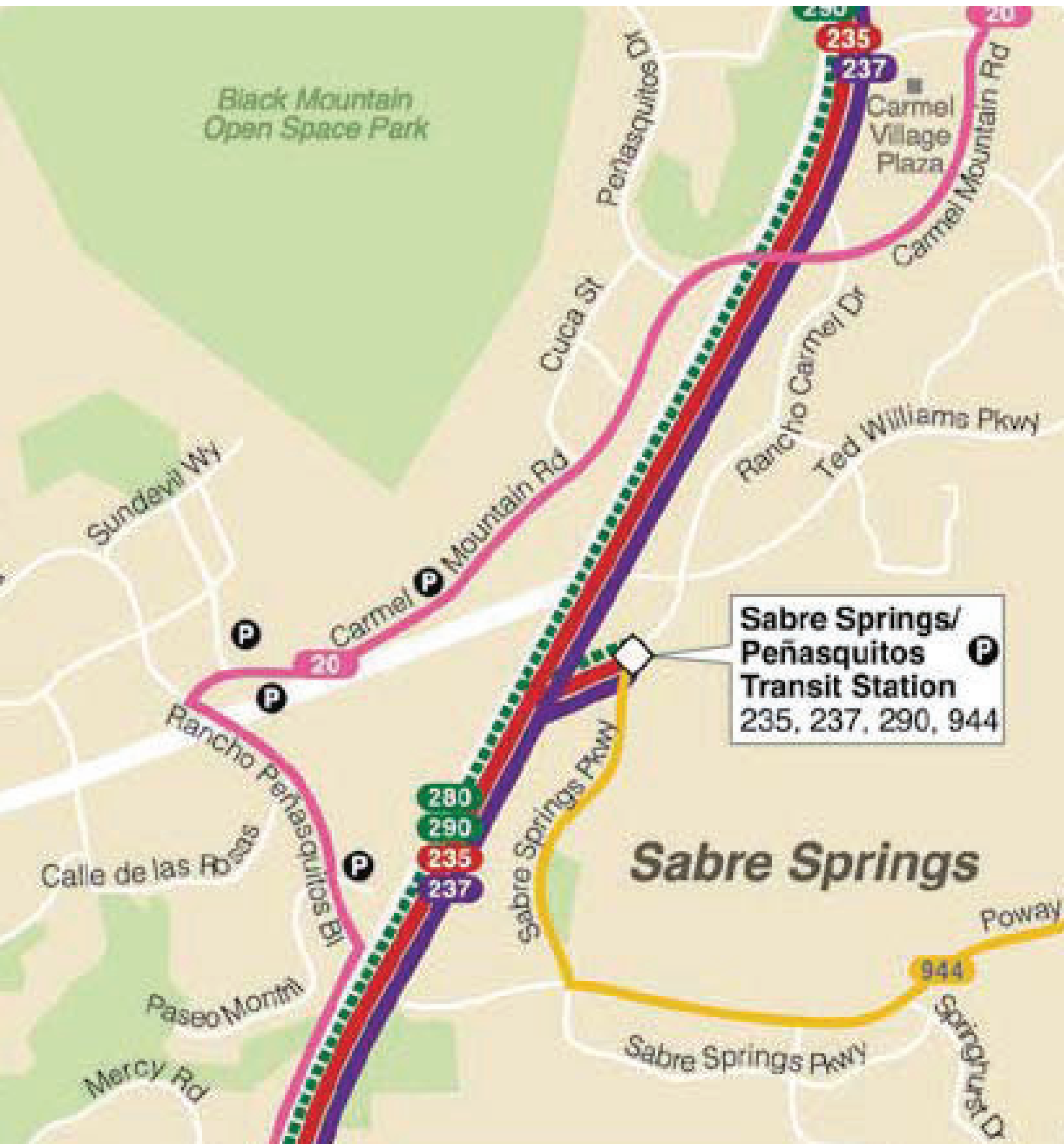
Bikeways and Pedestrian Circulation
Rancho Peñasquitos Community Plan

30
FIGURE



Appendix C

Transit Map and Schedules



CASH FARES / Tarifas en efectivo

CASH fare, please / Favor de pagar la cantidad exacta	
Day Pass (Regional) / Pase diario (Regional) Compass Card required (\$2) / Se requiere un Compass Card (\$2)	\$5.00
One-Way Fare / Tarifa de una direcccion	\$2.50
Senior (60+)/Disabled/Medicare Mayores de 60 años/Discapacitados/Medicare	\$1.25*
Children 5 & under / Niños de 5 años o menos Up to two children ride free per paying adult / Máximo dos niños viajan gratis por cada adulto	FREE / GRATIS
MONTHLY PASSES / Pases mensual	
Adult / Adulto	\$72.00
Senior (60+)/Disabled/Medicare Mayores de 60 años/Discapacitados/Medicare	\$18.00*
Youths (18 and under) Jóvenes (18 años o menos)	\$36.00*

*I.D. required for discount fare or pass.
*Se requiere identificación para tarifas o pases de descuento.

DAY PASS (REGIONAL) / Pase diario (Regional)

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for \$2 at select outlets. A \$5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional \$2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por \$2 en selectas sucursales. Un pase de un día por \$5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de \$2.

DIRECTORY / Directorio

Regional Transit Information Información de transporte público regional	511 or/ó (619) 233-3004
TTY/TDD (teletype for hearing impaired) Teletipo para sordos	(619) 234-5005 or/ó (888) 722-4889
InfoExpress (24-hour info via Touch-Tone phone) Información las 24 horas (vía teléfono de teclas)	(619) 685-4900
Customer Service / Suggestions Servicio al cliente / Sugerencias	(619) 557-4555
SafeWatch	(619) 557-4500
Lost & Found Objetos extraviados	(619) 557-4555
Transit Store	(619) 234-1060 12th & Imperial Transit Center M-F 8am-5pm

For MTS online trip planning sdmts.com
Planificación de viajes por Internet

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit sdmts.com.
Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a www.sdmts.com.

Thank you for riding MTS! ¡Gracias por viajar con MTS!

20

**Downtown –
Rancho Bernardo
Station**
via Fashion Valley

110

**Downtown –
Mira Mesa Express
Station**
via I-15 / Hwy 163

DESTINATIONS

- City College
- Downtown Courthouses (110)
- Fashion Valley Mall (20)
- Miramar College
- Mira Mesa MarketCenter

