MEMORANDUM

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Pasadena
Irvine
San Diego

To:	Ms. Sophia Mitchell Sophia Mitchell & Associates	Date:	June 4, 2025
From:	John Boarman, P.E. Renald Espiritu LLG, Engineers	LLG Ref:	3-22-3703
Subject:	Woodward 46 Apartment Project		

Linscott, Law and Greenspan, Engineers (LLG) has prepared this technical memorandum to provide additional substantial evidence supporting the use of the "Adjacency to High-Quality Transit" screening criterion for the Woodward 46 Apartment Project (hereafter referred to as the "Project") to demonstrate that the Project qualifies for screening from a formal Vehicle Miles Traveled (VMT) analysis. The Project proposes to construct 46 condominium units east of Woodward Street, north of Mission Road and south of Vineyard Road in the City of San Marcos. The Project is also located within walking distance of several amenities, including restaurants and cafes, a public library, a high-quality fitness center to the south, and the Twin Oaks Town Center to the west of the Project site, which includes a convenience store and other commercial businesses.

A VMT report was prepared for the Project under separate cover and is included in ***Attachment A***. The Project was originally screened out based on its location within a High Quality Transit Area, per the map provided in the *City of San Marcos Transportation Impact Analysis Guidelines (dated November 16, 2020)*, which is included in ***Attachment B***.

The Project is not located in a VMT efficient area (15% or more below the base year average household VMT/capita) based on the applicable location-based screening map produced by SANDAG. The San Diego average regional VMT/capita is 18.9. Using the SANDAG screening map for residential projects under per capita measurements, the Project is located in census tract 200.23 and would be expected to generate 17.8 VMT/capita. This equates to 94.0% of the regional average VMT/capita, as shown in the SANDAG screening map included in ***Attachment C***. Hence, the Project is 9% over the regional average and would have a potential significant VMT impact.

Figure A shows the location of the Project in relation to the San Marcos Civic Center Transit Center, which is less than 0.30 miles away (approximately 1,200 feet from the nearest Project access to the sidewalk to the nearest access point to the transit station). Therefore, the Project is located within a High Quality Transit Area (see *Attachment B*). The City's Transportation Impact Analysis Guidelines provides applicable VMT reduction percentages for projects in the City of San Marcos. According to the City's Transportation Impact Analysis Guidelines, a project located within half a mile (or a ten-minute walk) of a major transit center can receive a VMT reduction of up to 14.4%. These VMT reduction percentages are obtained from the *San Diego Association of Governments (SANDAG) Mobility Management Guidebook (dated June 2019)* and *Mobility Management VMT Reduction Calculator Tool*, which are included in ***Attachment D***.

The formula used to calculate the reduction percentage takes into account the difference in transit mode share with the implementation of this strategy. Assuming that just 4% of the Project's residents, who previously lived in areas where transit was less accessible, will now use transit at the Project site, thereby reducing single-occupancy vehicle use, this would result in a 10.9% VMT reduction, which is sufficient to lower the 17.8 VMT/capita in the Project's census tract to below the significant VMT impact threshold. Therefore, applying this 10.9% reduction to the 94% VMT resident per capita for the census tract would result in the Project VMT being 83.1% of the regional mean which concludes the Project would not have significant VMT impact and validates the project screening for adjacency to high quality transit. *Attachment D* includes the results from the VMT Reduction Calculator Tool.

Additionally, the Project incorporates the following features which complement the conclusion that the Project would have not have a significant VMT impact as they support active transportation modes:

- Internal sidewalk connection to Woodward Street
- The Project footprint is clustered to promote density and preserve open space
- Pedestrian safety features at the Project entry driveway (e.g., truncated domes)
- Street lighting addition to Woodward Street for pedestrian safety

Figure B shows the Project site plan.

The Project will also incorporate several Transportation Demand Management (TDM) strategies, including:

- Subsidized transit passes for residents
- Reserved parking spaces for carpool/vanpool/park-and-ride, etc.
- A bike repair station
- Bike lockers (within garages)

Please let us know if you have any questions. Thank you.

cc: File

FIGURES
Figure A: Project Area Map
Figure B: Project Site Plan

ATTACHMENT
Attachment A: Woodward 46 Apartment Project VMT Report
Attachment B: High Quality Transit Areas map from City of San Marcos Transportation Impact Analysis Guidelines
Attachment C: SANDAG VMT Screening Map
Attachment D: SANDAG Mobility Management Guidebook and Mobility Management VMT Reduction Calculator Tool results

