



THE CITY OF SAN DIEGO

ENVIRONMENTAL IMPACT REPORT

Project No. 357262
SCH No. 2017051058

SUBJECT: Black Mountain Road Community Plan Amendment: A request for a GENERAL PLAN AMENDMENT to Figure LU-2, Land Use and Street System Map in the Land Use and Community Planning Element of the General Plan to change the street system classification of a segment of Black Mountain Road from Prime Arterial to Major Arterial; a COMMUNITY PLAN AMENDMENT to the Rancho Peñasquitos Community Plan Circulation Element to reclassify the same segment from a 6-lane Primary Arterial to a 4-lane Major; and a COMMUNITY PLAN AMENDMENT to the Black Mountain Ranch Subarea Plan amending the Transportation Phasing Plan to remove the requirement to widen Black Mountain Road to a 6-lane Primary Arterial and add the project design feature and three traffic mitigation measures, identified below. The approximate 1.3-mile segment of Black Mountain Road to be reclassified would occur between Twin Trails Drive on the north to the southern community boundary adjacent to the Los Peñasquitos Canyon Preserve. The project also includes a design feature to restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps to increase the northbound to westbound left-turn pocket storage and improve the flow of northbound traffic. To accommodate this restriping on the overpass, the roadway north of the overpass bridge would need to be widened for northbound traffic. The widening would extend approximately 0.15 mile from the SR-56 westbound off-ramp to the first commercial driveway to the north of the overpass. In addition, the following three mitigation roadway improvement measures are included as part of the project and analyzed in full detail through the Environmental Impact Report: MM-TRA-1 would require the installation of a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive; MM-TRA-2 would require construction of a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road; and MM-TRA-3 would construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp. Implementation of the project would subsequently require amending the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch Public Facilities Financing Plans (PFFPs) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the Public Facilities Financing Plans are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by the action, would be incorporated. The Pacific Highlands Ranch requirement to widen the project roadway to a 6-lane Primary Arterial

is outlined in Table 4B-14, which is included in the Pacific Highlands Ranch Subarea Plan Master Environmental Impact Report. Upon certification of this Environmental Impact Report and approval of the General Plan Amendment, Community Plan Amendments, and the Black Mountain Ranch Transportation Phasing Plan amendment, MM-TRA-1 through MM-TRA-3 would supersede and replace widening the Black Mountain Road to a 6-lane Primary Arterial previously identified in the Pacific Highlands Ranch Subarea Plan Master Environmental Impact Report. This Environmental Impact Report, which analyzes the removal of the existing Black Mountain Road 6-lane Primary Arterial designation for the project roadway from the Rancho Penasquitos Community Plan, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the Public Facilities Financing Plans. APPLICANT: SPIC Del Sur, LLC.

I. ENVIRONMENTAL DETERMINATION:

This document has been prepared by the City of San Diego's Environmental Analysis Section under the direction of the Development Services Department and is based on the City's independent analysis and conclusions made pursuant to 21082.1 of the California Environmental Quality Act (CEQA) Statutes and Sections 128.0103(a), 128.0103(b) of the San Diego Land Development Code.

Based on the analysis conducted for the project described above, the City of San Diego, as the Lead Agency, has prepared the following Environmental Impact Report. The analysis addressed the following issue area(s) in detail: **Land Use, Transportation/Circulation, Air Quality, Greenhouse Gas Emissions, Noise, Biological Resources, Historical Resources, and Tribal Cultural Resources.**

The Environmental Impact Report concluded that the project would result in significant but mitigated environmental impacts to **Biological Resources**, and significant and unmitigated impacts to **Transportation/Circulation**. All other impacts analyzed in the draft EIR were determined to be less than significant.

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

II. PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals were distributed either the Public Notice or a copy of the draft Environmental Impact Report:

Federal Government

U.S. Environmental Protection Agency (19)

U.S. Fish and Wildlife Service (23)

U.S. Army Corps of Engineers (26)

State of California

Caltrans District 11 (31)
California Department of Fish and Wildlife (32)
California Regional Water Quality Control Board, Region 9 (44)
State Clearinghouse (46A)
California Department of Transportation (51)
California Transportation Commission (51A)
California Transportation Commission (51B)

City of San Diego

Mayor's Office (91)
Councilmember Bry, District 1 (MS 10A)
Councilmember Campbell, District 2 (MS 10A)
Councilmember Ward, District 3 (MS 10A)
Councilmember Montgomery, District 4 (MS 10A)
Councilmember Kersey, District 5 (MS 10A)
Councilmember Cate, District 6 (MS 10A)
Councilmember Sherman, District 7 (MS 10A)
Councilmember Moreno, District 8 (MS 10A)
Councilmember Gomez, District 9 (MS 10A)
Development Services Department
 EAS
 Transportation
 Project Manager
Planning Department
 Plan-Long Range Planning
 Plan Facilities Financing
Transportation Development - DSD (78)
Development Coordination (78A)
Fire and Life Safety Services (79)
Library Department - Government Documents (81)
Central Library (81A)
Carmel Mountain Ranch Branch (81E)
Carmel Valley Branch Library (81F)
Rancho Penasquitos Branch Library (81BB)
Historical Resources Board (87)
City Attorney (93C)
Wetlands Advisory Board (171)

Other Interested Groups, Organizations, and Individuals

San Diego Association of Governments (108)
San Diego County Regional Airport Authority (110)
San Diego Transit Corporation (112)
Metropolitan Transit System (115)
Rancho Santa Ana Botanic Garden at Claremont (161)
Sierra Club (165)
San Diego Natural History Museum (166)

Other Interested Groups, Organizations, and Individuals - continued

San Diego Audubon Society (167)
San Diego Audubon Society (167A)
California Native Plant Society (170)
Endangered Habitats League (182)
Endangered Habitats League (182A)
Carmen Lucas (206)
South Coastal Information Center (210)
San Diego Archaeological Center (212)
Save Our Heritage Organisation (214)
Ron Christman (215)
Clint Linton (215B)
Frank Brown – Inter-Tribal Cultural Resources Council (216)
Campo Band of Mission Indians (217)
San Diego County Archaeological Society (218)
Kumeyaay Cultural Heritage Preservation (223)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution [Notice Only] (225A-S)
Clint Linton, Lipay Nation of Santa Ysabel
Lisa Cumper, Jamul Indian Village
Jesse Pinto, Jamul Indian Village
Black Mountain Ranch - Subarea I (226C)
Pacific Highlands Ranch - Subarea III (377A)
California Department of Parks & Recreation (378)
Torrey Pines Associates (379)
Rancho Penasquitos Planning Board (380)
San Diego Gas & Electric (381)
Friends of Los Penasquitos Canyon Preserve Inc. (382)
Rancho Penasquitos Town Council (383)
Los Penasquitos Lagoon Foundation (384)
Los Penasquitos Canyon Preserve Citizens Advisory Committee (385)
Frank Landis, California Native Plant Society (387)
Jeannete Poole / waltzplan@gmail.com
SPIC Del Sur, LLC, Applicant
Steve Silverman, J & S Silverman Consulting, Applicant
Nick Larkin, RECON Environmental, Inc.

III. RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.

- () Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.

Copies of the draft Environmental Impact Report, the Mitigation, Monitoring and Reporting Program and any other materials are available in the office of the Development Services Department for review, or for purchase at the cost of reproduction.



Anna McPherson
Program Manager
Development Services Department

April 12, 2019

Date of Draft Report

Date of Final Report

Analyst: E. Shearer-Nguyen

**Draft Environmental Impact Report
for the Black Mountain Road
Community Plan Amendment,
San Diego, California
Project No. 357262
SCH No. 2017051058**

April 12, 2019

TABLE OF CONTENTS

List of Abbreviated Terms.....	v
Executive Summary	S-1
S.1 Project Synopsis	S-1
S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects	S-3
S.3 Areas of Controversy	S-3
S.4 Issues to be Resolved by the Decision-Making Body	S-3
S.5 Project Alternatives.....	S-3
1.0 Introduction.....	1-1
1.1 EIR Purpose and Intended Uses.....	1-3
1.2 EIR Legal Authority.....	1-3
1.3 EIR Scope and Content and Format.....	1-5
1.4 EIR Process	1-8
2.0 Environmental Setting.....	2-1
2.1 Regional Setting.....	2-1
2.2 Project Location.....	2-1
2.3 Physical Environment	2-2
2.4 Planning Context.....	2-4
3.0 Project Description.....	3-1
3.1 Introduction	3-1
3.2 Relationship to Rancho Peñasquitos Community Plan	3-1
3.3 Project Objectives	3-3
3.4 Discretionary Actions.....	3-3
3.5 Description of Project Components	3-4
4.0 Environmental Analysis.....	4-1
4.1 Land Use.....	4.1-1
4.2 Transportation/Circulation	4.2-1
4.3 Air Quality.....	4.3-1
4.4 Greenhouse Gas Emissions	4.4-1
4.5 Noise.....	4.5-1
4.6 Biological Resources	4.6-1
4.7 Cultural Resources.....	4.7-1
4.8 Tribal Cultural Resources	4.8-1

5.0	Significant Unavoidable Environmental Effects/ Irreversible Changes	5-1
5.1	Significant Environmental Effects Which Cannot Be Avoided if the Project Is Implemented	5-1
5.2	Irreversible Environmental Changes Which Would Result if the Project Is Implemented	5-2
6.0	Growth Inducement	6-1
7.0	Cumulative Impacts	7-1
7.1	Cumulative Effects Found To Be Significant	7-3
7.2	Cumulative Effects Found Not To Be Significant.....	7-4
8.0	Effects Found Not to be Significant	8-1
8.1	Agricultural Resources	8-1
8.2	Geologic Conditions.....	8-1
8.3	Growth Inducement.....	8-2
8.4	Health and Safety.....	8-2
8.5	Mineral Resources	8-2
8.6	Public Services and Facilities	8-3
8.7	Public Utilities	8-3
8.8	Visual Quality and Neighborhood Character	8-3
8.9	Hydrology	8-4
8.10	Water Quality.....	8-4
9.0	Project Alternatives	9-1
9.1	No Project Adopted Plan (6-lane Primary Arterial) Alternative.....	9-3
9.2	Environmentally Superior Alternative	9-6
10.0	Mitigation Monitoring and Reporting Program.....	10-1
11.0	References Cited.....	11-1
12.0	Individuals and Preparers Consulted	12-1

FIGURES

2-1:	Regional Location	2-6
2-2:	Project Location on Aerial Photograph	2-7
2-3a:	Project Design Feature: Black Mountain Road Bridge Segment Restriping and Minor Widening North of the Bridge	2-8
2-3b:	MM-TRA-2: Auxiliary Lane on Eastbound SR-56 between Camino Del Sur and Black Mountain Road	2-9
2-3c:	MM-TRA-3: Rancho Peñasquitos Boulevard/SR-56 Westbound On-Ramp Additional Lane.....	2-10

FIGURES (cont.)

2-4:	Rancho Peñasquitos Community Plan Bikeways and Pedestrian Circulation	2-11
2-5a:	Existing Class II Bike Lanes.....	2-12
2-5b:	Existing Class II Bike Lanes.....	2-13
3-1:	Existing Rancho Peñasquitos Community Plan Recommended Street Classifications Map.....	3-6
3-2:	Amended Rancho Peñasquitos Community Plan Recommended Street Classifications Map.....	3-7
4.2-1:	Traffic Study Area	4.2-38
4.2-2:	Existing Roadway Network.....	4.2-39
4.2-3:	Horizon Year Roadway Network	4.2-40
4.6-1:	Location of Design Feature and Traffic Mitigation Survey Areas on Aerial Photograph	4.6-18
4.6-2a:	Vegetation Communities and Land Cover Types within the Project Design Feature and MM-TRA-1 Survey Area	4.6-19
4.6-2b:	Vegetation Communities and Land Cover Types within the MM-TRA-2 Survey Area	4.6-20
4.6-2c:	Vegetation Communities and Land Cover Types within the MM-TRA-3 Survey Area	4.6-21
4.6-3:	Location of Jurisdictional Waters within the MM-TRA-2 Survey Area.....	4.6-22
4.6-4a:	Vegetation Community and Land Cover Type Impacts at Project Design Feature and MM-TRA-1	4.6-23
4.6-4b:	Vegetation Community and Land Cover Type Impacts at MM-TRA-2	4.6-24
4.6-4c:	Vegetation Community and Land Cover Type Impacts at MM-TRA-3	4.6-25

TABLES

S-1:	Summary of Significant Environmental Impacts and Mitigation Measures	S-6
4.1-1:	Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives	4.1-10
4.2-1:	Other Study Area Streets Summary	4.2-6
4.2-2:	Existing Roadway Segment Conditions	4.2-8
4.2-3:	Existing Intersection Conditions.....	4.2-9
4.2-4:	Existing Freeway Mainline Level of Service.....	4.2-11
4.2-5:	Existing Freeway Interchange Calculated On-Ramp Metering Delay	4.2-13
4.2-6:	Existing Freeway Interchange Observed On-Ramp Metering Delay	4.2-15
4.2-7:	Cumulative Projects	4.2-19
4.2-8:	Horizon Year (2050) Circulation Network Improvements/Changes	4.2-20
4.2-9:	Horizon Year Comparison of Roadway Segment Conditions.....	4.2-22
4.2-10a:	Horizon Year AM Peak Hour Intersection Conditions	4.2-24
4.2-10b:	Horizon Year PM Peak Hour Intersection Conditions	4.2-26
4.2-11a:	Horizon Year Freeway Mainline Analysis SR-56 Westbound and Eastbound	4.2-28
4.2-11b:	Horizon Year Freeway Mainline Analysis I-15 Northbound and Southbound	4.2-29
4.2-12:	Horizon Year Freeway Interchange On-Ramp Metering Delay	4.2-31
4.2-13:	Black Mountain Road/SR-56 Intersection Operations.....	4.2-33
4.2-14:	Mitigation Summary	4.2-35
4.3-1:	Summary of Air Quality Measurements.....	4.3-2
4.3-2:	Ambient Air Quality Standards.....	4.3-4

TABLES (cont.)

4.3-3:	Air Quality Impact Screening Criteria	4.3-8
4.3-4:	Construction Emissions.....	4.3-10
4.3-5:	SDAPCD CEQA Toxic Air Contaminant Emissions Thresholds.....	4.3-12
4.4-1:	Global Warming Potentials and Atmospheric Lifetimes	4.4-2
4.4-2:	California GHG Emissions by Sector in 1990, 2010, and 2014	4.4-3
4.4-3:	City of San Diego GHG Emissions in 2010.....	4.4-4
4.5-1:	Traffic Noise Significance Thresholds.....	4.5-2
4.5-2:	MM-TRA-1 Construction Noise Levels	4.5-3
4.5-3:	MM-TRA-2 Construction Noise Levels	4.5-4
4.5-4:	MM-TRA-3 Construction Noise Levels	4.5-5
4.5-5:	Project Design Feature Construction Noise Levels.....	4.5-5
4.5-6:	Changes in Vehicle Traffic Noise Levels	4.5-8
4.5-7:	MM-TRA-1 Noise Levels	4.5-10
4.5-8:	MM-TRA-2 Noise Levels	4.5-11
4.5-9:	MM-TRA-3 Noise Levels	4.5-11
4.6-1:	Summary of Vegetation and Land Cover Types by Survey Area.....	4.6-1
4.6-2:	Summary of Vegetation Community and Land Cover Type Impacts	4.6-10
4.6-3:	Mitigation Ratios for Impacts on Upland Vegetation Communities and Land Cover Types	4.6-13
4.6-4:	Wetland Mitigation Ratios Including Biologically Superior Design	4.6-14
4.6-5:	Wetland Mitigation Ratios for a Biologically Superior Project Outside of the Coastal Zone	4.6-14
7-1:	Cumulative Projects	7-2
9-1:	Comparison of the No Project Adopted Plan (6-lane Primary Arterial) Alternative to the Project.....	9-2
10-1:	Mitigation Monitoring and Reporting Program.....	10-2

APPENDICES

A-1:	Notice of Preparation and Comments
A-2:	Proposed Amendments
B:	Transportation Impact Study
C:	Air Quality Analysis
D:	Greenhouse Gas Analysis
E:	Noise Analysis
F:	Biological Technical Report
G:	Archaeological Resources Survey Report

List of Abbreviated Terms

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACC	Advanced Clean Cars program
ACOE	U.S. Army Corps of Engineers
ADD	Assistant Deputy Director
ADT	average daily traffic
AMSL	above mean sea level
BAU	business as usual
BCME	Biological Construction Mitigation/Monitoring Exhibit
BMP	best management practice
BMR	Black Mountain Ranch
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
California EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFO	Clean Fuels Outlet program
CFR	Code of Federal Regulations
CH ₄	Methane
City	City of San Diego
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CO ₂	Carbon dioxide
CPA	Community Plan Amendment
CRHR	California Register of Historic Resources
CSVR	Consultant Site Visit Record
dB	decibel
dB(A)	A-weighted decibel
DPM	diesel particulate matter
EIR	Environmental Impact Report
EO	Executive Order
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
FEMA	Federal Emergency Management Act

FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GIS	geographic information system
GPA	General Plan Amendment
GWP	global warming potential
HOV	High Occupancy Vehicle Lane
I-5	Interstate 5
I-15	Interstate 15
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LDC	Land Development Code
L _{eq}	average sound level
LEV III	Low Emission Vehicle III
LOS	level of service
LPW	sound power level
MBTA	Migratory Bird Treaty Act
MEIR	Master Environmental Impact Report
MHPA	Multi-Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MMRP	Mitigation Monitoring and Reporting Program
MMT CO ₂ E	million metric tons of CO ₂ equivalent
mph	miles per hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MT CO ₂ E	metric tons of CO ₂ equivalent
N ₂ O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCFUA	North City Future Urbanizing Area
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRMP	Natural Resources Management Plan
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
pb	lead
PFFP	Public Facilities Financing Plan
PHR	Pacific Highlands Ranch
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter

ppm	parts per million
PRC	Public Resources Code
project	Black Mountain Road Community Plan Amendment Project
project roadway	project segment of Black Mountain Road subject to the CPA
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
RE	Resident Engineer
ROG	reactive organic gas
RPCP	Rancho Peñasquitos Community Plan
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
sec/veh	seconds per vehicle
sf	square feet
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
SOV	Single Occupancy Vehicle Lane
SR-56	State Route 56
SR-78	State Route 78
SR-163	State Route 163
TCM	transportation control measures
THSP	Torrey Highlands Subarea Plan
TIS	Transportation Impact Study
TPP	Transportation Phasing Plans
U.S. EPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
V/C	volume to capacity
ZEV	zero emission vehicle

Executive Summary

This Environmental Impact Report (EIR) has been prepared for Black Mountain Road Community Plan Amendment (project). This document analyzes the potential environmental effects associated with implementation of the project. The EIR was prepared under the direction of the City of San Diego's (City's) Environmental Analysis Section and reflects the independent judgment of the City as lead agency pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC), Section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). This EIR was prepared to evaluate the environmental effects of the project.

S.1 Project Synopsis

This summary provides a brief synopsis of: (1) the project, (2) the results of the environmental analysis contained within this EIR, (3) the alternative to the project that was considered, and (4) the major areas of controversy and issues to be resolved by decision makers. This summary does not contain the extensive background and analysis found in the document. Therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

S.1.1 Project Location and Setting

The project is located in the Rancho Peñasquitos Community Plan (RPCP) in the northern portion of the city of San Diego (City). The segment of Black Mountain Road subject to the CPA (project roadway) stretches approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve. The project roadway intersects with State Route 56 (SR-56) and is located approximately 2.1 miles west of Interstate 15 (I-15). The locations of the project design feature and required traffic mitigation measures are described in the project description below.

S.1.2 Project Description

S.1.2.1 Reclassification of Project Roadway

The project proposes to reclassify a segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major. The project roadway extends approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve. The project roadway currently operates as a 4-lane Major with landscaped center medians, contiguous sidewalks, and Class II bike lanes. The bridge section of Black Mountain Road that crosses SR-56 is wider and operates as a 5-lane Primary Arterial.

S.1.2.2 Project Design Feature

The project proposes the following roadway improvement as a design feature to increase the northbound to westbound left turn pocket storage and improve the flow of northbound traffic (project design feature):

Restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps to include an additional northbound lane along Black Mountain Road from the SR-56 eastbound ramps to the middle of the overpass. To accommodate the additional northbound lane created by this restriping on the overpass, the roadway north of the overpass bridge would need to be widened for northbound traffic. The widening would extend approximately 0.15 mile from the SR-56 westbound off-ramp to the first commercial driveway to the north of the overpass (see Figure 2-3a).

The project design feature is included as part of the project. Consequently, this EIR includes a project-level impact analysis to evaluate potential environmental impacts associated with construction of the project design feature in addition to evaluating the potential impacts of the reclassification itself.

S.1.2.3 Traffic Mitigation Measures

The following three roadway improvements identified in the Transportation Impact Study (TIS) (Appendix B) would mitigate traffic impacts associated with the reclassification of the project roadway from a 6-lane Primary Arterial to a 4-lane Major. Furthermore, these three mitigation measures are included as part of the project. Consequently, the EIR includes project-level impact analysis to evaluate potential environmental impacts associated with each mitigation measure.

MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.¹

MM-TRA-2: Construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road (see Figure 2-3b).

MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (see Figure 2-3c).

S.1.3 Project Objectives

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the lead agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The objectives for the project are:

- Amend General Plan Figure LU-2 and the RPCP Transportation Element to be consistent with the current transportation network within the community.
- Amend General Plan Figure LU-2 and the RPCP Transportation Element to be consistent with the goals of the City's General Plan Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel.

¹A figure is not provided for MM-TRA-1 because it is limited to installation of a traffic signal.

- Implement the Rancho Peñasquitos Community Planning Group's desire to preserve the existing character of the community.

S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

Table S-1 summarizes the significant impacts identified through the environmental analysis completed for the project. Table S-1 also identifies the mitigation measures that would reduce and/or avoid the environmental effects as feasible, with a conclusion as to whether the impact would be mitigated to below a level of significance or if impacts would remain significant and unavoidable. Further discussion of potential and anticipated environmental impacts is detailed in Chapter 4.0.

S.3 Areas of Controversy

Pursuant to CEQA Section 15123(b)(2), an EIR shall identify areas of controversy known to the lead agency, including issues raised by the agencies, and the public, and issues to be resolved. The Notice of Preparation (NOP) for the EIR was distributed on May 17, 2017, for a 30-day public review and comment period, and a scoping meeting was held on May 31, 2017. No areas of controversy were raised in the comment letters received on the NOP or during the scoping meeting. The NOP and comment letters received are included in this EIR as Appendix A-1.

S.4 Issues to be Resolved by the Decision-Making Body

The issues to be resolved by the decision-making body (in this case the City Council) are whether: (1) the significant impacts associated with transportation/circulation that were not identified as significant and unavoidable and impacts associated with biological resources would be fully mitigated to below a level of significance, (2) to approve the proposed alternative instead of the project, and how (3) to reduce significant and unavoidable environmental impacts to the maximum extent feasible while achieving project objectives through adoption of mitigation measures and/or the project alternative identified in this EIR. Furthermore, a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 would be required for those impacts found to be significant and unavoidable as identified in the EIR.

S.5 Project Alternatives

The CEQA Guidelines Section 15126.6 requires that an EIR compare the effects of a "reasonable range of alternatives" to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The "range of alternatives" is governed by the "rule of reason,"

which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time while also taking into account economic, environmental, social, technological, and legal factors. However, the project purpose limits the number of feasible alternatives that could be considered for the project. Given the fact that the project is a reclassification of the roadway, the only feasible alternative to the project would be to expand the project roadway to a 6-lane Primary Arterial consistent with the RPCP (No Project Adopted Plan (6-lane Primary Arterial) Alternative). Consequently, this EIR only analyzes the No Project Adopted Plan (6-lane Primary Arterial) Alternative in comparison to the potential environmental impacts associated with the project.

S.5.1 No Project Adopted Plan (6-lane Primary Arterial) Alternative

The No Project Adopted Plan (6-lane Primary Arterial) Alternative would not process a General Plan Amendment (GPA) to Figure LU-2, Land Use and Street System Map, in the Land Use and Community Planning Element of the General Plan to reclassify the project roadway from a Prime Arterial to a Major Arterial, or a CPA for the RPCP to reclassify the project roadway from a 6-lane Primary Arterial to a 4-lane Major. Similarly, this alternative would not require the traffic mitigation measures recommended in the TIS and would not require amendments to the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch Public Facilities Financing Plans. Under this alternative, the project segment of Black Mountain Road would retain its current classification and would eventually be widened to a 6-lane Primary Arterial consistent with the current classification in the General Plan and the RPCP. Potential impacts associated with this roadway widening are presented in Chapter 9.0, Project Alternatives.

S.5.2 Environmentally Superior Alternative

Based on the analysis of the other alternative considered, the project would be environmentally superior to the alternative because it would have fewer impacts on land use, air quality, greenhouse gases, noise, biological resources, historic resources, and tribal cultural resources. Although significant and unavoidable impacts related to transportation/circulation would occur under the project (see Section 4.2.4, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would have a greater level of impact to a larger number of environmental categories than the project. Additionally the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not meet the project goals of reclassifying the circulation network to be consistent with the current transportation network. The RPCP area is built out, and the TIS prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at LOS D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately 20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on I-15 have been improved by implementation of the I-15 Express Lanes Project that was not anticipated when the RPCP was adopted in 1993, which has diminished the need to expand the project roadway to a 6-lane Primary Arterial (see Sections 3.2 and 9.1.3). Similarly, the No Project

Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the goals of the City's Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel that were developed after adoption of the RPCP. Furthermore, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the project objective to preserve the existing character of the community. Therefore, the project is considered environmentally superior to the alternative.

Table S-1
Summary of Significant Environmental Impacts and Mitigation Measures

Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Transportation/Circulation			
Would the project result in an increase in projected traffic, which is substantial in relation to the existing traffic load and capacity of the street system, or an addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp, or a substantial impact upon existing or planned transportation systems?	<p>Roadway Segments</p> <p>Impact TRA-1: Black Mountain Road south of Twin Trails Drive: volume to capacity (V/C) ratio increases from 0.634 to 0.939, and segment operations would decrease from level of service (LOS) C to LOS E.</p> <p>Impact TRA-2: Black Mountain Road north of Park Village Road – Adolphia Street: V/C ratio increases from 0.732 to 0.886, and segment operations would decrease from LOS C to LOS E.</p>	Per the Transportation Impact Study, mitigation was not identified to improve roadway segment operations on Black Mountain Road south of Twin Trails Drive (Impact TRA-1) and north of Park Village Road – Adolphia Street (Impact TRA-2). Mitigation for these roadway segments would require widening of Black Mountain Road that would be inconsistent with the project's objectives to maintain consistency with the community's current transportation network, maintain consistency with the City goals to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel, and to preserve the existing character of the community.	Significant and Unavoidable
	<p>Intersections</p> <p>Impact TRA-3: Sundance Avenue and Twin Trails Drive (AM peak hour): average delay increases from 38.8 to 46.4 seconds (an increase greater than 2.0 seconds) and continues to operate at LOS E.</p>	MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.	Less Than Significant
	<p>Freeway Segments</p> <p>Impact TRA-4: Eastbound State Route 56 (SR-56) between Camino del Sur and Black Mountain Road (PM peak hour): V/C ratio increases from 1.098 to 1.104 and continues to operate at LOS F.</p>	<p>MM-TRA-2: Construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road.</p> <p>Implementation of MM-TRA-2 would reduce impacts on eastbound SR-56 between Camino</p>	Significant and Unavoidable

**Table S-1
Summary of Significant Environmental Impacts and Mitigation Measures**

Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
		Del Sur and Black Mountain Road to a level less than significant. However, SR-56 is under the jurisdiction of California Department of Transportation (Caltrans), and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour) would remain significant and unavoidable.	
	<p>Metered Freeway On-Ramp</p> <p>Impact TRA-5: Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): average delay increases from approximately 21 minutes to approximately 24 minutes. This metered freeway on-ramp empties onto the westbound segment of SR-56 from Rancho Peñasquitos Boulevard to Black Mountain Road. This freeway segment would operate at LOS C in the AM peak hour and LOS A in the PM peak hour under the project's horizon year conditions (see Table 4.2-11 a).</p>	<p>MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp.</p> <p>Implementation of MM-TRA-3 would reduce impacts at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp to a level less than significant. However, the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would remain significant and unavoidable.</p>	Significant and Unavoidable

Table S-1
Summary of Significant Environmental Impacts and Mitigation Measures

Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Biological Resources			
Would the project result in a substantial adverse impact on any Tier I habitats, Tier II habitats, Tier IIIA habitats, or Tier IIIB habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service?	<p>Vegetation Communities</p> <p>Impact BIO-1: Impacts to coastal sage scrub would be significant.</p> <p>Freshwater marsh and southern willow scrub are wetland habitats that are under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), CDFW, and City of San Diego. See the row below for a discussion of impacts on jurisdictional wetlands and mitigation.</p>	<p>MM-BIO-1a: Biological Technical Report</p> <p>Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 shall be required to prepare a site-specific biological technical report consistent with the City's Biology Guidelines to ensure that potentially significant impacts to unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the area of potential effect.</p> <p>MM-BIO-1b: Sensitive Habitat</p> <p>Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall occur in accordance with the mitigation ratios specified within the City's Biology Guidelines as presented in Section 4.6.4.4.</p> <p><u>Mitigation for Impacts to Wetlands</u></p> <p>Please refer to mitigation measures MM-BIO-2a and MM-BIO-2b.</p>	Less Than Significant

Table S-1
Summary of Significant Environmental Impacts and Mitigation Measures

Environmental Issue	Impacts	Mitigation	Impact Level After Mitigation
Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?	<p>Wetlands</p> <p>Impact BIO-2: Impacts to freshwater marsh and southern willow scrub would be significant.</p>	<p>MM-BIO-2a: Wetland Habitat</p> <p>Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive wetlands shall occur in accordance with the mitigation ratios specified within the City's Biology Guidelines as shown in Section 4.6.4.4.</p> <p>MM-BIO-2b: Wetland Habitat</p> <p>Prior to the commencement of any construction-related activities on-site for projects impacting wetland habitat, the applicant shall provide evidence of the following, if applicable, to the Assistant Deputy Director (ADD)/Environmental Designee prior to any construction activity:</p> <ul style="list-style-type: none"> • Compliance with ACOE Section 404 nationwide permit; • Compliance with the RWQCB Section 401 Water Quality Certification; and • Compliance with the CDFW Section 1601/1603 Streambed Alteration Agreement. • Compliance with City Environmentally Sensitive Lands wetland deviation process. 	Less Than Significant

Chapter 1.0

Introduction

This section provides a brief description, background, and scope of the Black Mountain Road Community Plan Amendment (project); the purpose and legal authority for the Environmental Impact Report (EIR); and the EIR scope, process, and organization.

This EIR addresses the potential environmental effects of the proposed Black Mountain Road Community Plan Amendment (CPA) Project (project). It has been prepared by the City of San Diego (City) in compliance with the California Environmental Quality Act (CEQA) and Guidelines (Public Resources Code, Section 21000 et seq. and California Code of Regulations, Title 14, Section 15000, et seq.) and in accordance with the City's Technical Report and Environmental Impact Report Guidelines (updated May 2005) and City's Significance Determination Thresholds (July 2016).

Reclassification of Project Roadway

The project proposes to reclassify a segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major. The segment of Black Mountain Road subject to the CPA (project roadway) stretches approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve. The project roadway Black Mountain Road currently operates as a 4-lane Major with landscaped center medians, contiguous sidewalks, and Class II bike lanes. The bridge section of Black Mountain Road that crosses State Route 56 (SR-56) is wider and operates as a 5-lane Primary Arterial.

Project Design Feature

The project proposes the following roadway improvement as a design feature to increase the northbound to westbound left turn pocket storage and improve the flow of northbound traffic (project design feature):

Restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps to include an additional northbound lane along Black Mountain Road from the SR-56 eastbound ramps to the middle of the overpass. To accommodate the additional northbound lane created by this restriping on the overpass, it is estimated that the roadway north of the overpass bridge would need to be widened for northbound traffic. The widening would extend approximately 0.15 mile from the SR-56 westbound off-ramp to the first commercial driveway to the north of the overpass (see Figure 2-3a).