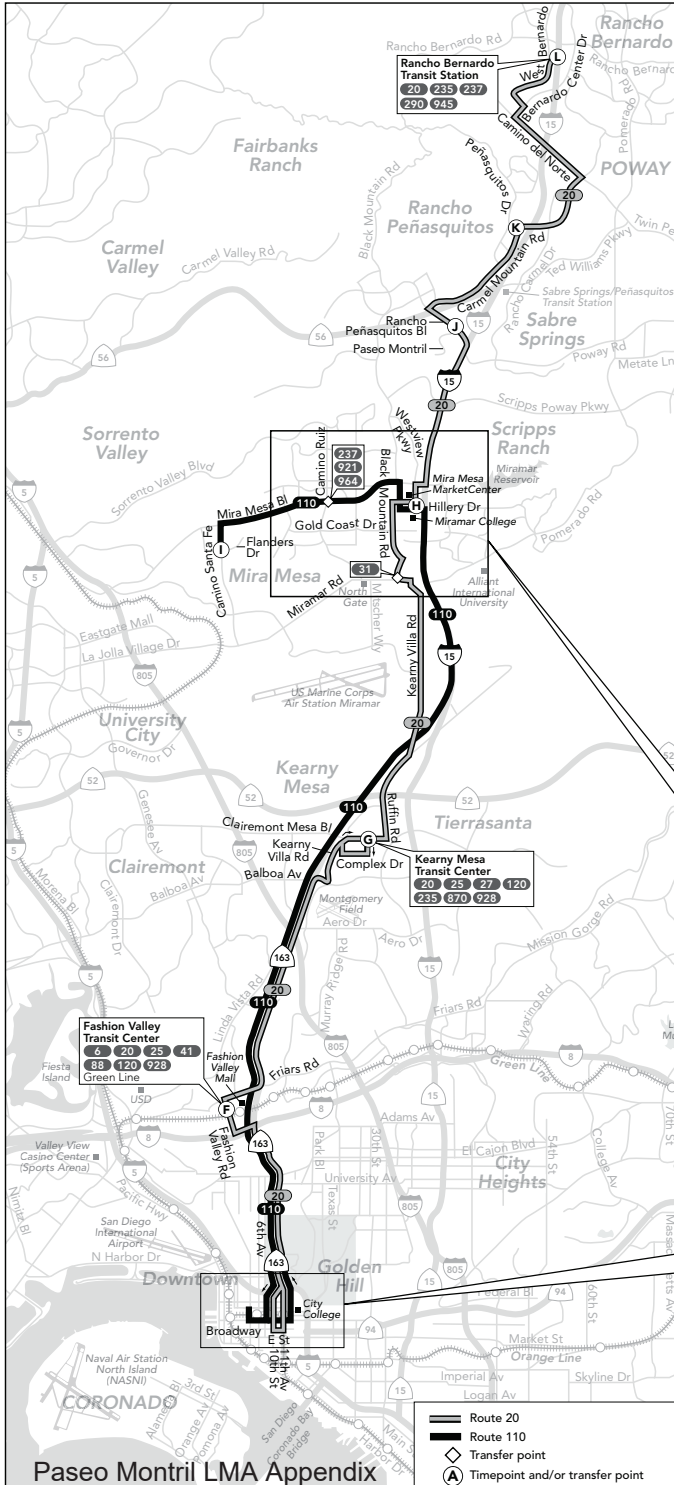


City College
Fashion Valley (20)



01/17

Alternative formats available upon request. Please call: (619) 557-4555 / Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555



Route 110 – Monday through Friday / lunes a viernes

Morning only

Mira Mesa → Downtown

I	H	D	C	B
Camino Santa Fe & Flanders Dr. DEPART	Miramar College Transit Station	10th Av. & B St.	Broadway & 5th Av.	Broadway & 1st Av. ARRIVE
6:02a	6:15a	6:35a	6:39a	6:44a
6:22	6:35	6:55	6:59	7:04
6:40	6:55	7:17	7:21	7:27
7:05	7:20	7:42	7:46	7:52

Route 110 – Monday through Friday / lunes a viernes

Afternoon only

Downtown → Mira Mesa

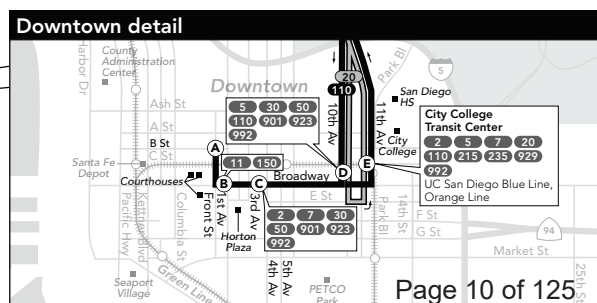
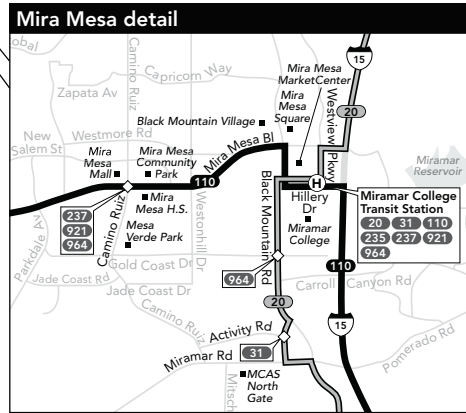
A	C	E	H	I
Front St. & B St. DEPART	Broadway & 3rd Av.	City College Transit Center (11th & B)	Miramar College Transit Station	Camino Santa Fe & Flanders Dr. ARRIVE
4:02p	4:05p	4:12p	4:31p	4:47p
4:27	4:30	4:37	4:58	5:15
4:52	4:55	5:02	5:23	5:40
5:22	5:25	5:32	5:53	6:10

The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.

Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 110 does not operate on weekends or on the following holidays and observed holidays
La ruta 110 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas y feriados observados



Route 20 - Monday through Friday / lunes a viernes

Downtown → Kearny Mesa → Rancho Bernardo

D	E	F	G	H	J	K	L
10th Av. & Broadway DEPART	City College Transit Center (11th & C) DEPART	Fashion Valley Transit Center ARRIVE DEPART	Kearny Mesa Transit Center	Miramar College Transit Station	Rancho Peñasquitos & Paseo Montril	Carmel Mtn. & Peñasquitos Dr.	R. Bernardo Transit Station ARRIVE
—	4:55a	5:06a	5:08a	5:20a	5:37a	5:44a	5:52a
—	5:25	5:36	5:38	5:51	6:10	6:17	6:41
—	5:40	5:51	5:53	6:07	6:29	6:37	7:02
—	5:55	6:06	6:08	6:22	—	—	—
—	6:10	6:21	6:23	6:37	7:02	7:10	7:37
6:22a	6:25	6:36	6:38	6:52	—	—	—
6:37	6:40	6:51	6:53	7:07	7:32	7:40	8:07
6:52	6:55	7:06	7:08	7:22	—	—	—
7:07	7:10	7:21	7:23	7:37	8:02	8:10	8:37
7:22	7:25	7:36	7:38	7:52	—	—	—
7:37	7:40	7:51	7:53	8:07	8:32	8:40	9:07
7:52	7:55	8:06	8:08	8:22	—	—	—
8:07	8:10	8:21	8:23	8:37	9:02	9:10	9:37
8:22	8:25	8:36	8:38	8:52	—	—	—
8:37	8:40	8:51	8:53	9:08	9:31	9:39	10:06
8:52	8:55	9:06	9:08	9:23	—	—	—
9:07	9:10	9:21	9:23	9:38	10:01	10:09	10:36
9:22	9:25	9:36	9:38	10:02	10:31	10:39	11:06
10:07	10:10	10:21	10:23	10:38	11:01	11:09	11:36
10:37	10:40	10:51	10:53	11:08	11:31	11:39	12:06p
11:07	11:10	11:21	11:23	11:38	12:01p	12:09p	12:36p
11:37	11:40	11:51	11:53	12:08p	12:31	12:39	13:06
12:07p	12:10p	12:21p	12:23p	12:38	1:01	1:09	1:36
12:37	12:40	12:52	12:54	1:10	1:33	1:42	2:10
1:07	1:10	1:22	1:24	1:40	2:04	2:13	2:41
1:37	1:40	1:52	1:54	2:10	2:34	2:43	3:11
2:07	2:10	2:23	2:25	2:41	3:07	3:16	3:45
2:37	2:40	2:53	2:55	3:11	3:37	3:46	4:15
2:52	2:55	3:08	3:10	3:26	—	—	—
3:07	3:10	3:23	3:25	3:41	4:07	4:16	4:45
3:22	3:25	3:38	3:40	3:56	—	—	—
3:37	3:40	3:53	3:55	4:11	4:37	4:46	5:15
3:52	3:55	4:08	4:10	4:26	—	—	—
4:07	4:10	4:23	4:25	4:41	5:07	5:16	5:45
4:22	4:25	4:38	4:40	4:56	—	—	—
4:37	4:40	4:53	4:55	5:11	5:37	5:46	6:15
4:52	4:55	5:08	5:10	5:26	—	—	—
5:07	5:10	5:23	5:25	5:41	6:05	6:14	6:42
5:22	5:25	5:38	5:40	5:56	—	—	—
5:37	5:40	5:52	5:54	6:09	6:32	6:41	7:07
6:07	6:10	6:21	6:23	6:37	6:58	7:07	7:31
6:37	6:40	6:51	6:53	7:07	7:28	7:37	8:01
7:07	7:10	7:21	7:23	7:35	7:54	8:02	8:24
7:36	7:39	7:50	7:52	8:05	8:24	8:32	8:54
8:36	8:39	8:50	8:52	9:05	—	—	—