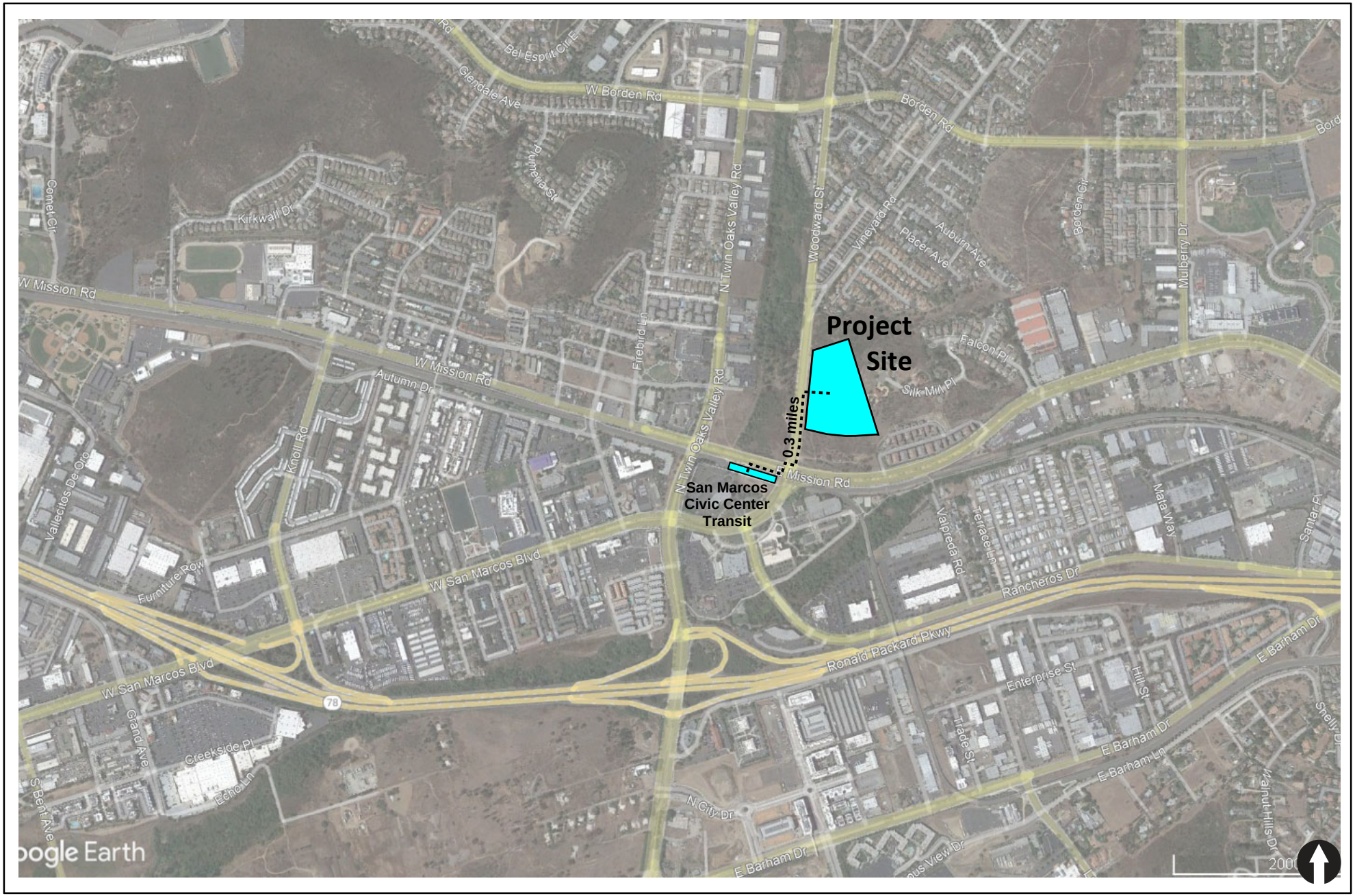

Figure A

Project Area Map

Woodward 46 Apartment Project

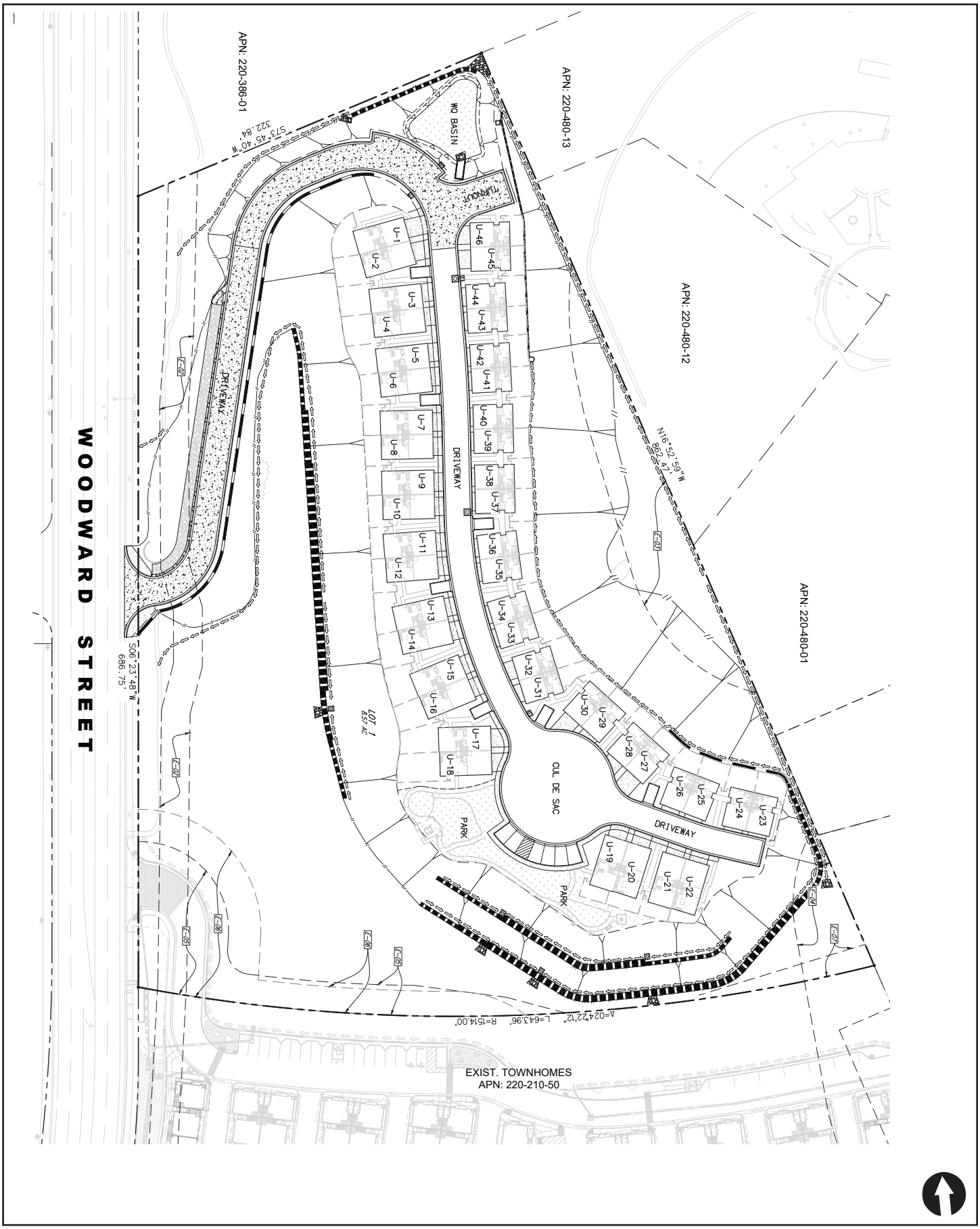

Figure B

Site Plan

ATTACHMENT A

LINSCOTT LAW & GREENSPAN engineers

VEHICLE MILES TRAVELED STUDY

WOODWARD 46 APARTMENT PROJECT

San Marcos, California
March 27, 2024

LLG Ref. 3-22-3703

Prepared by:
Renald Espiritu
Transportation Engineer II

Under the Supervision of:
John Boarman, P.E.
Principal

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TABLE OF CONTENTS

APPENDICES

LIST OF FIGURES

LIST OF TABLES

VEHICLE MILES TRAVELED STUDY

WOODWARD 46 APARTMENT PROJECT

San Marcos, California
March 27, 2024

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Vehicle Miles Traveled (VMT) study to determine the VMT impacts for the Woodward 46 Apartment Project (hereafter referred to as "Project"). The Project proposes to construct 46 condominium units east of Woodward Street, north of Mission Road and south of Vineyard Road in the City of San Marcos.