The project design feature is included as part of the project. Consequently, the EIR includes a project-level impact analysis to evaluate potential environmental impacts associated with construction of the project design feature in addition to evaluating the impacts of the reclassification itself.

Traffic Mitigation Measures

The following three roadway improvements identified in the Transportation Impact Study (TIS) (Appendix B) would mitigate traffic impacts associated with the reclassification of the project roadway from a 6-lane Primary Arterial to a 4-lane Major. Furthermore, these three mitigation measures are included as part of the project. Consequently, the EIR includes project-level impact analysis to evaluate potential environmental impacts associated with each mitigation measure.

- MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.¹
- MM-TRA-2: Construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road (see Figure 2-3b).
- MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/ SR-56 westbound on-ramp (see Figure 2-3c).

Discretionary Actions

Discretionary actions to implement the project include a General Plan Amendment (GPA) to Figure LU-2, Land Use and Street System Map in the Land Use and Community Planning Element of the General Plan to reclassify the project roadway from a Prime Arterial to a Major Arterial, and a CPA to the Rancho Peñasquitos Community Plan (RPCP) Transportation Element to reclassify the project roadway from a 6-lane Primary Arterial to a 4-lane Major² (see Figures 3-1 and 3-2). The City Planning Commission initiated the CPA on February 27, 2014. The CPA would also revise the Transportation Element of the RPCP to include the project design feature that would restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps and widen the roadway north of the overpass bridge as a future action since additional design would be required after approval of the CPA. A full description of the project design feature is provided above.

Concurrent with the GPA and CPA, the project would also amend the Black Mountain Ranch Subarea Plan and Transportation Phasing Plan (TPP) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. As a part of this amendment, the TPP for Black Mountain Ranch would be updated to reflect the project and mitigation measures. The proposed CPA, GPA, and Black Mountain Ranch TPP amendment are presented in Appendix A-2.

¹A figure is not provided for MM-TRA-1 because it is limited to installation of a traffic signal.

²The City of San Diego General Plan and Rancho Peñasquitos Community Plan use different nomenclature for roadway classifications. Consequently, the GPA would reclassify the project roadway as a Major Arterial, and the CPA would reclassify the project roadway as a 4-lane Major.

Implementation of the project would subsequently require amending the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch³ Public Facilities Financing Plans (PFFPs) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the PFFPs are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by this action would be incorporated. This EIR, which analyzes the removal of the existing 6-lane Primary Arterial designation for the project roadway from the RPCP, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the PFFP.

1.1 EIR Purpose and Intended Uses

In accordance with the CEQA Guidelines Section 15121, this EIR is intended to inform decision-makers, public agencies, and the public about the potential significant adverse environmental impacts of the project and provide decision-makers with an understanding of the associated physical and environmental changes prior to taking action on the project. The EIR includes recommended mitigation measures which, when implemented, would lessen project impacts and provide the City with ways to substantially lessen or avoid significant effects of the project on the environment, whenever feasible. Alternatives to the project are presented to evaluate scenarios that further reduce or avoid significant impacts associated with the project.

1.2 EIR Legal Authority

1.2.1 Lead Agency

The City is the lead agency for the project pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The lead agency, as defined by CEQA Guidelines Section 15367, is the public agency that has the principal responsibility and authority for carrying out or approving the project. As lead agency, the City of San Diego Development Services Department, Environmental Analysis Section conducted a preliminary review of the proposed development and determined that this EIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City.

³The Pacific Highlands Ranch (PHR) requirement to widen the project roadway to a 6-lane Primary Arterial is outlined in Table 4B-14, which is included in the PHR Subarea Plan Master EIR. Upon certification of this EIR and approval of the CPA, GPA, and Black Mountain Ranch TPP amendment, MM-TRA-1 through MM-TRA-3 would supersede and replace widening the project roadway to a 6-lane Primary Arterial previously identified in the PHR Subarea Plan Master EIR.

1.2.2 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by responsible and trustee agencies. A Responsible Agency, defined pursuant to State CEQA Guidelines Section 15381, includes all public agencies other than the lead agency that have discretionary approval power over the project. A Trustee Agency is defined in Section 15386 of the CEQA Guidelines as a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California.

Implementation of the project would require consultation with the following responsible and trustee agencies, as described below.

1.2.2.1 U.S. Army Corps of Engineers (ACOE)

The ACOE has jurisdiction over development in or affecting the waters of the United States. All permits issued by the ACOE are subject to consultation and/or review by the United States Fish and Wildlife Service (USFWS) and the United States Environmental Protection Agency (U.S. EPA). A total of 0.32 acre of wetlands under the jurisdiction of the ACOE is located within the footprint of MM-TRA-2 beneath the bridge segment of eastbound SR-56. Impacts to any portion of these wetlands associated with MM-TRA-2 would require issuance of an ACOE Section 404 Nationwide Permit.

1.2.2.2 California Department of Fish and Wildlife (CDFW)

An Agreement Regarding Proposed Stream or Lake Alteration (Streambed Alteration Agreement) with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, is under the authority of CDFW pursuant to Section 1600 et seq. of the State Fish and Game Code. The purpose of code Sections 1600-1616 is to protect and conserve fish and wildlife resources that could be substantially adversely affected by a substantial diversion or obstruction of natural flow of—or substantial change or use of material from the bed, bank, or channel of—any river, stream, or lake. A total of 0.32 acre of wetlands under the jurisdiction of CDFW is located within the footprint of MM-TRA-2 beneath the bridge segment of eastbound SR-56. Impacts to any portion of these wetlands associated with MM-TRA-2 would require issuance of a CDFW Streambed Alteration Agreement.

1.2.2.3 San Diego Regional Water Quality Control Board (RWQCB)

The RWQCB regulates water quality through the Federal Clean Water Act Section 401 certification process and oversees the National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0109266, which consists of wastewater discharge requirements as well as Waste Discharge Requirements Program, which regulates point discharges not subject to the Federal Water Pollution Control Act Amendments. The RWQCB is responsible for implementing permitting, compliance, and other activities to reduce pollutants in municipal, construction, and industrial storm water runoff, including overseeing the development and implementation of Water Quality Improvement Plans as required by the Regional MS4 Permit for parts of the San Diego region, which include the City, as well as ensuring that all other MS4 Permit requirements are met. The project would ensure the protection of water quality during construction of MM-TRA-2 and MM-TRA-3 by complying with

applicable NPDES permit requirements regarding implementation of BMPs. A total of 0.32 acre of wetlands under the jurisdiction of the RWQCB is located within the footprint of MM-TRA-2 beneath the bridge segment of eastbound SR-56. Impacts to any portion of these wetlands associated with MM-TRA-2 would require issuance of a RWQCB 401 Water Quality Permit.

1.2.2.4 California Department of Transportation (Caltrans)

Caltrans is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. The project would require implementation of two roadway improvements on Caltrans facilities to mitigate traffic impacts to a level less than significant. MM-TRA-2 would add an auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road, and MM-TRA-3 would add an additional lane to the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp. Caltrans is currently preparing a Project Study Report that includes design of both roadway improvements that would be constructed on Caltrans facilities. However, the current design of these facilities is conceptual, and it is unknown when they would be implemented.

1.3 EIR Scope and Content and Format

1.3.1 Type of EIR

This EIR has been prepared as a joint Program EIR, as defined in Section 15168 of the CEQA Guidelines, and a Project EIR, as defined in Section 15161 of the CEQA Guidelines. In accordance with CEQA, this Project EIR examines program-level environmental impacts associated with reclassification of the project roadway and subsequent amendments to the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch PFFPs, as well as project-level environmental impacts associated with implementation of the project design feature and three proposed traffic mitigation measures.

1.3.2 Scope

The scope of analysis for this EIR was determined by the City as a result of initial project review and consideration of comments received in response to the Notice of Preparation (NOP) distributed on May 17, 2017, and a scoping meeting held on May 31, 2017 at the Hotel Karlan, located at 14455 Peñasquitos Drive, San Diego, California 92129. The City's NOP and associated responses are included in Appendix A-1 of this EIR. Through these scoping activities, the project was determined to have the potential to result in significant environmental impacts to the following subject areas:

- Land Use
- Transportation/Circulation
- Air Quality
- Greenhouse Gas Emissions
- Noise
- Biological Resources
- Cultural Resources
- Tribal Cultural Resources

1.3.3 EIR Analysis Content

This EIR determines whether implementation of the project would have a significant effect on the environment through analysis of the issues identified during the scoping process (see Section 1.3.2). Each environmental issue area presented in Chapter 4.0 includes a presentation of threshold(s) of significance for the particular issue area based on the CEQA Guidelines and the City's Significance Determination Thresholds (2016); identification of an issue statement; an assessment of potential impacts associated with implementation of the project; a summary of the significance of any impacts; and recommendations for mitigation measures and mitigation monitoring and reporting, as appropriate, for each significant issue area.

Pursuant to CEQA Guidelines Section 15126, all phases of the project are considered in this EIR when evaluating its potential impacts on the environment, including the planning, acquisition, development, and operation phases. Impacts are identified as direct or indirect, short-term or long-term, and assessed on a "plan-to-ground" basis. The "plan-to-ground" analysis addresses the changes or impacts that would result from implementation of the project compared to existing ground conditions.

1.3.4 EIR Format

1.3.4.1 Organization

The format and order of contents of this EIR follow the direction of the City's EIR Guidelines. A brief overview of the various chapters of this EIR is provided below:

Executive Summary. Provides a summary of the EIR and a brief description of the project, identifies areas of controversy, and includes a summary table identifying significant impacts, mitigation measures, and impact conclusion after mitigation. A summary of the analyzed project alternative and comparison of the potential impacts of the project alternative with those of the project is also provided.

Chapter 1.0 Introduction. Contains an overview of the purpose and intended uses of the EIR; identifies the Lead, Responsible, and Trustee Agencies; summarizes the EIR scope and content; and details the CEQA environmental review process.

Chapter 2.0 Environmental Setting. Provides a description of the project's regional context, location, and existing physical characteristics and land use. Available public infrastructure and services, as well as relationship to relevant plans, are also provided in this chapter.

Chapter 3.0 Project Description. Provides a detailed discussion of the project, including background, objectives, key features, off-site components, and environmental design considerations. A description of the discretionary actions required to implement the project is also included.

Chapter 4.0 Environmental Analysis. Provides a detailed evaluation of potential environmental impacts of the project. In accordance with the City's EIR Guidelines, Chapter 4.0 evaluates potential

impacts associated with Land Use, Transportation/Circulation, Air Quality, Greenhouse Gas Emissions, Noise, Biological Resources, Cultural Resources, and Tribal Cultural Resources.. Under each issue area, this chapter includes a description of the existing conditions relevant to each environmental topic including the regulatory framework; presentation of threshold(s) of significance based on the City's CEQA Significance Determination Thresholds for the particular issue area under evaluation; identification of an issue statement; an assessment of any impacts associated with implementation of the project; a conclusion as to the significance of any project impacts; and recommendations for mitigation measures and mitigation monitoring and reporting, as appropriate, for each significant issue area. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is additionally provided.

Chapter 5.0 Significant Unavoidable Environmental Effects/Irreversible Changes. Discusses the significant unavoidable impacts of the project, including those that can be mitigated but not reduced to below a level of significance. This section also describes the significant irreversible changes that would result from the implementation of the project and addresses the use of nonrenewable resources during the construction and life of the project.

Chapter 6.0 Growth Inducement. Evaluates the potential influence the project may have on economic or population growth within the project area as well as the region, either directly or indirectly.

Chapter 7.0 Cumulative Impacts. Identifies the impact of the project in combination with other planned and future development in the vicinity.

Chapter 8.0 Effects Found Not To Be Significant. Identifies all of the issues determined in the scoping and preliminary environmental review process to be not significant and briefly summarizes the basis for these determinations.

Chapter 9.0 Project Alternatives. Provides a description of the No Project Adopted Plan (Six-Lane Primary Arterial) Alternative.

Chapter 10.0 Mitigation Monitoring and Reporting Program. Documents all the mitigation measures identified in this EIR that are required to be implemented as part of the project.

Chapter 11.0 References Cited. Lists all of the reference materials cited in the EIR.

Chapter 12.0 Individuals and Agencies Consulted. Identifies all of the individuals and agencies contacted during preparation of the EIR.

Chapter 13.0 Certification. Identifies all of the agencies, organizations, and individuals responsible for the preparation of the EIR.

1.3.4.2 Technical Appendices

Technical appendices, used as a basis for much of the environmental analysis in the EIR, have been summarized in the EIR and are printed under separate cover as part of the EIR. The technical

appendices are available for review at the City of San Diego Development Services Center, 1222 First Avenue, Fifth Floor, San Diego, California 92101.

1.4 EIR Process

The EIR review process occurs in two basic stages. The first stage is the Draft EIR, which offers the public the opportunity to comment on the document, while the second stage is the Final EIR, which provides the basis for approving the project.

1.4.1 Draft EIR

In accordance with Sections 15085 and 15087 (a) (1) of the CEQA Guidelines, upon completion of the Draft EIR a Notice of Completion is filed with the State Office of Planning and Research, and a notice of availability of the Draft EIR is issued in a newspaper of general circulation in the area.

The Draft EIR is distributed for review to the public, and interested and affected agencies for the purpose of providing comments “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (Section 15204, CEQA Guidelines).

This Draft EIR and all related technical studies are available for review during the public review period at the offices of the City of San Diego, Development Services Department, Land Development Review Division, located at 1222 First Avenue, Fifth Floor, San Diego, California, 92101. Copies of the Draft EIR are also available at the following public locations:

Rancho Peñasquitos Branch Public Library
Main Library (downtown San Diego)

1.4.2 Final EIR

Following public review of the Draft EIR, the City will provide written responses to comments per CEQA Guidelines Section 15088 and will consider all comments in making its decision to certify the Final EIR. Responses to the comments received during public review, a Mitigation Monitoring and Reporting Program (MMRP), and Findings of Fact will be included with the Final EIR.

The culmination of this process is a public hearing where the City Council will determine whether to certify the Final EIR, which includes the MMRP, Findings, and Statement of Overriding Considerations, as being complete and in accordance with CEQA. Pursuant to Section 128.0310(a) of the City of San Diego Land Development Code, the Final EIR will be available for public review for at least 14 calendar days before the first public hearing or discretionary action on the project.

Chapter 2.0

Environmental Setting

This chapter provides a description of existing site conditions for the Black Mountain Road Community Plan Amendment (project). The existing setting addresses the project site and provides an overview of the local and regional environmental setting, per Section 15125 of the California Environmental Quality Act (CEQA) Guidelines.

2.1 Regional Setting

The Black Mountain Road Community Plan Amendment (CPA) Project (project) is located in the Rancho Peñasquitos Community Plan (RPCP) in the northern portion of the city of San Diego (City). The Rancho Peñasquitos community encompasses approximately 6,500 acres and is bounded on the east by the communities of Carmel Mountain Ranch and Sabre Springs, on the south by the Los Peñasquitos Canyon Preserve and the Mira Mesa community, and on the west and north by lands designated by the General Plan as future urbanizing and the Rancho Bernardo community planning area. The segment of Black Mountain Road subject to the CPA (project roadway) intersects with State Route 56 (SR-56) and is located approximately 2.1 miles west of Interstate 15 (I-15) (Figure 2-1).

2.2 Project Location

The project roadway stretches approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve (Figure 2-2). The project roadway bisects the neighborhoods of Twin Trails and Town Center north of SR-56, and bisects the neighborhoods of Parkview and Ridgewood south of SR-56. The open space system to the south of the project roadway includes the Los Peñasquitos Canyon Preserve. Black Mountain Road currently operates as a 4-lane Major with landscaped center medians, contiguous sidewalks, and Class II bike lanes. Black Mountain Road operates as a 5-lane Primary Arterial on the bridge over SR-56.

Figure 2-2 shows the locations of the project design feature and traffic mitigation measures in relation to the project roadway. The project design feature would be implemented within the northern portion of the project roadway and would restripe the bridge segment of Black Mountain Road that crosses SR-56 (Figure 2-3a). The project design feature would also widen a segment of northbound Black Mountain Road extending approximately 0.15 mile from the SR-56 westbound off-ramp to the first commercial driveway. MM-TRA-1 would install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive, which is located approximately 0.2 mile northwest of the northern terminus of the project roadway. MM-TRA-2 would construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road (Figure 2-3b). The eastern terminus of this continuous auxiliary lane would merge with an existing auxiliary lane on eastbound SR-56 approximately 0.5 mile west of the project roadway. MM-TRA-3 would construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (Figure 2-3c). The western terminus of MM-TRA-3 is located approximately 0.6 mile east of the project roadway.

2.3 Physical Environment

2.3.1 Landform

The Rancho Peñasquitos community is topographically diverse and is physically characterized by numerous canyons, hillsides and ridges. The project roadway consists of an existing north-south roadway and is surrounded by residential uses and some commercial development. The footprint of the project design feature consists of the existing bridge segment of Black Mountain Road that crosses SR-56 and a manufactured slope adjacent to the segment of Black Mountain Road north of the westbound off-ramp. The footprint of MM-TRA-1 consists of the existing intersection of Sundance Avenue and Twin Trails Drive, which is surrounded by existing residential development. The footprint of MM-TRA-2 consists of an existing segment of eastbound SR-56, supporting manufactured slopes, and a bridge segment that crosses a southwest/northeast tributary of Los Peñasquitos Creek. The footprint of MM-TRA-3 consists of a manufactured slope and the existing Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp. Drainage for the project roadway and surrounding areas generally flows southerly toward Los Peñasquitos Canyon Preserve.

2.3.2 Land Use

Approximately 51 percent of the land within the RPCP is recommended for residential use according to the Rancho Peñasquitos Community Plan. Of that total land area, 76 percent is designated as Single-Family and 24 percent is designated as Multi-Family Residential.

The remaining 49 percent of land within the RPCP consists of Parks and Open Space (34 percent), Streets and Utilities (9 percent), Institutional uses (3 percent), Commercial uses (2 percent), and Industrial uses (1 percent).

As shown in Figure 2-2, the majority of land surrounding the project roadway is developed, consisting primarily of residential uses, along with smaller amounts of commercial, institutional, park, and open space uses. Single-family residential neighborhoods (with densities of 1–5 dwelling units/acre) lie along the majority of the western side of the project roadway, stretching from the northern project terminus to the intersection with Truman Street. Land south of Truman Street to the southern terminus west of the project consists of the Canyonside Community Park. Land east of the project roadway stretching from the northern terminus to the SR-56 interchange consists of commercial uses and a U.S. Post Office. Land southeast of the SR-56 interchange consists of a Church of Latter-Day Saints and private school, followed by open space that separates the project roadway from residential development further east. Canyon View Elementary School is located southeast of the intersection of Black Mountain Road and Adolphia Street, followed by more open space stretching to the project roadway's southern terminus. Land immediately south of the project roadway consists of the Los Peñasquitos Canyon Preserve, while land immediately north of the project roadway consists of residential and commercial development. The majority of the area along the project roadway is designated Residential in the RPCP. Other adjacent areas are designated for park, school, commercial, and religious facility uses.

The bridge segment of the project design feature is immediately surrounded by SR-56 and the associated eastbound and westbound on-ramps. The segment of Black Mountain Road north of the SR-56 westbound off-ramp to be widened is bordered to the east by commercial uses and a U.S. Post Office, and existing roadway and residential development to the west. The footprint of MM-TRA-1, located at the intersection of Sundance Avenue and Twin Trails Drive, is surrounded by existing residential development. Twin Trails Neighborhood Park is located approximately 0.06 mile to the northwest. The footprint of MM-TRA-2 partially consists of, and is border to the north by, the existing eastbound SR-56 roadway. Land immediately south of MM-TRA-2 consists of a mix of residential development, open space associated with the southwest/northeast tributary of Los Peñasquitos Creek crossed by the bridge segment, and a Class I Bicycle Path running parallel to eastbound SR-56. Land further north of MM-TRA-2 consists of westbound SR-56, open space, and residential development. The footprint of MM-TRA-3 partially consists of, and is border to the south by, the existing Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp. Land to the north consists of a manufactures slope and residential development.

2.3.3 Transportation/Circulation

The regional transportation network serving the project area consists of SR-56, which intersects with the project roadway, and I-15, located approximately 2.1 miles to the east. These two highways intersect east of the project roadway, and I-15 provides access to the greater San Diego area to the south and the City of Escondido to the north. Black Mountain Road extends south of the project roadway to its terminus at Carroll Centre Road, where it continues as Kearny Villa Road. Black Mountain Road extends north of the project roadway to its terminus with Carmel Valley Road. The project roadway, and other segments of Black Mountain Road within the traffic study area, are generally striped with two through lanes per direction, separated by a raised median, and left-turn channelization.

Class I bike paths are present in multiple areas of the community and serve as both recreational facilities and routes between neighborhoods. Class II bike lanes are present along many of the Major and Primary roadways within the community, including Camino Del Sur, Black Mountain Road, Carmel Valley Road, Carmel Mountain Road, Paseo Montalban, and Mercy Road.

As shown in Figure 2-4, the Rancho Peñasquitos Community Plan recommends that all of its major streets have Class II bike lanes, with on-street parking prohibited where possible. Black Mountain Road, including the project roadway, is consistent with this recommendation in the existing condition and has Class II bike lanes in each direction and no on-street parking. Figures 2-5a and 2-5b present photographs of the existing Class II bike lanes in each direction and no on-street parking on the project roadway.

Transit service within the Rancho Peñasquitos is limited to the eastern portion of the community. Currently, the community is served by San Diego Metropolitan Transit System's Line 20 bus route, which operates 7 days a week with modified schedules on Saturday and Sunday. The Sabre Springs/Peñasquitos Transit Station is located on the eastern periphery of Rancho Peñasquitos near the I-15/SR-56 junction, and provides express bus service along the I-15 corridor with connections to downtown San Diego and the City of Escondido. No transit lines traverse the project roadway.

2.4 Planning Context

Development in the City is generally guided by the City's General Plan, and more specifically by the applicable community plan. In addition, various other City, regional, and state plans, programs, and ordinances regulate the development of land and infrastructure within San Diego. A brief description of plans relevant to the project is provided below.

City of San Diego General Plan: The City of San Diego General Plan sets forth a comprehensive long-range vision and policy framework for development within the City. The General Plan incorporates a City of Villages strategy, which aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

Rancho Peñasquitos Community Plan: The Rancho Peñasquitos Community Plan was developed to address significant residential development in the area and resulting public facility deficiencies, including an inadequate street system. The plan emphasizes the preservation of the unique character of Rancho Peñasquitos' topography and the importance of providing public facilities in phase with development.

Multiple Species Conservation Program: The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City of San Diego, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms. Multi-Habitat Planning Area (MHPA) lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource.

Environmentally Sensitive Lands Regulations: The purpose of the Environmentally Sensitive Lands (ESL) Regulations (Land Development Code [LDC] Sections 143.0101 – 143.0160) is to protect, preserve and, where damaged, restore environmentally sensitive lands and the viability of the species supported by those lands. The ESL Regulations apply to all proposed development when environmentally sensitive lands, including sensitive biological resources, steep hillsides, floodplains, or coastal bluffs, are present. The regulations are designed to ensure that development occurs in a manner that protects natural resources and the natural and topographic character of the area, and retains biodiversity and interconnected habitats.

Historical Resources Regulations: The purpose of the City's Historical Resources Regulations, found in Section 143.0251 of the LDC, is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources.

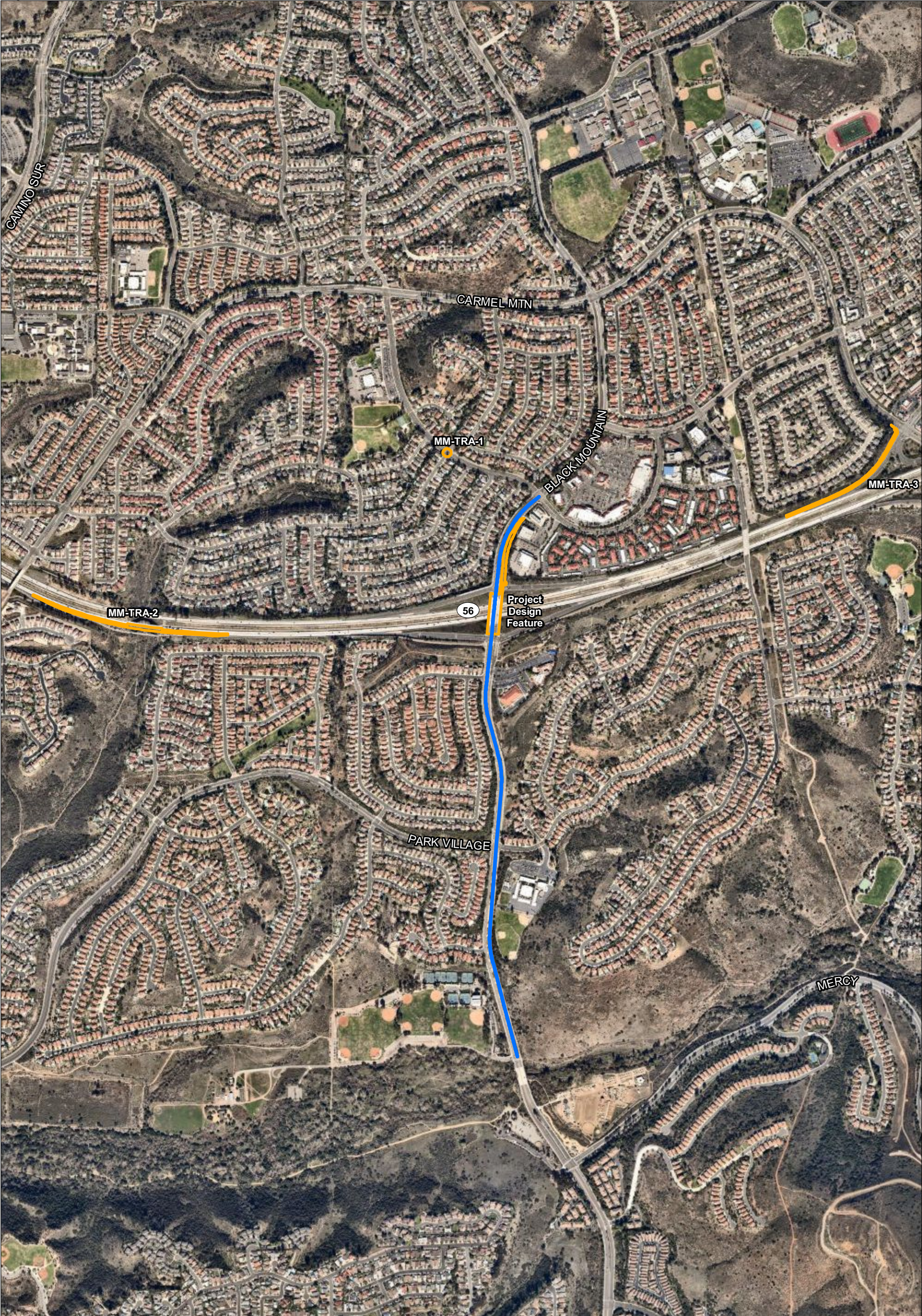
Air Quality Plans: Air quality plans provide an overview of the region's air quality and identify the pollution-control measures needed to expeditiously attain and maintain air quality standards. The region's plans include the San Diego Regional Air Quality Strategy (RAQS), addressing state requirements, and the San Diego portion of the California State Implementation Plan (SIP), addressing federal requirements.

San Diego Forward: The Regional Plan: The San Diego Association of Governments is the regional authority that creates region-specific documents to provide guidance to local agencies. The Regional Plan combines two of the region's existing planning documents: the Regional Comprehensive Plan for the San Diego Region and the Regional Transportation Plan/Sustainable Communities Strategy.

City of San Diego Climate Action Plan: The City of San Diego Climate Action Plan (CAP) identifies measures to meet greenhouse gas (GHG) reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a business-as-usual projection for emissions at 2020 and 2035, state targets, and emission reductions with implementation of the CAP.