Rancho Bernardo → Kearny Mesa → Downtown

L	K	J	H	G	F	D
Rancho Bernardo Transit Station DEPART	Carmel Mtn. & Peñasquitos Dr.	Rancho Peñasquitos & Paseo Montril	Miramar College Transit Station	Kearny Mesa Transit Center ARRIVE	Fashion Valley Transit Center ARRIVE DEPART	10th Av. & Broadway ARRIVE
4:58a	5:13a	5:21a	5:30a	5:49a	6:01a	6:12a
5:26	5:42	5:51	6:00	6:20	6:33	6:45
5:52	6:09	6:19	6:30	6:52	7:05	7:18
—	—	—	—	7:06	7:19	7:33
6:19	6:37	6:49	7:00	7:23	7:36	7:50
—	—	—	—	7:38	7:51	8:05
6:49	7:07	7:19	7:30	7:53	8:06	8:20
—	—	—	—	8:08	8:21	8:35
7:19	7:37	7:49	8:00	8:23	8:36	8:50
7:49	8:07	8:19	8:30	8:53	9:06	9:20
8:21	8:39	8:51	9:00	9:22	9:35	9:48
8:51	9:09	9:21	9:30	9:52	10:05	10:18
9:25	9:42	9:52	10:00	10:22	10:36	10:49
9:55	10:12	10:22	10:30	10:52	11:06	11:19
10:25	10:42	10:52	11:00	11:22	11:36	11:49
10:55	11:12	11:22	11:30	11:52	12:06p	12:19p
11:24	11:42	11:52	12:00p	12:23p	12:37	12:50
11:54	12:12p	12:22p	12:30	12:53	1:07	1:20
12:24p	12:42	12:52	1:00	1:23	1:37	1:50
12:54	1:12	1:22	1:30	1:53	2:07	2:20
1:24	1:42	1:52	2:00	2:23	2:37	2:50
—	—	—	—	2:38	2:52	3:05
1:54	2:12	2:22	2:30	2:53	3:07	3:20
—	—	—	—	3:08	3:22	3:35
2:24	2:42	2:52	3:00	3:23	3:37	3:50
2:51	3:10	3:20	3:29	3:53	4:08	4:22
—	—	—	—	4:08	4:23	4:37
3:19	3:38	3:48	3:57	4:21	4:37	4:51
—	—	—	—	4:36	4:52	5:06
3:49	4:08	4:18	4:27	4:52	5:08	5:22
—	—	—	—	5:07	5:23	5:37
4:18	4:38	4:48	4:57	5:22	5:38	5:53
—	—	—	—	5:37	5:53	6:08
4:48	5:08	5:18	5:27	5:52	6:08	6:23
—	—	—	—	6:07	6:23	6:37
5:19	5:39	5:49	5:58	6:21	6:36	6:50
5:49	6:09	6:19	6:28	6:50	7:04	7:17
6:24	6:42	6:52	7:01	7:21	7:34	7:47
7:10	7:27	7:36	7:45	8:05	8:17	8:29
8:15	8:30	8:39	8:47	9:05	9:17	9:29
9:18	9:32	9:40	9:48	10:05	10:17	10:28

Route 20 - Saturday / sábado

Downtown → Kearny Mesa → Rancho Bernardo

D	E	F	G	H	J	K	L
10th Av. & Broadway DEPART	City College Transit Center (11th & C) DEPART	Fashion Valley Transit Center ARRIVE DEPART	Kearny Mesa Transit Center	Miramar College Transit Station	Rancho Peñasquitos & Paseo Montril	Carmel Mtn. & Peñasquitos Dr.	R. Bernardo Transit Station ARRIVE
—	5:40a	5:50a	5:52a	6:05a	6:23a	6:29a	6:52a
—	6:10	6:20	6:22	6:35	6:53	6:59	7:22
6:37a	6:40	6:51	6:53	7:07	7:26	—	—
7:07	7:10	7:21	7:23	7:37	7:56	8:03	8:27
7:37	7:40	7:51	7:53	8:07	8:26	—	—
8:07	8:10	8:21	8:23	8:37	8:57	9:04	9:30
8:37	8:40	8:51	8:53	9:07	9:27	—	—
9:07	9:10	9:21	9:23	9:37	9:57	10:04	10:30
9:37	9:40	9:51	9:53	10:07	10:27	—	—
10:07	10:10	10:21	10:23	10:37	10:57	11:04	11:30
10:37	10:40	10:52	10:54	11:09	11:29	—	—
11:07	11:10	11:22	11:24	11:39	11:59	12:07p	12:17p
11:37	11:40	11:52	11:54	12:09p	12:29p	—	—
12:07p	12:10p	12:22p	12:24p	12:39	12:59	1:07	1:35
12:37	12:40	12:52	12:54	1:09	1:29	—	—
1:07	1:10	1:22	1:24	1:39	1:59	2:07	2:35
1:37	1:40	1:52	1:54	2:09	2:29	—	—
2:07	2:10	2:22	2:24	2:39	2:59	3:07	3:35
2:37	2:40	2:52	2:54	3:09	3:29	—	—
3:07	3:10	3:22	3:24	3:39	3:59	4:07	4:35
3:37	3:40	3:52	3:54	4:09	4:29	—	—
4:07	4:10	4:22	4:24	4:39	4:59	5:07	5:35
4:37	4:40	4:52	4:54	5:09	5:29	—	—
5:07	5:10	5:22	5:24	5:39	5:59	6:07	6:35
5:37	5:40	5:52	5:54	6:09	6:29	—	—
6:07	6:10	6:21	6:23	6:37	6:56	7:04	7:30
7:07	7:10	7:21	7:23	7:36	7:55	8:03	8:26

Rancho Bernardo → Kearny Mesa → Downtown

L	K	J	H	G	F	D
Rancho Bernardo Transit Station DEPART	Carmel Mtn. & Peñasquitos Dr.	Rancho Peñasquitos & Paseo Montril	Miramar College Transit Station	Kearny Mesa Transit Center ARRIVE	Fashion Valley Transit Center ARRIVE DEPART	10th Av. & Broadway ARRIVE
6:07a	6:20a	—	5:36a	5:52a	6:05a	6:07a
—	—	—	6:36	6:52	7:05	7:16
7:05	7:19	7:28	7:36	7:53	8:06	8:18
—	—	—	8:05	8:23	8:36	8:48
8:02	8:17	8:27	8:35	8:53	9:06	9:18
—	—	—	9:05	9:23	9:36	9:48
9:02	9:17	9:27	9:35	9:53	10:06	10:18
9:58	10:15	10:25	10:34	10:52	11:06	11:18
—	—	—	11:04	11:22	11:36	11:48
10:58	11:15	11:25	11:34	11:52	12:06p	12:18p
—	—	—	12:05p	12:23p	12:37	12:49
11:59	12:16p	12:26p	12:35	12:53	1:07	1:19
—	—	—	1:04	1:22	1:37	1:50
12:57p	1:15	1:25	1:34	1:52	2:07	2:20
—	—	—	2:04	2:22	2:37	2:50
1:57	2:15	2:25	2:34	2:52	3:07	3:20
—	—	—	3:04	3:22	3:37	3:50
2:57	3:15	3:25	3:34	3:52	4:07	4:20
—	—	—	4:04	4:22	4:37	4:50
3:57	4:15	4:25	4:34	4:52	5:07	5:20
—	—	—	5:04	5:22	5:37	5:50
4:57	5:15	5:25	5:34	5:52	6:07	6:20
—	—	—	6:05	6:22	6:36	6:49
6:00	6:17	6:26	6:35	6:52	7:06	7:19
—	—	—	7:05	7:22	7:35	7:47
7:02	7:18	7:27	7:35	7:52	8:05	8:17
8:04	8:19	8:27	8:35	8:52	9:05	9:17

Route 20 - Sunday / domingo

Downtown → Kearny Mesa → Rancho Bernardo

D	E	F	G	H	J	K	L
10th Av. & Broadway DEPART	City College Transit Center (11th & C) DEPART	Fashion Valley Transit Center ARRIVE DEPART	Kearny Mesa Transit Center	Miramar College Transit Station	Rancho Peñasquitos & Paseo Montril	Carmel Mtn. & Peñasquitos Dr.	R. Bernardo Transit Station ARRIVE
—	6:10a	6:20a	6:22a	6:35a	6:53a	6:59a	7:22a
7:07a	7:10	7:21	7:23	7:37	7:56	8:03	8:27
8:07	8:10	8:21	8:23	8:37	8:57	9:04	9:30
9:07	9:10	9:21	9:23	9:37	9:57	10:04	10:30
10:07	10:10	10:21	10:23	10:37	10:57	11:04	11:30
11:07	11:10	11:22	11:24	11:39	11:59	12:07p	12:17p
12:07p	12:10p	12:22p	12:24p	12:39p	12:59p	1:07	1:35
1:07	1:10	1:22	1:24	1:39	1:59	2:07	2:35
2:07	2:10	2:22	2:24	2:39	2:59	3:07	3:35
3:07	3:10	3:22	3:24	3:39	3:59	4:07	4:35
4:07	4:10	4:22	4:24	4:39	4:59	5:07	5:35
5:07	5:1						

Appendix D

City of San Diego Roadway Segment Capacity Table

Roadway Segment LOS by Classification and Average Daily Traffic (ADT)

Table Appendix F-1 provides street classifications and associated LOS thresholds dependent on the roadway's average daily traffic (ADT).