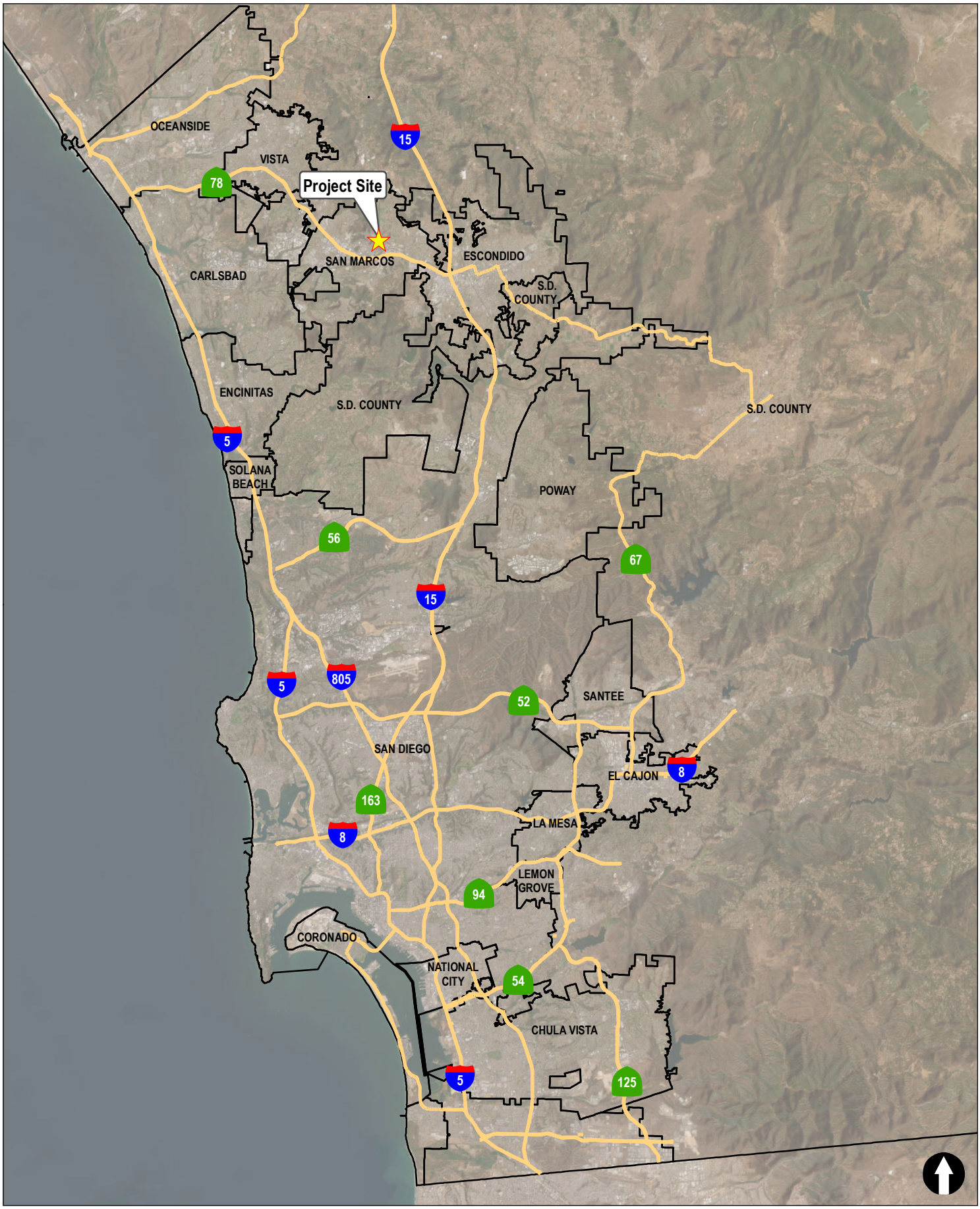
The VMT analysis presented in this report includes the following:

- Project Description
- Vehicle Miles Traveled: Overview and Background
- VMT Significance Criteria and Methodology
- VMT Analysis
- Conclusions

2.0 PROJECT DESCRIPTION

The Project proposes to develop 46 condominium units east of Woodward Street, north of Mission Road and south of Vineyard Road in the City of San Marcos. Site access is proposed via one (1) full-access driveway to Woodward Street. The proposed Project would require a General Plan Amendment but is consistent in terms of *Section 3.11* under Threshold #2, General Plan Consistency in the Project's Environmental Impact Report.

Figure 2–1 shows the Project vicinity. ***Figure 2–2*** shows a more detailed Project area map. ***Figure 2–3*** shows the Project site plan.



LINSCOTT LAW & GREENSPAN engineers

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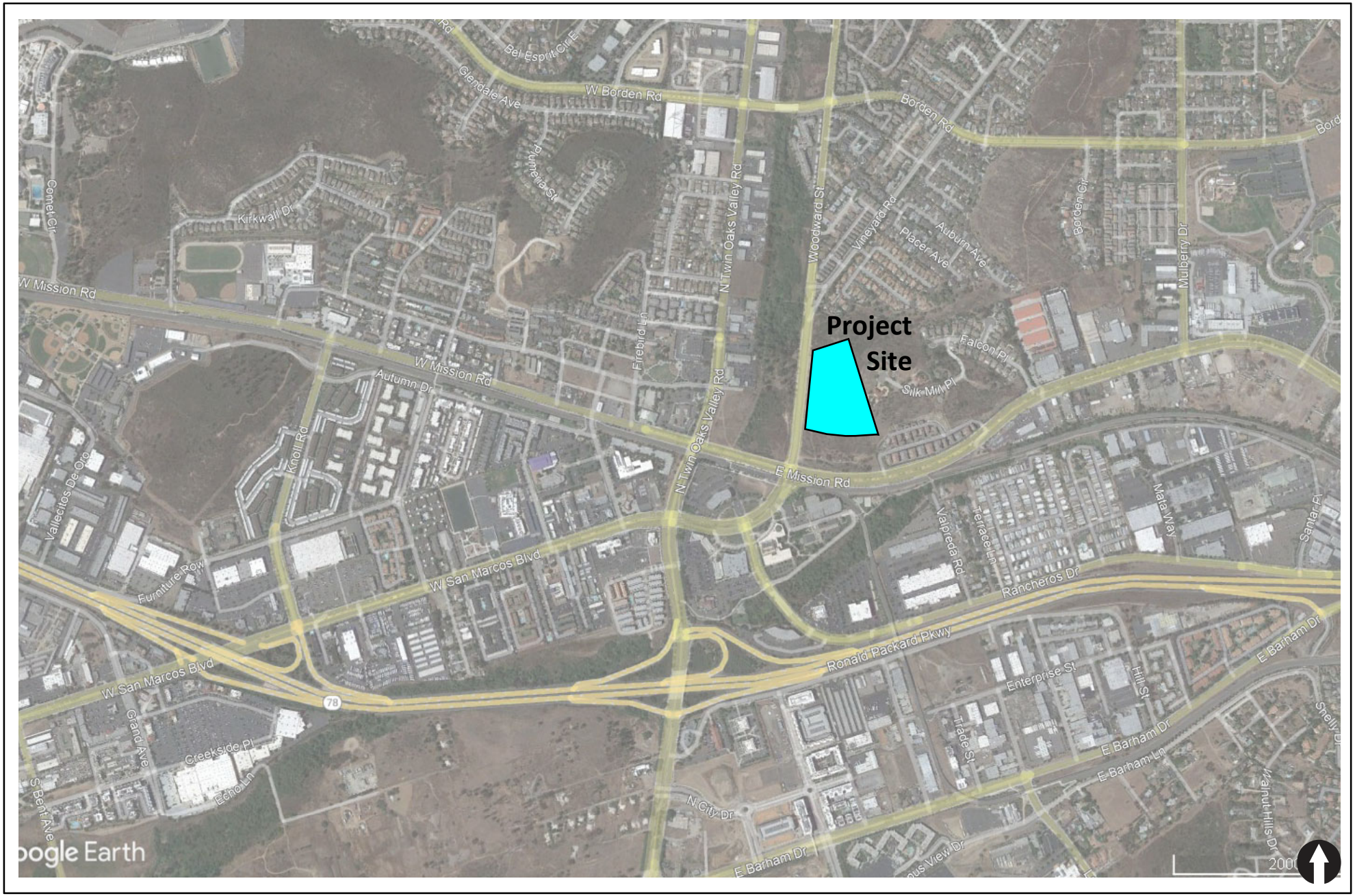
Figure 2-1