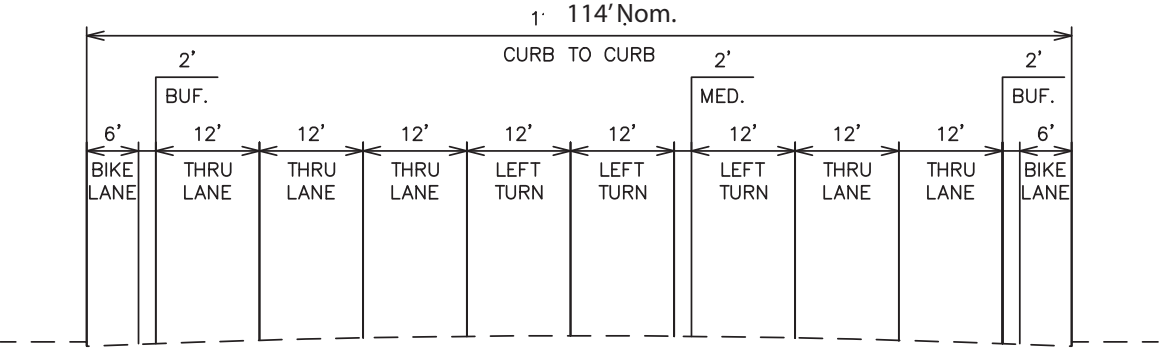
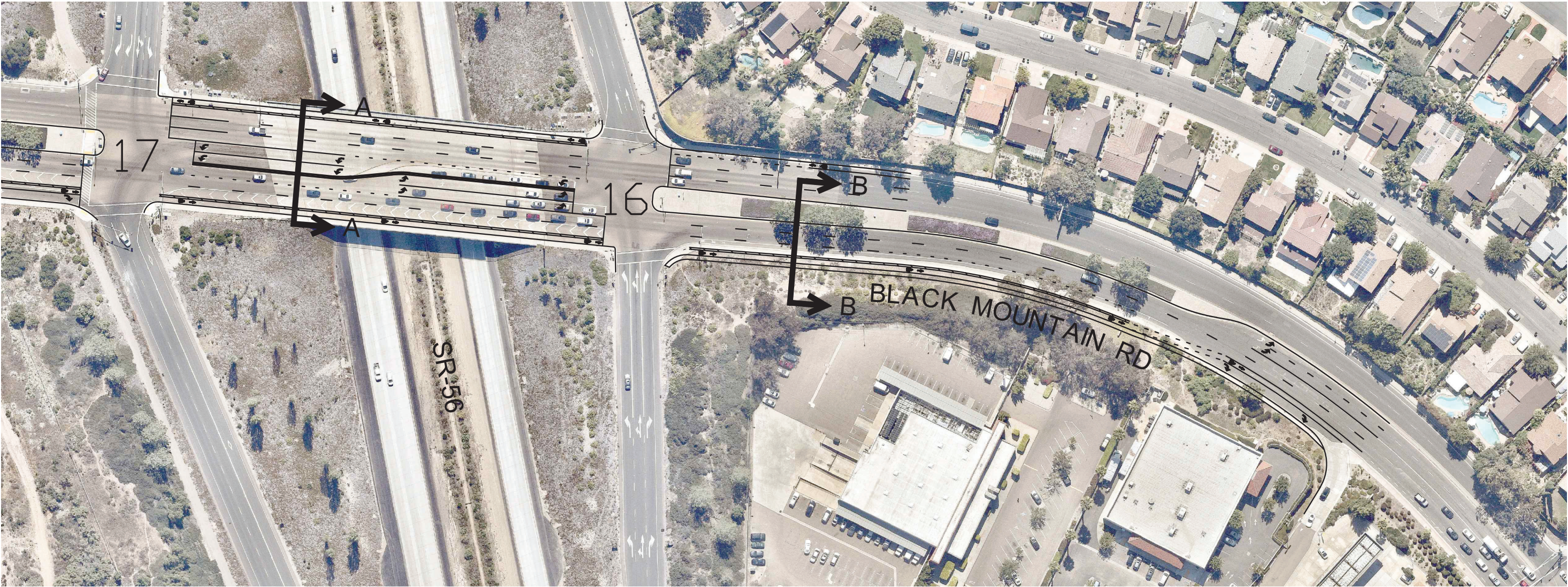
FIGURE 2-1
Regional Location



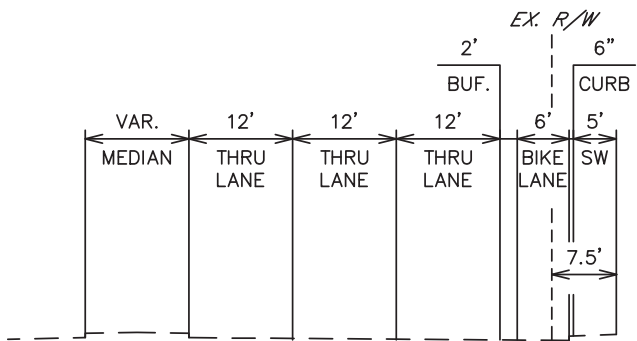
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- Project Roadway
- Project Design Feature and Traffic Mitigation Measures

FIGURE 2-2
Project Location on Aerial Photograph



SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE

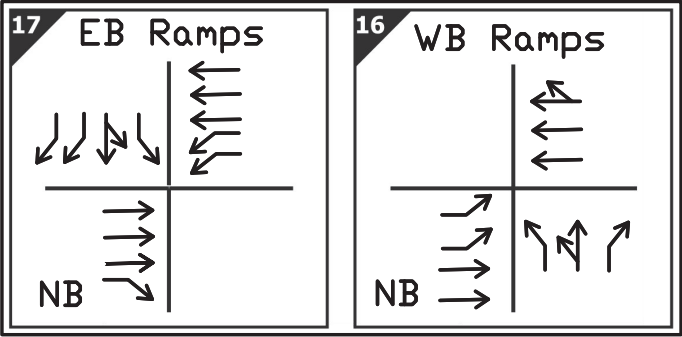
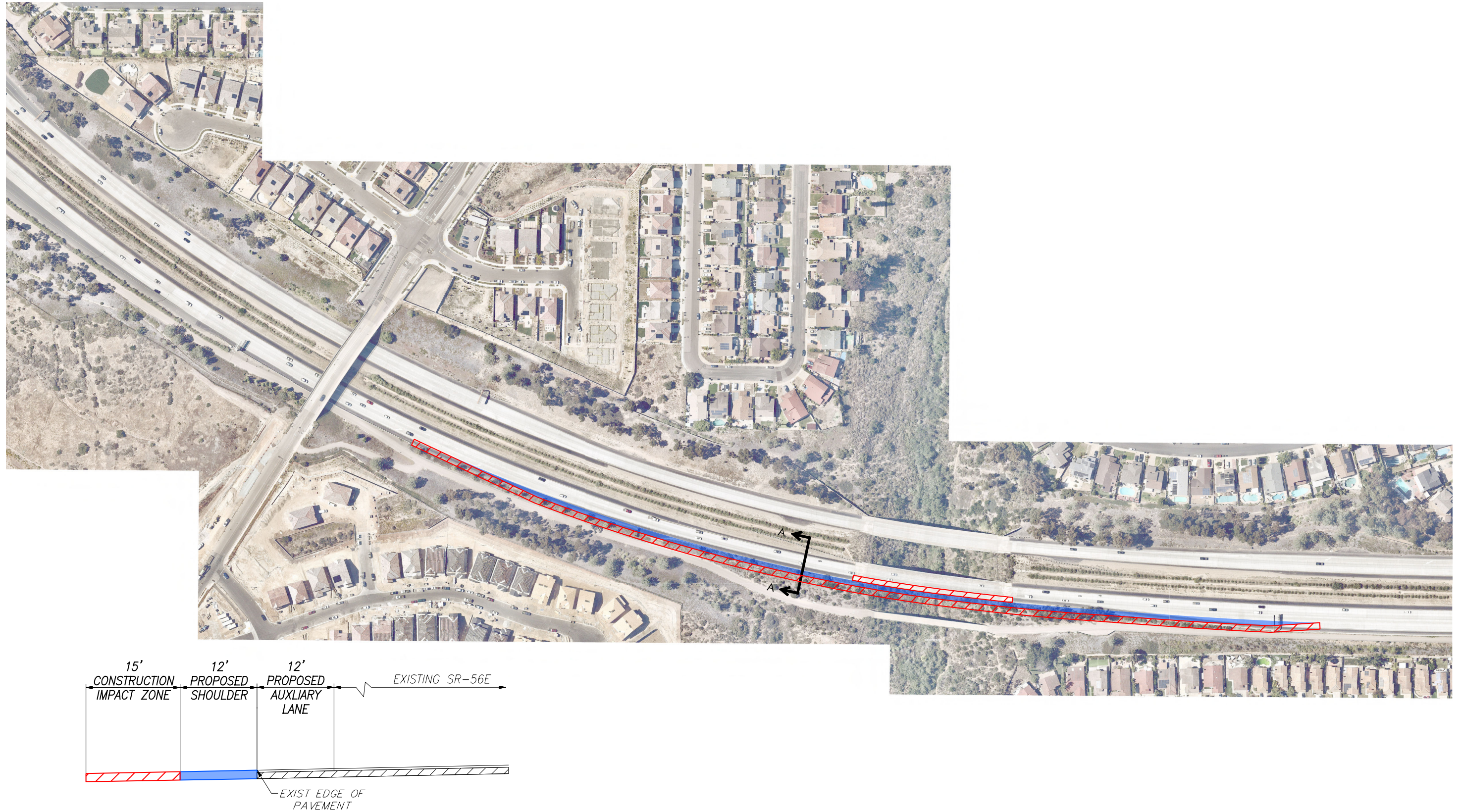


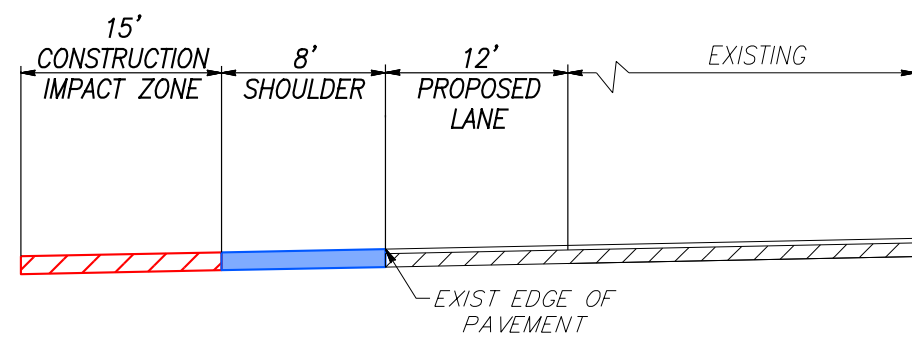
FIGURE 2-3a
Project Design Feature: Black Mountain Road Bridge
Segment Restriping and Minor Widening North of the Bridge



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FIGURE 2-3b
MM-TRA-2: Auxiliary Lane on Eastbound SR-56
Between Camino Del Sur and Black Mountain Road



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FIGURE 2-3c
MM-TRA-3: Rancho Peñasquitos Boulevard/SR-56
Westbound On-Ramp Additional Lane

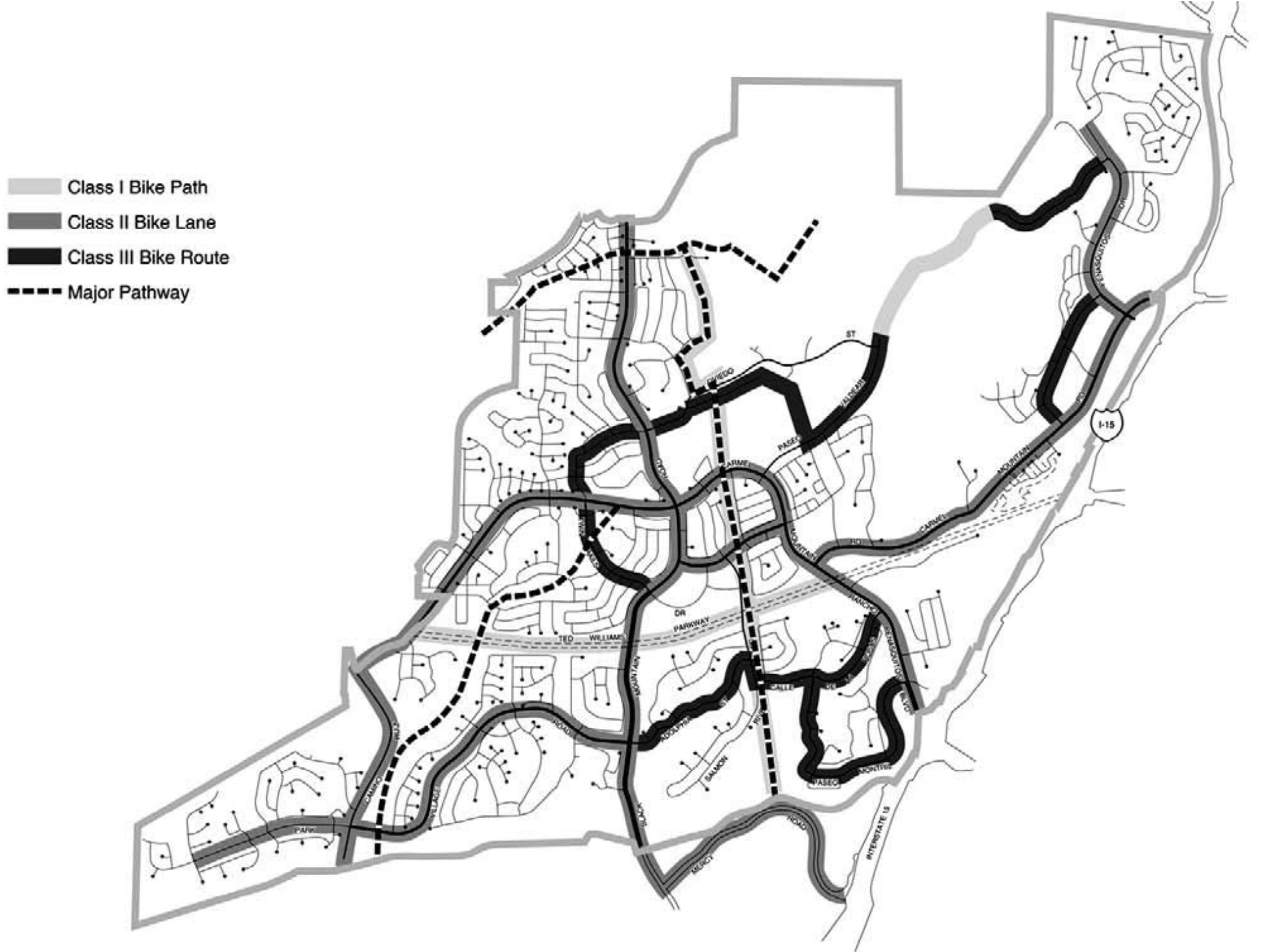


FIGURE 2-4
Rancho Peñasquitos Community Plan Bikeways and Pedestrian Circulation



Northbound Black Mountain Road, North of SR-56 Interchange



Southbound Black Mountain Road, South of SR-56 Interchange

FIGURE 2-5a
Existing Class II Bike Lanes



Northbound Black Mountain Road, North of Park Village Road



Southbound Black Mountain Road, North of Park Village Road

FIGURE 2-5b
Existing Class II Bike Lanes

Chapter 3.0

Project Description

This chapter of the Environmental Impact Report (EIR) provides a statement of project goals and objectives, describes the specific characteristic of the project, discusses project construction, and identifies the discretionary action necessary to implement the project. This chapter has been prepared pursuant to Section 15124 of the State California Environmental Quality Act (CEQA) Guidelines.

3.1 Introduction

The Black Mountain Road Community Plan Amendment (CPA) Project (project) proposes to reclassify a segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major. The segment of Black Mountain Road subject to the CPA (project roadway) stretches approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve (see Figure 2-2).

3.2 Relationship to Rancho Peñasquitos Community Plan

In March 1993, the City of San Diego (City) adopted the Rancho Peñasquitos Community Plan (RPCP) by Resolution Number 281713. The RPCP was developed to address significant residential development in the area and resulting public facility deficiencies, including an inadequate street system. The RPCP emphasizes the preservation of the unique character of Rancho Peñasquitos' topography and the importance of providing public facilities in phase with development. A primary transportation goal is to construct and maintain an adequate system for vehicular, bicycle and pedestrian circulation within the community, while providing adequate access to the larger San Diego Region. To help address this goal, the RPCP recommended the improvement of Black Mountain Road, from just north of Twin Trails Drive to the southern community boundary, to a 6-lane Primary Arterial with Class II bicycle lanes. However, the project roadway was constructed and operates as a 4-lane Major.

Subsequent to approval of the RPCP and classification of the project roadway as a 6-lane Primary Arterial from just north of Twin Trails Drive to the southern community boundary, the RPCP Planning Board has publicly advocated keeping this segment of Black Mountain Road as a 4-lane Major. The Planning Board was primarily concerned that expanding the project roadway to a 6-lane Primary Arterial would likely require numerous property acquisitions that would disrupt the surrounding community. During development of Black Mountain Road as a 4-lane Major, the right-of-way was never secured to allow for the eventual expansion to a 6-lane Primary Arterial. An initial high-level analysis of right-of-way acquisitions associated with widening to a 6-lane Primary Arterial determined that expansion of the project roadway may require partial property acquisitions from up to approximately 100 parcels.

Additionally, per the Rancho Peñasquitos Community Plan Public Facilities Financing Plan, approximately 80 percent of funding necessary for widening the project roadway has not been identified. The estimated construction cost to widen this segment of Black Mountain Road is \$9.4 million. While Black Mountain Ranch, Pacific Highlands Ranch, and Rancho Peñasquitos would have a combined responsibility for approximately 20 percent of the cost, totaling approximately \$1.9 million, funding for the remaining \$7.5 million has not been identified¹. Furthermore, the construction cost estimate of approximately \$9.4 million is over a decade old and does not include the cost of property acquisitions. Consequently, the costs associated with expanding the project roadway may be much higher. Widening of Black Mountain Road, however, is included in the last phase of the Black Mountain Ranch Subarea Transportation Phasing Plan.

The RPCP is built out, and the Transportation Impact Study (TIS) prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at level of service (LOS) D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately 20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on Interstate 15 (I-15) have been improved by implementation of the I-15 Express Lanes Project that was not anticipated when the RPCP was adopted in 1993 (San Diego 1993). Planning that ultimately lead to development of the I-15 Express Lanes Project began in 1995 with a detailed corridor study looking at transit, freeway, and regional arterial improvements that might be needed for the I-15 corridor (Caltrans 2003). This study resulted in the I-15 Express Lanes Project² that proposed to widen I-15 to accommodate four “managed lanes” within the median that would allow the flexibility to alter lane configurations through the use of a moveable barrier (Caltrans 2003). Construction of the 1.4 billion dollar Express Lanes Project between State Route (SR-163) and State Route 78 (SR-78) was completed in January 2012 (SANDAG 2018a). The completed I-15 Express Lanes Project accommodates Rapid bus service and utilizes an Integrated Corridor Management system that is designed to efficiently guide drivers around incidents with the least amount of impact to local streets in order to reduce delays and improve travel time reliability (SANDAG 2018b). Since Black Mountain Road runs parallel to I-15, improved freeway operations on I-15 have decreased the likelihood that motorists would travel on Black Mountain Road during AM and PM peak hours to avoid congestion on I-15. Consequently, these upgrades associated with the I-15 Express Lanes Project that were not anticipated in 1993 when the

¹Although the project is located entirely within the boundaries of the RPCP, Black Mountain Ranch and Pacific Highlands Ranch were required to contribute funding for widening the project roadway, because development within these communities would generate vehicle trips that would use this segment of Black Mountain Road and thereby contribute to the need for additional lanes. However, the improvements described above that have occurred since approval of the RPCP in 1993 have diminished the need to expand the project roadway to a 6-lane Primary Arterial (see above).

²The project was known as the “Interstate 15 Managed Lanes Project” in the Final Initial Study/Environmental Assessment and Mitigated Negative Declaration that was certified in March 2003. The project name was changed to the “Interstate 15 Express Lanes Project” after certification of the environmental document.

RPCP was adopted have diminished the need to expand the project roadway to a 6-lane Primary Arterial.

Furthermore, the City has subsequently updated the Mobility Element of the General Plan to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel. Furthermore, the City has developed a Climate Action Plan that encourages future development to occur within Transit Priority Areas in order to reduce reliance on vehicle travel. Consequently, expanding the project roadway to a 6-lane Primary Arterial would not be consistent with the goals of the City's Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel that were developed after adoption of the RPCP.

Black Mountain Ranch LLC agreed to serve as the project applicant. The CPA for the project was initiated on February 27, 2014. Three other CPAs (discussed in Chapter 7.0 Cumulative Impacts) to the RPCP were initiated around the same time, and the RPCP Planning Board felt that this provided an excellent opportunity to also initiate this proposed CPA. The Merge 56 CPA was approved by the City Council in May 2018, and the Preserve at Torrey Highlands and Rhodes and Grus Investments CPAs are currently in progress.

3.3 Project Objectives

In accordance with CEQA Guidelines Section 15124, the following primary objectives support the purpose of the project, assist the Lead Agency in developing a reasonable range of alternatives to be evaluated in this report, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The objectives for the project are:

- Amend General Plan Figure LU-2 and the RPCP Transportation Element to be consistent with the current transportation network within the community.
- Amend General Plan Figure LU-2 and the RPCP Transportation Element to be consistent with the goals of the City's General Plan Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel.
- Implement the Rancho Peñasquitos Community Planning Group's desire to preserve the existing character of the community.

3.4 Discretionary Actions

Discretionary actions are those actions taken by an agency that call for the exercise of judgment in deciding whether to approve or how to carry out a project. For the project, the discretionary actions to be considered by the City Council would be a General Plan Amendment (GPA) and a CPA. The project proposes a GPA to Figure LU-2, Land Use and Street System Map in the Land Use and Community Planning Element of the General Plan to reclassify the project roadway from a Prime Arterial to a Major Arterial, and a CPA to the RPCP Transportation Element to reclassify the project

roadway from a 6-lane Primary Arterial to a 4-lane Major³. The current adopted RPCP Recommended Street Classifications Map is presented in Figure 3-1. The proposed RPCP Recommended Street Classifications Map is presented in Figure 3-2. The City Planning Commission initiated the CPA on February 27, 2014. The CPA would also revise the Transportation Element of the RPCP to include the project design feature that would restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps and widen the roadway north of the overpass bridge as a future action since additional design would be required after approval of the CPA. A full description of the project design feature is provided in Section 3.5.2 below.

Concurrent with the GPA and CPA, the project would also amend the Black Mountain Ranch Subarea Plan and Transportation Phasing Plan (TPP) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. As a part of this amendment, the TPP for Black Mountain Ranch would be updated to reflect the project and mitigation measures. The proposed CPA, GPA, and Black Mountain Ranch TPP amendment are presented in Appendix A-2.

Implementation of the project would subsequently require amending the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch⁴ Public Facilities Financing Plans (PFFPs) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the PFFPs are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by this action would be incorporated. This EIR, which analyzes the removal of the existing 6-lane Primary Arterial designation for the project roadway from the RPCP, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the PFFP.

3.5 Description of Project Components

3.5.1 Reclassification of Project Roadway

The project proposes to reclassify a segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major. The project roadway extends approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community adjacent to the Los Peñasquitos Canyon Preserve (see Figure 2-2). The project roadway currently operates as a 4-lane

³The City of San Diego General Plan and Rancho Peñasquitos Community Plan use different nomenclature for roadway classifications. Consequently, the GPA would reclassify the project roadway as a Major Arterial, and the CPA would reclassify the project roadway as a 4-lane Major.

⁴The Pacific Highlands Ranch (PHR) requirement to widen the project roadway to a 6-lane Primary Arterial is outlined in Table 4B-14, which is included in the PHR Subarea Plan Master EIR. Upon certification of this EIR and approval of the CPA, GPA, and Black Mountain Ranch TPP amendment, MM-TRA-1 through MM-TRA-3 would supersede and replace widening the project roadway to a 6-lane Primary Arterial previously identified in the PHR Subarea Plan Master EIR.

Major with landscaped center medians, contiguous sidewalks, and Class II bike lanes. The bridge section of Black Mountain Road that crosses State Route 56 (SR-56) is wider and operates as a 5-lane Primary Arterial.

3.5.2 Project Design Feature

The project proposes the following roadway improvement as a design feature to increase the northbound to westbound left-turn pocket storage and improve the flow of northbound traffic (project design feature):

Restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps to include an additional northbound lane along Black Mountain Road from the SR-56 eastbound ramps to the middle of the overpass. To accommodate the additional northbound lane created by this restriping on the overpass, the roadway north of the overpass bridge would need to be widened for northbound traffic. The widening would extend approximately 0.15 mile from the SR-56 westbound off-ramp to the first commercial driveway to the north of the overpass (see Figure 2-3a).

The project design feature is included as part of the project. Consequently, the EIR includes a project-level impact analysis to evaluate potential environmental impacts associated with the project design feature in addition to evaluating the impacts of the reclassification itself.

3.5.3 Traffic Mitigation Measures

The following three roadway improvements identified in the TIS (Appendix B) would mitigate traffic impacts associated with the reclassification of the project roadway from a 6-lane Primary Arterial to a 4-lane Major. Furthermore, these three mitigation measures are included as part of the project. Consequently, the EIR includes project-level impact analysis to evaluate potential environmental impacts associated with each mitigation measure.

MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.⁵

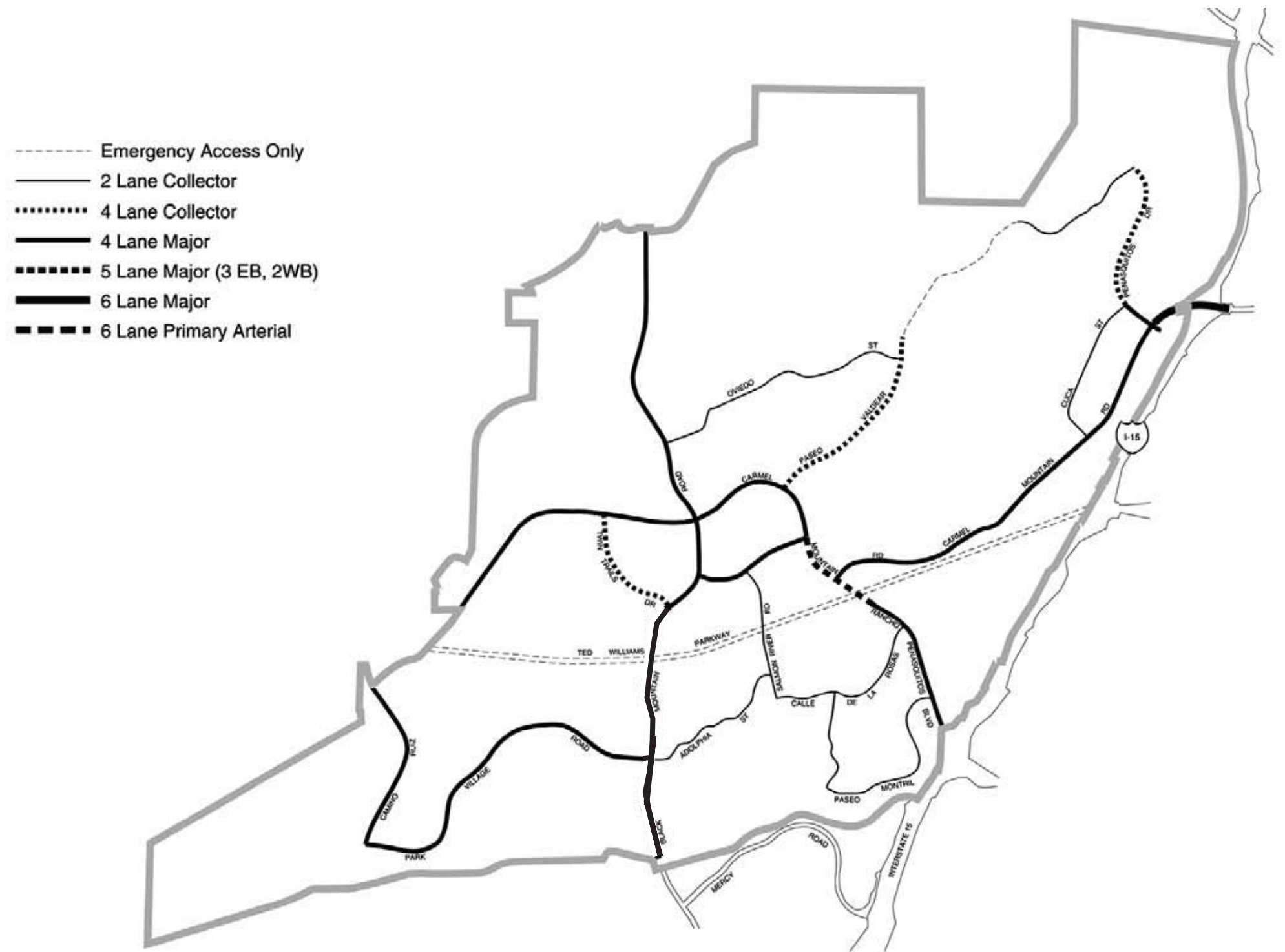
MM-TRA-2: Construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road (see Figure 2-3b).

MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (see Figure 2-3c).

⁵A figure is not provided for MM-TRA-1 because it is limited to installation of a traffic signal.



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Recommended Street Classifications

Rancho Peñasquitos Community Plan

FIGURE 3-2
Amended Rancho Peñasquitos Community Plan Recommended Street Classifications Map

Chapter 4.0

Environmental Analysis

The following sections analyze the potential environmental impacts that may occur as a result of project implementation. The environmental issues subject to detailed analysis in the following sections include those that were identified by the City of San Diego (City) through preliminary project review and in response to the Notice of Preparation as potentially significant.

Eight environmental issues are addressed in the following sections, and in accordance with the City's 2005 Environmental Impact Report Guidelines, the issue of land use is addressed first and followed by the remaining issues in order of descending significance. However, for some issues, relative significance of impacts is roughly equal; thus, the ordering of issues contained in Section 4.0 comprises an approximate and subjective prioritization of impact significance. The eight environmental issues addressed in Section 4.0, in sequential order, include:

- Land Use
- Transportation/Circulation
- Air Quality
- Greenhouse Gases
- Noise
- Biological Resources
- Cultural Resources
- Tribal Cultural Resources

Each issue analysis section is formatted to include a summary of existing conditions, the criteria for the determination of impact significance, evaluation of potential project impacts, a list of required mitigation measures if applicable, and conclusion of significance after mitigation for impacts identified as requiring mitigation.

All potential direct and indirect impacts in Section 4.0 are evaluated in relation to applicable City, state, and federal standards, as reflected in the City's Significance Determination Thresholds (July 2016) and include City goals and standards for each environmental issue that are largely in compliance with the City General Plan (March 2008). Where the General Plan includes updated standards, those are additionally considered in the impact evaluation in Section 4.0.

4.1 Land Use

This section evaluates potential land use impacts associated with the Black Mountain Road Community Plan Amendment (project) in relation to land uses and policies that are applicable to the project.

4.1.1 Existing Conditions

The project segment of Black Mountain Road subject to the Community Plan Amendment (CPA) (project roadway), stretches approximately 1.3 miles from Twin Trails Drive on the north to the southern boundary of the Rancho Peñasquitos community. As shown in Figure 2-2, the majority of land surrounding the project roadway is developed, consisting primarily of residential uses, along with smaller amounts of commercial, institutional, park, and open space uses. Single-family residential neighborhoods (1–5 dwelling units/acre) lie along the majority of the western side of the project roadway, stretching from the northern terminus to the intersection with Truman Street. Land south of Truman Street to the southern terminus west of the project roadway consists of the Canyonside Community Park. Land east of the project roadway stretching from the northern terminus to the State Route 56 (SR-56) interchange consists of commercial uses and a U.S. Post Office. Land southeast of the SR-56 interchange consists of a Church of Latter-Day Saints and private school, followed by open space that separates the project roadway from residential development further east. Canyon View Elementary School is located southeast of the intersection of Black Mountain Road and Adolphia Street, followed by more open space stretching to the project roadway's southern terminus. Land immediately south of the project roadway consists of the Los Peñasquitos Canyon Preserve, while land immediately north of the project roadway consists of residential and commercial development.

The bridge segment of the project design feature is surrounded by SR-56 and the associated eastbound and westbound on- and off-ramps. The to be widened segment of Black Mountain Road north of the SR-56 westbound off-ramp is bordered to the east by commercial uses and a U.S. Post Office, and existing roadway and residential development to the west. The footprint of MM-TRA-1, located at the intersection of Sundance Avenue and Twin Trails Drive, is surrounded by existing residential development. Twin Trails Neighborhood Park is located approximately 0.06 mile to the northwest. The footprint of MM-TRA-2 consists of the existing eastbound SR-56 freeway and an associated right-of-way. Land immediately south of MM-TRA-2 consists of a mix of open space crossed by the bridge segment of eastbound SR-56, residential development, and a Class I Bicycle Path running parallel to eastbound SR-56. Land further north of MM-TRA-2 consists of westbound SR-56, open space, and residential development. The footprint of MM-TRA-3 consists of the existing Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp and an associated right-of-way. Land to the south consists of SR-56, and land to the north consists of a manufactured slope and residential development.

4.1.2 Regulatory Framework

4.1.2.1 City of San Diego General Plan

State law requires each city to adopt a general plan to guide its future development, and mandates that the plan be periodically updated to assure its continuing relevance and value (State Planning and Zoning Law, California Government Code, Section 65300). State law also requires the inclusion of seven mandatory elements into the General Plan (land use, circulation, housing, conservation, noise, open space, and safety) but permits flexibility and the inclusion of optional elements to best meet the needs of a particular city.

The City of San Diego's (City) General Plan sets forth a comprehensive, long-range vision and policy framework to guide future development within the City. A comprehensive update of the City's General Plan was adopted March 10, 2008 and was based on a new planning strategy for the City developed in the 2002 Strategic Framework Element. Known as the City of Villages strategy, the General Plan aims to redirect development away from undeveloped lands and toward already urbanized areas and/or areas with conditions allowing the integration of housing, employment, civic, and transit uses. This development strategy mirrors regional planning and smart growth principles intended to preserve remaining open space and natural habitat and focus development within areas with available public infrastructure.

The Strategic Framework comprises the introductory chapter of the new General Plan, followed by the following 10 elements:

- Land Use and Community Planning
- Mobility
- Urban Design
- Economic Prosperity
- Public Facilities, Services, and Safety
- Historic Preservation
- Recreation
- Conservation
- Noise
- Housing

Descriptions of the elements that apply to the project are provided in the following paragraphs:

The **Land Use and Community Planning Element** (Land Use Element) provides policies to implement the City of Villages strategy within the context of the City's community planning program. The element addresses land use issues that apply to the City as a whole and identifies the community planning program as the mechanism to designate land uses, identify site-specific recommendations, and refine citywide policies as needed. The Land Use Element establishes a structure for the diversity of each community and includes policy direction to govern the preparation of community plans. The element addresses zoning and policy consistency, the plan amendment process, airport-land use planning, balanced communities, equitable development, and environmental justice. The project roadway is currently identified in the General Plan's Land Use and Street System Map (contained in the Land Use Element) as a six-lane Primary Arterial.

The **Mobility Element** contains policies that promote a balanced, multi-modal transportation network that meets a variety of user needs, while minimizing environmental and neighborhood

impacts. In addition to addressing walking, streets, and transit, the element also includes policies related to regional collaboration, bicycling, parking, the movement of goods, and other components of the transportation system, including improved performance and efficiency of the street and freeway system, by means other than roadway widening or construction. The Mobility Element policies provide a strategy for congestion relief and increased transportation choices that strengthens the City of Villages land use vision while helping to achieve a clean and sustainable environment.

The **Public Facilities, Services, and Safety Element** is directed at providing adequate public facilities through policies that address public financing strategies, public and developer financing responsibilities, prioritization, and the provision of specific facilities and services that must accompany growth. The policies within the Public Facilities Element apply to transportation improvements with additional guidance from the Mobility Element. The 2002 Strategic Framework Element identified the facilities deficit in urbanized communities, and reaffirmed the need to address existing and future public facility and service needs. Strategic Framework Element direction has been further developed in the Public Facilities Element through inclusion of a financing strategy, prioritization guidelines, and policies for new growth to pay its fair-share. Other sections of the Public Facilities Element provide updated guidelines and policies for specific facilities and services to guide land use development and guard public safety.