TABLE APPENDIX F-1

ROADWAY CLASSIFICATIONS, LOS, AND AVERAGE DAILY TRAFFIC (ADT)

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Expressway	8 lanes	40,000	56,000	80,000	93,500	107,000
Expressway	7 lanes	35,000	49,000	70,000	82,000	93,500
Expressway	6 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial ¹	8 lanes	35,000	50,000	70,000	75,000	80,000
Prime Arterial ¹	7 lanes	30,000	42,500	60,000	65,000	70,000
Prime Arterial	6 lanes	25,000	35,000	50,000	55,000	60,000
Prime Arterial ¹⁰	5 lanes	20,000	28,000	40,000	45,000	50,000
Prime Arterial ¹¹	4 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial ²	7 lanes	22,500	31,500	45,000	50,000	55,000
Major Arterial	6 lanes	20,000	28,000	40,000	45,000	50,000
Major Arterial ³	5 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial	4 lanes	15,000	21,000	30,000	35,000	40,000
Major Arterial	3 lanes	11,250	15,750	22,500	26,250	30,000
Major Arterial	2 lanes	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way) ⁴	3 lanes	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way) ⁵	2 lanes	10,000	13,000	17,500	20,000	22,500

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Collector (with two-way left turn lane)	5 lanes	12,500	17,500	25,000	30,750	37,500
Collector (with two-way left turn lane)	4 lanes	10,000	14,000	20,000	25,000	30,000
Collector (with two-way left turn lane)	3 lanes	7,500	10,500	15,000	18,750	22,500
Collector (with two-way left turn lane)	2 lanes	5,000	7,000	10,000	13,000	15,000
Collector (without two-way left turn lane)	4 lanes	5,000	7,000	10,000	13,000	15,000
Collector (without two-way left turn lane) ⁶	3 lanes	4,000	5,000	7,500	10,000	11,000
Collector (without two-way left turn lane)	2 lanes	2,500	3,500	5,000	6,500	8,000
Collector (with no fronting property)	2 lanes	4,000	5,500	7,500	9,000	10,000
Collector (one-way) ⁷	3 lanes	11,000	14,000	19,000	22,500	26,000
Collector (one-way) ⁸	2 lanes	7,500	9,500	12,500	15,000	17,500
Collector (one-way) ⁹	1 lane	2,500	3,500	5,000	6,500	7,500
Sub-Collector (Single-family)	2 lanes	--	--	2,200	--	--

Notes:

The volumes and the average daily level of service listed above are only intended as a general planning guideline. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

¹Calculated assuming that each additional lane above a 6-Ln Arterial adds 5,000 ADT for LOS A, 7,500 ADT for LOS B and 10,000 ADT for LOS C, D, and E

²Calculated assuming that ADT is 1/2 way between steps of a 6-Ln Major Arterial & 6 Ln Prime Arterial

³Calculated assuming that ADT is 1/2 way between steps of a 4-Ln Major Arterial & 6 Ln Major Arterial

⁴Calculated using: Capacity = 0.5 (6-Ln Major (2-way) + Added Capacity of 2,500 ADT)

⁵Calculated using: Capacity = 0.5 (4-Ln Major (2-way) + Added Capacity of 2,500 ADT)

⁶Calculated using: Capacity = 4-Ln Collector (no center lane) * (3/4)

⁷Calculated using: Capacity = 2-Ln Collector (one-way) * (3/2)

⁸Calculated using: Capacity = 0.5 (4-Ln Collector w/continuous left turn lane) + Added Capacity of 2,500 ADT)

⁹Calculated using: Capacity = 0.5 (2-Ln Collector w/ continuous left turn lane). Capacity took into account parking friction from both sides of roadway

¹⁰ Calculated by applying same differences between 8-Ln Prime & 7-Ln Prime & 7-Ln Prime & 6-Ln Prime

¹¹ Calculated assuming ratio between 6-Ln Prime & 6-Ln Major applied to 4-Ln Major

Appendix E

Excerpts from City of San Diego TSM for Roadway Improvement Criteria

Transportation Study Manual (TSM)

DATE: 09/29/2020

Roadway Segment Analysis

Roadway segment analysis should be evaluated for any roadway segment that has identified improvements (including planned new circulation element roadways) in the Community Plan and the project is expected to add 1,000 or more daily final primary trips (cumulative trips) if consistent with the Community Plan, or 500 or more daily final primary trips (cumulative trips) if inconsistent with the Community Plan. Roadways should be evaluated using **Appendix F: Roadway Segment LOS by Classification and Average Daily Traffic (ADT)**. The intent of this analysis is to determine if the project results in the need to implement roadway improvements as identified in the Community Plan. The functional classification of the roadway segment should be evaluated in this analysis.

Freeway Interchange Analysis

Freeway analysis should focus on off-ramp queuing spillbacks onto freeway mainline. Studies should normally document changes in off-ramp maximum queues and propose mitigation for queues that spill back onto mainline (or exacerbate conditions already or projected to be) occurring. Freeway interchange analysis should be coordinated with Caltrans.

Identifying Off-Site Improvements

Off-site improvements to accommodate project traffic that address access, circulation and safety for all modes should be determined using the following analysis methods for each type of improvement:

Pedestrian Facilities

- Closing Sidewalk Gaps/Removing Obstructions:
 - The project should construct sidewalks to close sidewalk gaps adjacent to the project site.
 - The project should remove sidewalk obstructions that constrain pedestrian access route to less than four feet adjacent to the project site.
 - The project should construct curb ramps/meet accessibility standards for any intersections adjacent to the project site.
- Accommodating Pedestrian Demand:
 - The project should consider adding traffic calming and pedestrian-related signal timing changes (such as pedestrian hybrid beacons, leading pedestrian interval signal timing, etc.) to accommodate an increase in pedestrian demand on roadways and intersections adjacent to the project site.

Bicycle Facilities

- Accommodating Bicycle Demand:
 - The project should construct (or reserve space for) any planned bicycle facility per the Community Plan or Bicycle Master Plan.
 - The project should consider upgrading adjacent bicycle facilities by adding upgraded treatments (such as green bike lane paint, buffers, etc. where appropriate) to accommodate an increase in bicycle demand.

Transit Facilities

- Transit Priority Treatments/Improvements
 - The project should consider transit priority treatments when operational analysis determines a transit movement would experience LOS E or worse.
 - The project should consider transit priority treatments identified within the Community Plan for the study area.
- Proposed Transit Stops:
 - The project should consider accommodating transit stops to serve existing or proposed transit services, including those identified in the Community Plan, RTIP and/or RTP within the study area. The project should coordinate any identified transit stops with SANDAG, the Metropolitan Transit System (MTS) and/or the North County Transit District (NCTD).
- Transit Stop Amenities:
 - The project should coordinate with MTS and/or the NCTD, as applicable, to determine additional or upgraded transit stop amenities.

Signalized Intersections

- Adding or lengthening a turn lane:
 - Considerations for intersection improvements:

When considering intersection improvements for circulation, access, and safety for all modes, factors that should be considered include, but are not limited to, conflicting pedestrian movements, existing and proposed bicycle facilities, transit priority, protected or permissive turn movement phasing, number of lanes, speed of prevailing traffic and expected queue lengths.
 - Left Turn Lane:

- No Existing Left-Turn Lane: If the project adds traffic to an individual left turn movement causing the total number of peak hour left turns to exceed 100, consider adding a left turn lane.⁸
 - Existing Single Left-Turn Lane: If the project adds traffic to an individual left turn movement causing the total number of peak hour left turns to exceed 300, consider adding a second left turn lane.
 - Right Turn Lane:
 - No Existing Right-Turn Lane: If the addition of a right turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, AND the project adds traffic to an individual right turn movement causing the total number of peak hour right turns to exceed 500, consider adding a right turn lane.
 - Existing Single Right-Turn Lane: If the addition of a right turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, AND the project adds traffic to an individual right turn movement causing the total number of peak hour right turns to exceed 800, consider adding a second right turn lane. In addition to the considerations previously stated, dual-right turn (or more) treatments may require supplementary improvements including but not limited to no right-turn on red with blank-out signs, lead pedestrian intervals (LPIs) for pedestrians and cycle track treatment for bicyclists.
 - Lengthening a Turn Pocket:
 - If the project adds traffic to a turning movement and causes the 95th percentile queue to exceed the available turn pocket length, consider lengthening the turn pocket.
- Signal Timing Improvements/Signal Modifications:
 - Determined based on intersection operations analysis as follows:

⁸ FHWA, *Signalized Intersections: Informational Guide*, August 2004. This source also provides additional factors which can be used to determine the need of a single left turn lane or additional left turn lanes including, left-turn volumes on the major and minor approaches, number of lanes, and vehicles per hour.