Vicinity Map

WOODWARD 46 APARTMENT PROJECT



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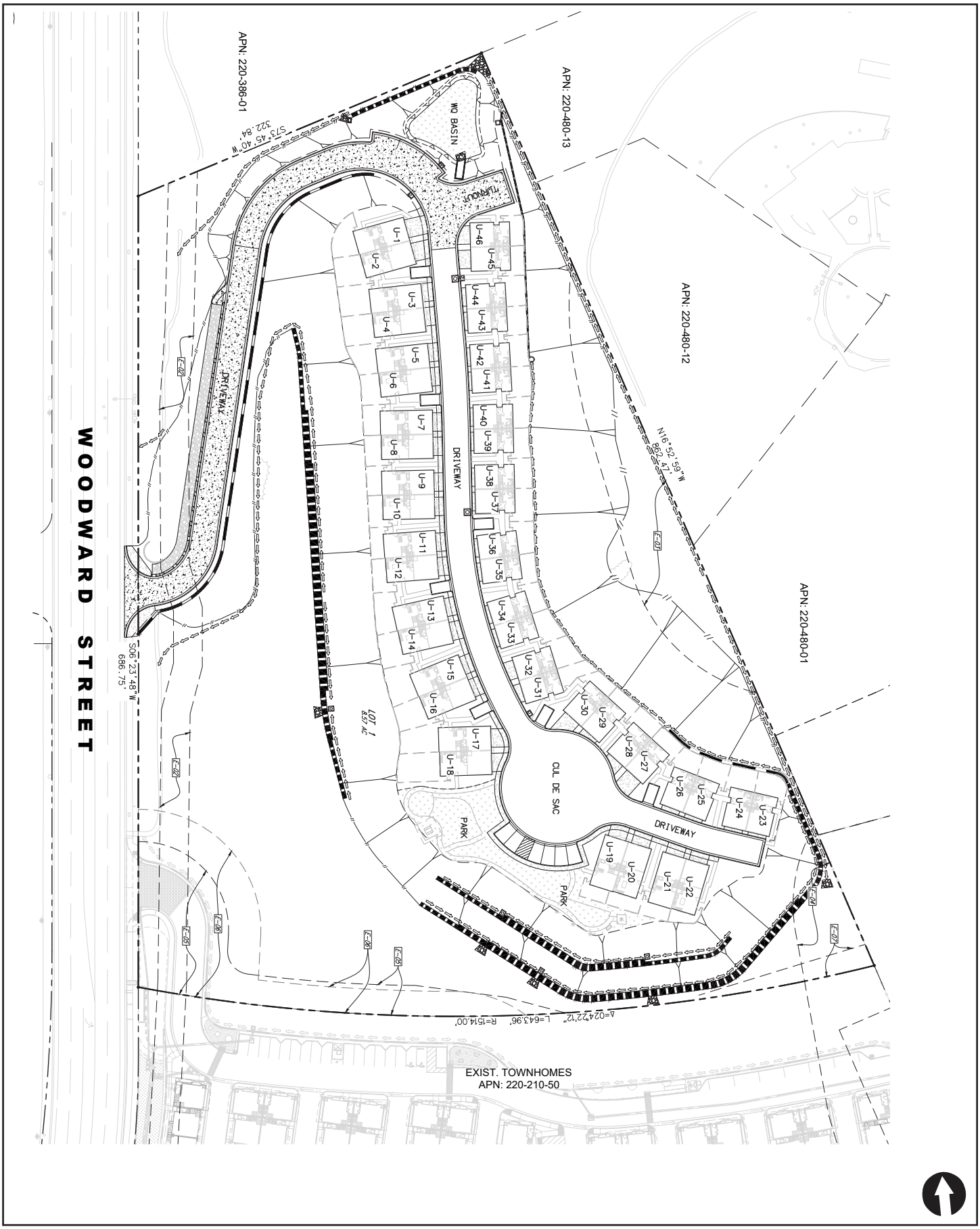
Date: 02/01/23

Figure 2-2

Project Area Map

Woodward 46 Apartment Project



LINSCOTT LAW & GREENSPAN engineers

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Date: 02/01/23

Figure 2-3

Site Plan

WOODWARD 46 APARTMENT PROJECT

3.0 VEHICLE MILES TRAVELED: OVERVIEW AND BACKGROUND

This section presents background on an evaluation of potential transportation impacts of the Project per the California Governor's Office of Planning and Research (OPR) to implement California State Law Senate Bill (S.B.) 743 and the City's adopted *Transportation Impact Analysis Guidelines*, December 2020.

3.1 VMT Background

VMT is a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT measures the efficiency of the transportation network. VMT is calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip) travel and is often estimated for a typical weekday to measure transportation impacts.

3.2 Senate Bill 743

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. These changes include the elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The guidance identifies VMT as the most appropriate CEQA transportation metric, along with the elimination of Auto Delay/LOS for CEQA purposes statewide. The justification for this paradigm shift is that Auto Delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions.

In December 2018, after over five years of stakeholder-driven development, the California Natural Resource Agency certified and adopted the CEQA Statute. As of July 1, 2020, the VMT guidelines are applicable statewide.

4.0 VMT SIGNIFICANCE CRITERIA & METHODOLOGY

4.1 Local / Regional Agency Transition to SB743

The City of San Marcos adopted the *Transportation Impact Analysis (TIA) Guidelines*, November 2020 version, that provides significance determination thresholds for VMT and VMT analysis methodologies. The City's *TIA Guidelines* was utilized as the basis for this VMT analysis.

4.2 Screening Criteria

Based on the *TIA Guidelines*, the requirement to prepare a detailed transportation VMT analysis applies to all land development projects except for those that meet at least one of the provided screening criteria. A project that meets at least one of the screening criteria listed below would be considered to have a less-than-significant impact due to the project or location characteristics.

- Small Projects (less than 110 daily vehicle trips)
- Affordable Housing (100% deed restricted)
- Local Serving Retail and Public Facilities (50,000 square feet gross floor area or less)
- Adjacency to High-Quality Transit. A high-quality transit area is defined as the one-half mile walkshed around either of the following:
    - An existing major transit stop, defined as a site containing an existing rail transit station or the intersection of two or more bus routes with a combined frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. In addition, a rail transit station must be within 0.25 miles of bus stops serving at least one bus route with individual service intervals no longer than 30 minutes during peak commute periods per route in order to qualify as a high-quality transit area.
    - An existing stop along a high-quality transit corridor, defined as a corridor with fixed route bus service with combined service intervals (gaps between buses serving the corridor) no longer than 15 minutes during peak commute hours.

  However, this presumption does not apply if the project:
    1. has a floor area ratio (FAR) of less than 0.75;
    2. includes more parking for use by residents, customers, or employees of the project than required by the City;
    3. is inconsistent with the City's current General Plan, as determined by the City; or, replaces affordable residential units with a smaller number of moderate- or high-income residential units.
- Map-Based Screening (projects located in VMT efficient areas): Residential and employment projects that are proposed in areas that generate VMT below adopted City thresholds can be presumed to have a less-than-significant transportation impact and would not require a detailed VMT analysis. This determination must be made using SANDAG's online

residential and employment VMT maps, which show census tracts in the city where the VMT is below the regional average. The following types of projects could be screened out using this approach:

- Residential projects proposed in census tracts with residential VMT per capita below the City's threshold of exceeding 85 percent of the SANDAG regional average
- Employment projects proposed in census tracts with work VMT per employee below the City's threshold of exceeding 85 percent of the SANDAG regional average

4.3 Mitigation Measures and Strategies for VMT Reduction

If a project is not presumed to have a less than significant VMT impact due to project characteristics and/or location, then it is considered to have a significant impact and will require mitigation measures and strategies.

5.0 VMT ANALYSIS

Per the *TIA Guidelines*, a VMT analysis for CEQA purposes will not be required as the project is located within a high-quality transit area. The High-Quality Transit Areas map shows the Project site is within this area. The following is a discussion of the three items (listed in *Section 4.2*) that are potential caveats:

FLOOR AREA RATIO AND GENERAL PLAN

Per coordination with City staff, the Specific Plan requires a minimum floor area ratio of 0.75. The proposed Project would require a General Plan Amendment but is consistent in terms of *Section 3.11* under Threshold #2, General Plan Consistency in the Project's Environmental Impact Report.