The **Historic Preservation Element** guides the preservation, protection, restoration, and rehabilitation of historical and cultural resources.

The **Conservation Element** contains policies to guide the conservation of resources that are fundamental components of the City's environment, that help define the City's identity, and that are relied upon for continued economic prosperity. The City's resources include, but are not limited to water, land, air, biodiversity, minerals, natural materials, recyclables, topography, viewsheds, and energy.

The **Noise Element** provides goals and policies to guide compatible land uses and the incorporation of noise attenuation measures for new uses to protect people living and working in the City from an excessive noise environment.

4.1.2.2 Rancho Peñasquitos Community Plan

Community plans provide the level of information that is needed to review and assess public and private development projects. However, community plans are policy documents that do not contain regulatory requirements. Regulatory requirements are contained in the Land Development Code (LDC), as explained below.

The Rancho Peñasquitos Community Plan (RPCP) is a revision of the Peñasquitos East Community Plan that was adopted by the City Council in 1978. Rancho Peñasquitos experienced significant residential growth from 1985 through 1987, which necessitated a comprehensive update to the 1978 community plan that was initiated in February 1987. Originally approved in 1993, the RPCP was most recently revised in August 2015. The RPCP identifies community issues and goals ascertained through an examination of existing conditions and meetings and workshops held with residents of

Rancho Peñasquitos. The RPCP contains the following twelve elements; those elements relative to the project are briefly described below.

- Residential
- Commercial
- Neighborhood Planning
- Industrial
- Community Appearance and Design
- Transportation
- Park and Recreation
- Open Space and Resource Management
- Education
- Public Facilities and Services
- Marine Corps Air Station Miramar
- Social Needs

The **Community Appearance and Design Element** seeks to ensure a pleasant, healthful, physical, and social environment for Rancho Peñasquitos residents by balancing development with the preservation of the community's natural resources and amenities. Policies within this element include preserving natural features and canyons as viable connected open space systems and directing that the transportation system should be developed to enhance the overall efficiency of pedestrian and vehicular circulation within the community. This element includes Roadway Design Recommendations that Black Mountain Road "should be sited to retain major adjacent open spaces, rather than fragmenting open spaces into smaller areas. Adequate pedestrian and bicycle crossings should be provided. Landscaping should be used as a transition from roadways to open space areas (San Diego 1993)."

The **Transportation Element** seeks to construct and maintain an adequate system for vehicular, bicycle, and pedestrian circulation within the community, while providing adequate access to the larger San Diego Region. General policy recommendations in this element include that developers of all future residential, commercial, and industrial projects in Rancho Peñasquitos must participate in building or funding needed transportation improvements identified in the RPCP and further defined in the Public Facilities Financing Plan. Similarly, each new development should contribute its fair share to needed transportation improvements based on traffic, transit ridership, and population expected to be generated by the development. This element also contains policies stating that adequate vehicular and pedestrian access should be available to serve all significant community resources and public facilities with an emphasis on safety, aesthetics, and integration of facilities and that a continuous pedestrian and bicycle system should be provided throughout the community focused on open space areas and minimizing conflicts with motor vehicles. This element also seeks to expand public transit to serve the entire Rancho Peñasquitos community with increased frequency and prohibits off-road vehicles from designated open space areas and public property. This element also includes a specific recommendation that Black Mountain Road, from just north of Twin Trails Drive to the southern boundary of the RPCP, may be improved to a modified 6-lane arterial with Class II bicycle lanes.

The **Open Space and Resource Management Element** seeks to conserve, enhance, and restore all open space and sensitive resource areas in the Rancho Peñasquitos community. This element also seeks to retain viable connected systems of open space, maintain all open space containing biologically sensitive habitat in its natural state and prohibit encroachment and impacts of adjacent development on areas designated as open space. Relevant policies within this element include that open space areas should provide a continuous, connected open space system maximizing the use of

open spaces as wildlife habitat and that open space serving as wildlife habitat should be maintained in its natural state.

The **Public Facilities and Services Element** seeks to maintain a high level of public facilities and services as the community grows and in conformance with standards set forth in the General Plan. This element recommends adoption of a public facilities financing plan that identifies needed public facilities and methods to fund such facilities. This element also recommends revised Development Impact Fees and other fees as needed for the adequate provision of public facilities.

4.1.2.3 Black Mountain Ranch Subarea Plan

The Black Mountain Ranch (BMR) Subarea Plan constitutes Subarea I of the former North City Future Urbanizing Area (NCFUA) Framework Plan, and consists of approximately 5,098 acres of land located immediately north of the RPCP area. The land use element of the BMR Subarea Plan focuses development in two villages surrounded by significant open space, recreational amenities, and low-density development. Overall, the Subarea Plan allows for development of 5,400 residential units on 1,395 acres, 235 acres of non-residential development, and 3,065 acres of open space. The remaining acreage is identified for development of streets. The majority of the Subarea Plan has been built out, with only a small number of planned residential and non-residential units yet to be developed.

The Circulation Element seeks to establish a mobility network that results in an efficient movement of vehicles, and developed a hierarchical pattern of streets that allows for the separation of local and through traffic and minimize conflicts. The northernmost portion of Black Mountain Road is located within the boundaries of the BMR Subarea Plan. Although not located within the planning area, the BMR Subarea Plan states that the project roadway is expected to have traffic volumes that would necessitate widening the project roadway to six lanes. As the BMR Subarea Plan was prepared, it was anticipated that trips originating from the planning area would contribute to the traffic volumes necessitating widening the project roadway to six lanes. Widening the project roadway to six lanes was also identified in Phase III of the Transportation Phasing Program, and in the BMR Public Facilities Financing Plan (PFFP).

4.1.2.4 Pacific Highlands Ranch Subarea Plan

The Pacific Highlands Ranch (PHR) Subarea Plan constitutes Subarea III of the NCFUA Framework Plan, and consists of approximately 2,652 acres of land located west of the RPCP, with both planning areas separated by Torrey Highlands. The Land Use Element seeks to preserve and enhance natural resources within the MHPA, while also developing a town center that includes office, commercial, civic and residential uses within a pedestrian-oriented development pattern. Overall, the PHR Subarea Plan allows for development of up to 5,470 residential units, a mixed-use community core with 400,000 square feet of commercial and office uses, multi-family housing, public and semi-public uses, schools, and parks. The majority of the subarea plan has been built out, with only a small number of planned residential and non-residential units awaiting development.

The Circulation Element seeks to establish a circulation system that assists in the efficient movement of vehicles, while also developing a multi-modal circulation system to provide alternative means and

routes to arrive at the same destination point. The Circulation Element seeks to establish a balanced, topographically sensitive, and pedestrian-friendly local street system that connects different neighborhoods and districts that allows for efficient traffic dispersal and minimum road widths. Although Black Mountain Road is not located within the boundaries of the PHR Subarea Plan, it was anticipated that trips originating from the planning area would contribute to the traffic volumes necessitating widening the project roadway to six lanes. Widening the project roadway to six lanes was also identified in the PHR Mitigation and Monitoring Reporting Program, and in the PFFP.

4.1.2.5 Multiple Species Conservation Program Subarea Plan

The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City of San Diego, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms. Multi-Habitat Planning Area (MHPA) lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City to be a sensitive biological resource.

4.1.2.6 Environmentally Sensitive Lands Regulations

The purpose of the Environmentally Sensitive Lands (ESL) Regulations (LDC Sections 143.0101 – 143.0160) is to protect, preserve and, where damaged, restore environmentally sensitive lands and the viability of the species supported by those lands. The ESL Regulations apply to all proposed development when environmentally sensitive lands, including sensitive biological resources, steep hillsides, floodplains, or coastal bluffs, are present. The regulations are designed to ensure that development occurs in a manner that protects natural resources and the natural and topographic character of the area, and retains biodiversity and interconnected habitats. Future development of the project design feature and traffic mitigation measures would be subject to the ESL Regulations, because they would have the potential to impact sensitive biological resources.

4.1.2.7 Historical Resources Regulations

The purpose of the City's Historical Resources Regulations, found in Section 143.0251 of the LDC, is to protect, preserve, and, where damaged, restore the historical resources of San Diego, which include historical buildings, historical structures or objects, important archaeological sites, historical districts, historical landscapes, and traditional cultural properties. These regulations are intended to assure that development occurs in a manner that protects the overall quality of historical resources. The Historic Resources Regulations require that development affecting designated historical resources or historical districts shall provide full mitigation for the impact to the resource, in accordance with the Historical Resources Guidelines of the Land Development Manual, as a condition of approval. If development cannot, to the maximum extent feasible, comply with the development regulations for historical resources, then a project would require a permit.

4.1.3 Issue 1: General and Community Plan Consistency

Would the project result in a conflict with the environmental goals, objectives, or recommendations of the General/Community Plan in which it is located?

4.1.3.1 Thresholds

Per the City's Significance Determination Thresholds, an inconsistency with a plan is not by itself a significant environmental impact; the inconsistency would have to relate to an environmental issue to be considered significant under CEQA. Land use compatibility impacts may be significant if the project would:

- Conflict or be inconsistent with the environmental goals, objectives, or guidelines of a community or general plan.
- Be substantially incompatible with an adopted plan.

4.1.3.2 Impacts

a. City General Plan and Rancho Peñasquitos Community Plan

The project roadway is currently classified as a 6-lane Primary Arterial within the RPCP. The project requires approval of a General Plan Amendment (GPA) to Figure LU-2, Land Use and Street System Map in the Land Use and Community Planning Element of the General Plan to reclassify the project roadway from a Prime Arterial to a Major Arterial, and a CPA to the RPCP Transportation Element to reclassify the project roadway from a 6-lane Primary Arterial to a 4-lane Major¹. The City Planning Commission initiated the CPA on February 27, 2014. Table 4.1-1, located at the end of this section, presents an evaluation of the project's consistency with the applicable goals and policies of the General Plan and RPCP. As demonstrated in Table 4.1-1, the project would be consistent with all applicable General Plan and RPCP goals, objectives, and policies.

b. Black Mountain Ranch and Pacific Highlands Ranch Subarea Plans

Black Mountain Road functions as a regional roadway primarily accommodating vehicle trips generated beyond the boundaries of the RPCP, including trips originating from the BMR and PHR Subareas. Consequently, an evaluation of impacts associated with reclassification of the project roadway to a Major Arterial in General Plan Figure LU-2 and a 4-lane Major in the RPCP must consider vehicle trips originating from the BMR and PHR Subareas as well. The Transportation

¹The City of San Diego General Plan and Rancho Peñasquitos Community Plan use different nomenclature for roadway classifications. Consequently, the GPA would reclassify the project roadway as a Major Arterial and the CPA would reclassify the project roadway as a 4-lane Major.

Impact Study (Appendix B) prepared for the project used 2050 for the horizon year and assumed build out of the RPCP and adjacent subarea plans, including BMR and PHR.

Concurrent with the GPA and CPA, the project would also amend the BMR Subarea Plan and Transportation Phasing Plan (TPP) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. As a part of this amendment, the TPP for BMR would be updated to reflect the project and mitigation measures.

Widening the project roadway to a 6-lane Primary Arterial was identified as traffic mitigation in the Master Environmental Impact Report (MEIR) prepared for the BMR (Subarea I) Subarea Plan in the North City Future Urbanizing Area (NCFUA) (BMR Subarea Plan MEIR) (LDR No. 96-7902/SCH No. 97111070) and the MEIR prepared for the PHR (Subarea III) Subarea Plan in the NCFUA (PHR Subarea Plan MEIR) (LDR No. 96-7918/SCH No. 97111077). However, the proposal to widen the project roadway to six lanes was intended to provide adequate capacity on this segment of Black Mountain Road to accommodate vehicular traffic that would be generated by future development within the BMR and PHR subareas. As described in Section 3.2 Relationship to Rancho Peñasquitos Community Plan, improvements that have occurred since approval of the RPCP in 1993 have diminished the need to expand the project roadway to a 6-lane Primary Arterial (see Section 3.2). Additionally, Section 4.2 documents that all potential impacts related to future traffic operations would be mitigated to a level less than significant, with the exception of two roadway segments on Black Mountain Road located within the boundaries of the project roadway. Therefore, the project would not require construction of any roadway improvements within the boundaries of the BMR and PHR subarea plans. Upon certification of this EIR and approval of the CPA, GPA, and Black Mountain Ranch TPP amendment, MM-TRA-1 through MM-TRA-3 would supersede and replace widening the project roadway to a 6-lane Primary Arterial previously identified in the BMR Subarea Plan MEIR and PHR Subarea Plan MEIR.

The project would also require subsequent amendments to the BMR and PHR² Subarea PFFPs to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. Amending these PFFPs would ensure consistency between these implementation documents and the amended General Plan and RPCP. Therefore, approval of the GPA and CPA, and construction of the project design feature and MM-TRA-1 through MM-TRA-3, would not conflict with any of the goals and policies of the BMR and PHR subarea plans.

²The Pacific Highlands Ranch (PHR) requirement to widen the project roadway to a 6-lane Primary Arterial is outlined in Table 4B-14, which is included in the PHR Subarea Plan MEIR. Upon certification of this EIR and approval of the CPA, GPA, and Black Mountain Ranch TPP amendment, MM-TRA-1 through MM-TRA-3 would supersede and replace widening the project roadway to a 6-lane Primary Arterial previously identified in the PHR Subarea Plan MEIR.

c. Multiple Species Conservation Program Subarea Plan

MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat preservation in order to maximize conservation of sensitive biological resources, including sensitive species. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. The project site and proposed roadway improvements do not contain MHPA lands nor are they located directly adjacent to any MHPA lands. Therefore, the project would not conflict with any of the goals and policies of the City's MSCP Subarea Plan.

Table 4.1-1 Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives	
Objectives	Consistency Evaluation
CITY OF SAN DIEGO GENERAL PLAN	
Land Use and Community Planning Element	
<p>C. Community Planning Goals</p> <ul style="list-style-type: none"> Community plan updates that are accompanied by updated public facilities financing plans. Community plans that are kept consistent with the future vision of the General Plan through comprehensive updates or amendments. 	<p>Consistent: Concurrent with the GPA and CPA, the project would also amend the Black Mountain Ranch Subarea Plan and Transportation Phasing Plan (TPP) to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. As a part of this amendment, the TPP for Black Mountain Ranch would be updated to reflect the project and mitigation measures.</p> <p>Implementation of the project would subsequently require amending the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch PFFPs to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the PFFPs are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by this action would be incorporated. This EIR, which analyzes the removal of the existing 6-lane Primary Arterial designation for the project roadway from the RPCP, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the PFFP. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.</p> <p>The GPA and CPA would reclassify the project roadway to be consistent with the current transportation network within the community. The RPCP is built out, and the Transportation Impact Study (TIS) prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at LOS D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately</p>

**Table 4.1-1
Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives**

Objectives	Consistency Evaluation
	<p>20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on Interstate 15 (I-15) have been improved by implementation of the I-15 Express Lanes Project that was not anticipated in 1993 when the RPCP was adopted (City of San Diego 1993), which has diminished the need to expand the project roadway to a 6-lane Primary Arterial (see Sections 3.2 and 9.1.3). The GPA and CPA would also avoid numerous property acquisitions that would disrupt the surrounding community should the project roadway be expanded to a 6-lane Prime Arterial per the existing designation. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.</p>
<p>D. Plan Amendment Process</p> <ul style="list-style-type: none"> • Approve plan amendments that better implement the General Plan and community plan goals and policies. • Allow for changes that will assist in enhancing and implementing the community's vision. 	<p>Consistent: As described in the discussion of consistency with Land Use and Community Planning Element Goal C, the GPA and CPA would reclassify the project roadway to be consistent with the current transportation network within the community and avoid numerous property acquisitions that would disrupt the surrounding community. Additionally, the City has subsequently updated the Mobility Element of the General Plan to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel. Similarly, the City has developed a Climate Action Plan that seeks to encourage future development to occur within Transit Priority Areas in order to reduce reliance on vehicle travel. Consequently, expanding the project roadway to a 6-lane Primary Arterial would not be consistent with the goals of the City's Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel that were developed after adoption of the RPCP. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.</p>

**Table 4.1-1
Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives**

Objectives	Consistency Evaluation
Mobility Element B. <u>Transit</u> <ul style="list-style-type: none"> • An attractive and convenient transit system that is the first choice of travel for many of the trips made in the City. • Increased transit ridership. 	Consistent: As described in Section 4.2.6, implementation of the project would not impact any existing transit facilities. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.
F. <u>Bicycling</u> <ul style="list-style-type: none"> • A city where bicycling is a viable travel choice, particularly for trips of less than five miles. • A safe and comprehensive local and regional bikeway network. 	Consistent: As described in Section 4.2.6, implementation of the project would maintain the existing sidewalks and bike lanes along the project roadway. Widening of the segment of Black Mountain Road north of the SR-56 westbound off-ramp associated with the project design feature may temporarily restrict access to the existing sidewalk and bike lane segments on the bridge segment that crosses SR-56 during construction. However, these impacts would be temporary and cease upon project completion. Therefore, conflicts with this goal would be less than significant.
Public Facilities, Services, and Safety Element Applicable goals: A. Public Facilities Financing <ul style="list-style-type: none"> • Implementation of financing strategies to address existing and future public facility needs citywide. 	<p>Consistent: Concurrent with the GPA and CPA, the project would also amend the Black Mountain Ranch Subarea Plan and TPP to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. As a part of this amendment, the TPP for Black Mountain Ranch would be updated to reflect the project and mitigation measures.</p> <p>Implementation of the project would subsequently require amending the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch PFFPs to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the PFFPs are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by this action would be incorporated. This EIR, which analyzes the</p>

Table 4.1-1
Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives

Objectives	Consistency Evaluation
	removal of the existing 6-lane Primary Arterial designation for the project roadway from the RPCP, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the PFFP. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.
Historic Preservation Element Applicable goals: A. <u>Identification and Preservation of Historical Resources</u> <ul style="list-style-type: none"> • Identification of the historical resources of the City. • Preservation of the City's important historical resources. 	Consistent: As described in Section 4.7.4, no prehistoric or historic buildings, structures, or objects or sites were identified within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3, and it is considered unlikely that resources would be discovered during construction. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.
Conservation Element Applicable goals: A. <u>Climate Change and Sustainable Development</u> <ul style="list-style-type: none"> • To reduce the City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation, employing sustainable planning and design techniques, and providing environmentally sound waste management. 	Consistent: As described in Section 4.4.5, the project is consistent with all applicable goals and policies and aimed at reducing greenhouse gas (GHG) emissions from land use and development, including the City's Climate Action Plan. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.
C. <u>Open Space and Landform Preservation</u> <ul style="list-style-type: none"> • Preservation and long-term management of the natural landforms and open spaces that help make San Diego unique. 	Consistent: Construction of MM-TRA-2 would result in minor modifications to slopes on both sides of the canyon that were altered previously during the original construction of SR-56. These minor modifications would be limited to where the expanded auxiliary lane connects with the top of each slope and would not affect the faces of the hillsides beneath the expanded roadway. Therefore, impacts related to natural landform would be less than significant. Impacts associated with construction of the project design feature, MM-TRA-2, and MM-TRA-3 would be reduced to a level less than significant through mitigation measures described in Section 4.6. Temporary impacts to natural habitat beneath the

**Table 4.1-1
Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives**

Objectives	Consistency Evaluation
	bridge segment of SR-56 associated with MM-TRA-2 would be revegetated. Therefore, the project would not result in any permanent impacts to open space, and conflicts with this goal would be mitigated to a level less than significant.
F. <u>Air Quality</u> <ul style="list-style-type: none"> Regional air quality that meets state and federal standards. 	Consistent: As described in Section 4.3.4, the project would be consistent with all regional, state, and federal air quality standards. Therefore, implementation of the proposed GPA and CPA would be consistent with this goal.
Noise Element Applicable goals: A. <u>Noise and Land Use Compatibility</u> <ul style="list-style-type: none"> Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise. 	Consistent: As described in Section 4.5.4, changes in ambient noise levels would not be readily perceivable and would not exceed the City's significance threshold of a 3 A-weighted decibel (dB(A)) increase where noise currently exceeds 65 Community Noise Equivalent Level (CNEL). Therefore, redistribution of traffic associated with the project would not result in a significant increase over existing ambient noise conditions, and the proposed GPA and CPA would be consistent with this goal.
B. <u>Motor Vehicle Traffic Noise</u> <ul style="list-style-type: none"> Minimal excessive motor vehicle traffic noise on residential and other noise-sensitive land uses. 	Consistent: As described in Section 4.5.4, changes in ambient noise levels would not be readily perceivable and would not exceed the City's significance threshold of a 3 dB(A) increase where noise currently exceeds 65 CNEL. Therefore, redistribution of traffic associated with the project would not result in a significant increase over existing ambient noise conditions, and the proposed GPA and CPA would be consistent with this goal.
G. <u>Construction, Refuse Vehicles, Parking Lot Sweepers, and Public Activity Noise</u> <ul style="list-style-type: none"> Minimal exposure of residential and other noise-sensitive land uses to excessive construction, refuse vehicles, parking lot sweeper-related noise and public noise. 	Consistent: As described in Section 4.5.4, noise levels at nearby residential receivers during construction of MM-TRA-1 through MM-TRA-3 and the project design feature would be equal to or less than the 75 dB(A) L_{eq} threshold. Therefore, the proposed GPA and CPA would be consistent with this goal.

Table 4.1-1 Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives	
Objectives	Consistency Evaluation
RANCHO PEÑASQUITOS COMMUNITY PLAN (RPCP)	
<u>Community Appearance and Design Element</u> Primary Goal: Ensure a pleasant, healthful, physical and social environment for Rancho Peñasquitos residents by balancing development with the preservation of the community's natural resources and amenities.	Consistent: This element includes Roadway Design Recommendations that Black Mountain Road “should be sited to retain major adjacent open spaces, rather than fragmenting open spaces into smaller areas. Adequate pedestrian and bicycle crossings should be provided. Landscaping should be used as a transition from roadways to open space areas” (San Diego 1993). The CPA would not propose design changes to the existing facility. Therefore, implementation of the proposed CPA would be consistent with this goal.
<u>Transportation Element</u> Primary Goal: Construct and maintain an adequate system for vehicular, bicycle and pedestrian circulation within the community, while providing adequate access to the larger San Diego Region.	Consistent: The CPA would change the street system classification of the project roadway to be consistent with the current transportation network within the community. The RPCP is built out, and the TIS prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at LOS D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately 20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on I-15 have been improved by implementation of the I-15 Express Lanes Project that was not anticipated in 1993 when the RPCP was adopted (City of San Diego 1993), which has diminished the need to expand the project roadway to a 6-lane Primary Arterial. Therefore, implementation of the proposed CPA would be consistent with this goal.

Table 4.1-1
Summary of Project Consistency with Applicable Land Use Plans Goals and Objectives

Objectives	Consistency Evaluation
<p><u>Open Space and Resource Management Element</u></p> <p>Primary Goal: Conserve, enhance and restore all open space and sensitive resource areas in the Rancho Peñasquitos community. Retain viable connected systems of open space, maintain all open space containing biologically sensitive habitat in its natural state and prohibit encroachment and impacts of adjacent development on areas designated open space.</p>	<p>Consistent: Impacts to biological resources associated with construction of the project design feature, MM-TRA-2, and MM-TRA-3 would be reduced to a level less than significant through mitigation measures described in Section 4.6. Temporary impacts to natural habitat beneath the bridge segment of SR-56 associated with MM-TRA-2 would be revegetated. Therefore, the project would not result in any permanent impacts to open space, and conflicts with this goal would be mitigated to a level less than significant.</p>
<p><u>Public Facilities and Services Element</u></p> <p>Primary Goal: Maintain a high level of public facilities and services as the community grows and in conformance with standards set forth in the General Plan.</p>	<p>Consistent: Implementation of the project would subsequently require amending the RPCP PFFP to remove the requirement to widen the project roadway to a 6-lane Primary Arterial and to add the project design feature and three traffic mitigation measures. At such time the PFFPs are updated for the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch communities, any changes to reflect the project and mitigation measures adopted by this action would be incorporated. This EIR, which analyzes the removal of the existing 6-lane Primary Arterial designation for the project roadway from the RPCP, the addition of the project design feature, along with the future implementation of three mitigation measures, could be relied upon for this future update to the PFFP. Therefore, implementation of the proposed CPA would be consistent with this goal.</p>

4.2 Transportation/Circulation

This section is based on the May 2016 Transportation Impact Study (TIS) prepared by KOA Corporation, included as Appendix B of this Environmental Impact Report.

4.2.1 Existing Conditions

4.2.1.1 Existing Circulation System

The TIS prepared for the project identified a traffic study area with numerous roadway segments and intersections potentially affected by the project. A total of 37 roadway segments and 57 intersections were within the traffic study area selected for analysis and are listed below. The locations of these roadway segments and intersections are shown in Figure 4.2-1.

Roadway Segments

1. Camino Del Sur south of Carmel Valley Road
2. Camino Del Sur south of Wolverine Way – Fallhaven Road
3. Camino Del Sur north of SR-56 westbound ramps
4. Camino Del Sur south of SR-56 eastbound ramps
5. Carmel Valley Road west of Black Mountain Road
6. Carmel Valley Road east of Black Mountain Road
7. Black Mountain Road north of Maler Road
8. Black Mountain Road south of Oviedo Street
9. Black Mountain Road south of Carmel Mountain Road
10. Black Mountain Road between Paseo Montalban and Twin Trails Drive
11. Black Mountain Road south of Twin Trails Drive
12. Black Mountain Road between SR-56 Westbound and eastbound ramps
13. Black Mountain Road north of Park Village Road – Adolphia Street
14. Black Mountain Road north of Canyonside Park Drive
15. Black Mountain Road between Mercy Road and Babuta Road
16. Black Mountain Road south of Westview Parkway
17. Westview Parkway east of Black Mountain Road
18. Carmel Mountain Road between Paseo Aldabra and Sundevil Way
19. Carmel Mountain Road between Paseo Montalban and SR-56 westbound ramps
20. Rancho Peñasquitos Boulevard between SR-56 westbound ramps – Azuaga Street and Calle De Las Rosas
21. Rancho Peñasquitos Boulevard between Calle De Las Rosas and Via Del Sud
22. Rancho Peñasquitos Boulevard between Paseo Montril and I-15 southbound ramps
23. Poway Road east of I-15 northbound ramps
24. Carmel Mountain Road south of Sundance Avenue
25. Carmel Mountain Road west of Sparren Avenue
26. Carmel Mountain Road west of Black Mountain Road
27. Sundance Avenue west of War Bonnet Street
28. Carmel Mountain Road east of Freeport Road

29. Carmel Mountain Road between Peñasquitos Drive and Gerana Street
30. Carmel Mountain Road between I-15 southbound ramps and Peñasquitos Drive
31. Carmel Mountain Road east of I-15 northbound ramps
32. Camino Del Sur north of Park Village Road
33. Park Village road east of Camino Del Sur
34. Park Village Road west of Black Mountain Road
35. Mercy Road between Chabola road and Branicole Lane
36. Mercy Road north of Alemania Road
37. Scripps Poway Parkway east of I-15 northbound ramps

Intersections¹

1. Camino Del Sur/Carmel Valley Road
2. Camino Del Sur/Watson Ranch Road
3. Camino Del Sur/Wolverine Way – Fallhaven Road
4. Camino Del Sur/Torrey Meadows Drive
5. Camino Del Sur/Highlands Village Place
6. Camino Del Sur/SR-56 westbound ramps
7. Camino Del Sur/SR-56 eastbound ramps
8. Camino Del Sur/Torrey Santa Fe Road
9. Black Mountain Road/Carmel Valley Road
10. Black Mount Road/Maler Road
11. Black Mountain Road/Stargaze Avenue
12. Black Mountain Road/Oviedo Street
13. Black Mountain Road/Carmel Mountain Road
14. Black Mountain Road/Paseo Montalban
15. Black Mountain Road/Twin Trails Drive
16. Black Mountain Road/SR-56 westbound ramps
17. Black Mountain Road/SR-56 eastbound ramps
18. Black Mountain Road/Park Village Road - Adolphia Street
19. Black Mountain Road/Canyonside Park Drive
20. Black Mountain Road/Mercy Road
21. Black Mountain Road/Westview Parkway
22. Carmel Mountain Road/Sundevil Way
23. Carmel Mountain Road/Paseo Montalban
24. Carmel Mountain Road/SR-56 westbound ramps – Rancho Peñasquitos Boulevard
25. Rancho Peñasquitos Boulevard/SR-56 eastbound ramps – Azuaga Street
26. Rancho Peñasquitos Boulevard/Calle De Las Rosas
27. Rancho Peñasquitos Boulevard/Via Del Sud
28. Rancho Peñasquitos Boulevard/Paseo Montril
29. Rancho Peñasquitos Boulevard/I-15 southbound off-ramp

¹Except as noted, all of the following intersections are signalized.

30. Rancho Peñasquitos Boulevard/I-15 Northbound off-ramp
31. Carmel Mountain Road/(west) Sundance Avenue
32. Carmel Mountain Road/Sedorus Street (*All-way stop control*)
33. Carmel Mountain Road/Entreken Way
34. Sparren Avenue/Carmel Mountain Road
35. Twin Trails Drive/Carmel Mountain Road
36. (East) Sundance Avenue/Carmel Mountain Road (*Two-way stop control*)
37. Sundance Avenue/Twin Trails Drive (*All-way stop control*)
38. Peñasquitos Post Office Driveway/Twin Trails Drive
39. Twin Trails Drive/Fairgrove Lane (*All-way stop control*)
40. Twin Trails Drive/Paseo Montalban
41. Salmon River Road/Paseo Montalban
42. Salmon River Road/Fairgrove Lane (*All-way stop control*)
43. Salmon River Road/Adolphia Street – Limar Way (*All-way stop control*)
44. Paseo Cardiel/Carmel Mountain Road
45. Freeport Road/Carmel Mountain Road
46. Stoney Creek Road/Carmel Mountain Road
47. Cuca Street – Caminata Deluz/Carmel Mountain Road
48. Peñasquitos Drive/Carmel Mountain Road
49. I-15 southbound ramps/Carmel Mountain Road
50. I-15 northbound ramps/Carmel Mountain Road
51. Camino Del Sur/Park Village Road
52. Rumex Lane/Park Village Road
53. Ragweed Street/Park Village Road
54. Mercy Road/Kika Court
55. Alemania Road/Mercy Road
56. I-15 southbound ramps/Mercy Road
57. I-15 northbound ramps/Mercy Road – Scripps Poway Parkway

The principal roadways in the traffic study area are described briefly below. Each description includes physical characteristics of each roadway, adjacent land uses, traffic control devices located along each roadway, as well as a discussion of the roadways with respect to the Rancho Peñasquitos Community Plan. The existing roadway network is presented in Figure 4.2-2.

Primary regional access to the traffic study area is provided via Interstate 15 (I-15) (Escondido Freeway) and State Route 56 (SR-56) (Ted Williams Freeway). SR-56 intersects I-15 to the east of the traffic study area.

Interstate 15 is a north – south highway extending southward from the State of Montana to the State of California. Within the vicinity of the traffic study area, I-15 has five through lanes per direction, two managed lanes in each direction, an auxiliary lane in each direction between each on/off-ramp, and on/off-ramps at Mercy Road-Scripps Poway Parkway, Rancho Peñasquitos Boulevard – Poway Road, and Carmel Mountain Road. I-15 provides access to the greater San Diego area to the south and the City of Escondido to the north.

State Route 56 is an east – west highway running between Interstate 5, near the Pacific Ocean, and I-15 within the Rancho Peñasquitos Community. Within the vicinity of the traffic study area, SR-56 has two through lanes per direction with and additional intermittent auxiliary/transition lane in each direction and on/off-ramps at Camino Del Sur, Black Mountain Road, and Rancho Peñasquitos Boulevard.

The following streets provide freeway access and circulation to local destinations.