- Within a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an intersection to degrade to LOS F, or if the project adds traffic to a signal already operating at LOS F.
- Outside of a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an intersection to degrade to LOS E or F, or if the project adds traffic to a signal already operating at LOS E or F.
- Types of signal improvements that can be considered are:
 - Updating signal split times
 - Transit signal priority improvements
 - Right turn overlap phasing
 - Signal phasing changes
 - Intelligent Transportation Systems (ITS) improvements

Unsignalized Intersections

- Considerations for intersection improvements:
 - When considering intersection improvements for circulation, access, and safety for all modes, factors that should be considered include, but are not limited to, conflicting pedestrian movements, existing and proposed bicycle facilities, transit priority, protected or permissive turn movement phasing, number of lanes, speed of prevailing traffic and expected queue lengths.
- Constructing a Roundabout or Traffic Signal at an all-way stop-controlled intersection: If the project causes the operations at an all-way stop-controlled intersection to degrade (see below), perform an intersection control evaluation that includes a signal warrant analysis and a roundabout LOS analysis. Prepare a roundabout conceptual layout (prepared by a consultant qualified/experienced in roundabout design) to determine the geometric impact of a roundabout. Coordinate with Development Services Department Transportation Development Section staff on appropriate intersection control improvement. Staff may request additional lifecycle safety and mobility
 - The intersection control evaluation should be prepared if the project causes an all-way stop-controlled intersection to degrade as follows:
 - Within a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an all-way stop-controlled intersection located to degrade to LOS F, or if the project adds traffic to an all-way stop-controlled intersection already operating at LOS F.

- Outside of a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an all-way stop-controlled intersection to degrade to LOS E or F, or if the project adds traffic to an all-way stop controlled intersection already operating at LOS E or F.
- Constructing a Roundabout or Traffic Signal at a side-street stop-controlled intersection: If the project causes the operations at a side-street stop-controlled intersection to degrade (see below), perform an intersection control evaluation that includes a signal warrant analysis and a roundabout LOS analysis. Prepare a roundabout conceptual layout (prepared by a consultant qualified/experienced in roundabout design) to determine the geometric impact of a roundabout. Coordinate with Development Services Department Transportation Development Section staff on appropriate intersection control improvement. Staff may request additional lifecycle safety and mobility
 - The intersection control evaluation should be prepared If the project causes a side-street stop-controlled intersection to degrade as follows:
 - Within a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes the **worst movement** of a side-street stop-controlled intersection to degrade to LOS F, or if the project adds traffic to the **worst movement** of a side-street stop-controlled intersection that is already operating at LOS F.
 - Outside of a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes the **worst movement** of a side-street stop-controlled intersection to degrade to LOS E or F, or if the project adds traffic to the **worst movement** of a side-street stop-controlled intersection that is already operating at LOS E or F.
- Improvements to a Roundabout Intersection
 - If the project causes a roundabout intersection to degrade determined based on operations analysis as follows:
 - Within a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an intersection to degrade to LOS F, or if the project adds traffic to a roundabout already operating at LOS F.
 - Outside of a 1/2 mile path of travel of a *Major Transit Stop*: If the project causes an intersection to degrade to LOS E or F, or if the project adds traffic to a roundabout already operating at LOS E or F.
 - Determine improvements to the roundabout to reduce vehicle delay, such as metering traffic during peak hours or other geometric improvements - such

as adding a right turn bypass lane or multilane segments within the roundabout.

Roadway Segments

- Improvements identified in the community plan (including upgrading to ultimate classification):
 - If the project adds greater than 50% of total daily vehicle trips on the segment, the project should consider implementing the improvement as identified in the community plan.
 - If the project adds less than or equal to 50% of total daily vehicle trips on the segment, the project should evaluate its fair share towards the improvement.
- Planned new circulation element roadways:
 - If the project adds greater than 50% of total daily vehicle trips on the segment, the project should consider implementing the improvement as identified in the community plan.
 - If the project adds less than or equal to 50% of total daily vehicle trips on the segment, the project should evaluate its fair share towards the improvement.

In addition, the project should make improvements to study intersections and roadways to preserve consistency with Community Plan/PFFP/IFS identified improvements. The project applicant will have responsibility for the implementation of identified improvements.

The improvement types listed above are typical mobility improvements. Other types of mobility improvements may be proposed by the applicant or considered thorough coordination with the Development Services Departments Transportation Development Section staff.

Appendix F

Rancho Penasquitos Community Plan Roadway Classifications



Rancho
Peñasquitos

COMMUNITY PLAN



Printed on recycled paper.

This information, or this document (or portions thereof), will be made available in alternative formats upon request.

RANCHO PEÑASQUITOS COMMUNITY PLAN

The following amendments have been incorporated into this April 2011 posting of this Plan:

Amendment	Date Approved by Planning Commission	Resolution Number	Date Adopted by City Council	Resolution Number
Rescinded the 1978 Peñasquitos East Community Plan and approved the 1993 Rancho Penasquitos Plan update, except for the portion related to the Paraiso Cumbres property.			March 30, 1993	R-281713
Designated the 232-acre Paraiso Cumbres property as 197 acres of open space and 35 acres of low-density residential development. Also revised text on page 92 and 125 of the 1993 Rancho Penasquitos Community Plan update.			June 1, 1993	R-282056
Shifted 206 acres of development area into the MHPA.			March 18, 1997	R-288456
Redesignated 2.94 acres from neighborhood commercial to low-medium density residential (5-10 du/ac).			June 8, 1998	R-290169
Deleted prohibition on residential use on 3.8-acre site on Azuaga Street adjacent to SDG&E substation to permit the development of a church with associated senior housing.			April 9, 2002	R-296301
Redesignated 1-acre portion of park & ride (commercial designation) to park use to permit development of a skate park.			September 23, 2003	R-298423
Reconfigured low-medium residential, regional commercial, and open space areas on approximately 147 acres. Also adjusted the boundary between Rancho Peñasquitos and Torrey Highlands based on the realignment of Carmel Mountain Road.			March 30, 2004	R-299054
Added MCAS Miramar ALUCP policy language and deleted references and maps to the NAS Miramar CLUP.	February 17, 2011		April 26, 2011	R-306737



MAYOR

Susan Golding

CITY COUNCIL

Abbe Wolfsheimer

Ron Roberts

John Hartley

George Stevens

Tom Behr

Valerie Stallings

Judy McCarty

Juan Vargas

CITY ATTORNEY

John W. Witt

CITY MANAGER

Jack McGrory

PLANNING COMMISSION

Karl ZoBell, Chair

Lynn Benn

Scott H. Bernet

Verna Quinn

Edward Reynolds

Frisco White

PLANNING DEPARTMENT

Ernest Freeman, A.I.C.P., Planning Director

George N. Arimes, Assistant Planning Director

Rachel Hurst, Principal Planner

Charles Studen, Senior Planner

Victoria Charfauros, Word Processing

Sabrina Lozano, Word Processing

Ron Poblete, Graphics

Ron St. Germain, Editor/Proofreader

Other individuals who contributed to the preparation of this Plan are Mary Lee Balko, James Ragsdale, Mike Westlake, Bill Levin and Sam Riordan.