PARKING

The Project proposes a total of 46 condominium units. Per the *City of San Marcos Municipal Code, Chapter 20.340*, 108 parking spaces are required. A summary of the parking code requirements and calculations are shown in ***Table 5–1***. The project proposes to provide 108 parking spaces. Therefore, the project meets the parking requirements and does not exceed.

TABLE 5–1
CITY OF SAN MARCOS MUNICIPAL CODE PARKING REQUIREMENTS & CALCULATIONS

Parking Code Land Use	Required Off-Street Parking Rate[a]	Project Quantity (dwelling units)	Required Parking
Residential Uses			
Duplex	2 spaces / dwelling unit	46 3-bedroom	92
Guest	1 space / 3 dwelling unit	46 3-bedroom	16
Total Spaces			**108**

Footnotes:
a. Rates from the *City of San Marcos Municipal Code, Chapter 20.340.*

Appendix A contains the TIA Guidelines' High-Quality Transit Areas map, excerpts from the City of San Marcos Municipal Code Parking Rate and floor area ratio calculation.

Therefore, based on the City's TIA Guidelines, a VMT analysis is not required as the Project is located in a high-quality transit area. VMT impacts are presumed to be less than significant.

LINSCOTT LAW & GREENSPAN
engineers

TECHNICAL APPENDICES
WOODWARD 46 APARTMENT PROJECT

San Marcos, California
March 27, 2024

LLG Ref. 3-22-3703

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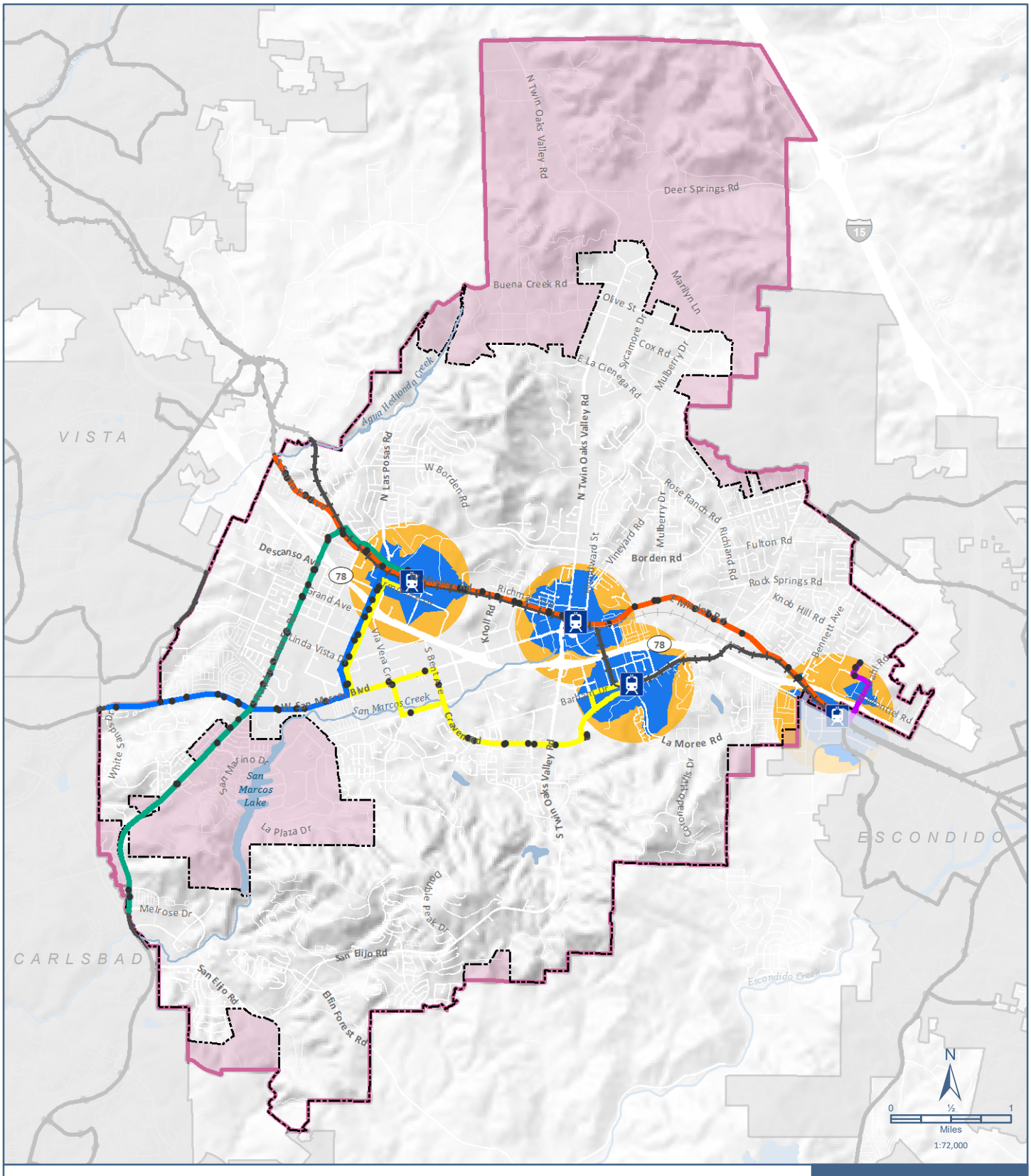
APPENDICES

APPENDIX

A. *City of San Marcos Transportation Impact Analysis Guidelines* – High Quality Transit Areas map, City of San Marcos Municipal Code Parking Rate, and Floor Area Ratio calculations

APPENDIX A

CITY OF SAN MARCOS TRANSPORTATION IMPACT ANALYSIS GUIDELINES – HIGH QUALITY TRANSIT AREAS MAP, CITY OF SAN MARCOS MUNICIPAL CODE PARKING RATE, AND FLOOR AREA RATIO CALCULATIONS



LEGEND

NCTD Breeze Routes

- 304
- 305
- 347
- 353
- 445

- NCTD SPRINTER Light Rail Line
- Transit Stop
- Half Mile Transit Buffer
- Half Mile Walkshed
- City of San Marcos
- Sphere of Influence
- Areas within the Sphere of Influence
- Neighboring City

Data sources: SANGIS; CalAtlas. Map date: February 24, 2020.