Camino Del Sur is functionally classified as a 4-Lane Prime Arterial running primarily north – south from Rancho Bernardo Road in the north, becoming Camino del Norte to Torrey Santa Fe Road. Camino Del Sur is then broken off by a canyon and continues to the south from Dormouse Road to just past Park Village Road. An extension of Camino Del Sur is planned to be constructed by the Merge 56 project and will connect the two segments between Torrey Santa Fe Road and Dormouse Road. It is striped with two through lanes in each direction, separated by a raised median, and left-turn channelization. The curb-to-curb width varies throughout the segment with a common measurement of 110 feet. Sidewalks and bike lanes are present and on-street parking is restricted.

The posted speed limit is generally 45 miles per hour (mph) within the traffic study area. From the SR-56 westbound ramps north to Carmel Valley Road, Camino Del Sur has an ultimate community plan classification of a 6-lane Major Arterial. The Merge 56 project, a proposed development in the Rancho Peñasquitos area, is currently proposing to downgrade the ultimate classification of Camino del Sur to a 2-lane facility between a portion of its frontage and the existing terminus near Dormouse Road.

Black Mountain Road is functionally classified as a 4-lane Prime Arterial within the traffic study area and extends southward from Carmel Valley Road to its terminus at Carroll Centre Road, where it continues as Kearny Villa Road. Within the traffic study area, Black Mountain Road is generally striped with two through lanes per direction, separated by a raised median, and left-turn channelization.

The roadway has sidewalks, bike lanes, and a curb-to-curb width that varies throughout the segment with a common measurement of 90 feet. On-street parking is restricted. Within the traffic study area, the speed limit is generally 45 mph, with the exception of the segment between Twin Trails Drive and Oviedo Street, where it is 40 mph. South of Mercy Road, the speed limit increases to 50 mph.

The roadway serves both residential and commercial uses. Black Mountain Road is built to its ultimate community plan classification of a 4-lane Primary Arterial, with the exception of the segment from Twin Trails Drive to Mercy Road. The Rancho Peñasquitos Community Plan identifies this segment to become a 6-lane Primary Arterial. This study analyzes the implications of this segment being maintained as four lanes instead of being widened to six lanes.

Carmel Mountain Road is functionally classified as a 4-lane Major Arterial within the traffic study area. It is generally an east – west roadway that extends from Via Panacea to Camino Del Norte, where it continues as Paseo Lucido. It is generally striped with two through lanes in each direction, with the exception of the segment from Paseo Montalban to Azuaga Street/SR-56 northbound ramps, which is striped with three eastbound lanes and two westbound lanes. A raised center

median is generally present, along with left-turn channelization. The curb-to-curb width varies throughout the segment with a common measurement of 80 feet. The speed limit is generally 40 mph. Sidewalks are present and the roadway is striped with bike lanes along most of its segments. On-street parking is restricted. Carmel Mountain Road south of Sundance Avenue to Via Panacea currently functions as a 2-lane Collector with a 35 foot curb-to-curb width. Carmel Mountain Road is built to its ultimate community plan classification of a 4-lane Major Arterial except for south of Sundance Avenue. An extension of Carmel Mountain Road is planned to be constructed by the Merge 56 project and will extend from Via Panacea to the extended section of Camino Del Sur described above. The Merge 56 development project also looks to downgrade the ultimate classification of this extension portion from Sundance Avenue to extended section of Camino del Sur to a 2-lane Collector.

Rancho Peñasquitos Boulevard, functionally classified as a 4-lane Major Arterial, generally spans an area between SR-56 and I-15. It begins at Carmel Mountain Road, where it bends eastward at the SR-56 southbound ramps and terminates at I-15, where it continues as Poway Road. Sidewalks are present, bike lanes are absent, and the roadway is striped with two lanes per direction, separated by a raised median and left-turn channelization. The curb-to-curb width varies throughout the segment with a common measurement of 80 feet. The posted speed is 40 mph. Rancho Peñasquitos Boulevard is built to its ultimate community plan classification of a 4-lane Major Arterial.

Mercy Road is functionally classified as a 4-lane Major Arterial from Black Mountain Road to the I-15 freeway ramps, where it continues as Scripps Poway Parkway. It is striped with two lanes per direction and divided by a raised median. The roadway provides sidewalks, bike lanes, and left-turn channelization and prohibits on-street parking. The curb-to-curb width varies throughout the segment with a common measurement of 75 feet. The posted speed limit is 45 mph traveling eastbound and 50 mph traveling westbound. Mercy Road is built to its ultimate community plan classification of a 4-lane Major Arterial.

Carmel Valley Road is functionally classified as a 4-lane Major Arterial from SR-56 to Chadamy Way and striped with one lane in each direction from Chadamy Way to Black Mountain Road.

Carmel Valley Road runs primarily east – west within the northern half of Torrey Highlands and extends all the way east to Camino del Norte. The roadway provides sidewalks and a raised median from SR-56 to Chadamy Way and provides bike lanes, left turn channelization, and prohibits on-street parking throughout the traffic study area. The curb-to-curb width varies throughout the segment with a common measurement of 100 feet. The posted speed limit is 55 mph. Carmel Valley Road's ultimate classification is a 4-lane Major Arterial with additional right-of-way for transit dedicated lanes.

A summary of other traffic study area streets is provided in Table 4.2-1.

**Table 4.2-1
Other Study Area Streets Summary**

Roadway Name	Functional Classification	Lanes per Direction	Curb-to-Curb Width	Posted Speed Limit	Raised Median	TWLTL	Left-Turn Channel	Sidewalks	Bike Lanes
Sundance Avenue	Local	1	40 feet	25 mph				✓	
Twin Trails Drive (west of Black Mountain Road)	2-lane Collector ¹	1	60 feet	30 mph		✓	✓	✓	✓
Twin Trails Drive (east of Black Mountain Road)	2-lane Collector	1	50 feet	25-35 mph		✓	✓	✓	
Paseo Montalban (west of Carmel Mountain Road)	4-lane Major	2	80 feet	40 mph	✓		✓	✓	✓
Fairgrove Lane	Local	1	40 feet	25 mph				✓	
Salmon River Road	Local	1	40-50 feet	30 mph		✓	✓	✓	
Park Village Road	4-lane Major	2	80 feet	45 mph	✓		✓	✓	✓
Westview Parkway	4-lane Collector	2	70 feet	45 mph		✓	✓	✓	

¹Community Plan recommended classification is 4-lane Collector.
 TWLTL = two-way left-turn lane
 mph = miles per hour

4.2.1.2 Existing Traffic Volumes

The TIS prepared for the project documented existing traffic conditions of the traffic study area, under which the project segment of Black Mountain Road functions as a 4-lane Major. Daily traffic volumes along roadway segments were obtained through machine data collection, and intersection turning movement counts were conducted during the weekday morning peak period from 7:00 A.M. to 9:00 A.M. and evening peak period from 4:00 P.M. to 6:00 P.M. The dates on which the segment and intersection counts were conducted range from the period of October, 2013 to July, 2014 on non-holiday weekdays, specifically Tuesday through Thursday.

Roadway Capacity Level of Service

A detailed roadway capacity analysis was conducted for the Existing Conditions scenario. The results of this analysis are presented in Table 4.2-2.

Intersection Capacity Level of Service

A detailed intersection capacity analysis was conducted the Existing Conditions scenario. The results of this analysis are presented in Table 4.2-3.

Freeway Mainline Level of Service

A detailed freeway mainline analysis was conducted to determine the traffic study area freeway mainline level of service (LOS) under existing conditions. This analysis was based on existing count volumes provided by California Department of Transportation (Caltrans) for the year 2013. The results of this analysis presented in Table 4.2-4 shows that two of the four study segments along SR-56 are operating at LOS E during the AM and/or PM peak hours, and study segments along I-15 are operating at LOS C or better during the peak hours.

Freeway Interchange On-Ramp Metering Delay

An on-ramp metering delay analysis was conducted for existing conditions based on ramp metering rates obtained from Caltrans. The calculated on-ramp metering delay is presented in Table 4.2-5, while the observed on-ramp metering delay is presented in Table 4.2-6.

4.2.1.3 Alternative Transportation

a. Transit Facilities

Transit service within the Rancho Peñasquitos community is limited to its eastern portion. Currently, the community is served by San Diego Metropolitan Transit System's Line 20 bus route. Line 20 runs from downtown San Diego up I-15 and exits onto Rancho Peñasquitos Boulevard, where it travels northward to Carmel Mountain Road. Line 20 then turns right onto Carmel Mountain Road and continues to the northeast, beyond the Rancho Peñasquitos community boundary. Line 20 operates seven days a week with modified schedules on Saturday and Sunday. The shortest headway is 30 minutes for Line 20. The longest headway observed for Line 20 is 60 minutes over Saturday and Sunday.

**Table 4.2-2
Existing Roadway Segment Conditions**

Segment Number and Name	Lanes/ Class	LOS E (Capacity)	Existing ADT	V/C	LOS
1. Camino Del Sur s/o Carmel valley Road	4PA	40,000	17,728	0.443	B
2. Camino Del Sur s/o Wolverine Way – Fallhaven Road	4PA	40,000	20,710	0.518	B
3. Camino Del Sur n/o SR-56 Westbound Ramps	4PA	40,000	25,921	0.648	C
4. Camino Del Sur s/o SR-56 Eastbound Ramps	4MA	40,000	9,818	0.245	A
5. Carmel Valley Road w/o Black Mountain Road	2C NF	10,000	10,489	1.049	F
6. Carmel Valley Road e/o Black Mountain Road	4MA	40,000	13,793	0.345	A
7. Black Mountain Road n/o Maler Road	4MA	40,000	12,303	0.308	A
8. Black Mountain Road s/o Oviedo Street	4MA	40,000	18,956	0.474	B
9. Black Mountain Road s/o Carmel Mountain Road	4MA	40,000	14,740	0.369	A
10. Black Mountain Road bet. Paseo Montalban & Twin Trails Drive	4MA	40,000	14,315	0.358	A
11. Black Mountain Road s/o Twin Trails Drive	4MA	40,000	33,492	0.837	D
12. Black Mountain Road bet. SR-56 Westbound & Eastbound Ramps	4MA	40,000	30,567	0.764	D
13. Black Mountain Road n/o Park Village Road – Adolphia St	4MA	40,000	35,443	0.886	E
14. Black Mountain Road n/o Canyonside Park Drive	4MA	40,000	30,380	0.760	D
15. Black Mountain Road bet. Mercy Road & Babuta Road	6PA	60,000	28,862	0.481	B
16. Black Mountain Road s/o Westview Parkway	6PA	60,000	22,214	0.370	A
17. Westview Parkway e/o Black Mountain Road	4C	30,000	6,099	0.203	A
18. Carmel Mountain Road bet. Paseo Aldabra & Sundevil Way	4MA	40,000	14,152	0.354	A
19. Carmel Mountain Road bet. Paseo Montalban & SR-56 Westbound Ramps	4MA	40,000	21,907	0.548	C
20. Rancho Peñasquitos Blvd bet. SR-56 EB Ramps – Azuaga St & Calle De Las Rosas	4MA	40,000	27,441	0.686	C
21. Rancho Peñasquitos Boulevard bet. Calle De Las Rosas & Via Del Sud	4MA	40,000	28,120	0.703	C
22. Rancho Peñasquitos Boulevard bet. Paseo Montril & I-15 Southbound Ramps	4MA	40,000	33,066	0.827	D
23. Poway Road e/o I-15 Northbound Ramps	6PA	60,000	45,045	0.751	C
24. Carmel Mountain Road s/o Sundance Avenue	2C NF	10,000	1,241	0.124	A
25. Carmel Mountain Road w/o Sparren Avenue	4MA	40,000	6,811	0.170	A
26. Carmel Mountain Road w/o Black Mountain Road	4MA	40,000	8,316	0.208	A
27. Sundance Avenue w/o War Bonnet Street*	-	-	1,884	-	-
28. Carmel Mountain Road e/o Freeport Road	4MA	40,000	11,328	0.283	A
29. Carmel Mountain Road bet. Peñasquitos Drive & Gerana Street	4MA	40,000	13,655	0.341	A
30. Carmel Mountain Road bet. I-15 Southbound Ramps & Peñasquitos Drive	4MA	40,000	25,071	0.627	C
31. Carmel Mountain Road e/o I-15 Northbound Ramps	6PA	60,000	44,953	0.749	C
32. Camino Del Sur n/o Park Village Road	4MA	40,000	1,185	0.030	A
33. Park Village Road e/o Camino Del Sur	4MA	40,000	8,430	0.211	A
34. Park Village Road w/o Black Mountain Road	4MA	40,000	17,546	0.439	B
35. Mercy Road bet. Chabola Road & Branicole Ln	4MA	40,000	14,279	0.357	A
36. Mercy Road n/o Alemania Road	4MA	40,000	19,851	0.496	B
37. Scripps Poway Parkway e/o I-15 Northbound Ramps	6PA	60,000	52,815	0.880	D
*Capacity for local residential street not specified in San Diego Street Design Manual, July 2002. LOS = level of service; ADT = average daily traffic; V/C = volume/capacity, SR-56 = State Route 56; I-15 = Interstate 15 2C NF: 2-lane Collector with no fronting property 2MA: 2-lane Major Arterial 4C: 4-lane Collector 4MA: 4-lane Major Arterial 4PA: 4-lane Prime Arterial 6PA: 6-lane Prime Arterial					

Table 4.2-3
Existing Intersection Conditions

Intersection Number and Name	2014 Existing			
	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
1. Camino Del Sur/Carmel Valley Road	41.1	D	33.3	C
2. Camino Del Sur/Watson Ranch Road	10.3	B	9.4	A
3. Camino Del Sur/Wolverine Way – Fallhaven Road	25.3	C	17.9	B
4. Camino Del Sur/Torrey Meadows Drive	18.1	B	21.0	C
5. Camino Del Sur/Highlands Village Place	19.3	B	13.2	B
6. Camino Del Sur/SR-56 Westbound Ramps	15.6	B	16.3	B
7. Camino Del Sur/SR-56 Eastbound Ramps	15.9	B	23.4	C
8. Camino Del Sur/Torrey Santa Fe Road	13.8	B	15.8	B
9. Black Mountain Road/Carmel Valley Road	23.3	C	50.2	D
10. Black Mount Road/Maler Road	7.6	A	7.5	A
11. Black Mountain Road/Stargaze Avenue	15.7	B	15.4	B
12. Black Mountain Road/Oviedo Street	16.8	B	16.0	B
13. Black Mountain Road/Carmel Mountain Road	47.4	D	36.5	D
14. Black Mountain Road/Paseo Montalban	13.4	B	13.4	B
15. Black Mountain Road/Twin Trails Drive	43.2	D	38.8	D
16. Black Mountain Road/SR-56 Westbound Ramps	37.9	D	29.6	C
17. Black Mountain Road/SR-56 Eastbound Ramps	22.0	C	23.9	C
18. Black Mountain Road/Park Village Road – Adolphia Street	46.3	D	26.1	C
19. Black Mountain Road/Canyonside Park Drive	2.3	A	4.8	A
20. Black Mountain Road/Mercy Road	29.8	C	25.3	C
21. Black Mountain Road/Westview Parkway	13.4	B	16.1	B
22. Carmel Mountain Road/Sundevil Way	20.2	C	16.8	B
23. Carmel Mountain Road/Paseo Montalban	24.6	C	33.4	C
24. Carmel Mountain Road/SR-56 WB Ramps – Rancho Peñasquitos Boulevard	41.9	D	34.3	C
25. Rancho Peñasquitos Boulevard/SR-56 Eastbound Ramps – Azuaga Street	20.6	C	51.3	D
26. Rancho Peñasquitos Boulevard/Calle De Las Rosas	10.1	B	10.0	A
27. Rancho Peñasquitos Boulevard/Via Del Sud	4.5	A	4.3	A
28. Rancho Peñasquitos Boulevard/Paseo Montrail	13.5	B	14.6	B
29. Rancho Peñasquitos Boulevard/I-15 Southbound Off-Ramp	7.9	A	9.4	A
30. Rancho Peñasquitos Boulevard/I-15 Northbound Off-Ramp	10.9	B	14.9	B
31. Carmel Mountain Road/(West) Sundance Avenue	13.8	B	16.1	B
32. Carmel Mountain Road/Sedorus Street (All-way stop control)	7.5	A	7.4	A
33. Carmel Mountain Road/Entreken Way	21.3	C	13.4	B
34. Sparren Avenue/Carmel Mountain Road	24.1	C	24.0	C
35. Oviedo Street/Carmel Mountain Road	28.8	C	16.7	B
36. (East) Sundance Avenue/Carmel Mountain Road (Two-way stop control)*	18.4	C	9.9	A
37. Sundance Avenue/Twin Trails Drive (All-way stop control)	22.7	C	14.9	B
38. Peñasquitos Post Office Driveway/Twin Trails Drive	18.2	B	26.7	C
39. Twin Trails Drive/Fairgrove Lane (All-way stop control)	8.0	A	9.0	A
40. Twin Trails Drive/Paseo Montalban	11.0	B	12.9	B
41. Salmon River Road/Paseo Montalban	13.6	B	15.1	B
42. Salmon River Road/Fairgrove Lane (All-way stop control)	8.0	A	8.8	A
43. Salmon River Road/Adolphia Street – Limar Way (All-way stop control)	7.5	A	7.9	A
44. Paseo Cardiel/Carmel Mountain Road	23.1	C	29.1	C
45. Freeport Road/Carmel Mountain Road	8.8	A	7.8	A

**Table 4.2-3
Existing Intersection Conditions**

Intersection Number and Name	2014 Existing			
	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
46. Stoney Creek Road/Carmel Mountain Road	10.5	B	3.6	A
47. Cuca Street - Caminata Deluz/Carmel Mountain Road	14.0	B	10.9	B
48. Peñasquitos Drive/Carmel Mountain Road	28.9	C	28.1	C
49. I-15 Southbound Ramps/Carmel Mountain Road	18.2	B	25.3	C
50. I-15 Northbound Ramps/Carmel Mountain Road	21.9	C	27.3	C
51. Camino Del Sur/Park Village Road	24.5	C	19.3	B
52. Rumex Lane/Park Village Road	7.9	A	7.1	A
53. Ragweed Street/Park Village Road	15.9	B	16.1	B
54. Mercy Road/Kika Court	8.0	A	7.4	A
55. Alemania Road/Mercy Road	9.4	A	10.3	B
56. I-15 Southbound Ramps/Mercy Road	31.0	C	33.0	C
57. I-15 Northbound Ramps/Mercy Road – Scripps Poway Parkway	39.0	D	34.8	C
Signal Timing and Phasing Source – City of San Diego Timing Sheets - See Appendix B.				
*Worst case control delay and level of service (LOS) shown.				
SR-56 = State Route 56				
I-15 = Interstate 15				

**Table 4.2-4
Existing Freeway Mainline Level of Service**

Freeway Segment	Direction	# of Lanes	Hourly Capacity	ADT	Peak Hour Volume		V/C		LOS	
					AM	PM	AM	PM	AM	PM
SR-56										
West of Camino del Sur	WB EB	2 Mainline, 0 Auxiliary, 0 HOV, 2 Mainline, 0 Auxiliary, 0 HOV	4700 4700	65,000	4238 1625	1559 4161	0.902 0.346	0.332 0.885	D A	A D
Camino del Sur to Black Mountain Road	WB EB	2 Mainline, 0 Auxiliary, 0 HOV, 2 Mainline, 0 Auxiliary, 0 HOV	4700 4700	72,000	4695 1800	1727 4609	0.999 0.383	0.367 0.981	E A	A E
Black Mountain Road to Rancho Peñasquitos Blvd	WB EB	2 Mainline, 1 Auxiliary, 0 HOV, 3 Mainline, 0 Auxiliary, 0 HOV	6500 7050	76,000	4956	1823	0.762	0.280	C	A
					1900	4865	0.270	0.690	A	C
Rancho Peñasquitos Blvd to I-15 Interchange	WB EB	2 Mainline, 0 Auxiliary, 0 HOV, 2 Mainline, 0 Auxiliary, 0 HOV	4700 4700	71,000	4630	1703	0.985	0.362	E	A
					1775	4545	0.378	0.967	A	E
I-15										
South of Mercy Road	NB SB	5 Mainline, 1 Auxiliary, 2 HOV, 5 Mainline, 1 Auxiliary, 2 HOV	16910 16910	249,000	12258 8997	9034 12113	0.725 0.532	0.534 0.716	C B	B C
Mercy Road to Rancho Peñasquitos Blvd	NB SB	5 Mainline, 1 Auxiliary, 2 HOV, 5 Mainline, 1 Auxiliary, 2 HOV	16910 16910	236,000	11618 8527	8563 11481	0.687 0.504	0.506 0.679	C B	B C
Rancho Peñasquitos Blvd to Ted Williams Pkwy	NB SB	5 Mainline, 0 Auxiliary, 2 HOV, 5 Mainline, 1 Auxiliary, 2 HOV	15110 16910	207,000	10190 7480	7510 10070	0.674 0.442	0.497 0.596	C B	B B
Ted Williams Pkwy to Carmel Mountain Road	NB SB	5 Mainline, 1 Auxiliary, 2 HOV, 5 Mainline, 1 Auxiliary, 2 HOV	16910 16910	229,000	11273 8274	8309 11140	0.667 0.489	0.491 0.659	C B	B C

**Table 4.2-4
Existing Freeway Mainline Level of Service**

Freeway Segment	Direction	# of Lanes	Hourly Capacity	ADT	Peak Hour Volume		V/C		LOS	
					AM	PM	AM	PM	AM	PM
North of Carmel Mountain Road	NB SB	5 Mainline, 1 Auxiliary, 2 HOV, 5 Mainline, 0 Auxiliary, 2 HOV	16910 15110	218,000	11694 5108	7142 11678	0.692 0.338	0.422 0.773	C A	B C

Peak Hour Volume = (ADT)(K)(D)/(Truck Factor)

SR-56 = State Route 56

I-15 = Interstate 15

ADT = average daily traffic

V/C = peak hour volume/capacity

LOS = level of service

HOV = high occupancy vehicle lane

NB = northbound; EB = eastbound; SB = southbound; WB = westbound

Truck Source: 2013 Annual Average Daily Truck Traffic on the California State Highway System

ADT Source: 2013 Traffic Volumes on the California State Highway System

K/D Source: 2013 K and D Factors on the California State Highway System

Hourly Capacity Assumptions:

Mainline – 2,350 vehicles per hour

Auxiliary – 1,800 vehicles per hour

Managed – 1,680 vehicles per hour

High occupancy vehicle lane – 1,600 vehicles per hour

**Table 4.2-5
Existing Freeway Interchange Calculated On-Ramp Metering Delay**

Location	# of Lanes	Meter Rate (veh/hr/lane)	Combined Meter Rate (veh/hr)	Without Connection			
				Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)
AM Peak Hour							
Camino del Sur – SR-56 WB Ramp	2	435	870	462	0	0	0
Camino del Sur – SR-56 WB Ramp (HOV)	1	435	435	51	0	0	0
Black Mountain Road – SR-56 WB Ramp	2	520	1,040	1,341	301	17	8,729
Black Mountain Road – SR-56 WB Ramp (HOV)	1	520	520	149	0	0	0
Rancho Peñasquitos – SR-56 WB Ramp	1	600	600	757	157	16	4,553
Carmel Mountain Road – I-15 SB Ramp	2	367	734	773	39	3	1,134
Carmel Mountain Road – I-15 SB Ramp (HOV)	1	367	367	86	0	0	0
Rancho Peñasquitos - I-15 SB Ramp - Loop WB->SB	2	492	984	1,470	486	30	14,094
Rancho Peñasquitos – I-15 SB Ramp - EB->SB	2	492	984	785	0	0	0
Mercy Road – I-15 SB Ramp	2	420	840	1,089	249	18	7,221
Mercy Road – I-15 SB Ramp (HOV)	1	420	420	121	0	0	0
PM Peak Hour							
Camino del Sur – SR-56 EB Ramp	2	480	960	917	0	0	0
Camino del Sur – SR-56 EB Ramp (HOV)	1	480	480	102	0	0	0
Black Mountain Road – SR-56 EB Ramp	2	600	1,200	651	0	0	0
Black Mountain Road – SR-56 EB Ramp (HOV)	1	600	600	72	0	0	0
Rancho Peñasquitos – SR-56 EB Ramp	2	300	600	194	0	0	0
Carmel Mountain Road – I-15 SB Ramp	2	473	946	1,034	88	6	2,555
Carmel Mountain Road – I-15 SB Ramp (HOV)	1	473	473	115	0	0	0
Carmel Mountain Road – I-15 NB Ramp	2	463	926	723	0	0	0
Carmel Mountain Road – I-15 NB Ramp (HOV)	1	463	463	80	0	0	0
Rancho Peñasquitos – I-15 SB Ramp - Loop WB->SB	2	576	1,152	849	0	0	0
Rancho Peñasquitos – I-15 SB Ramp - EB->SB	2	576	1,152	781	0	0	0

**Table 4.2-5
Existing Freeway Interchange Calculated On-Ramp Metering Delay**

Location	# of Lanes	Meter Rate (veh/hr/lane)	Combined Meter Rate (veh/hr)	Without Connection			
				Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)
Rancho Peñasquitos – I-15 NB Ramp - WB->NB	1	335	335	430	95	17	2,755
Rancho Peñasquitos – I-15 NB Ramp - Loop EB->NB	1	335	335	130	0	0	0
Mercy Road – I-15 SB Ramp	2	406	812	1,177	365	27	10,591
Mercy Road – I-15 SB Ramp (HOV)	1	406	406	131	0	0	0
Mercy Road – I-15 NB Ramp	2	270	540	950	410	46	11,902
Mercy Road – I-15 NB Ramp (HOV)	1	270	270	106	0	0	0

SOURCE: Caltrans January 2015.

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix C.

High Occupancy Vehicle (HOV) demand is equal to 10% of Total Demand.

veh/hr = vehicles/hour

SR-56 = State Route 56

I-15 = Interstate 15

NB = northbound; EB = eastbound; SB = southbound; WB = westbound

Combined meter rate = (meter rate per lane) * (# of lanes)

Excess demand = (demand * # of lanes) -(combined meter rate); if excess demand <0, then excess demand = 0.

Delay = excess demand / combined meter rate

Queue = excess demand * 29 feet/vehicle

**Table 4.2-6
Existing Freeway Interchange Observed On-Ramp Metering Delay**

Ramp Location	Date	Time	# of lanes	Max Observed Queue (veh/lane)	Max Observed Delay (min)	Observed Queue Length (feet)	Calculated Flow Rate (veh/hr/lane)
AM Peak Hour							
Camino del Sur – SR-56 WB Ramp	6/17/15	7:50 AM	2 - SOV, 1 - HOV	4	0.2	116.0	421
Black Mountain Road – SR-56 WB Ramp	6/17/15	7:28 AM	2 - SOV, 1 - HOV	15	0.6	435.0	529
Rancho Peñasquitos – SR-56 WB Ramp	6/17/15	7:05 AM	1 - SOV	8	0.5	232.0	900
Carmel Mountain Road – I-15 SB Ramp	6/17/15	7:45 AM	2 - SOV, 1 - HOV	10	0.5	290.0	436
Rancho Peñasquitos – I-15 SB Ramp - Loop WB->SB	6/17/15	7:30 AM	2 - SOV	25	1.9	725.0	391
Rancho Peñasquitos – I-15 SB Ramp - EB->SB	6/17/15	7:40 AM	2 - SOV	12	0.7	348.0	514
Mercy Road – I-15 SB Ramp	6/17/15	8:10 AM	2 - SOV, 1 - HOV	12	0.4	348.0	600
PM Peak Hour							
Camino del Sur – SR-56 EB Ramp	6/17/15	5:00 PM	2 - SOV, 1 - HOV	8	0.2	232.0	736
Black Mountain Road – SR-56 EB Ramp	6/17/15	4:48 PM	2 - SOV, 1 - HOV	4	0.1	116.0	736
Rancho Peñasquitos – SR-56 EB Ramp	6/17/15	4:53 PM	1 - SOV	4	0.2	116.0	1,200
Carmel Mountain Road – I-15 SB Ramp	6/17/15	5:00 PM	2 - SOV, 1 - HOV	8	0.4	232.0	436
Carmel Mountain Road – I-15 NB Ramp	6/17/15	5:10 PM	2 - SOV, 1 - HOV	8	0.4	232.0	436
Rancho Peñasquitos – I-15 SB Ramp - Loop WB->SB	6/17/15	4:55 PM	2 - SOV	9	0.3	261.0	948
Rancho Peñasquitos – I-15 SB Ramp - EB->SB	6/17/15	5:20 PM	2 - SOV	4	0.3	116.0	818
Rancho Peñasquitos – I-15 NB Ramp - WB->NB	6/17/15	5:08 PM	1 - SOV	13	1.9	377.0	419
Rancho Peñasquitos – I-15 NB Ramp - Loop EB->NB	6/17/15	5:33 PM	1 - SOV	3	0.4	87.0	439
Mercy Road – I-15 SB Ramp	6/17/15	5:44 PM	2 - SOV, 1 - HOV	13	1.2	377.0	218
Mercy Road – I-15 NB Ramp	6/17/15	4:45 PM	2 - SOV, 1 - HOV	11	0.6	319.0	387
Meter rate = observed in field, see Appendix B. SOV = single occupancy vehicle lane; HOV = high occupancy vehicle lane NB = northbound; EB = eastbound; SB = southbound; WB = westbound							

On the eastern periphery of the Rancho Peñasquitos community, Sabre Springs/Peñasquitos Transit Station is located near the I-15/SR-56 junction and provides express bus service along the I-15 corridor with connections to downtown San Diego and the City of Escondido. Express bus lines that stop at this station include Line 235, Line 290, and Line 944. Lines 235 and 944 have headways of 30 minutes. Line 290 has a headway of 10 minutes. Route information on Lines 20, 235, 290, and 944 can be found in Appendix B.

No transit lines traverse the subject section of Black Mountain Road. The Rancho Peñasquitos Community Plan discusses a desire for future intra-community transit services but recognizes that funding for these services may not be available. The community plan does not indicate any particular routes or destinations to be served.

b. Pedestrian Facilities

Sidewalks are provided throughout the Rancho Peñasquitos community along nearly all local, collector and major roadways. Black Mountain Road, including the subject segment between Twin Trails Drive and the southern community boundary, provides sidewalks and pedestrian links between neighborhoods and commercial areas.

c. Bicycle Facilities

Class I bike paths are present in multiple areas of the community and serve as both recreational facilities and routes between neighborhoods. Class II bike lanes are present along many of the Major and Primary roadways within the community, including Camino Del Sur, Black Mountain Road, Carmel Valley Road, Carmel Mountain Road, Paseo Montalban, and Mercy Road.

The Rancho Peñasquitos Community Plan recommends that all of its major streets have Class II bike lanes, with on-street parking prohibited where possible. Black Mountain Road, including the segment between Twin Trails Drive and the southern community boundary (project roadway), is consistent with this recommendation and has Class II bike lanes in each direction and no on-street parking.

4.2.2 Regulatory Framework

4.2.2.1 State Regulations

California Department of Transportation

Caltrans is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. The project would require implementation of two roadway improvements on Caltrans facilities to mitigate traffic impacts to a level less than significant. MM-TRA-2 would add an auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road, and MM-TRA-3 would add an additional lane to the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp. Caltrans is currently preparing a Project Study Report that includes design of both these roadway improvements that would be constructed

on Caltrans facilities. However, the current design of these facilities is conceptual and it is unknown when they would be implemented.

4.2.2.2 Local Regulations

a. City of San Diego General Plan

The Mobility Element of the City of San Diego General Plan contains policies that promote a balanced, multi-modal transportation network that meets a variety of user needs while minimizing environmental and neighborhood impacts. In addition to addressing walking, streets, and transit, the element also includes policies related to regional collaboration, bicycling, parking, the movement of goods, and other components of the transportation system. The Mobility Element policies provide a strategy for congestion relief and increased transportation choices that strengthens the City of Villages land use vision while helping to achieve a clean and sustainable environment.

b. Rancho Peñasquitos Community Plan

The Transportation Element of the Rancho Peñasquitos Community Plan seeks to construct and maintain an adequate system for vehicular, bicycle, and pedestrian circulation within the community, while providing adequate access to the larger San Diego Region. This element includes a specific recommendation that Black Mountain Road, from just north of Twin Trails Drive to the southern boundary of the Rancho Peñasquitos Community Plan, may be improved to a modified 6-lane Arterial with Class II bicycle lanes.