Residential

■ Medium Density

Commercial

G General Commercial

N Neighborhood Commercial

Religious

◇ Religious Facility

Industrial

▨ Recreational Vehicle / Mini-Storage Facility

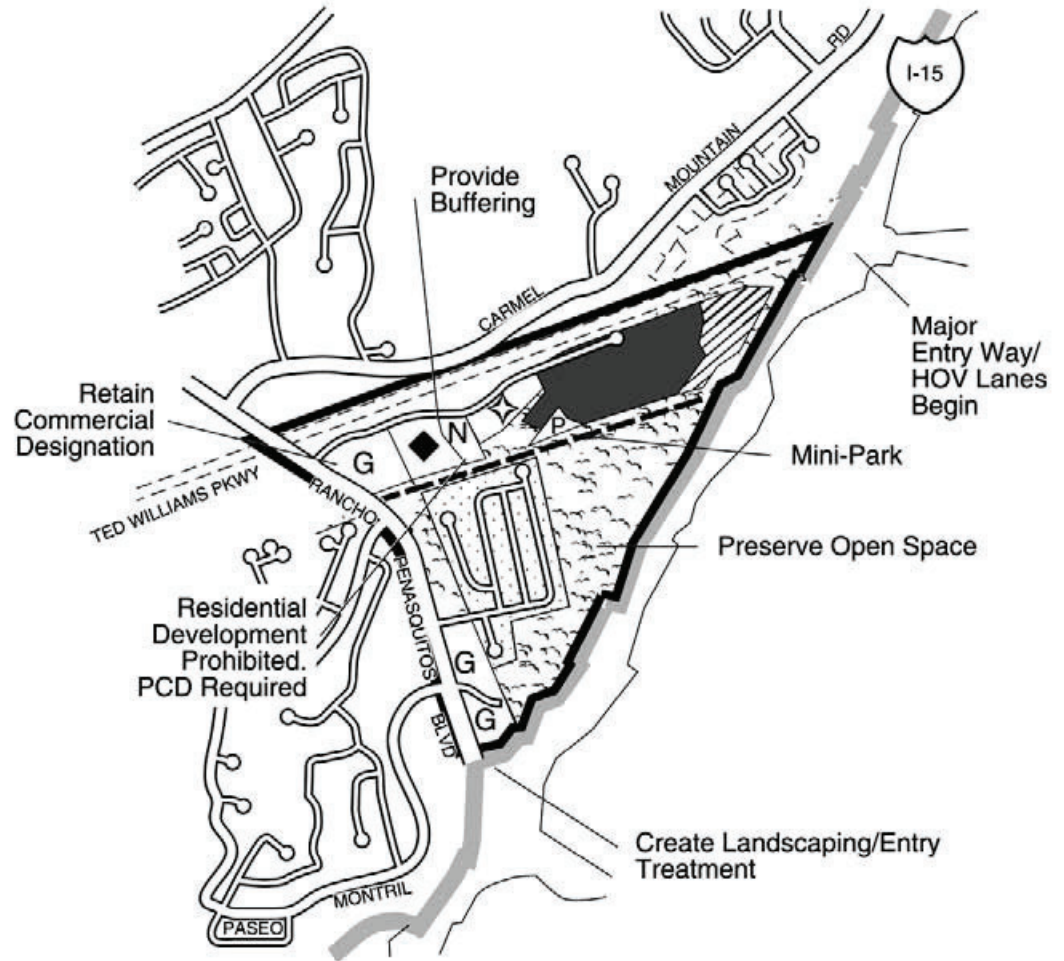
Recreational

Open Space

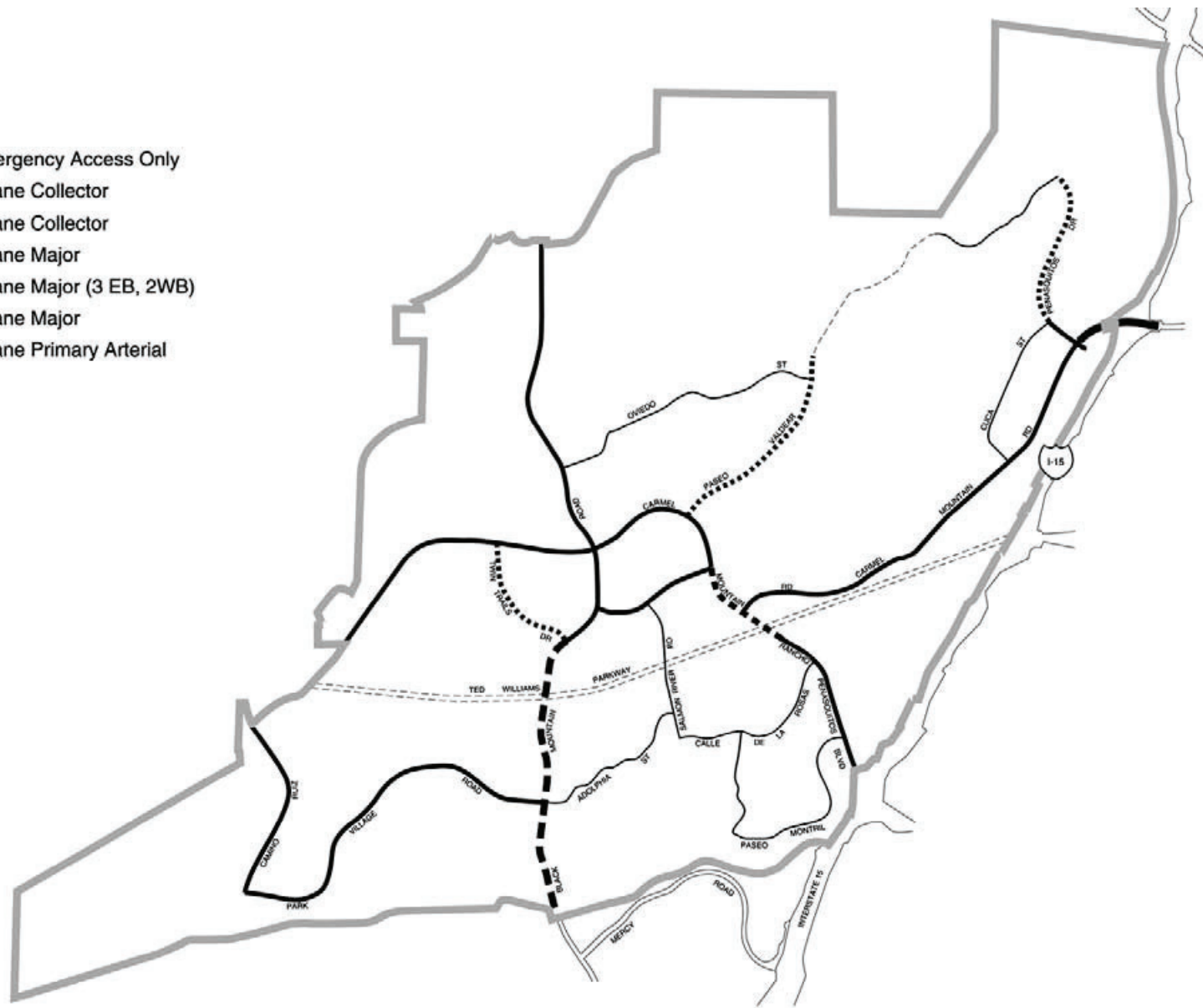
P Mini Park

--- SDG&E Easement

◆ SDG&E Substation



- Emergency Access Only
- 2 Lane Collector
- 4 Lane Collector
- 4 Lane Major
- 5 Lane Major (3 EB, 2WB)
- 6 Lane Major
- 6 Lane Primary Arterial

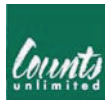


Recommended Street Classifications
Rancho Peñasquitos Community Plan

28
FIGURE

Appendix G

Historical and Existing Count Data



PO Box 1178
Corona, CA 92880
951-268-6268

Location: San Diego
N/S: Rancho Penasquitos
E/W: Paseo Montril

Date: 11/7/2017
Day: TUESDAY
Project # 143-17759

TURNING MOVEMENT COUNT

Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00AM to 8:00 AM

Vehicle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			Paseo Montril Eastbound			Paseo Montril Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	17	334	3	19	323	8	13	3	40	22	0	3	785
7:15 AM	35	238	4	20	292	11	31	6	58	46	4	2	747
7:30 AM	37	210	4	27	240	10	15	4	67	48	7	2	671
7:45 AM	42	145	5	22	282	8	24	4	47	46	2	0	627
8:00 AM	23	166	6	53	275	10	19	6	54	52	8	1	673
8:15 AM	33	165	5	23	267	20	14	3	50	40	7	2	629
8:30 AM	26	156	3	23	225	11	20	5	49	43	5	2	568
8:45 AM	23	178	4	21	299	10	17	4	45	39	4	3	647
TOTAL VOLUMES:	236	1592	34	208	2203	88	153	35	410	336	37	15	5347

AM Peak Hr Begins at: 700 AM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	131	927	16	88	1137	37	83	17	212	162	13	7	2830