City of San Marcos
SB 743 Implementation

FIGURE X

High Quality Transit Areas

Single-Family Detached	**≤3,000 s.f. unit:** 2 attached covered spaces required; **>3,000 s.f. unit:** 3 attached covered spaces required	See Table 20.340-5 for additional standards; Section 20.340.060.H
Sport Court, on a Residential Lot	None required.	Residential Zones only.
Supportive Housing	**Studio:** 1 space/unit **1 Bedroom Unit:** 1.5 space/unit **2+ Bedroom Unit:** 2 spaces/unit; 1 space shall be covered, Guest Parking: 1 space/3 units	
Transitional Housing	2 covered spaces/unit	
Recreation, Education & Public Assembly Uses		
Animal Keeping, Large	1 space/250 s.f. gross floor area	
Assembly and Recreation	To be determined by the Director during SDP or CUP review process.	
Automobile Parking Lot or Storage Garage (Enclosed or Freestanding)	Adequate for facility, building, or area served.	
Cemetery	As provided by internal circulation system.	
Child Care Facility, Daycare Center	1 space/2 employees plus 1 space/5 children (per maximum capacity) or 1 space/10 children where adequate drop-off facilities are provided per 20.340.040.I.1.	
Club	10 spaces/1,000 s.f. of assembly floor area	
College, Nontraditional Campus Setting	3 spaces/1,000 s.f.	
College, Traditional Campus	1 space/3 non-resident students; plus 1 space/3 employees and faculty	

Lot: 137,921 SF
Bldg.: 103,460
FAR: 0.75

APN: 220-480-01

APN: 220-480-12

APN: 220-480-13

APN: 220-386-01

N16°52'59"W
862.47'

S73°45'40"W
322.84'

S06°23'48"W
686.75'

Δ=024°22'12"
L=643.96'
R=1514.00'

CUL DE SAC

DRIVEWAY

DRIVEWAY

DRIVEWAY

TURNOUT

PARK

PARK

WQ BASIN

137,921 sf

LOT 1
8.57 AC

EXIST. TOWNHOMES
APN: 220-210-50

U-1 U-2 U-3 U-4 U-5 U-6 U-7 U-8 U-9 U-10 U-11 U-12 U-13 U-14 U-15 U-16 U-17 U-18 U-19 U-20 U-21 U-22 U-23 U-24 U-25 U-26 U-27 U-28 U-29 U-30 U-31 U-32 U-33 U-34 U-35 U-36 U-37 U-38 U-39 U-40 U-41 U-42 U-43 U-44 U-45 U-46

E-01 E-02 E-03 E-04 E-05 E-06 E-07

WOODWARD STREET

SCALE 1":40'

0 40 80 Feet

EXISTING EASEMENTS

E-01 AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED OCTOBER 19, 1948, IN BOOK 2985, PAGE 237 OF OFFICIAL RECORDS, IN FAVOR OF THE SAN DIEGO GAS & ELECTRIC COMPANY. THE EXACT LOCATION AND EXTENT OF SAID EASEMENT IS NOT DISCLOSED OF RECORD.

E-02 AN EASEMENT FOR DRAINAGE, SLOPE, PUBLIC STREET UTILITY AND RIGHTS INCIDENTAL THERETO RECORDED MARCH 26, 2002, AS DOCUMENT NO. 2002-0251944 OF OFFICIAL RECORDS, IN FAVOR OF THE CITY OF SAN MARCOS.

E-03 AN EASEMENT FOR ENTRY, VEGETATION, CLEARING AND REMOVAL OF COMBUSTIBLE MATERIALS AND RIGHTS INCIDENTAL THERETO RECORDED AUGUST 31, 2007, AS DOCUMENT NO. 2007-0580764 OF OFFICIAL RECORDS, IN FAVOR OF PETE DE JONG, A MARRIED MAN.

E-04 AN EASEMENT FOR ENTRY, VEGETATION, CLEARING AND REMOVAL OF COMBUSTIBLE MATERIALS AND RIGHTS INCIDENTAL THERETO RECORDED MAY 6, 2015, AS DOCUMENT NO. 2015-0225378 OF OFFICIAL RECORDS, IN FAVOR OF KB HOME CAPITAL LLC.

E-05 THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED GRANT OF EASEMENT, RECORDED MARCH 4, 2020 AS INSTRUMENT NO. 2020-0113186 OF OFFICIAL RECORDS.

E-06 THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED GRANT OF VEHICULAR AND PEDESTRIAN ACCESS EASEMENT, RECORDED MARCH 4, 2020 AS INSTRUMENT NO. 2020-0113187 OF OFFICIAL RECORDS.

E-07 AN EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED OCTOBER 20, 1948, IN BOOK 2988, PAGE 440 OF OFFICIAL RECORDS, IN FAVOR OF THE SAN DIEGO GAS & ELECTRIC COMPANY.

LEGEND

PROJECT BOUNDARY	
PROPERTY LINE	-PL-
RIGHT OF WAY	-RW-
EXIST MAJOR CONTOUR	100
EXIST MINOR CONTOUR	
PROPOSE MAJOR CONTOUR	100
PROPOSE MINOR CONTOUR	
GEOGRID TYPE RETAINING	
CMU TYPE RETAINING	
SOIL NAIL TYPE RETAINING	
EXIST WATER MAIN	W
EXIST SEWER MAIN	S
NEW WATER MAIN	W
NEW SEWER MAIN	S
FLOW LINE	
PCC BROW DITCH	
EXIST. FIRE LINE	F
FIRE HYDRANT	
STREET/PARKING LIGHT	
STORM DRAIN INLETS/CLEANOUTS	
WATER SERVICE LATERAL	W
SEWER SERVICE LATERAL	S
FIRE SERVICE LATERAL	F
PCC CURB	
PCC CURB & GUTTER	
BLDG UNIT NUMBER	U-18

DATE	REMARKS
10/2022	PLANNING SUBMITTAL

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • GPS • SURVEYING
440 STATE PLACE, ESCONDIDO, CA 92029
PH (760)745-0118 FX (760)745-8334

SHEET 3 OF 13 SHEETS
TENTATIVE MAP

CORNERSTONE COMMUNITIES
WOODWARD
APN 220-210-49
WOODWARD ST, SAN MARCOS CA

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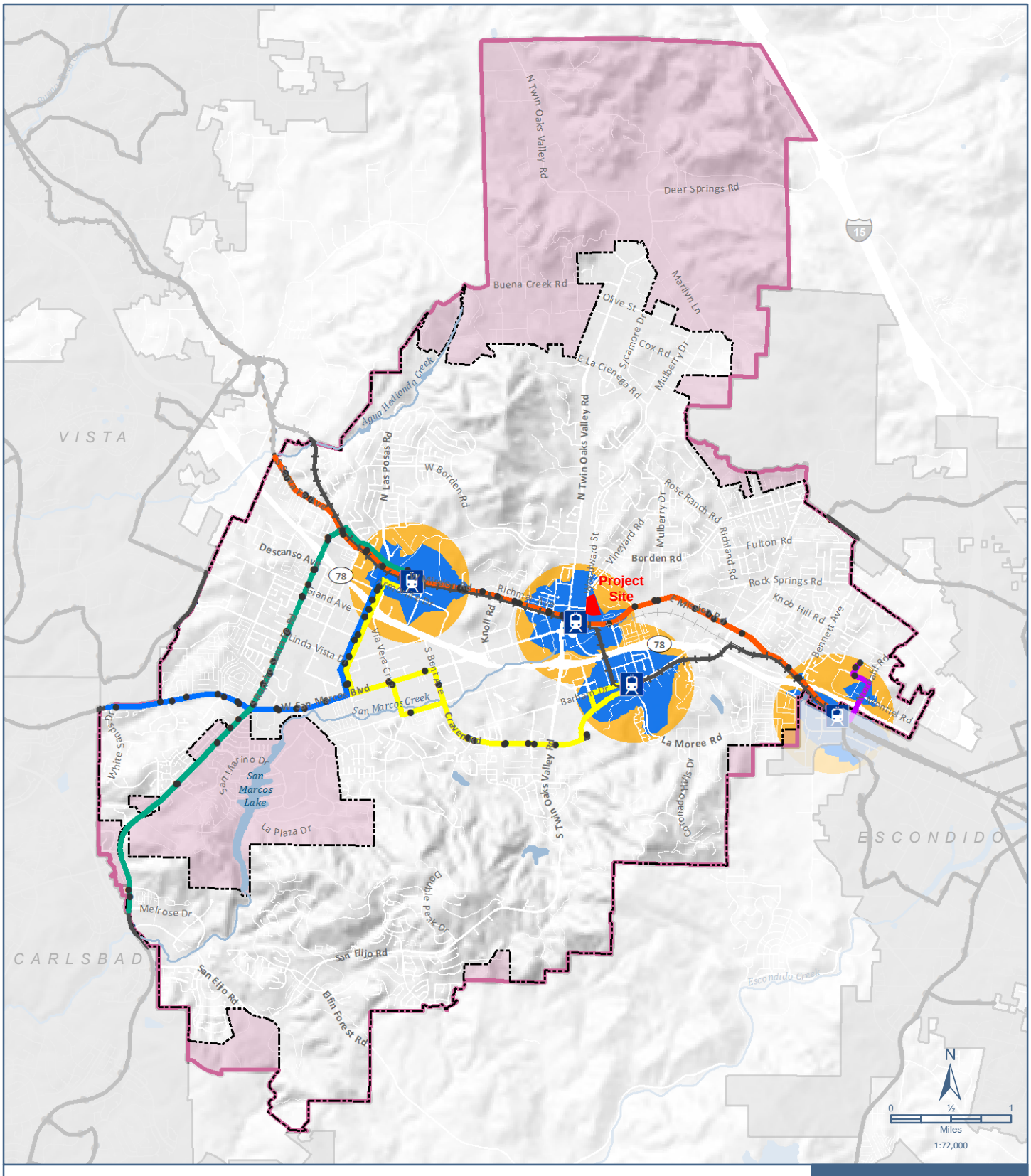
ATTACHMENT B