4.2.3 Impacts on Transportation/Circulation

Based on the City's 2016 Significance Determination Thresholds, impacts related to traffic and circulation would be significant if implementation of the project would result in:

- Any intersection, roadway segment, or freeway segment affected by the project would operate at LOS E or F under either direct or cumulative conditions, and the project exceeds the City's thresholds described below; and/or
- The addition of project traffic results in a change in level of service from acceptable to deficient.

Per the City Significance Determination Thresholds, direct traffic impacts are defined as those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but which are anticipated to be operational at that time. Cumulative traffic impacts are defined as those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (near-term) or when the affected community plan area reaches full planned buildout in 2050 (long-term).

Specifically, direct and cumulative impacts are forecast to occur if an intersection, roadway segment, or freeway facility would degrade from LOS D or better without a project to LOS E or F with a project.

If the LOS without the project is E or F, a significant impact is forecast to occur if the contribution of project-related traffic exceeds the allowable increases specified by the City. An intersection operating at LOS E or F without a project would experience a significant impact if that project's contribution resulted in an increase in delay by two seconds at LOS E or one second at LOS F with the project. Similarly, a roadway segment operating at LOS E or F without a project would experience a significant impact if that project's contribution would result in an increase in volume to capacity (v/c) of 0.02 for LOS E or 0.01 at LOS F. Also, freeway segments operating at LOS E or F without a project would experience a significant impacts if that project's contribution resulted in an increase in v/c of 0.010 for LOS E or 0.005 at LOS F. Lastly, for freeway on- and off-ramps, impacts are identified if the on- or off-ramp meter delay is greater than 15 minutes, the adjacent freeway segment operates at LOS E or F, and project operation results in an increase in delay greater than two minutes. If each of these conditions are met, a significant impact is determined. Feasible mitigation measures would need to be identified to reduce the impact to within the associated City thresholds, or the impact would be considered significant and unmitigated and a statement of overriding considerations would be necessary.

4.2.4 Issues 1, 2, and 3: Capacity

Would the project result in traffic generation in excess of specific community plan allocation?

Would the project result in an increase in projected traffic, which is substantial in relation to the existing traffic load and capacity of the street system?

Would the project result in an addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp?

4.2.4.1 Thresholds

Refer to Section 4.2.3.

4.2.4.2 Impacts

The TIS prepared for the project evaluated potential significant impacts consistent with the City's Traffic Impact Study Manual and Significance Determination Thresholds based on the following considerations:

- Study scenarios and time periods
- Capacity analysis methodologies

As the remaining phases of development of the Rancho Peñasquitos community and neighboring communities would be intermittent between the existing year (2014) and 2050, with no specific phasing timelines, a near-term analysis was not considered applicable. Therefore, the impact analysis conducted for the TIS focused on horizon year conditions utilizing long-range traffic volume forecasts for the year 2050.

Long-range traffic growth in the traffic study area would occur due to land development, land use changes, increases in economic activity, and changes in demographics. Horizon year traffic volumes for the traffic study area roadway network were estimated based on SANDAG's Series 12 daily traffic volume forecasts, updated land use/socio-economic projections, and planned/programmed transportation improvements and changes for the region. The land use/socio-economic projections were augmented by the inclusion of three cumulative projects that are proposing Community Plan Amendments, which are presented in Table 4.2-7.

Horizon year daily volume forecasts were provided for two conditions: Without Project, which assumed the project roadway as a 6-lane Primary Arterial, and With Project, which assumed the project roadway as a 4-lane Major. The Horizon year freeway mainline analysis conducted for horizon year conditions utilized volumes, peak hour factors, directional factors, and truck percentages in the freeway mainline analysis obtained from Caltrans.

Table 4.2-7 Cumulative Projects			
Project Name	Location	Change in ADT	Project Status
Merge 56 CPA (19,500 daily trips to 19,040 daily trips)	Torrey Highlands/ Subarea IV	-459	Final EIR completed in December 2017. CPA approved in May 2018.
Rhodes and Grus Investments CPA (14 SFU to 260 MFU)	Torrey Highlands/ Subarea IV	2,740	CPA was initiated in November 2013; no development application filed.
The Preserve at Torrey Highlands CPA	Torrey Highlands/ Subarea IV	9,000	CPA was initiated in September 2013; development application is in review with the City of San Diego.
ADT = average daily traffic CPA = Community Plan Amendment SFU = single-family unit MDU = multi-family unit			

The SANDAG transportation models used to develop the above traffic volume forecasts included horizon year improvements and changes to the circulation network in the Rancho Peñasquitos area. The model assumed two scenarios for the subject segment of Black Mountain Road between Twin Trails Drive and Mercy Road, one with the segment as a 6-lane Primary Arterial (Without Project condition) and one with the segment as a 4-lane Major (With Project condition). Both of these scenarios also include additional circulation network changes that are listed in Table 4.2-8. The Horizon year roadway network is presented in Figure 4.2-3.

Table 4.2-8 Horizon Year (2050) Circulation Network Improvements/Changes			
Roadway Segment and Intersection Locations	Improvement/Change	Project Source	Completion Date
Camino Del Sur			
From Carmel Valley Road to SR-56 Westbound Ramps	Widen from 4PA to 6MA	Torrey Highlands PFFP Project # T-2.2	Phase 3 @ 2,700 EDU of Torrey Highlands PFFP
From Torrey Santa Fe Road to Park Village Road	Construct road, modeled as 4MA, Merge 56 proposes to downgrade classification from 4MA to 2C	Torrey Highlands PFFP Project # T-3.1 A&B Rancho Peñasquitos PFFP Project # T-4B	Phase 4 @3,610 EDU of Torrey Highlands PFFP
Carmel Valley Road			
From west of Camino Del Sur	Widen from 2C NF, 2MA to 4MA	Torrey Highlands PFFP Project # T-4.3 & T-4.4	Phase 3 @ 2,700 EDU of Torrey Highlands PFFP
Carmel Mountain Road			
From Via Panacea to Camino Del Sur	Construct road, modeled as 2C, Merge 56 proposes to downgrade classification from 4MA to 2C	Torrey Highlands PFFP Project # T-5.2	Phase 4 @3,610 EDU of Torrey Highlands PFFP
Carmel Mountain Road/Sedorus Street Intersection	Upgrade from AWSC to Signalized	K-B Homes Project Feature	Part of Project
Black Mountain Road			
From Twin Trails Drive to Mercy Road	Widen from 4MA to 6PA (Without Project Scenario)	Black Mountain Ranch PFFP Project #T-57	Phase 3 @4,270 EDU of Black Mountain Ranch PFFP
SR-56			
From I-5 to I-15	Widen from 4 lanes to 6 lanes	Caltrans	2050 RTP (SANDAG 2015)
From SR-56 to I-5 North	Construct fly-over ramps to I-5 North	Caltrans	2050 RTP (SANDAG 2015)
SR-56 On-Ramps at Camino del Sur	Construct cloverleaf on-ramp loops	Torrey Highlands PFFP Project #T-1.3	As Funding Becomes Available
PFFP = Public Facilities Financing Program; EDU = Equivalent Dwelling Unit; AWSC = All-Way Stop Controlled; SR-56 = State Route 56; I-5 = Interstate 5; Caltrans = California Department of Transportation; RTP = Regional Transportation Plan; 2C NF: 2-lane Collector with no fronting property ; 2MA: 2-lane Major Arterial; 4MA: 4 lane Major Arterial; 4PA: 4-lane Prime Arterial; 6MA: 6-lane Major Arterial; 6PA: 6-lane Prime Arterial			

a. Roadway Segments

As shown in Table 4.2-9, significant impacts were identified for the following roadway segments:

Impact TRA-1: Black Mountain Road south of Twin Trails Drive: the project would increase the volume/capacity (V/C) ratio from 0.634 to 0.939, and segment operations would decrease from LOS C to LOS E.

Impact TRA-2: Black Mountain Road north of Park Village Road – Adolphia Street: the project would increase the V/C ratio from 0.732 to 0.886, and segment operations would decrease from LOS C to LOS E.

b. Intersections

As shown in Table 4.2-10a, a significant impact was identified for the following intersection during the AM peak hour:

Impact TRA-3: Sundance Avenue and Twin Trails Drive (AM peak hour): the project would increase average delay from 38.8 seconds to 46.4 seconds, and intersection operations would continue to operate at LOS E.

As shown in Table 4.2-10b, no significant impacts were identified during the PM peak hour.

c. Freeway Segments

As shown in Table 4.2-11a, a significant impact was identified for the following freeway segment on SR-56:

Impact TRA-4: Eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour): the project would increase the V/C ratio from 1.098 to 1.104 and segment operations would continue to operate at LOS F.

As shown in Table 4.2-11b, no significant impacts were identified for any freeway segments on I-15.

It should be noted that some freeway mainline segments had V/C ratios that improved due to the project. This phenomenon occurs to changes in anticipated traffic patterns reflected in San Diego Association of Governments (SANDAG) 2050 scenario models. Generally, the model runs prepared by SANDAG for the two scenarios show a slight shift of traffic in the future when Black Mountain Road is limited to four lanes in the future. With a lower capacity on Black Mountain Road in the future as the result of being held to four (rather than six) lanes, traffic somewhat increases on two bypass routes. Those routes consist of portions of I-15 between Mercy Road and SR-56 and of SR-56 between I-15 and Black Mountain Road.

**Table 4.2-9
Horizon Year Comparison of Roadway Segment Conditions**

Segment Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Difference	Impact
	V/C	LOS	V/C	LOS		
1. Camino Del Sur s/o Carmel valley Road	0.518	B	0.505	B	-0.01	No
2. Camino Del Sur s/o Wolverine Way - Fallhaven Road	0.605	C	0.590	C	-0.02	No
3. Camino Del Sur n/o SR-56 Westbound Ramps	0.757	C	0.738	C	-0.02	No
4. Camino Del Sur s/o SR-56 Eastbound Ramps	0.534	B	0.548	B	0.01	No
5. Carmel Valley Road w/o Black Mountain Road	0.431	B	0.434	B	0.00	No
6. Carmel Valley Road e/o Black Mountain Road	0.566	C	0.570	C	0.00	No
7. Black Mountain Road n/o Maler Road	0.457	B	0.480	B	0.02	No
8. Black Mountain Road s/o Oviedo Street	0.589	C	0.587	C	0.00	No
9. Black Mountain Road s/o Carmel Mountain Road	0.459	B	0.443	B	-0.02	No
10. Black Mountain Road between Paseo Montalban & Twin Trails Drive	0.446	B	0.430	B	-0.02	No
11. Black Mountain Road s/o Twin Trails Drive	0.634	C	0.939	E	0.31	Yes
12. Black Mountain Road between SR-56 westbound & eastbound ramps	0.578	B	0.857	D	0.28	No
13. Black Mountain Road n/o Park Village Road - Adolphia Street	0.732	C	0.888	E	0.16	Yes
14. Black Mountain Road n/o Canyonside Park Drive	0.674	C	0.867	D	0.19	No
15. Black Mountain Road between Mercy Road & Babuta Road	0.640	C	0.549	B	-0.09	No
16. Black Mountain Road s/o Westview Parkway	0.493	B	0.423	B	-0.07	No
17. Westview Parkway e/o Black Mountain Road	0.295	A	0.240	A	-0.06	No
18. Carmel Mountain Road between Paseo Aldabra & Sundevil Way	0.367	A	0.370	A	0.00	No
19. Carmel Mountain Road between Paseo Montalban & SR-56 westbound ramps	0.567	C	0.574	C	0.01	No
20. Rancho Peñasquitos Blvd between SR-56 EB Ramps - Azuaga St & Calle De Las Rosas	0.655	C	0.688	C	0.03	No
21. Rancho Peñasquitos Boulevard between Calle De Las Rosas & Via Del Sud	0.672	C	0.705	C	0.03	No
22. Rancho Peñasquitos Boulevard between Paseo Montrail & I-15 southbound ramps	0.790	D	0.828	D	0.04	No
23. Poway Road e/o I-15 northbound ramps	0.887	D	0.887	D	0.00	No
24. Carmel Mountain Road s/o Sundance Avenue	0.245	A	0.250	A	0.01	No
25. Carmel Mountain Road w/o Sparren Avenue	0.222	A	0.233	A	0.01	No
26. Carmel Mountain Road w/o Black Mountain Road	0.260	A	0.265	A	0.01	No
27. Sundance Avenue w/o War Bonnet Street*	-	-	-	-	-	-
28. Carmel Mountain Road e/o Freeport Road	0.361	A	0.360	A	0.00	No
29. Carmel Mountain Road between Peñasquitos Drive & Gerana Street	0.435	B	0.434	B	0.00	No
30. Carmel Mountain Road between I-15 southbound ramps & Peñasquitos Drive	0.736	C	0.733	C	0.00	No
31. Carmel Mountain Road e/o I-15 northbound ramps	0.880	D	0.877	D	0.00	No

**Table 4.2-9
Horizon Year Comparison of Roadway Segment Conditions**

Segment Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Difference	Impact
	V/C	LOS	V/C	LOS		
32. Camino Del Sur n/o Park Village Road	0.268	A	0.255	A	-0.01	No
33. Park Village Road e/o Camino Del Sur	0.315	A	0.293	A	-0.02	No
34. Park Village Road w/o Black Mountain Road	0.444	B	0.440	B	0.00	No
35. Mercy Road between Chabola Road & Branicole Lane	0.467	B	0.436	B	-0.03	No
36. Mercy Road n/o Alemania Road	0.592	C	0.561	C	-0.03	No
37. Scripps Poway Parkway e/o I-15 northbound ramps	1.057	F	1.033	F	-0.02	No

W/O Project = Without Project

W/Project = With Project

BMR = Black Mountain Road

V/C = volume/capacity

LOS = level of service

SR-56 = State Route 56

I-15 = Interstate 15

s/o = south of

n/o = north of

e/o = east of

w/o = west of

*Capacity for local residential street not specified in San Diego Traffic Impact Study Manual, July 2008.

Table 4.2-10a
Horizon Year AM Peak Hour Intersection Conditions

Intersection Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Comparison	
	Delay	LOS	Delay	LOS	Δ Delay	Impact
1. Camino Del Sur/Carmel Valley Road	56.7	E	56.0	E	-0.7	No
2. Camino Del Sur/Watson Ranch Road	8.4	A	8.3	A	-0.1	No
3. Camino Del Sur/Wolverine Way – Fallhaven Road	22.2	C	20.4	C	-1.8	No
4. Camino Del Sur/Torrey Meadows Drive	16.5	B	16.7	B	0.2	No
5. Camino Del Sur/Highlands Village Place	15.4	B	14.9	B	-0.5	No
6. Camino Del Sur/SR-56 westbound ramps	17.5	B	17.8	B	0.3	No
7. Camino Del Sur/SR-56 eastbound ramps	10.4	B	10.2	B	-0.2	No
8. Camino Del Sur/Torrey Santa Fe Road	13.4	B	13.3	B	-0.1	No
9. Black Mountain Road/Carmel Valley Road	22.3	C	22.5	C	0.2	No
10. Black Mount Road/Maler Road	7.8	A	8.0	A	0.2	No
11. Black Mountain Road/Stargaze Avenue	14.7	B	13.4	B	-1.3	No
12. Black Mountain Road/Oviedo Street	17.0	B	26.3	C	9.3	No
13. Black Mountain Road/Carmel Mountain Road	44.0	D	47.9	D	3.9	No
14. Black Mountain Road/Paseo Montalban	12.4	B	12.8	B	0.4	No
15. Black Mountain Road/Twin Trails Drive	52.9	D	54.4	D	1.5	No
16. Black Mountain Road/SR-56 westbound ramps	47.3	D	45.0	D	-2.3	No
17. Black Mountain Road/SR-56 eastbound ramps	22.4	C	23.1	C	0.7	No
18. Black Mountain Road/Park Village Road – Adolphia Street	33.9	C	37.3	D	3.4	No
19. Black Mountain Road/Canyonside Park Drive	2.5	A	5.2	A	2.7	No
20. Black Mountain Road/Mercy Road	24.4	C	27.4	C	3.0	No
21. Black Mountain Road/Westview Parkway	16.3	B	14.5	B	-1.8	No
22. Carmel Mountain Road/Sundevil Way	16.0	B	15.6	B	-0.4	No
23. Carmel Mountain Road/Paseo Montalban	24.0	C	23.8	C	-0.2	No
24. Carmel Mountain Road/SR-56 westbound ramps – Rancho Peñasquitos Boulevard	45.7	D	46.0	D	0.3	No
25. Rancho Peñasquitos Boulevard/SR-56 eastbound ramps - Azuaga Street	24.8	C	24.2	C	-0.6	No
26. Rancho Peñasquitos Boulevard/Calle De Las Rosas	10.3	B	9.9	A	-0.4	No
27. Rancho Peñasquitos Boulevard/Via Del Sud	4.3	A	4.6	A	0.3	No
28. Rancho Peñasquitos Boulevard/Paseo Montrail	13.6	B	13.6	B	0.0	No
29. Rancho Peñasquitos Boulevard/I-15 southbound off-ramp	8.2	A	8.4	A	0.2	No
30. Rancho Peñasquitos Boulevard/I-15 northbound off-ramp	15.0	B	15.6	B	0.6	No
31. Carmel Mountain Road/(West) Sundance Avenue	12.9	B	12.9	B	0.0	No
32. Carmel Mountain Road/Sedorus Street (all-way stop control)*	8.2	A	8.1	A	-0.1	No
33. Carmel Mountain Road/Entreken Way	22.6	C	22.6	C	0.0	No
34. Sparren Avenue/Carmel Mountain Road	32.1	C	28.2	C	-3.9	No

Table 4.2-10a
Horizon Year AM Peak Hour Intersection Conditions

Intersection Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Comparison	
	Delay	LOS	Delay	LOS	Δ Delay	Impact
35. Twin Trails Drive/Carmel Mountain Road	25.9	C	29.5	C	3.6	No
36. (East) Sundance Avenue/Carmel Mountain Road (two-way stop control)**	15.5	C	15.2	C	-0.3	No
37. Sundance Avenue/Twin Trails Drive (all-way stop control)	38.8	E	46.4	E	7.6	Yes
38. Peñasquitos Post Office Driveway/Twin Trails Drive	18.3	B	18.4	B	0.1	No
39. Twin Trails Drive/Fairgrove Lane (all-way stop control)	8.0	A	8.1	A	0.1	No
40. Twin Trails Drive/Paseo Montalban	11.0	B	11.1	B	0.1	No
41. Salmon River Road/Paseo Montalban	13.9	B	13.2	B	-0.7	No
42. Salmon River Road/Cairgrove Lane (all-way stop control)	8.0	A	8.0	A	0.0	No
43. Salmon River Road/Adolphia Street – Limar Way (all-way stop control)	7.5	A	7.5	A	0.0	No
44. Paseo Cardiel/Carmel Mountain Road	20.2	C	20.3	C	0.1	No
45. Freeport Road/Carmel Mountain Road	5.8	A	6.4	A	0.6	No
46. Stoney Creek Road/Carmel Mountain Road	9.0	A	8.9	A	-0.1	No
47. Cuca Street – Caminata Deluz/Carmel Mountain Road	12.2	B	12.2	B	0.0	No
48. Peñasquitos Drive/Carmel Mountain Road	29.0	C	29.0	C	0.0	No
49. I-15 southbound ramps/Carmel Mountain Road	19.7	B	20.1	C	0.4	No
50. I-15 northbound ramps/Carmel Mountain Road	25.2	C	25.3	C	0.1	No
51. Camino Del Sur/Park Village Road	51.6	D	45.6	D	-6.0	No
52. Rumex Lane/Park Village Road	7.8	A	7.9	A	0.1	No
53. Ragweed Street/Park Village Road	16.0	B	16.4	B	0.4	No
54. Mercy Road/Kika Court	7.8	A	7.8	A	0.0	No
55. Alemania Road/Mercy Road	9.8	A	9.9	A	0.1	No
56. I-15 southbound ramps/Mercy Road	35.5	D	34.8	C	-0.7	No
57. I-15 northbound ramps/Mercy Road – Scripps Poway Parkway	77.0	E	70.1	E	-6.9	No
<p>*Assumes a signalization upgrade in 2050 scenarios.</p> <p>**Worst case control delay and LOS shown.</p> <p>W/O Project = Without Project</p> <p>W/Project = With Project</p> <p>BMR = Black Mountain Road</p> <p>LOS = level of service</p> <p>Δ Delay = change in delay</p> <p>SR-56 = State Route 56</p> <p>I-15 = Interstate 15</p>						

Table 4.2-10b
Horizon Year PM Peak Hour Intersection Conditions

Intersection Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Difference	
	Delay	LOS	Delay	LOS	Delay	Impact
1. Camino Del Sur/Carmel Valley Road	45.9	D	45.4	D	-0.5	No
2. Camino Del Sur/Watson Ranch Road	6.7	A	5.6	A	-1.1	No
3. Camino Del Sur/Wolverine Way - Fallhaven Road	20.2	C	18.3	B	-1.9	No
4. Camino Del Sur/Torrey Meadows Drive	13.7	B	14.0	B	0.3	No
5. Camino Del Sur/Highlands Village Place	16.6	B	16.8	B	0.2	No
6. Camino Del Sur/SR-56 westbound ramps	19.7	B	20.2	C	0.5	No
7. Camino Del Sur/SR-56 eastbound ramps	16.8	B	16.8	B	0.0	No
8. Camino Del Sur/Torrey Santa Fe Road	19.2	B	19.7	B	0.5	No
9. Black Mountain Road/Carmel Valley Road	47.9	D	48.8	D	0.9	No
10. Black Mount Road/Maler Road	7.5	A	7.6	A	0.1	No
11. Black Mountain Road/Stargaze Avenue	14.0	B	14.8	B	0.8	No
12. Black Mountain Road/Oviedo Street	17.6	B	26.0	C	8.4	No
13. Black Mountain Road/Carmel Mountain Road	28.5	C	28.3	C	-0.2	No
14. Black Mountain Road/Paseo Montalban	14.8	B	15.1	B	0.3	No
15. Black Mountain Road/Twin Trails Drive	40.5	D	32.0	C	-8.5	No
16. Black Mountain Road/SR-56 westbound ramps	34.4	C	34.7	C	0.3	No
17. Black Mountain Road/SR-56 eastbound ramps	26.1	C	26.2	C	0.1	No
18. Black Mountain Road/Park Village Road - Adolphia Street	29.7	C	29.4	C	-0.3	No
19. Black Mountain Road/Canyonside Park Drive	4.8	A	6.8	A	2.0	No
20. Black Mountain Road/Mercy Road	37.2	D	31.8	C	-5.4	No
21. Black Mountain Road/Westview Parkway	22.7	C	20.5	C	-2.2	No
22. Carmel Mountain Road/Sundevil Way	14.6	B	14.6	B	0.0	No
23. Carmel Mountain Road/Paseo Montalban	23.3	C	23.1	C	-0.2	No
24. Carmel Mountain Road/SR-56 westbound ramps - Rancho Peñasquitos Boulevard	35.6	D	35.3	D	-0.3	No
25. Rancho Peñasquitos Boulevard/SR-56 eastbound ramps - Azuaga Street	70.7	E	69.4	E	-1.3	No
26. Rancho Peñasquitos Boulevard/Calle De Las Rosas	9.5	A	10.0	A	0.5	No
27. Rancho Peñasquitos Boulevard/Via Del Sud	3.9	A	4.5	A	0.6	No
28. Rancho Peñasquitos Boulevard/Paseo Montrail	14.5	B	14.5	B	0.0	No
29. Rancho Peñasquitos Boulevard/I-15 southbound off-ramp	9.7	A	9.7	A	0.0	No
30. Rancho Peñasquitos Boulevard/I-15 northbound off-ramp	19.4	B	20.6	C	1.2	No
31. Carmel Mountain Road/(West) Sundance Avenue	16.0	B	16.5	B	0.5	No
32. Carmel Mountain Road/Sedorus Street (all-way stop control)*	5.2	A	5.1	A	-0.1	No
33. Carmel Mountain Road/Entreken Way	12.6	B	12.5	B	-0.1	No
34. Sparren Avenue/Carmel Mountain Road	20.1	C	20.2	C	0.1	No
35. Oviedo Street/Carmel Mountain Road	20.1	C	19.6	B	-0.5	No

Table 4.2-10b
Horizon Year PM Peak Hour Intersection Conditions

Intersection Number and Name	2050 W/O Project (BMR as 6 Lanes)		2050 W/ Project (BMR as 4 Lanes)		Difference	
	Delay	LOS	Delay	LOS	Delay	Impact
36. (East) Sundance Avenue/Carmel Mountain Road (two-way stop control)**	10.3	B	10.3	B	0.0	No
37. Sundance Avenue/Twin Trails Drive (all-way stop control)	23.8	C	27.5	D	3.7	No
38. Peñasquitos Post Office Driveway/Twin Trails Drive	26.6	C	26.1	C	-0.5	No
39. Twin Trails Drive/Cairgrove Lane (all-way stop control)	9.1	A	9.2	A	0.1	No
40. Twin Trails Drive/Paseo Montalban	12.9	B	13.0	B	0.1	No
41. Salmon River Road/Paseo Montalban	15.1	B	11.9	B	-3.2	No
42. Salmon River Road/Fairgrove Lane (all-way stop control)	8.8	A	8.9	A	0.1	No
43. Salmon River Road/Adolphia Street - Limar Way (all-way stop control)	7.9	A	7.9	A	0.0	No
44. Paseo Cardiel/Carmel Mountain Road	25.1	C	27.3	C	2.2	No
45. Freeport Road/Carmel Mountain Road	5.1	A	7.5	A	2.4	No
46. Stoney Creek Road/Carmel Mountain Road	4.2	A	3.7	A	-0.5	No
47. Cuca Street - Caminata Deluz/Carmel Mountain Road	10.9	B	10.8	B	-0.1	No
48. Peñasquitos Drive/Carmel Mountain Road	30.9	C	30.8	C	-0.1	No
49. I-15 southbound ramps/Carmel Mountain Road	35.4	D	35.5	D	0.1	No
50. I-15 northbound ramps/Carmel Mountain Road	50.5	D	51.4	D	0.9	No
51. Camino Del Sur/Park Village Road	23.7	C	23.8	C	0.1	No
52. Rumex Lane/Park Village Road	6.9	A	7.0	A	0.1	No
53. Ragweed Street/Park Village Road	16.1	B	16.6	B	0.5	No
54. Mercy Road/Kika Court	8.3	A	7.5	A	-0.8	No
55. Alemania Road/Mercy Road	10.6	B	10.3	B	-0.3	No
56. I-15 southbound ramps/Mercy Road	40.5	D	37.6	D	-2.9	No
57. I-15 northbound ramps/Mercy Road - Scripps Poway Parkway	61.7	E	52.9	D	-8.8	No

* Assumes a signalization upgrade in 2050 scenarios.

** Worst case control delay and LOS shown.

W/O Project = Without Project

W/Project = With Project

BMR = Black Mountain Road

LOS = level of service

SR-56 = State Route 56

I-15 = Interstate 15

Table 4.2-11a
Horizon Year Freeway Mainline Analysis SR-56 Westbound and Eastbound

Freeway Segment	AM/PM	LOS E Capacity	Long Term Without Project (BMR 6-lanes)			Long Term With Project (BMR 4-lanes)			Comparison	
			PHV	V/C	LOS	PHV	V/C	LOS	Δ V/C	Significant?
SR-56 Westbound										
West of Camino del Sur	AM	7,050	7,984	1.132	F	8,011	1.136	F	0.004	No
	PM	7,050	2,937	0.417	B	2,947	0.418	B	0.001	No
Camino del Sur to Black Mountain Road	AM	7,050	7,888	1.119	F	7,925	1.124	F	0.005	No
	PM	7,050	2,902	0.412	B	2,916	0.414	B	0.002	No
Black Mountain Road to Rancho Peñasquitos Boulevard	AM	8,850	7,147	0.808	D	7,062	0.798	C	-0.010*	No
	PM	8,850	2,629	0.297	A	2,598	0.294	A	-0.003*	No
Rancho Peñasquitos Blvd to I-15 Interchange	AM	7,050	7,026	0.997	E	6,928	0.983	E	-0.014*	No
	PM	7,050	2,585	0.367	A	2,549	0.362	A	-0.005*	No
SR-56 Eastbound										
West of Camino del Sur	AM	7,050	3,060	0.434	B	3,071	0.436	B	0.002	No
	PM	7,050	7,838	1.112	F	7,864	1.115	F	0.003	No
Camino del Sur to Black Mountain Road	AM	7,050	3,024	0.429	B	3,038	0.431	B	0.002	No
	PM	7,050	7,744	1.098	F	7,780	1.104	F	0.006	Yes
Black Mountain Road to Rancho Peñasquitos Boulevard	AM	7,050	2,739	0.389	A	2,707	0.384	A	-0.005*	No
	PM	7,050	7,016	0.995	E	6,933	0.983	E	-0.012*	No
Rancho Peñasquitos Blvd to I-15 Interchange	AM	7,050	2,693	0.382	A	2,656	0.377	A	-0.005*	No
	PM	7,050	6,897	0.978	E	6,802	0.965	E	-0.013*	No
Peak Hour Volume = (ADT)(K)(D)/(Truck Factor)										
W/O Project = Without Project; W/Project = With Project; BMR = Black Mountain Road; LOS = level of service; Δ V/C = change in peak hour volume/capacity;										
SR-56 = State Route 56; I-15 = Interstate 15; PHV = peak hour volume; V/C = peak hour volume/capacity										
* These locations see decrease in V/C due to decreased total average daily traffic (ADT) per model runs. See Appendix E for San Diego Association of Governments (SANDAG) models. See description in Freeway Mainline portion of Chapter 4 for discussion.										
Truck Source: 2013 Annual Average Daily Truck Traffic on the California State Highway System										
ADT Source: SANDAG Modeling (Appendix E)										
K/D Source: 2013 K and D Factors on the California State Highway System										
Hourly Capacity Assumptions:										
Mainline – 2,350 vehicles per hour										
Auxiliary – 1,800 vehicles per hour										
Managed – 1,680 vehicles per hour										
High occupancy vehicle lane – 1,600 vehicles per hour										

Table 4.2-11b
Horizon Year Freeway Mainline Analysis I-15 Northbound and Southbound

Freeway Segment	AM/PM	LOS E Hourly Capacity	Long Term Without Project (BMR 6-lanes)			Long Term With Project (BMR 4-lanes)			Comparison	
			PHV	V/C	LOS	PHV	V/C	LOS	Δ V/C	Significant?
I-15 Northbound										
South of Mercy Rd	AM	16,910	21,045	1.245	F	20,952	1.239	F	-0.006*	No
	PM	16,910	15,511	0.917	D	15,442	0.913	D	-0.004*	No
Mercy Road to Rancho Peñasquitos Blvd	AM	16,910	20,460	1.210	F	20,211	1.195	F	-0.015*	No
	PM	16,910	15,080	0.892	D	14,896	0.881	D	-0.011*	No
Rancho Peñasquitos Blvd to Ted Williams Pkwy	AM	15,110	18,824	1.246	F	18,612	1.232	F	-0.014*	No
	PM	15,110	13,874	0.918	D	13,717	0.908	D	-0.010*	No
Ted Williams Pkwy to Carmel Mountain Rd	AM	16,910	18,503	1.094	F	18,501	1.094	F	0.000	No
	PM	16,910	13,638	0.807	D	13,636	0.806	D	-0.001*	No
North of Carmel Mountain Rd	AM	16,910	19,356	1.145	F	19,374	1.146	F	0.001	No
	PM	16,910	11,821	0.699	C	11,832	0.700	C	0.001	No
I-15 Southbound										
South of Mercy Road	AM	16,910	15,447	0.913	D	15,379	0.909	D	-0.004*	No
	PM	16,910	20,797	1.230	F	20,705	1.224	F	-0.006*	No
Mercy Road to Rancho Peñasquitos Blvd	AM	16,910	15,018	0.888	D	14,835	0.877	D	-0.011*	No
	PM	16,910	20,219	1.196	F	19,973	1.181	F	-0.015*	No
Rancho Peñasquitos Blvd to Ted Williams Pkwy	AM	16,910	13,817	0.817	D	13,661	0.808	D	-0.009*	No
	PM	16,910	18,602	1.100	F	18,393	1.088	F	-0.012*	No
Ted Williams Pkwy to Carmel Mountain Rd	AM	16,910	13,582	0.803	D	13,580	0.803	D	0.000	No
	PM	16,910	18,286	1.081	F	18,283	1.081	F	0.000	No
North of Carmel Mountain Rd	AM	15,110	8,454	0.559	B	8,462	0.560	B	0.001	No
	PM	15,110	19,329	1.279	F	19,347	1.280	F	0.001	No

Peak Hour Volume = (ADT)(K)(D)/(Truck Factor)

W/O Project = Without Project; W/Project = With Project; BMR = Black Mountain Road; LOS = level of service; Δ V/C = change in peak hour volume/capacity;

SR-56 = State Route 56; I-15 = Interstate 15; PHV = peak hour volume; V/C = peak hour volume/capacity

* These locations see decrease in V/C due to decreased total average daily traffic (ADT) per model runs. See Appendix E for San Diego Association of Governments (SANDAG) models. See description in Freeway Mainline portion of Chapter 4 for discussion.