PEAK HR FACTOR:	0.758			0.901			0.821			0.798			0.901
-----------------	-------	--	--	-------	--	--	-------	--	--	-------	--	--	-------

Bicycle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			Paseo Montril Eastbound			Paseo Montril Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Counts

	Rancho Penasquitos North Leg	Rancho Penasquitos South Leg	Paseo Montril East Leg	Paseo Montril West Leg	TOTAL
7:00 AM	0	0	0	2	2
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	2	0	2	4
8:00 AM	0	0	1	1	2
8:15 AM	0	0	0	2	2
8:30 AM	0	0	0	3	3
8:45 AM	0	0	1	2	3
TOTAL VOLUMES:	0	2	3	12	17

PEAK VOLUMES:	North Leg	South Leg	East Leg	West Leg	TOTAL
	0	2	1	4	7



PO Box 1178
 Corona, CA 92880
 951-268-6268

Location: San Diego
 N/S: Rancho Penasquitos
 E/W: Paseo Montril

Date: 11/7/2017
 Day: TUESDAY
 Project # 143-17759

TURNING MOVEMENT COUNT

Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM

Vehicle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			Paseo Montril Eastbound			Paseo Montril Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM	39	261	10	7	260	15	27	1	20	16	2	6	664
4:15 PM	22	258	6	11	291	16	24	1	21	13	2	4	669
4:30 PM	34	266	6	6	268	16	21	0	14	18	1	3	653
4:45 PM	28	317	6	8	276	14	26	0	17	7	1	5	705
5:00 PM	36	295	6	11	289	15	17	4	23	7	2	5	710
5:15 PM	38	294	5	10	304	24	24	4	16	12	2	6	739
5:30 PM	45	238	7	5	279	16	23	3	26	18	2	2	664
5:45 PM	34	283	6	11	304	24	29	1	16	15	1	4	728
TOTAL VOLUMES:	276	2212	52	69	2271	140	191	14	153	106	13	35	5532

PM Peak Hr Begins at: 500 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	153	1110	24	37	1176	79	93	12	81	52	7	17	2841

PEAK HR FACTOR:	0.955	0.953	0.894	0.864	0.961
-----------------	-------	-------	-------	-------	-------

Bicycle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			Paseo Montril Eastbound			Paseo Montril Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Counts

	Rancho Penasquitos North Leg	Rancho Penasquitos South Leg	Paseo Montril East Leg	Paseo Montril West Leg	TOTAL
4:00 PM	1	1	0	4	6
4:15 PM	1	0	1	0	2
4:30 PM	0	0	1	0	1
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	1	2
5:30 PM	2	0	0	0	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	4	4	2	5	15

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	2	1	0	1	4



PO Box 1178
Corona, CA 92880
951-268-6268

Location: San Diego
N/S: Rancho Penasquitos
E/W: I-15 Southbound Ramps

Date: 11/7/2017
Day: TUESDAY
Project # 143-17759

TURNING MOVEMENT COUNT

Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00AM to 8:00 AM

Vehicle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			I-15 Southbound Ramps Eastbound			I-15 Southbound Ramps Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	330	232	0	157	304	0	0	0	46	0	21	1090
7:15 AM	0	269	184	0	181	274	0	0	0	54	0	22	984
7:30 AM	0	249	209	0	195	268	0	0	0	58	0	21	1000
7:45 AM	0	215	200	0	194	251	0	0	0	47	0	19	926
8:00 AM	0	198	209	0	153	252	0	0	0	52	0	20	884
8:15 AM	0	202	211	0	148	279	0	0	0	39	0	23	902
8:30 AM	0	225	214	0	158	266	0	0	0	46	0	24	933
8:45 AM	0	233	229	0	142	234	0	0	0	46	0	24	908
TOTAL VOLUMES:	0	1921	1688	0	1328	2128	0	0	0	388	0	174	7627

AM Peak Hr Begins at: 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	1063	825	0	727	1097	0	0	0	205	0	83	4000

PEAK HR FACTOR:	0.840	0.985	0.000	0.911	0.917
------------------------	-------	-------	-------	-------	-------

Bicycle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			I-15 Southbound Ramps Eastbound			I-15 Southbound Ramps Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Counts

	Rancho Penasquitos North Leg	Rancho Penasquitos South Leg	I-15 Southbound Ramps East Leg	I-15 Southbound Ramps West Leg	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	0	0	1	0	1

	North Leg	South Leg	East Leg	West Leg	TOTAL
PEAK VOLUMES:	0	0	0	0	0



PO Box 1178
 Corona, CA 92880
 951-268-6268

Location: San Diego
 N/S: Rancho Penasquitos
 E/W: I-15 Southbound Ramps

Date: 11/7/2017
 Day: TUESDAY
 Project # 143-17759

TURNING MOVEMENT COUNT

Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 4:45 PM to 5:45 PM

Vehicle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			I-15 Southbound Ramps Eastbound			I-15 Southbound Ramps Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM	0	305	155	0	164	158	0	0	0	78	0	44	904
4:15 PM	0	299	178	0	163	192	0	0	0	72	0	28	932
4:30 PM	0	341	175	0	179	151	0	0	0	59	0	25	930
4:45 PM	0	342	177	0	168	152	0	0	0	82	0	44	965
5:00 PM	0	335	187	0	168	218	0	0	0	75	0	38	1021
5:15 PM	0	336	207	0	177	174	0	0	0	80	0	38	1012
5:30 PM	0	302	161	0	165	205	0	0	0	92	0	34	959
5:45 PM	0	311	160	0	170	182	0	0	0	67	0	34	924
TOTAL VOLUMES:	0	2571	1400	0	1354	1432	0	0	0	605	0	285	7647

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1315	732	0	678	749	0	0	0	329	0	154	3957

PEAK HR FACTOR:	0.942			0.924			0.000			0.958			0.969
-----------------	-------	--	--	-------	--	--	-------	--	--	-------	--	--	-------

Bicycle Counts

	Rancho Penasquitos Northbound			Rancho Penasquitos Southbound			I-15 Southbound Ramps Eastbound			I-15 Southbound Ramps Westbound			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

PEAK VOLUMES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Counts

	Rancho Penasquitos North Leg		Rancho Penasquitos South Leg		I-15 Southbound Ramps East Leg		I-15 Southbound Ramps West Leg		TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	1

PEAK VOLUMES:	North Leg	South Leg	East Leg	West Leg	TOTAL
	0	0	0	0	0

street_name	limits	Total	date_count
RANCHO PENASQUITOS BL	PASEO MONTRIL - VIA SUD	29778	9/24/2014
RANCHO PENASQUITOS BL	PASEO MONTRIL - VIA SUD	30241	2/20/2018
RANCHO PENASQUITOS BL	SD 015 - PASEO MONTRIL	33568	9/24/2014
RANCHO PENASQUITOS BL	SD 015 - PASEO MONTRIL	32259	2/20/2018