LEGEND

NCTD Breeze Routes

- 304
- 305
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- NCTD SPRINTER Light Rail Line
- Transit Stop
- Half Mile Transit Buffer
- Half Mile Walkshed
- City of San Marcos
- Sphere of Influence
- Areas within the Sphere of Influence
- Neighboring City

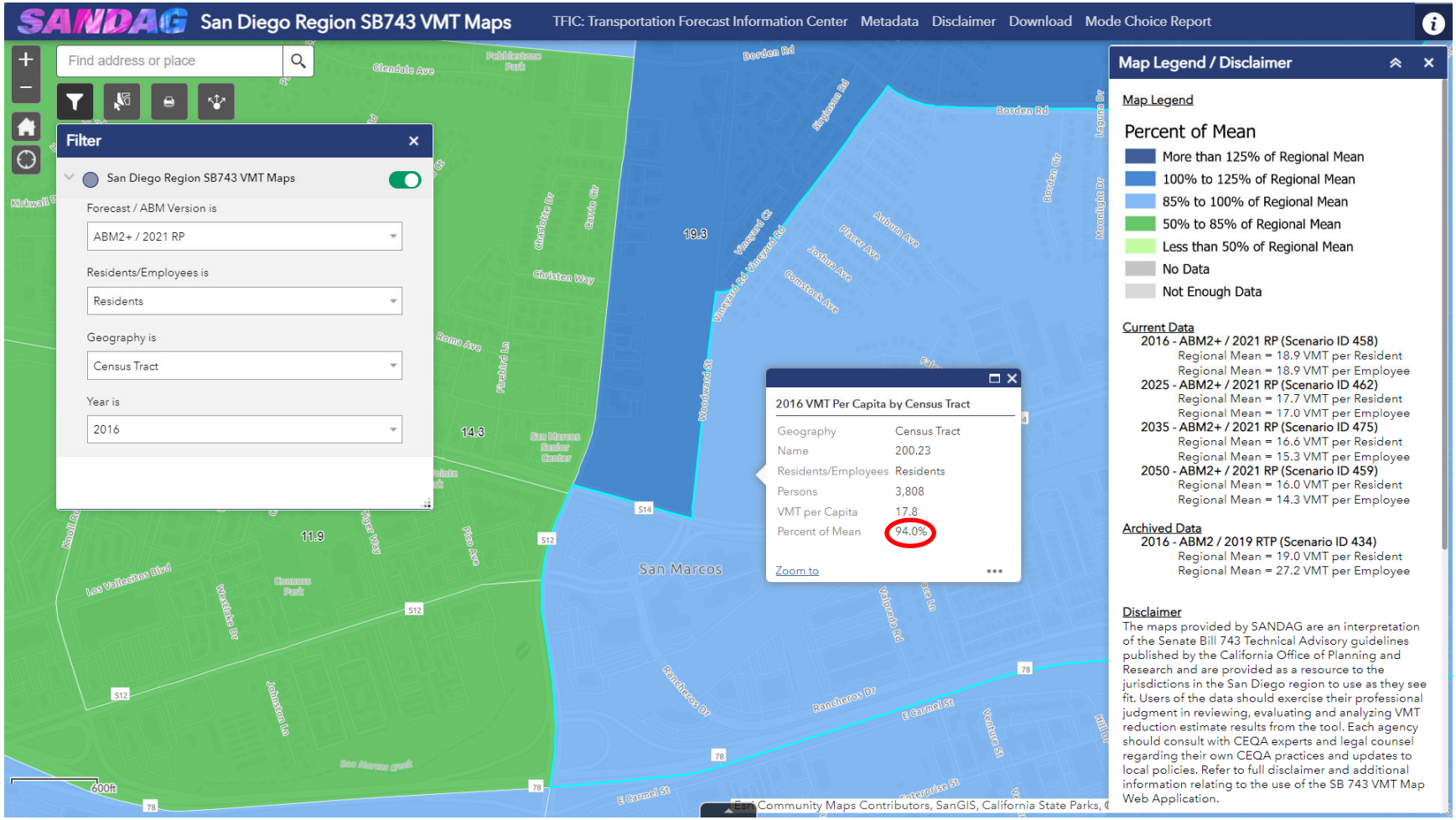
Data sources: SANGIS; CalAtlas. Map date: February 24, 2020.

City of San Marcos
SB 743 Implementation

FIGURE X

High Quality Transit Areas

ATTACHMENT C


SANDAG San Diego Region SB743 VMT Maps
TFIC: Transportation Forecast Information Center
Metadata
Disclaimer
Download
Mode Choice Report
Find address or place
Filter
San Diego Region SB743 VMT Maps
Forecast / ABM Version is
ABM2+ / 2021 RP
Residents/Employees is
Residents
Geography is
Census Tract
Year is
2016
2016 VMT Per Capita by Census Tract
Geography Census Tract
Name 200.23
Residents/Employees Residents
Persons 3,808
VMT per Capita 17.8
Percent of Mean 94.0%
Zoom to
Map Legend / Disclaimer
Map Legend
Percent of Mean
More than 125% of Regional Mean
100% to 125% of Regional Mean
85% to 100% of Regional Mean
50% to 85% of Regional Mean
Less than 50% of Regional Mean
No Data
Not Enough Data
Current Data
2016 - ABM2+ / 2021 RP (Scenario ID 458)
Regional Mean = 18.9 VMT per Resident
Regional Mean = 18.9 VMT per Employee
2025 - ABM2+ / 2021 RP (Scenario ID 462)
Regional Mean = 17.7 VMT per Resident
Regional Mean = 17.0 VMT per Employee
2035 - ABM2+ / 2021 RP (Scenario ID 475)
Regional Mean = 16.6 VMT per Resident
Regional Mean = 15.3 VMT per Employee
2050 - ABM2+ / 2021 RP (Scenario ID 459)
Regional Mean = 16.0 VMT per Resident
Regional Mean = 14.3 VMT per Employee
Archived Data
2016 - ABM2 / 2019 RTP (Scenario ID 434)
Regional Mean = 19.0 VMT per Resident
Regional Mean = 27.2 VMT per Employee
Disclaimer
The maps provided by SANDAG are an interpretation of the Senate Bill 743 Technical Advisory guidelines published by the California Office of Planning and Research and are provided as a resource to the jurisdictions in the San Diego region to use as they see fit. Users of the data should exercise their professional judgment in reviewing, evaluating and analyzing VMT reduction estimate results from the tool. Each agency should consult with CEQA experts and legal counsel regarding their own CEQA practices and updates to local policies. Refer to full disclaimer and additional information relating to the use of the SB 743 VMT Map Web Application.
San Marcos
19.3
14.3
11.9
Community Maps Contributors, SanGIS, California State Parks,