Truck Source: 2013 Annual Average Daily Truck Traffic on the California State Highway System

ADT Source: SANDAG Modeling (Appendix E)

K/D Source: 2013 K and D Factors on the California State Highway System

Hourly Capacity Assumptions: mainline - 2350 vehicles per hour; auxiliary - 1800 vehicles per hour; managed - 1680 vehicles per hour;

high occupancy vehicle lane - 1600 vehicles per hour

The initial future model volumes tend to have around 1,000 to 2,000 average daily traffic (ADT) more on these two freeways within these limits, and beyond those limits the differences are minimal. Similarly, the portion of Peñasquitos Boulevard to the west of I-15 and northerly to SR-56 also has about 1,000 more ADT on the 4-lane alternative for Black Mountain Road presumably due to bypass traffic that otherwise would have been using Black Mountain Road.

d. Metered Freeway On-Ramps

As shown in Table 4.2-12, a significant impact was identified for the following on-ramp:

Impact TRA-5: Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): the project would increase an average delay from approximately 21 minutes to 24 minutes.

After completion of traffic modeling associated with implementation of the CPA, the TIS also evaluated traffic operations associated with restriping of the bridge segment of Black Mountain Road that crosses SR-56 that would increase the northbound to westbound left-turn pocket storage and improve the flow of northbound traffic. A complete description of the project design feature is presented below:

Restripe the segment of Black Mountain Road between the SR-56 westbound ramps and SR-56 eastbound ramps to include an additional northbound lane along Black Mountain Road from the SR-56 eastbound ramps to the middle of the overpass. To accommodate the additional northbound lane created by this restriping on the overpass, it is estimated that the roadway north of the overpass bridge would need to be widened by up to 22 feet for northbound traffic. The widening would extend approximately 0.15 mile from the SR56 westbound off-ramp to the first commercial driveway.

Table 4.2-13 presents traffic operations for the Black Mountain Road/SR-56 eastbound and westbound on-ramp intersections with implementation of the project design feature. Although LOS would not change, delay would decrease for the Black Mountain Road/SR-56 eastbound ramp during the AM and PM peak hours, and would decrease for the Black Mountain Road/SR-56 westbound ramp during the AM peak hour. The slight increase in delay of 0.3 second for the Black Mountain Road/SR-56 westbound ramp during the PM peak hour would be negligible.

Table 4.2-12
Horizon Year Freeway Interchange On-Ramp Metering Delay

Location	# of Lanes	Meter Rate (veh/hr/ lane)	Meter Rate (veh/hr)	Without Project				With Project				Comparison	
				Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Δ Delay	Significant
AM Peak Hour													
Camino del Sur – SR-56 WB ramp	2	435	870	718	0	0	0	702	0	0	0	0	No
Camino del Sur – SR-56 WB Ramp (HOV)	1	435	435	80	0	0	0	78	0	0	0	0	No
Black Mountain Road – SR-56 WB ramp	2	520	1,040	1,524	484	28	14,027	1,503	463	27	13,427	-1	No
Black Mountain Road – SR-56 WB Ramp (HOV)	1	520	520	169	0	0	0	167	0	0	0	0	No
Rancho Peñasquitos – SR-56 WB ramp	1	600	600	811	211	21	6,119	835	235	24	6,815	3	Yes
Carmel Mountain Road – I-15 SB ramp	2	367	734	909	175	14	5,075	905	171	14	4,971	0	No
Carmel Mountain Road – I-15 SB ramp (HOV)	1	367	367	101	0	0	0	101	0	0	0	0	No
Rancho Peñasquitos – I-15 SB ramp - Loop WB->SB	2	492	984	1,733	749	46	21,721	1,737	735	46	21,837	0	No
Rancho Peñasquitos – I-15 SB ramp - EB->SB	2	492	984	797	0	0	0	801	0	0	0	0	No
Mercy Road – I-15 SB ramp	2	420	840	1,294	454	32	13,172	1,227	387	28	11,214	-4	No
Mercy Road – I-15 SB ramp (HOV)	1	420	420	144	0	0	0	136	0	0	0	0	No
PM Peak Hour													
Camino del Sur – SR-56 EB ramp	2	480	960	1,212	252	16	7,317	1,176	216	14	6,273	-2	No
Camino del Sur – SR-56 EB ramp (HOV)	1	480	480	135	0	0	0	131	0	0	0	0	No
Black Mountain Road – SR-56 EB ramp	2	600	1,200	773	0	0	0	717	0	0	0	0	No
Black Mountain Road – SR-56 EB ramp (HOV)	1	600	600	86	0	0	0	80	0	0	0	0	No
Rancho Peñasquitos – SR-56 EB ramp	2	300	600	198	0	0	0	201	0	0	0	0	No
Carmel Mountain Road – I-15 SB ramp	2	473	946	1,215	269	17	7,801	1,211	265	17	7,671	0	No
Carmel Mountain Road – I-15 SB ramp (HOV)	1	473	473	135	0	0	0	135	0	0	0	0	No
Carmel Mountain Road – I-15 NB ramp	2	463	926	849	0	0	0	846	0	0	0	0	No
Carmel Mountain Road – I-15 NB ramp (HOV)	1	463	463	94	0	0	0	94	0	0	0	0	No

Table 4.2-12
Horizon Year Freeway Interchange On-Ramp Metering Delay

Location	# of Lanes	Meter Rate (veh/hr/lane)	Meter Rate (veh/hr)	Without Project				With Project				Comparison	
				Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Demand (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Δ Delay	Significant
Rancho Peñasquitos – I-15 SB ramp - Loop WB->SB	2	576	1,152	1,001	0	0	0	1,003	0	0	0	0	No
Rancho Peñasquitos – I-15 SB ramp - EB->SB	2	576	1,152	791	0	0	0	795	0	0	0	0	No
Rancho Peñasquitos – I-15 NB ramp - WB->NB	1	335	335	507	172	31	4,988	508	173	31	5,017	0	No
Rancho Peñasquitos – I-15 NB ramp - Loop EB->NB	1	335	335	153	0	0	0	154	0	0	0	0	No
Mercy Road - I15 SB ramp	2	406	812	1,403	591	44	17,142	1,330	518	38	15,028	-6	No
Mercy Road - I15 SB ramp (HOV)	1	406	406	156	0	0	0	148	0	0	0	0	No
Mercy Road - I15 NB ramp	2	270	540	1,141	601	67	17,435	1,116	576	64	16,704	-3	No

Source: Caltrans January 2015

veh/hr = vehicles per hour

Δ Delay = change in delay

NB = northbound

EB = eastbound

SB = southbound

WB = westbound

SR-56 = State Route 56

I-15 = Interstate 15

HOV – high occupancy vehicle lane

Meter rate is based on the most restrictive meter rate provided by Caltrans, see Appendix B.

HOV demand is equal to 10% of total demand.

Combined meter rate = (meter rate per lane) * (# of lanes)

Excess demand = (demand * # of lanes) - (combined meter rate); if Excess Demand <0, then excess demand = 0.

Delay = excess demand/combined meter rate queue = excess demand * 29 feet/vehicle

Table 4.2-13 Black Mountain Road/SR-56 Intersection Operations							
Location	Peak Hour	2050 Without Project (BMR as 6 Lanes)		2050 With Project (BMR as 4 Lanes)		2050 With Project and Restriping	
		Delay	LOS	Delay	LOS	Delay	LOS
Black Mountain Road/SR-56 WB ramp	AM	47.3	D	45.0	D	45.0	D
	PM	34.4	C	34.7	C	34.7	C
Black Mountain Road/SR-56 EB ramp	AM	22.4	C	23.1	C	21.6	C
	PM	26.1	C	26.2	C	23.6	C
BMR = Black Mountain Road LOS = level of service SR-56 = State Route 56							

4.2.4.3 Significance of Impacts

As shown above, the project would result in significant impacts to the following one intersection, two roadway segments, one freeway segment, and one freeway on-ramp:

a. Roadway Segments

Impact TRA-1: Black Mountain Road south of Twin Trails Drive: V/C ratio increases from 0.634 to 0.939, and segment operations would decrease from LOS C to LOS E.

Impact TRA-2: Black Mountain Road north of Park Village Road – Adolphia Street: V/C ratio increases from 0.732 to 0.886, and segment operations would decrease from LOS C to LOS E.

b. Intersections

Impact TRA-3: Sundance Avenue and Twin Trails Drive (AM peak hour): average delay increases from 38.8 to 46.4 seconds (an increase greater than 2.0 seconds) and continues to operate at LOS E.

c. Freeway Segments

Impact TRA-4: Eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour): V/C ratio increases from 1.098 to 1.104 and continues to operate at LOS F.

d. Metered Freeway On-Ramps

Impact TRA-5: Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): average delay increases from approximately 21 minutes to approximately 24 minutes. This metered freeway on-ramp empties onto the westbound segment of SR-56 from Rancho Peñasquitos Boulevard to Black Mountain Road. This freeway segment would operate at LOS C in the AM peak hour and LOS A in the PM peak hour under the project's horizon year conditions (see Table 4.2-11a).

4.2.4.4 Mitigation

a. Roadway Segments

Per the TIS, mitigation was not identified to improve roadway segment operations on Black Mountain Road south of Twin Trails Drive (Impact TRA-1) and north of Park Village Road – Adolphia Street (Impact TRA-2). Mitigation for these roadway segments would require widening of Black Mountain Road that would be inconsistent with the project's objectives to maintain consistency with the community's current transportation network, maintain consistency with the City goals to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel, and to preserve the existing character of the community.

b. Intersections

MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.

c. Freeway Segments

MM-TRA-2: Construct a continuous auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road.

d. Metered Freeway On-Ramps

MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp.

4.2.4.5 Significance after Mitigation

Table 4.2-14 shows that implementation of MM-TRA-1 through MM-TRA-3 would improve operations at the impacted intersection, freeway segment, and freeway on-ramp to acceptable levels.

**Table 4.2-14
Mitigation Summary**

Mitigation Measure	Location	Peak Hour	2050 Without Project (BMR as 6 Lanes)		2050 With Project (BMR as 4 Lanes)		2050 With Project and With Mitigation	
			Delay or V/C	LOS	Delay or V/C	LOS	Delay or V/C	LOS
MM-TRA-1	Traffic signal at the Intersection of Sundance Avenue and Twin Trails Drive	AM	38.8 sec	E	46.4 sec	E	7.8 sec	A
MM-TRA-2	Auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road	PM	1.098	E	1.104	E	0.879	D
MM-TRA-3	Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp	AM	21 min	N/A	24 min	N/A	No Delay	N/A
BMR = Black Mountain Road V/C = volume/capacity LOS = level of service SR-56 = State Route 56								

a. Roadway Segments

Per the TIS, mitigation was not identified to improve roadway segment operations on Black Mountain Road south of Twin Trails Drive and north of Park Village Road – Adolphia Street. Mitigation for these roadway segments would require widening of Black Mountain Road that would be inconsistent with the project's objectives to maintain consistency with the community's current transportation network, maintain consistency with the City goals to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel, and to preserve the existing character of the community. Therefore, impacts on two roadway segments of Black Mountain Road would remain significant and unavoidable.

b. Intersections

Implementation of MM-TRA-1 would reduce impacts at the intersection of Sundance Avenue and Twin Trails Drive to a level less than significant.

c. Freeway Segments

Implementation of MM-TRA-2 would reduce impacts on eastbound SR-56 between Camino Del Sur and Black Mountain Road to a level less than significant. However, SR-56 is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the

recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour) would remain significant and unavoidable.

d. Metered Freeway On-Ramps

Implementation of MM-TRA-3 would reduce impacts at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp to a level less than significant. However, the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would remain significant and unavoidable.

4.2.5 Issue 4: Traffic Hazards

Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access restricted roadway)?

4.2.5.1 Thresholds

Refer to Section 4.2.3.

4.2.5.2 Impacts

Project construction is limited to roadway improvements associated with the project design feature and MM-TRA-1 through MM-TRA-3. The project design feature and three mitigation measures would be designed consistent with the alignments of the existing roadway facilities and would not create new intersections, on- or off-ramps, or otherwise create new vehicular access. Furthermore, the project design feature and three mitigation measures would be designed and implemented consistent with applicable City and Caltrans safety regulations and design criteria.

4.2.5.3 Significance of Impacts

Implementation of the project design feature and MM-TRA-1 through MM-TRA-3 would not result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians due to a proposed non-standard design feature, and impacts would be less than significant.

4.2.5.4 Mitigation

Impacts would be less than significant. No mitigation is required.

4.2.6 Issue 5: Alternative Transportation

Would the project conflict with adopted policies, plans, or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks)?

4.2.6.1 Thresholds

Refer to Section 4.2.3.

4.2.6.2 Impacts

Implementation of the Project would not impact any existing transit facilities and would maintain the existing sidewalks and bike lanes along the project roadway. Widening of the segment of Black Mountain Road north of the SR-56 westbound off-ramp associated with the project design feature may temporarily restrict access to the existing sidewalk and bike lane segments on the bridge segment that crosses SR-56 during construction. However, these impacts would be temporary and cease upon project completion. Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternative transportation models.

4.2.6.3 Significance of Impacts

Impacts would be less than significant. No mitigation is required.

4.2.6.4 Mitigation

Impacts would be less than significant. No mitigation is required.

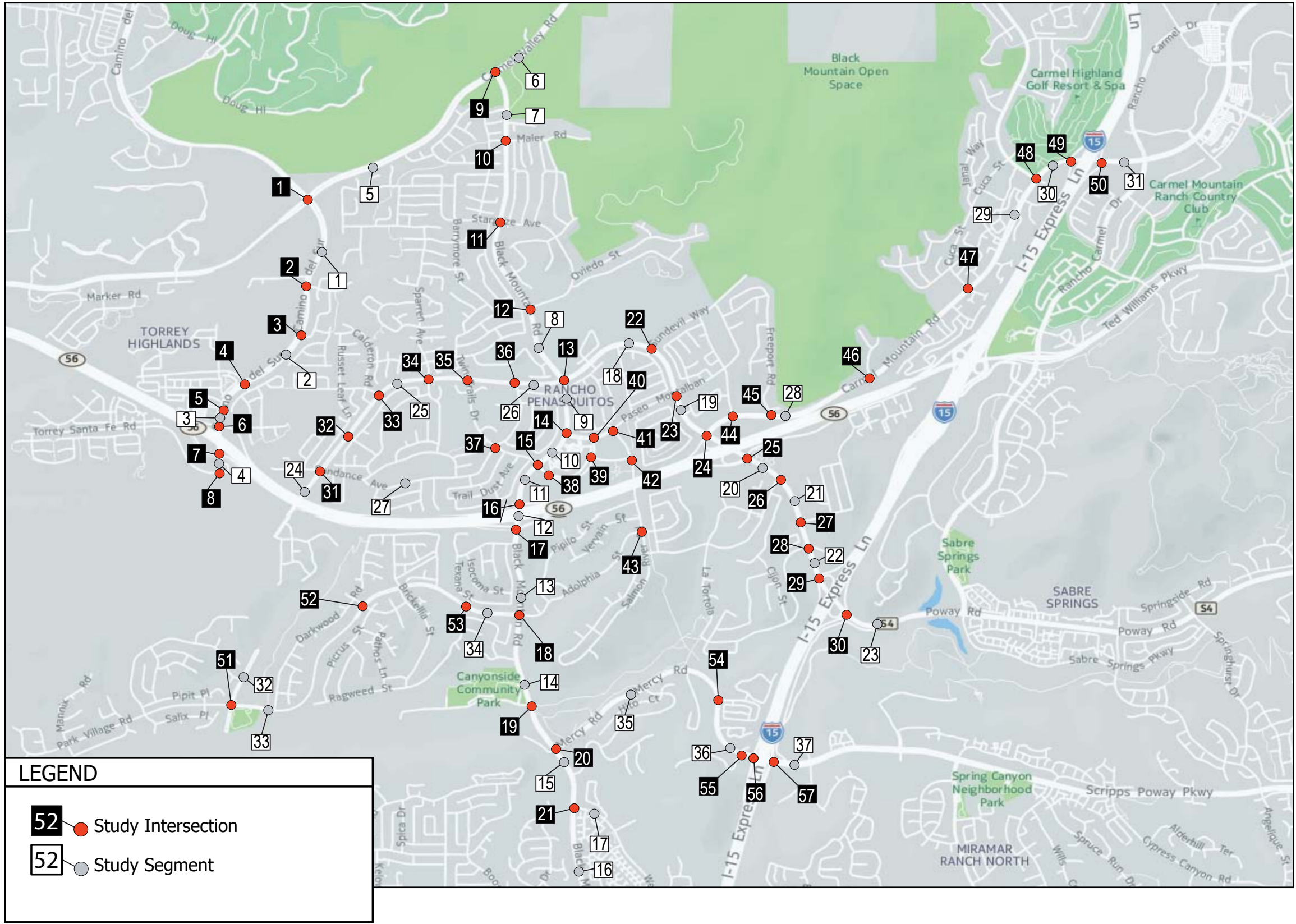


FIGURE 4.2-1
Traffic Study Area

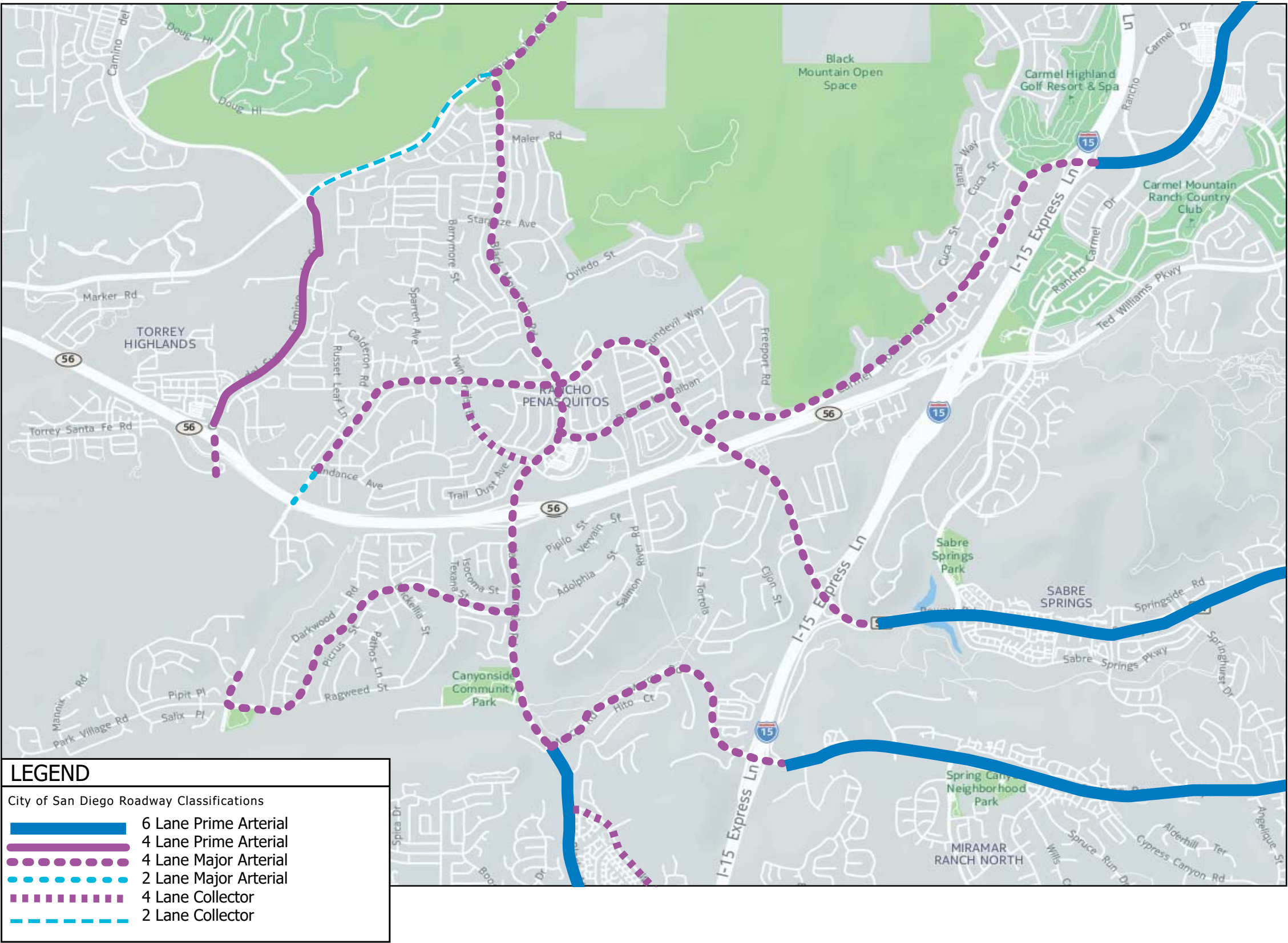


FIGURE 4.2-2
Existing Roadway Network

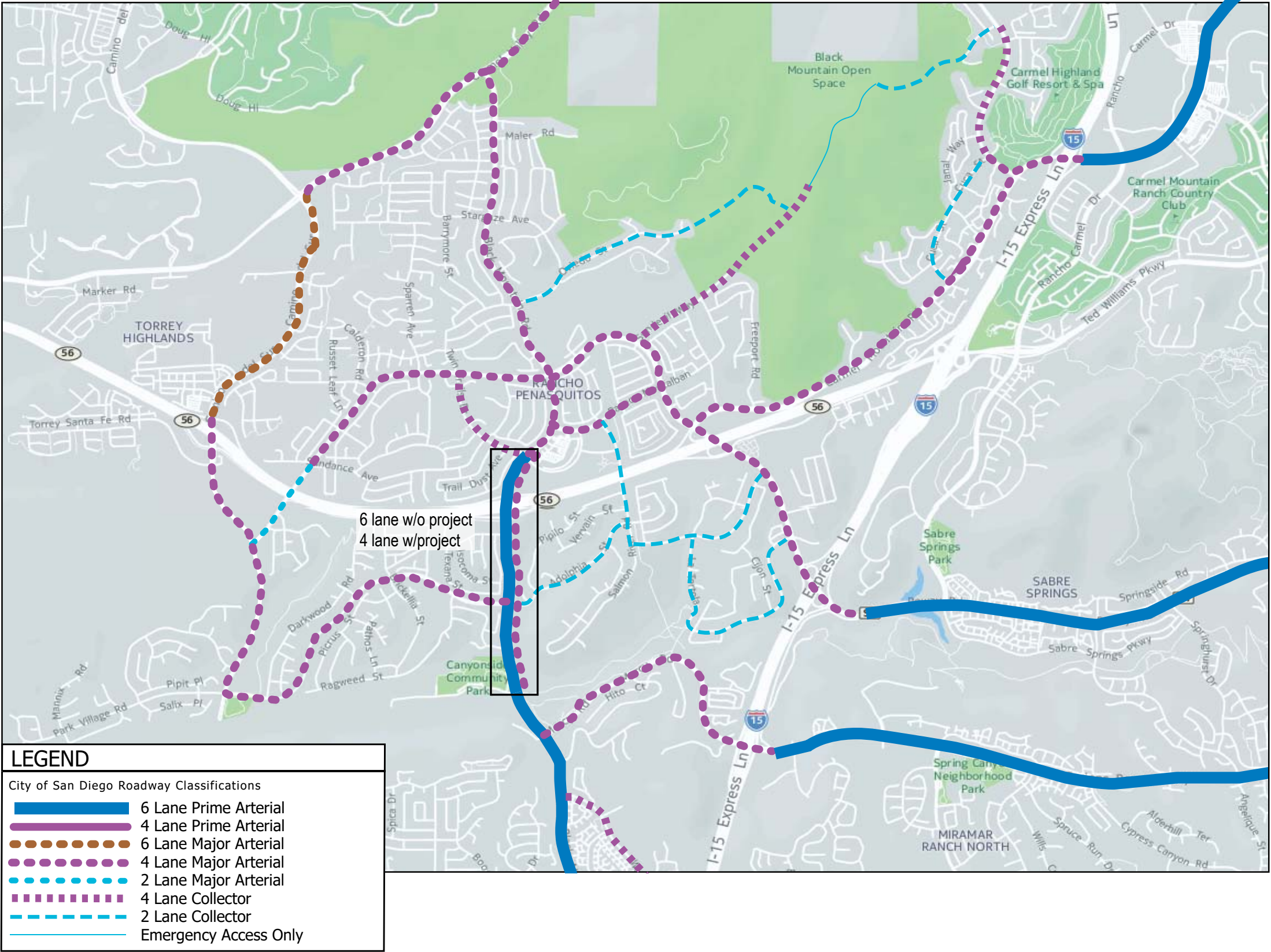


FIGURE 4.2-3
Horizon Year Roadway Network

4.3 Air Quality

This section evaluates potential air quality impacts associated with the Black Mountain Road Community Plan Amendment (project). The following discussion is based on the Air Quality Analysis prepared by RECON and included as Appendix C.

4.3.1 Existing Conditions

The project roadway, project design feature, and MM-TRA-1 through MM-TRA-3 are all located within the San Diego Air Basin (SDAB), which is regulated locally by the San Diego Air Pollution Control District (SDAPCD). Air quality at a particular location is a function of the kinds, amounts, and dispersal rates of pollutants being emitted into the air locally and throughout the basin. The major factors affecting pollutant dispersion are wind speed and direction, vertical dispersion of pollutants (which is affected by inversions), the local topography.

The SDAPCD maintains 10 air quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels. The San Diego – Rancho Carmel Drive monitoring station, located at 11403 Rancho Carmel Drive approximately 3.5 miles northeast of the project roadway, is the closest monitoring station to the project roadway. The San Diego – Rancho Carmel Road monitoring station began operation in 2015 and measures carbon monoxide (CO), nitrogen dioxide (NO₂), and particulate matter less than 2.5 microns (PM_{2.5}); however, only 2015 and 2016 NO₂ data are available. The nearest monitoring station that measures a wider range of data and pollutants is the San Diego – Kearny Villa Road monitoring station, located at 6125A Kearny Villa Road, approximately 7.5 miles southeast of the project roadway. The San Diego – Kearny Villa Road monitoring station measures ozone (O₃), NO₂, particulate matter more than 10 microns (PM₁₀), and PM_{2.5}. Table 4.3-1 provides a summary of measurements collected at the San Diego – Rancho Carmel Road and San Diego – Kearny Villa Road monitoring stations for the years 2012 through 2016.

Air quality is commonly expressed as the number of days per year in which air pollution levels exceed state standards set by the California Air Resources Board (CARB) or federal standards set by the U.S. Environmental Protection Agency (U.S. EPA). As shown in Table 4.3-1, the nearby monitoring station shows exceedance of O₃ levels. If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as a non-attainment area for that pollutant. The SDAB is currently classified as a federal non-attainment area for O₃. At the state level, the SDAB is classified a non-attainment area for O₃, PM₁₀, and PM_{2.5}. Section 4.3.2 below further describes the regulatory framework.

**Table 4.3-1
Summary of Air Quality Measurements**

Pollutant/Standard	2012	2013	2014	2015	2016
San Diego – Rancho Carmel Drive					
NO₂					
Days State 1-hour Standard Exceeded (0.18 ppm)	--	--	--	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	--	--	--	0	0
Max 1-hr (ppm)	--	--	--	0.055	0.062
Annual Average (ppm)	--	--	--	--	0.017
San Diego – Kearny Villa Road					
O₃					
Days State 1-hour Standard Exceeded (0.09 ppm)	1	0	1	0	0
Days State 8-hour Standard Exceeded (0.07 ppm)	3	1	4	0	3
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	2	0	4	0	3
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	1	0	1	0	0
Max. 1-hr (ppm)	0.099	0.081	0.099	0.077	0.087
Max 8-hr (ppm)	0.077	0.071	0.082	0.070	0.075
NO₂					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0	0	0
Max 1-hr (ppm)	0.057	0.067	0.051	0.051	0.053
Annual Average (ppm)	--	0.011	0.010	0.009	0.009
PM₁₀[*]					
Measured Days State 24-hour Standard Exceeded (50 $\mu\text{g}/\text{m}^3$)	0	0	0	0	0
Calculated Days State 24-hour Standard Exceeded (50 $\mu\text{g}/\text{m}^3$)	--	0.0	0.0	0.0	--
Measured Days Federal 24-hour Standard Exceeded (150 $\mu\text{g}/\text{m}^3$)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (150 $\mu\text{g}/\text{m}^3$)	--	0.0	0.0	0.0	0.0
Max. Daily ($\mu\text{g}/\text{m}^3$)	35.0	38.0	39.0	37.0	35.0
State Annual Average ($\mu\text{g}/\text{m}^3$)	--	20.5	19.5	16.7	--
Federal Annual Average ($\mu\text{g}/\text{m}^3$)	14.7	19.9	19.4	17.0	17.1
PM_{2.5}[*]					
Measured Days Federal 24-hour Standard Exceeded (35 $\mu\text{g}/\text{m}^3$)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (35 $\mu\text{g}/\text{m}^3$)	--	0.0	0.0	0.0	0.0
Max. Daily ($\mu\text{g}/\text{m}^3$)	20.1	22.0	20.2	25.7	20.3
State Annual Average ($\mu\text{g}/\text{m}^3$)	--	8.3	8.2	--	7.8
Federal Annual Average ($\mu\text{g}/\text{m}^3$)	--	8.3	8.1	7.2	7.5
SOURCE: Appendix C NO ₂ = nitrogen dioxide; O ₃ = ozone; PM ₁₀ = particulate matter less than 10 microns; PM _{2.5} = particulate matter less than 2.50 microns; ppm = parts per million; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; -- = not available. * Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.					

4.3.2 Regulatory Framework

4.3.2.1 Federal Regulations

The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (U.S.C.) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 U.S.C. 7409], the U.S. EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS).

Six criteria pollutants of primary concern have been designated: O₃, CO, sulfur dioxide (SO₂), NO₂, lead (Pb), and PM₁₀ and PM_{2.5}. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 4.3-2.

An air basin is designated as either attainment or non-attainment for a particular pollutant. Once a non-attainment area has achieved the ambient air quality standards (AAQS) for a particular pollutant, it is redesignated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After redesignation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. As mentioned above, the SDAB is a non-attainment area for the federal O₃ standard.

**Table 4.3-2
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		–		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m ³)	–	Non- dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		–	–	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemi- luminescence	100 ppb (188 µg/m ³)	–	Gas Phase Chemi- luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	–	Ultraviolet Fluorescence; Spectro- photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas) ¹¹	–	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chroma- tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chroma- tography			

Table 4.3-2
Ambient Air Quality Standards

ppm = parts per million; ppb = parts per billion; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; – = not applicable.

- ¹ California standards for O_3 , CO (except 8-hour Lake Tahoe), SO_2 (1 and 24-hour), NO_2 , particulate matter (PM_{10} , $\text{PM}_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than O_3 , particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10} , the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For $\text{PM}_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ Any equivalent measurement method which can be shown to the satisfaction of the California Air Resources Board (CARB) to give equivalent results at or near the level of the air quality standard may be used.
- ⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁷ Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- ⁸ On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ⁹ On December 14, 2012, the national annual $\text{PM}_{2.5}$ primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour $\text{PM}_{2.5}$ standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standards of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM_{10} standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ¹⁰ To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ¹¹ On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- ¹² CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ¹³ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- ¹⁴ In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016a.