City of San Diego
 Rancho Penasquitos Boulevard
 B/ Via Del Sud - Paseo Montrail

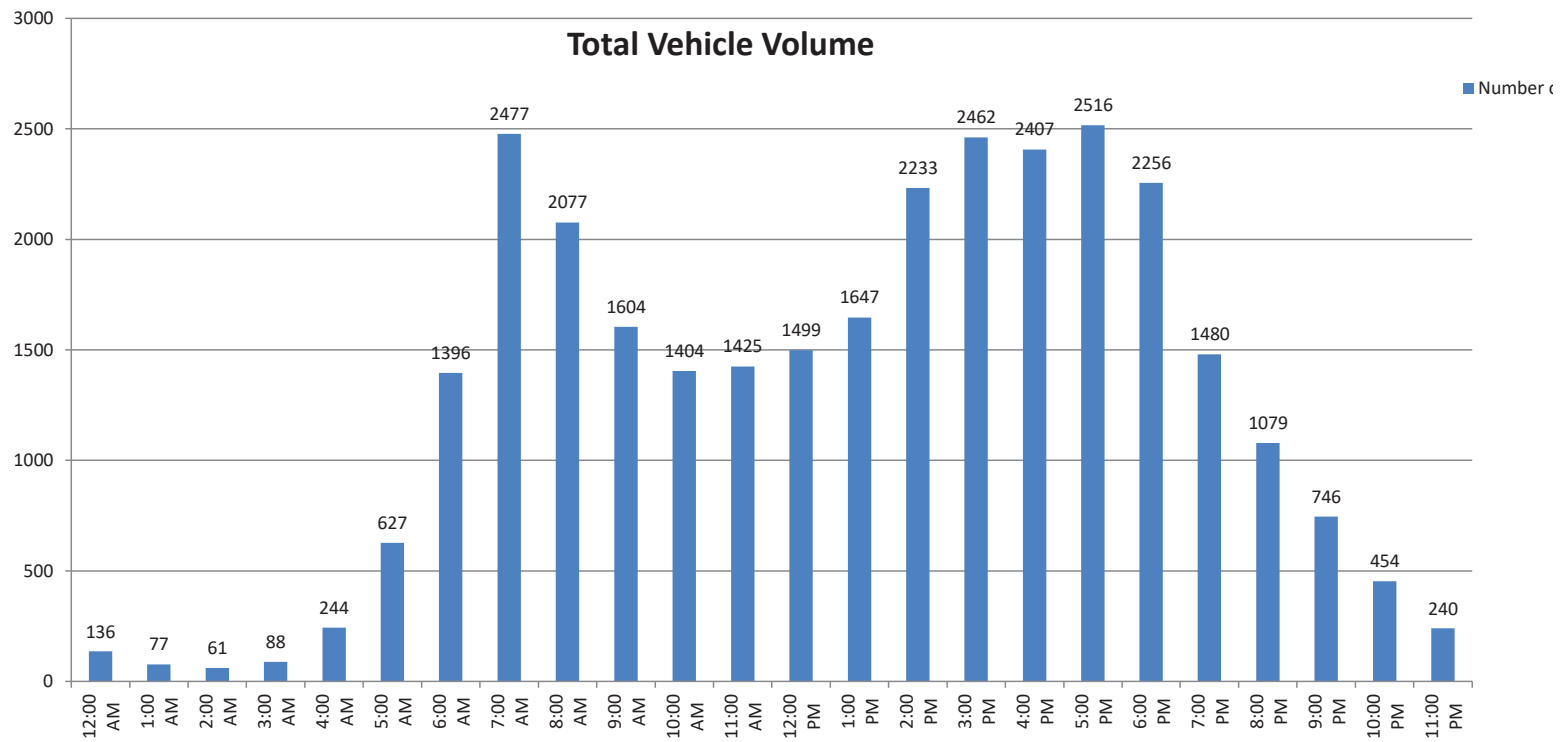
File Name 001
 Site Code: 143-19818
 24 Hour Directional Volume Count

Date: 12/3/2019	Northbound				Southbound				Combined Totals	
	15 Minute Totals		Hourly Totals		15 Minute Totals		Hourly Totals		Morning	Afternoon
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	23	167			18	190				
12:15	20	155			19	187				
12:30	16	181			13	206				
12:45	17	184	76	687	10	229	60	812	136	1499
1:00	9	189			11	216				
1:15	11	144			3	243				
1:30	15	191			6	242				
1:45	13	185	48	709	9	237	29	938	77	1647
2:00	7	202			12	242				
2:15	3	249			4	287				
2:30	9	241			4	315				
2:45	7	252	26	944	15	445	35	1289	61	2233
3:00	6	248			11	368				
3:15	8	248			15	319				
3:30	7	254			16	373				
3:45	12	288	33	1038	13	364	55	1424	88	2462
4:00	13	224			15	375				
4:15	19	271			29	304				
4:30	26	295			50	344				
4:45	32	286	90	1076	60	308	154	1331	244	2407
5:00	36	272			75	365				
5:15	41	300			83	355				
5:30	65	289			130	342				
5:45	66	291	208	1152	131	302	419	1364	627	2516
6:00	78	256			117	371				
6:15	103	296			182	297				
6:30	131	243			277	294				
6:45	232	233	544	1028	276	266	852	1228	1396	2256
7:00	343	216			363	209				
7:15	185	176			406	209				
7:30	175	158			437	181				
7:45	204	181	907	731	364	150	1570	749	2477	1480
8:00	208	133			341	149				
8:15	152	139			308	131				
8:30	189	150			325	132				
8:45	219	134	768	556	335	111	1309	523	2077	1079
9:00	178	101			235	106				
9:15	158	106			249	94				
9:30	156	93			252	88				
9:45	156	77	648	377	220	81	956	369	1604	746
10:00	137	86			196	53				
10:15	131	60			212	60				
10:30	119	70			198	47				
10:45	188	37	575	253	223	41	829	201	1404	454
11:00	147	44			204	33				
11:15	149	32			213	32				
11:30	162	26			179	24				
11:45	168	25	626	127	203	24	799	113	1425	240
Totals	4549	8678			7067	10341				
Combined Totals		13227				17408				
ADT										30635
AM Peak Hour	645	AM			700	AM				
Volume	935				1570					
P.H.F.	0.681				0.898					
PM Peak Hour		430	PM			245	PM			
Volume		1153				1505				
P.H.F.		0.961				0.846				
Percentage	34.4%	65.6%			40.6%	59.4%				



24 Hour Volume Plot
Rancho Penasquitos Boulevard
B/ Via Del Sud - Paseo Montril
 12/3/2019

Start Time	12/3/2019
12:00 AM	136
1:00 AM	77
2:00 AM	61
3:00 AM	88
4:00 AM	244
5:00 AM	627
6:00 AM	1396
7:00 AM	2477
8:00 AM	2077
9:00 AM	1604
10:00 AM	1404
11:00 AM	1425
12:00 PM	1499
1:00 PM	1647
2:00 PM	2233
3:00 PM	2462
4:00 PM	2407
5:00 PM	2516
6:00 PM	2256
7:00 PM	1480
8:00 PM	1079
9:00 PM	746
10:00 PM	454
11:00 PM	240
Total	30635



Volumes represent the combined totals for both directions



City of San Diego
 Rancho Penasquitos Boulevard
 B/ Paseo Montril - Interstate 15 Southbound

File Name 004
 Site Code: 143-19818
 24 Hour Directional Volume Count

Date: 12/3/2019	Northbound				Southbound				Combined Totals	
	15 Minute Totals		Hourly Totals		15 Minute Totals		Hourly Totals		Morning	Afternoon
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	34	212			27	239				
12:15	27	201			19	240				
12:30	24	208			19	255				
12:45	20	208	105	829	14	274	79	1008	184	1837
1:00	15	199			15	227				
1:15	15	201			10	300				
1:30	21	203			14	304				
1:45	18	235	69	838	11	255	50	1086	119	1924
2:00	9	224			13	286				
2:15	9	260			8	320				
2:30	11	285			10	353				
2:45	11	302	40	1071	18	455	49	1414	89	2485
3:00	8	243			11	399				
3:15	10	317			15	348				
3:30	13	290			27	389				
3:45	14	336	45	1186	19	396	72	1532	117	2718
4:00	24	289			23	402				
4:15	25	318			35	350				
4:30	41	343			66	355				
4:45	48	342	138	1292	66	338	190	1445	328	2737
5:00	43	340			104	378				
5:15	60	333			102	395				
5:30	78	356			168	379				
5:45	94	349	275	1378	164	326	538	1478	813	2856
6:00	93	319			178	354				
6:15	129	302			223	332				
6:30	165	286			315	319				
6:45	288	272	675	1179	373	302	1089	1307	1764	2486
7:00	363	240			423	257				
7:15	208	199			456	220				
7:30	222	194			540	199				
7:45	239	204	1032	837	499	178	1918	854	2950	1691
8:00	280	162			463	154				
8:15	268	173			459	136				
8:30	256	177			450	135				
8:45	290	146	1094	658	438	139	1810	564	2904	1222
9:00	245	125			377	121				
9:15	214	137			313	116				
9:30	180	123			321	99				
9:45	180	91	819	476	294	84	1305	420	2124	896
10:00	157	109			232	77				
10:15	183	72			255	75				
10:30	161	81			232	56				
10:45	227	58	728	320	272	48	991	256	1719	576
11:00	184	49			244	46				
11:15	195	48			256	49				
11:30	186	30			228	30				
11:45	212	42	777	169	231	31	959	156	1736	325
Totals	5797	10233			9050	11520				
Combined Totals		16030				20570				
ADT										36600
AM Peak Hour	800	AM			730	AM				
Volume	1094				1961					
P.H.F.	0.943				0.908					
PM Peak Hour		500	PM			245	PM			
Volume		1378				1591				
P.H.F.		0.968				0.874				
Percentage	36.2%	63.8%			44.0%	56.0%				