ATTACHMENT D

Mobility Management

Guidebook

JUNE 2019

TRANSIT-ORIENTED DEVELOPMENT

Transit-Oriented Development (TOD) refers to projects built in walkable areas that have easy access to public transit and typically offer a mix of uses, including housing, retail, offices, and/or community facilities. TOD should be built within a half-mile of a high-frequency rail transit station (e.g., SPRINTER, COASTER, Trolley) and, at a minimum, incorporate adequate bike and pedestrian facilities that facilitate connections to and from transit, encouraging transit use and reducing single-occupancy vehicle use.

SCALE OF APPLICATION: Project Scale

IMPACT ON VMT

Reduction of up to 14% of project VMT

VMT reduction affected by:

- Current transit mode share in project area.
- Proximity and access to transit station.
- Frequency of and accessibility provided by nearby transit service.

IMPLEMENTATION CONSIDERATIONS

- Transit corridors that provide direct connections to the region's downtown or major employment centers are significantly more likely to attract new TOD compared to transit lines that do not serve these destinations.
- Walking and biking are essential to the success of TOD.

COMPLEMENTARY STRATEGIES

- Higher-Density Development
- Mixed-Use Development
- Reduced Parking
- Employer Transit Pass Subsidy
- Bikeshare

CASE STUDY

Villa Encantada Apartments was completed in 2019 as a TOD that provides 67 affordable, high-quality apartments and 1,000 square feet of neighborhood-serving retail. Located at the 62nd/Encanto Trolley Station, the project was developed as a partnership between MTS and AMCAL Multi-Family Housing. The apartment complex is a 20-minute Trolley ride to downtown via the Orange Line.

Image source: San Diego Metropolitan Transit System

IMPLEMENTATION RESOURCES

- SANDAG developed a Regional TOD Strategy as part of San Diego Forward: The Regional Plan to promote and incentivize sustainable development throughout the region. A variety of reports are available at: arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf

REFERENCE

Lund, H., et al. 2004. "Travel Characteristics of Transit-Oriented Development in California." bart.gov/sites/default/files/docs/Travel_of_TOD.pdf

Tal, G., et al. 2013. "Technical Background Document on the Impacts of Transit Access (Distance to Transit) Based on a Review of the Empirical Literature." arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf

2A. Transit Oriented Development

Level of application: **Project/Site**
Type of VMT affected: **Project-generated trips**
Max VMT reduction: **14.4%**

Return to Main
Results Summary

Description: Transit Oriented Development (TOD) refers to projects built in compact, walkable areas that have easy access to public transit, ideally in a location with a mix of uses, including housing, retail, offices, and community facilities. TODs are generally described as places within a 10 minute walk of a high-frequency rail transit station (e.g. SPRINTER, COASTER, Trolley). They should, at a minimum, incorporate bike and pedestrian access to transit, thereby encouraging transit use and reducing vehicle travel.

Is the project within 0.5 mile of a rail transit station (e.g., SPRINTER, COASTER, Trolley)?	yes	user input, source (1)
Default [city/CPA] transit mode share (all trips)		coefficient, source (2), overridden
User override of existing transit mode share	4.0%	user input, optional
Transit mode share used for calculation	4.0%	calculated
Ratio of transit mode share for TOD area compared to transit mode share for surrounding [city/CPA]	4.9	constant, source (3)
Transit mode share with strategy	19.6%	calculated
Mode shift factor	0.7	constant, source (2)
Change in VMT (as compared to same project in non-TOD location)	-10.9%	☐ Exclude from Results

Formula: % Change in VMT = difference in transit mode share with strategy * mode shift factor
Transit mode share is capped at 27%, source (3).

Sources:

(1). Tal, G., et al. 2013. "Technical Background Document on the Impacts of Transit Access (Distance to Transit) Based on a Review of the Empirical Literature." www.arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf
(2). SANDAG. 2016. Activity Based Model. (v14.0.1, scenario ID 232)
(3). Lund, H., et al. 2004. "Travel Characteristics of Transit-Oriented Development in California." www.bart.gov/sites/default/files/docs/Travel_of_TOD.pdf

TRANSPORTATION IMPACT ANALYSIS GUIDELINES

City of San Marcos, CA

November 16, 2020

Table 1: Applicable VMT Reduction Strategies

Tier and Category	Mitigation Measure	Description	Maximum VMT Reduction	Land Use Applicability	Implementation Body/Method	Source
Project Tier: Land Use and Location	Increase Site Density	This measure increases the density of households and employment per acre for the project site over what was used in the initial project VMT estimation. Density can be measured in terms of jobs, residents, employees, or dwelling units per unit area. Floor area ratio may be used as a proxy for employment, when employment is not known, or when considering non-office commercial developments.	Up to 30%	Residential, Office, Retail	Developer, City	CAPCOA (1.1)
	Increase Site Diversity	This measure involves improving the mix of uses and jobs/housing balance within a project or a planning area, incorporating a range of complementary land uses that provide a balanced development approach relative to the surrounding neighborhood and encourage shorter trips and transportation alternatives.	Up to 30%	Residential, Office, Retail	Developer, City	SANDAG (2B)
	Major Transit Center Accessibility	This measure locates a project within half a mile or a ten minute walk of a major transit center, defined as a rail transit station or a bus rapid transit station, but can be any transit stop with frequent service (5 to 15 minute headways) and significant transfer opportunities to other transit routes. Residential and commercial centers designed around rail and bus stations are known as Transit-Oriented Development and contain bike and pedestrian access.	Up to 14.4%	Residential, Office, Retail	Developer, City	SANDAG (2A)
	Integrate Affordable Housing	This measure incorporates a higher proportion of affordable housing within the residential portion of a project, subdivision, or a planning area. Income has a statistically significant effect on whether someone will drive a single-occupant vehicle to work or for other trip purposes.	Up to 32.5% of home VMT	Residential, Office, Retail	Developer, City	San Jose (PC-003)
Project Tier: Commute Demand Management Strategies	Voluntary Employer Commute Program	This measure consists of a variety of measures to reduce single-occupant vehicle commuting through an employer, such as carpool/vanpool programs, subsidized transit passes, preferential carpool parking, bicycle facilities, and flexible work schedules. Unlike a mandatory program, this strategy does not require monitoring, reporting, or performance standards. Note, this measure cannot be analyzed in combination with a mandatory employer commute program. In addition, separate commute demand management measures should not be analyzed if already included under this measure.	Up to 6.2% of work VMT	Office, Retail	Tenant	SANDAG (1A)