4.3.2.2 State Regulations

a. Criteria Pollutants

The CARB has developed the California AAQS (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 4.3-2). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the state classifies as either “attainment” or “non-attainment” areas for each pollutant based on the comparison of measured data with the CAAQS. The SDAB is a non-attainment area for the state O₃ standards, the state PM₁₀ standard, and the state PM_{2.5} standard.

b. State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving ambient air quality standards. The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards, and appropriates money (including permit fees) to achieve its objectives.

c. Regional Air Quality Strategy

The SDAPCD prepared the original 1991/1992 Regional Air Quality Strategy (RAQS) in response to requirements set forth in the California CAA. The California CAA requires areas that are designated state non-attainment areas for O₃, CO, SO₂, and NO₂ prepare and implement plans to attain the standards by the earliest practicable date. The California CAA does not provide guidance on timing or requirements for attaining the state PM₁₀ and PM_{2.5} standards. Attached as part of the RAQS are the Transportation Control Measures (TCMs) adopted by the San Diego Association of Governments (SANDAG). Updates of the RAQS and corresponding TCM are required every three years. The RAQS and TCM set forth the steps needed to accomplish attainment of state and federal AAQS. The most recent update of the RAQS and TCM occurred in 2016.

4.3.3 Issue 1: Air Quality Plan Implementation

Would the project conflict with or obstruct the implementation of the applicable air quality plan?

4.3.3.1 Threshold

If a project proposes development that is greater than that anticipated in the general plan and SANDAG's growth projections, the project might conflict with the SIP and RAQS and may contribute to a potentially significant impact on air quality.

4.3.3.2 Impacts

The RAQS is the applicable regional air quality plan that sets forth the SDAPCD's strategies for achieving the NAAQS and CAAQS. The SDAB is designated a non-attainment area for the federal and state O₃ standard. Accordingly, the RAQS was developed to identify feasible emission control measures and provide expeditious progress toward attaining the standards for O₃. The two pollutants addressed in the RAQS are reactive organic gases (ROG) and oxides of nitrogen (NO_x), which are precursors to the formation of O₃. Projected increases in motor vehicle usage, population, and growth create challenges in controlling emissions and, by extension, to maintaining and improving air quality. The RAQS was most recently adopted in 2016.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the General Plan would not conflict with the RAQS. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The project would reclassify a portion of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major. The project would not include any land use change or development that would result in growth. Therefore, the project would not obstruct or conflict with implementation of the SDAPCD RAQS.

4.3.3.3 Significance of Impacts

The project would not result in impacts to air quality plan implementation based on the significance thresholds identified above. The project would not result in land use changes that would alter growth as forecasted in the General Plan and would be consistent with the growth assumptions of the RAQS. Therefore, the project would not conflict with or obstruct implementation of the RAQS, and impacts would be less than significant.

4.3.3.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.3.4 Issue 2: Air Quality Violations

Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

4.3.4.1 Threshold

As stated in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, “significance established by the applicable air quality management or air pollution control district may be relied upon.” The City’s air quality significance determination thresholds are established by the SDAPCD. The SDAPCD sets forth quantitative emission thresholds for stationary sources. Project-related air quality impacts would be considered significant if any of the applicable significance thresholds presented herein are exceeded.

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project’s total emissions would not result in a significant impact to air quality. Significance thresholds are listed in Table 4.3-3.

Table 4.3-3 Air Quality Impact Screening Criteria			
Pollutant	Emission Rate		
	Pounds/Hour	Pounds/Day	Tons/Year
Nitrogen Oxides (NO _x)	25	250	40
Sulfur Oxides (SO _x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Particulate Matter less than 10 microns (PM ₁₀)	--	100	15
Lead	--	3.2	0.6
Volatile Organic Compounds, Reactive Organic Gases	--	137	15
Particulate Matter less than 2.5 microns (PM _{2.5} *)	--	67*	10
SOURCE: Appendix C			
*SDAPCD Resolution 16-041 was adopted on April 27, 2016. It amended Rules 20.1, 20.2, and 20.3. City of San Diego significance thresholds have not been updated to reflect this amendment.			

4.3.4.2 Impacts

a. Construction Emissions

Construction-related pollutants result from dust raised during demolition and grading, emissions from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in Regulation 4 Rules 52, 54, and 55 of the SDAPCD’s rules and regulations.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_x, oxides of sulfur (SO_x), and particulate matter than gasoline-

powered engines. However, diesel-powered engines generally produce less CO and less ROG than gasoline-powered engines. Standard construction equipment includes tractors, loaders, backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

The project would reclassify a 1.3-mile segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major from Twin Trails Drive to the southern boundary of the Rancho Peñasquitos community (project roadway). The project would also widen a portion of northbound Black Mountain Road north of the State Route 56 (SR-56) westbound off-ramp to accommodate restriping of the bridge segment that crosses over SR-56 (project design feature). Reclassification of the project roadway would require implementation of three traffic mitigation measures (MM-TRA-1 through MM-TRA-3). This analysis addresses the air quality impacts associated with construction of the project design feature and traffic mitigation measures. It was assumed that installation of the signal at the intersection of Sundance Avenue and Twin Trails Drive would take five days and would require a crane and a drill rig. The auxiliary lane would be approximately 0.5 mile in length, and it was assumed that construction would last for six months (MM-TRA-2). The on-ramp lane would be approximately 0.3 mile in length, and it was assumed that construction would last for one month (MM-TRA-3). The portion of Black Mountain Road that would be widened would be approximately 0.15 mile in length, and it was assumed that construction would last for one month (project design feature). The typical equipment required for roadway construction includes backhoes, crawler tractors, excavators, graders, loaders, rollers, scrapers, and signal boards. Additionally, construction of the auxiliary lane would require the reconstruction of an existing bridge. Therefore, in addition to the listed equipment, cranes and drill rigs were included in the emissions estimate.

As shown in Table 4.3-4, construction of the project design feature and MM-TRA-1 through MM-TRA-3 would not exceed the applicable regional emissions thresholds. Furthermore, should construction of all improvements occur simultaneously, total emissions would still be less than the applicable thresholds. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. Therefore, as project construction emissions would be well below these limits, project construction would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations. Therefore, construction of the project design feature and MM-TRA-1 through MM-TRA-3 would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Table 4.3-4 Construction Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
MM-TRA-1 - Signal Installation						
Signal Installation	1	11	5	0	5	1
Maximum Daily Emissions	1	11	5	0	5	1
<i>Significance Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
MM-TRA-2 - Auxiliary Lane Construction						
Grubbing/Land Clearing	1	15	10	0	11	3
Grading/Excavation	9	95	62	0	15	6
Drainage/Utilities/Sub-Grade	5	44	35	0	13	4
Paving	2	20	18	0	1	1
Maximum Daily Emissions	9	95	62	0	15	6
<i>Significance Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
MM-TRA-3 - Ramp Lane Construction						
Grubbing/Land Clearing	1	15	10	0	18	4
Grading/Excavation	8	84	57	0	21	7
Drainage/Utilities/Sub-Grade	5	44	35	0	20	6
Paving	2	20	18	0	1	1
Maximum Daily Emissions	8	84	57	0	21	7
<i>Significance Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
Project Design Feature - Black Mountain Road Restriping/Widening Construction						
Grubbing/Land Clearing	1	12	7	0	13	3
Grading/Excavation	4	45	28	0	14	4
Drainage/Utilities/Sub-Grade	4	39	30	0	14	4
Paving	1	12	11	0	1	1
Maximum Daily Emissions	4	45	30	0	14	4
<i>Significance Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
TOTAL						
Maximum Daily Emissions	22	235	154	0	55	18
<i>Significance Threshold</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
ROG = reactive organic gas NO _x = oxides of nitrogen CO = carbon monoxide SO _x = oxides of sulfur PM ₁₀ = particulate matter less than 10 microns PM _{2.5} = particulate matter less than 2.50 microns						

b. Operational Emissions

The project would not generate additional trips, and reclassification of Black Mountain Road to a 4-lane Major would only result in a future redistribution of vehicles on the roadway network in the vicinity of the project. Additionally, the Transportation Impact Study (TIS) that analyzed year 2050 traffic volumes on area roadways with and without the project, determined that reclassification of Black Mountain Road to a 4-lane Major would not result in an increase in vehicle miles traveled on roadways in the vicinity of the project (Appendix B). Therefore, the project would not result in an increase in mobile source emissions.

Additionally, the project would not introduce any permanent area sources of emissions, including consumer products, natural gas used in space and water heating, architectural coatings, landscaping equipment, hearths (fireplaces), and woodstoves. Therefore, the project would not result in any operational mobile source or area source emissions.

c. Non-Attainment

The region is classified as attainment for all criterion pollutants except O_3 , PM_{10} , and $PM_{2.5}$. The SDAB is non-attainment for the 8-hour federal and state O_3 standards. O_3 is not emitted directly, but is a result of atmospheric activity on precursors. NO_x and ROG are known as the chief “precursors” of O_3 . These compounds react in the presence of sunlight to produce O_3 .

As shown in Tables 4.3-4, emissions of O_3 precursors (NO_x and ROG), PM_{10} , and $PM_{2.5}$ from construction would be below the applicable thresholds. The project would not result in operational emissions. Therefore, the project would not result in a cumulatively considerable net increase in emissions of O_3 , PM_{10} , or $PM_{2.5}$.

4.3.4.3 Significance of Impacts

a. Construction Emissions

The project would not exceed construction emission levels based on the significance determination thresholds. As discussed above, maximum daily construction emissions are projected to be less than the applicable thresholds for all criteria pollutants, and construction impacts would be less than significant.

b. Operational Emissions

The project would not result in operational emissions. No operational emissions impact would occur.

c. Non-Attainment

Implementation of the project would not result in a cumulatively considerable net increase in emissions of O_3 , PM_{10} , or $PM_{2.5}$, and impacts would be less than significant.

4.3.4.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.3.5 Issue 3: Sensitive Receptors

Would the project expose sensitive receptors to substantial pollutant concentration including air toxics such as diesel particulates?

4.3.5.1 Threshold

The SDAPCD's Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments (SDAPCD 2015) provides guidance to perform health risk assessments (HRAs) within the San Diego Air Basin. Although the SDAPCD guidance is specifically targeted toward health risk from air toxic emissions from stationary source operations, the thresholds were adapted here for informational purposes. The SDAPCD's current thresholds of significance for toxic air contaminant emissions from the operations of permitted and non-permitted sources are presented in Table 4.3-5.

Table 4.3-5 SDAPCD CEQA Toxic Air Contaminant Emissions Thresholds	
Carcinogens	Non-Carcinogens
	<i>Chronic</i>
Maximally exposed individual risk equals or exceeds 10 in 1 million	Hazard Index equals or exceeds 1 for the maximally exposed individual

4.3.5.2 Impacts

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. There are residential uses located near the traffic improvement areas.

a. Construction Emissions

Construction of the project design feature and MM-TRA-1 through MM-TRA-3 would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project design feature and MM-TRA-1 through MM-TRA-3 would result in the generation of diesel-exhaust diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from the construction footprints.

Generation of DPM from construction projects typically occurs in a single area for a short period. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were 12 months, the exposure would be less than 3 percent of the total exposure period used for health risk calculation.

Therefore, because of the limited size of the project design feature and MM-TRA-1 through MM-TRA-3, and the short duration of construction, DPM generated by construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual. Similarly, construction is not expected to generate ground-level concentrations of noncarcinogenic toxic air contaminants that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels, off-road diesel engine retrofits, and new low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced over time. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

b. Operational Emissions

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. CO hotspots due to traffic almost exclusively occur at signalized intersections that operate at a level of service (LOS) E or below. Projects may result in or contribute to a CO hotspot if they worsen traffic flow at signalized intersections operating at LOS E or F.

Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis.

As discussed, the project would not generate traffic. However, implementation of the project would result in a future redistribution of vehicles on the roadway network in the vicinity of the project. The TIS prepared for the project analyzed future year 2050 intersection volumes with and without implementation of the project. Based on this analysis, four intersections are projected to operate at LOS E in year 2050. However, implementation of the project would decrease the delay and improve operation at these intersections. Additionally, the turning volumes at these intersections would be well below 31,600 vehicles per hour. Consequently, the project would reduce CO concentration at these four intersections and reduce the potential for CO hotspots. All other signalized intersections are projected to operate at LOS D or better and would not contribute to CO hotspots.

4.3.5.3 Significance of Impacts

a. Construction Emissions

Construction of the project design feature and MM-TRA-1 through MM-TRA-3 would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

b. Operational Emissions

Under future year conditions, traffic redistribution associated with the project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

4.3.5.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.3.6 Issue 4: Odor

Would the project create objectionable odors affecting a substantial number of people?

4.3.6.1 Threshold

Per the City's CEQA Significance Determination Thresholds (City of San Diego 2011), determining the significance of potential odor impacts should be based on what is known about the quantity of the odor compound(s) that would result from the project's proposed use(s), the types of neighboring uses potentially affected, the distance(s) between the project's point source(s) and the neighboring uses such as sensitive receptors, and the resultant concentration(s) at receptors.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person (SDAPCD 1969). A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

4.3.6.2 Impacts

The project does not include heavy industrial or agricultural uses that are typically associated with odor complaints. During construction, diesel equipment may generate some nuisance odors. Sensitive receptors near the project design feature and MM-TRA-1 through MM-TRA-3 include residential uses; however, exposure to odors associated with construction would be short term and temporary in nature.

4.3.6.3 Significance of Impacts

Exposure to odors associated with construction would be short term and temporary in nature. Impacts would be less than significant.

4.3.6.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.3.7 Issue 5: Particulate Matter

Would the project exceed 100 pounds per day of particulate matter (dust)?

4.3.7.1 Threshold

Per the City's CEQA Significance Determination Thresholds (City of San Diego 2011), the project would have significant effects if it exceeded 100 pounds of PM dust per day.

4.3.7.2 Impacts

As shown in Table 4.3-4, construction of the project design feature and MM-TRA-1 through MM-TRA-3 would not result in more than 100 pounds per day of particulate matter. The project would not result in operational particulate matter emissions (see Section 4.3.5 above).

4.3.7.3 Significance of Impacts

Construction and operation of the project would not result in PM₁₀ emissions exceeding 100 pounds per day. Impacts would be less than significant.

4.3.7.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.3.8 Issue 6: Air Movement

Would the project result in a substantial alteration of air movement in the area?

4.3.8.1 Threshold

Per the City's CEQA Significance Determination Thresholds (City of San Diego 2011), a project would have significant effects if it would result in a substantial alteration of air movement in the area.

4.3.8.2 Impacts

Local topographic variation such as that caused by the height and shape of a row of buildings can influence air movement in a given location (Boston Redevelopment Authority 1986). Alterations in the built environment may increase the dispersion of air pollutants or cause stagnation that may result in a harmful concentration of air pollutants. Urban canyons are places where the street is flanked by buildings on both sides creating a canyon-like environment. Where urban canyons are oriented perpendicular to the prevailing wind patterns, the likelihood of restricted air movement and associated pollutant accumulation may increase. The project would not construct any buildings or structures. Therefore, there would be no impact associated with the alteration of air movement.

4.3.8.3 Significance of Impacts

The project would not construct any buildings or structures that could alter air movement. No impact would occur.

4.3.8.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.4 Greenhouse Gas Emissions

This section evaluates potential greenhouse gas emission impacts associated with the Black Mountain Road Community Plan Amendment (project). The following discussion is based on the City's Climate Action Plan Consistency Checklist and included as Appendix D.

4.4.1 Existing Conditions

To evaluate the incremental effect of the project on statewide greenhouse gas (GHG) emissions and global climate change, it is important to have a basic understanding of the nature of the global climate change problem. Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. The earth's climate is in a state of constant flux with periodic warming and cooling cycles. Extreme periods of cooling are termed "ice ages," which may then be followed by extended periods of warmth. For most of the earth's geologic history, these periods of warming and cooling have been the result of many complicated interacting natural factors that include: volcanic eruptions that spew gases and particles (dust) into the atmosphere; the amount of water, vegetation, and ice covering the earth's surface; subtle changes in the earth's orbit; and the amount of energy released by the sun (sun cycles). However, since the beginning of the Industrial Revolution around 1750, the average temperature of the earth has been increasing at a rate that is faster than can be explained by natural climate cycles alone.

With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, natural gas, and biomass. Industrial processes have also created emissions of substances not found in nature. This in turn has led to a marked increase in the emissions of gases shown to influence the world's climate. These gases, termed "greenhouse" gases, influence the amount of heat trapped in the earth's atmosphere. Because recently observed increased concentrations of GHGs in the atmosphere are related to increased emissions resulting from human activity, the current cycle of "global warming" is generally believed to be largely due to human activity. Of late, the issue of global warming or global climate change has arguably become the most important and widely debated environmental issue in the United States and the world. The collective of human actions taking place throughout the world contributes to climate change; thus, it is a global or cumulative issue.

4.4.1.1 GHGs of Primary Concern

There are numerous GHGs, both naturally occurring and manmade. Table 4.4-1 summarizes some of the most common. Each GHG has variable atmospheric lifetime and global warming potential (GWP). The atmospheric lifetime of the GHG is the average time a molecule stays stable in the atmosphere. Most GHGs have long atmospheric lifetimes, staying in the atmosphere hundreds or thousands of years. The potential of a gas to trap heat and warm the atmosphere is measured by its GWP. The reference gas for establishing GWP is carbon dioxide (CO₂), which has a GWP of 1. As an example, methane (CH₄), while having a shorter atmospheric lifetime than CO₂, has a 100-year GWP of 28, which means that it has a greater global warming effect than CO₂ on a molecule-by-molecule basis. Specifically, GWP is defined as the cumulative radiative forcing—both direct and indirect

effects—integrated over a period of time from the emission of a unit mass of gas relative to some reference gas (U.S. Environmental Protection Agency [U.S. EPA] 2010).

Table 4.4-1 Global Warming Potentials and Atmospheric Lifetimes (years)			
Gas	Atmospheric Lifetime (years)	100-year GWP	20-year GWP
Carbon dioxide (CO ₂)	50–200	1	1
Methane (CH ₄)	12.4	28	84
Nitrous oxide (N ₂ O)	121	265	264
HFC-23	222	12,400	10,800
HFC-32	5.2	677	2,430
HFC-125	28.2	3,170	6,090
HFC-134a	13.4	1,300	3,710
HFC-143a	47.1	4,800	6,940
HFC-152a	1.5	138	506
HFC-227ea	38.9	3,350	5,360
HFC-236fa	242	8,060	6,940
HFC-43-10mee	16.1	1,650	4,310
CF ₄	50,000	6,630	4,880
C ₂ F ₆	10,000	11,100	8,210
C ₃ F ₈	2,600	8,900	6,640
C ₄ F ₁₀	2,600	9,200	6,870
c-C ₄ F ₈	3,200	9,540	7,110
C ₅ F ₁₂	4,100	8,550	6,350
C ₆ F ₁₄	3,100	7,910	5,890
SF ₆	3,200	23,500	17,500
SOURCE: Intergovernmental Panel on Climate Change (IPCC) 2014. GWP = global warming potential			

It should be noted that the U.S. EPA and other organizations will update the GWP values they use occasionally. This change can be due to updated scientific estimates of the energy absorption or lifetime of the gases or to changing atmospheric concentrations of GHGs that result in a change in the energy absorption of one additional ton of a gas relative to another. The GWPs shown in Table 4.4-1 are the most current. However, it should be noted that in the California Emissions Estimator Model (CalEEMod), the 100-year GWP for CH₄ and nitrous oxide (N₂O) are 21 and 310, respectively. These CalEEMod values are used for this analysis.

All of the gases in Table 4.4-1 are produced by both biogenic (natural) and anthropogenic (human) sources. The GHGs of primary concern in this analysis are CO₂, CH₄, and N₂O. CO₂ would be emitted through combustion of fossil fuels in vehicles (including construction), from electricity generation and natural gas consumption, water use, and from solid waste disposal. Smaller amounts of CH₄ and N₂O would be emitted from the same project operations.

4.4.1.2 State and Regional GHG Inventories

The California Air Resources Board (CARB) performs statewide GHG inventories. The inventory is divided into broad sectors of economic activity: electricity generation, transportation, industrial, commercial, residential, and agriculture and forestry. Emissions are quantified in million metric tons of CO₂ equivalent (MMT CO₂E). Table 4.4-2 shows the estimated statewide GHG emissions for the years 1990, 2010, and 2014. Although annual GHG inventory is available, these years are highlighted in Table 4.4-2 because 1990 is the baseline year for established reduction targets, 2010 corresponds to the same years for which inventory data for the City of San Diego (City) are available, and 2014 is the most recent data available.

Table 4.4-2 California GHG Emissions by Sector in 1990, 2010, and 2014 ¹			
Sector	1990 Emissions in MMT CO ₂ E (% total) ²	2010 Emissions in MMT CO ₂ E (% total) ^{2,3}	2014 Emissions in MMT CO ₂ E (% total) ^{2,3}
Electricity Generation	110.6 (25.9%)	90.6 (20.4%)	88.4 (20.0%)
Transportation	150.7 (35.3%)	166.2 (37.3%)	163.0 (36.9%)
Industrial	103.0 (24.2%)	100.9 (22.7%)	104.2 (23.6%)
Commercial	14.4 (3.4%)	20.2 (4.5%)	21.6 (4.9%)
Residential	29.7 (7.0%)	31.4 (7.1%)	27.4 (6.2%)
Agriculture and Forestry	16.9 (4.0%)	34.9 (7.8%)	36.1 (8.2%)
Not Specified	1.3 (0.3%)	0.8 (0.2%)	0.8 (0.2%)
TOTAL⁴	426.6	445.0	441.5
SOURCE: CARB 2007 and 2016b. MMT CO ₂ E = million metric tons of CO ₂ equivalent ¹ 1990 data was obtained from the CARB 2007 source and are based on Intergovernmental Panel on Climate Change (IPCC) second assessment report global warming potentials (GWPs). The revised calculation, which uses the scientifically updated IPCC fifth assessment report GWPs, is 431 MMT CO ₂ E. ² Percentages may not total 100 due to rounding. ³ 2010 and 2014 data was retrieved from the CARB 2016b source. ⁴ Totals may vary due to independent rounding.			

As shown in Table 4.4-2, statewide GHG source emissions totaled approximately 427 MMT CO₂E in 1990, 445 MMT CO₂E in 2010, and 442 MMT CO₂E in 2014. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

A San Diego emissions inventory was prepared for baseline year 2010 as a part of the City's Climate Action Plan (CAP). The total community-wide GHG emissions in 2010 were 12,984,993 metric tons of CO₂ equivalent (MT CO₂E). Table 4.4-3 summarizes the sources and quantities of community emissions. The largest source of emissions is transportation, followed by electricity, natural gas, solid waste and wastewater, and water.

Table 4.4-3 City of San Diego GHG Emissions in 2010	
Sector	2010 GHG Emissions (MT CO ₂ E)
Transportation	7,141,746 (55%)
Electricity	3,116,398 (24%)
Natural Gas	2,077,599 (16%)
Solid Waste and Wastewater	389,550 (3%)
Water	259,700 (2%)
TOTAL	12,984,993
SOURCE: City of San Diego 2015. MT CO ₂ E = metric tons of CO ₂ equivalent	

4.4.1.3 On-site Greenhouse Gas Emission Sources

The project roadway is currently developed as a 4-lane roadway. GHG emissions are generated by vehicle trips associated with existing development.

4.4.2 Regulatory Framework

In response to rising concern associated with increasing GHG emissions and global climate change impacts, several plans and regulations have been adopted at the international, national, and state levels with the aim of reducing GHG emissions. The following is a discussion of the plans and regulations most applicable to the project.

4.4.2.1 State

The State of California has adopted a number of plans and regulations aimed at identifying statewide and regional GHG emissions caps, GHG emissions reduction targets, and actions and timelines to achieve the target GHG reductions.

a. Executive Order S-3-05

Executive Order (EO) S-3-05 established the following GHG emission reduction targets for the State of California:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020 reduce GHG emissions to 1990 levels;
- By 2050 reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California Environmental Protection Agency (California EPA) to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The EO also requires reporting on mitigation and adaptation plans to combat the impacts of climate change. The

first Climate Action Team Assessment Report was produced in March 2006, and has been updated every two years.

b. Executive Order B-30-15

This EO, issued on April 29, 2015, establishes an interim GHG emission reduction goal for the State of California by 2030 of 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal. Therefore, in the coming months, CARB is expected to develop statewide inventory projection data for 2030 as well as commence its efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the EO's new interim goal.

c. California Global Warming Solutions Act

In response to EO S-3-05, the California Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of Assembly Bill (AB) 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009 indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

Approved in September 2016, Senate Bill (SB) 32 updates the California Global Warming Solutions Act of 2006. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. In implementing the 40 percent reduction goal, CARB is required to prioritize emissions reductions to consider the social costs of the emissions of GHGs. 'Social costs' is defined as "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk and changes in energy system costs, per metric ton of greenhouse gas emission per year."

d. Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in 2008, which identifies the main strategies California will implement to achieve the GHG reductions necessary to reduce forecasted business as usual (BAU) emissions in 2020 to the state's historic 1990 emissions level (CARB 2008). In October 2017, CARB released a revised version of The 2017 Climate Change Scoping Plan Update, The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target (Proposed Second Update to the Scoping Plan; CARB 2017). The Proposed Second Update to the Scoping Plan identifies the state strategy for achieving its 2030 interim reduction target codified by SB 32. The plan proposes to build on existing programs such as the Cap-and-Trade Regulation, Low Carbon Fuel Standard (LCFS), Advanced Clean Cars Program (ACC), Renewable Portfolio Standard (RPS), Sustainable Communities Strategy (SCS), and the Short-Lived Climate Pollutant Reduction Strategy. It

also proposes further strategies to reduce waste emissions through cogeneration, reduce GHG emissions from the refinery sector by 20 percent, and new policies to address GHG emissions from natural and working lands.

e. Transportation Related Measures

California Advanced Clean Car Program

The ACC Program, adopted January 2012, combines the control of smog, soot-causing pollutants, and GHG emissions into a single coordinated package of requirements for model years 2015 through 2025. Accordingly, the ACC program coordinates the goals of the Pavley, low emissions vehicle (LEV), zero emission vehicle (ZEV), and Clean Fuels Outlet (CFO) programs in order to lay the foundation for the commercialization and support of ultra-clean vehicles.

AB 1493 (Pavley) directed CARB to adopt vehicle standards that lowered GHG emissions from passenger vehicles and light-duty trucks to the maximum extent technologically feasible, beginning with the 2009 model year. CARB has adopted amendments to its regulations that would enforce AB 1493 but provide vehicle manufacturers with new compliance flexibility.

CARB has also adopted a second phase of the Pavley regulations, originally termed 'Pavley II' but now called the 'Low Emission Vehicle III' (LEV III) Standards or ACC Program, which covers model years 2017 to 2025. CARB estimates that LEV III will reduce vehicle GHGs by an additional 4.0 MMT CO₂E for a 2.4 percent reduction over Pavley I. These reductions come from improved vehicle technologies such as smaller engines with superchargers, continuously variable transmissions, and hybrid electric drives. On August 7, 2012, the final regulation for the adoption of LEV III became effective.

EO S-01-07—Low Carbon Fuel Standard

EO S-01-07 directed that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through a LCFS. LCFS promotes the use of GHG reducing transportation fuels (e.g., liquid biofuels, renewable natural gas, electricity, and hydrogen) through a declining carbon intensity standard. The carbon intensity of a fuel is a measure of the GHG emissions associated with the production, distribution, and consumption of a fuel. CARB approved LCFS in 2009 and implemented it in 2010 as an early action measure under AB 32. Subsequently CARB approved amendments to the LCFS, which began implementation January 1, 2013. Due to a court ruling that found procedural issues related to the original adoption of the LCFS, CARB re-adopted the LCFS regulation in September 2015, which went into effect on January 1, 2016. The program establishes a strong framework to promote the low carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG goals (CARB 2016c).

Senate Bill 375—Regional Emissions Targets

SB 375, the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations

under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan (RTP). San Diego Association of Governments (SANDAG) is the San Diego region's MPO. The CARB targets for the SANDAG region require a 7 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020 and a 13 percent reduction by 2035.

4.4.2.2 Local

a. San Diego Forward: The Regional Plan

SANDAG is the regional authority that creates regional-specific documents to provide guidance to local agencies, as SANDAG does not have land use authority. SANDAG's San Diego Forward: The Regional Plan, adopted in 2015, combines two of the region's existing planning documents: the Regional Comprehensive Plan for the San Diego Region (RCP) and the RTP/SCS. The RCP, adopted in 2004, laid out key principles for managing the region's growth while preserving natural resources and limiting urban sprawl. The plan covered eight policy areas, including urban form, transportation, housing, health environment, economic prosperity, public facilities, our borders, and social equity. These policy areas were addressed in the 2050 RTP/SCS and are now fully integrated into the Regional Plan.

b. City of San Diego General Plan

The City General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element policy CE-A.2 aims to "reduce the City's carbon footprint" and to "develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth" related to climate change. The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services, and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or state and federal legislation. .

c. City of San Diego Climate Action Plan

In December 2015, the City adopted its CAP (City of San Diego 2015). The CAP identifies measures to meet GHG reduction targets for 2020 and 2035. The CAP consists of a 2010 inventory of GHG emissions, a BAU projection for emissions at 2020 and 2035, state targets, and emission reductions with implementation of the CAP. The City identifies GHG reduction strategies focusing on energy- and water-efficient buildings; clean and renewable energy; bicycling, walking, transit, and land use; zero waste; and climate resiliency. Accounting for future population and economic growth, the City projects that GHG emissions will be approximately 15.9 MMT CO₂E in 2020 and 16.7 MMT CO₂E in

2035. To achieve its proportional share of the state reduction targets for 2020 (AB 32) and 2050 (EO S-3-05), the City would need to reduce emissions below the 2010 baseline by 15 percent in 2020 and 50 percent by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 11.0 MMT CO₂E in 2020 and 6.5 MMT CO₂E in 2035. Through implementation of the CAP, the City is projected to reduce emissions even further below targets by 1.2 MMT CO₂E by 2020 and 205,462 MT CO₂E by 2035.

In 2016, the City amended the Land Development Manual to include a GHG emission significance threshold and amended the CAP to revise text and incorporate a CAP Consistency Checklist that is required for new development projects subject to California Environmental Quality Act to demonstrate consistency with the City's CAP. Additionally, the Planning Department has provided guidance for determining CAP consistency for program-level environmental documents (e.g. community plan updates). The CAP Consistency Checklist was most recently updated in February 2017.

4.4.3 Issues 1 and 2: Greenhouse Gas Emissions and Conflicts with the CAP or other Plans or Policies

Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with the City's CAP or an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs?

4.4.3.1 Threshold

According to the City's Significance Determination Thresholds, projects that are consistent with the City's CAP, as determined through the CAP Consistency Checklist, would result in a less than significant cumulative impact regarding GHG emissions. If a project is not consistent with the City's CAP, as determined through the CAP Consistency Checklist, potentially significant cumulative GHG impacts would occur.

4.4.3.2 Impacts

The regulatory plans and policies discussed in Section 4.4.2 aim to reduce national, state, and local GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. Plan goals and regulatory standards are, thus, largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding, and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use change and infrastructure investments. For the energy sector, the reduction strategies aim to reduce energy demand, impose emission caps on energy providers, establish minimum building energy and green building standards, transition to renewable non-fossil fuels, incentivize homeowners and builders, fully recover landfill gas for energy, and expand research and development.

a. Consistency with State Plans

EO S-3-05 establishes GHG emission reduction targets for the state, and AB 32 launched the Climate Change Scoping Plan that outlines the reduction measures needed to reach these targets. The City has adopted a qualified GHG emission reduction plan (i.e., CAP) that outlines an approach to reach the state Scoping Plan GHG reduction targets. Therefore, project consistency with the City's CAP would ensure consistency with state plans.

b. Consistency with Local Plans

City of San Diego Climate Action Plan

As a means to implement the CAP, the City created a Consistency Checklist utilized by projects to assure compliance with the measures identified in the CAP (City of San Diego 2017). The Consistency Checklist includes three steps in evaluating if a project is consistent with the CAP. An evaluation of the project's consistency with these three steps is presented below:

Step 1: Land Use Consistency – The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. However, the project is not a development project. The project would reclassify the project roadway from a 6-lane Primary Arterial to a 4-lane Major and implement the project design feature and three traffic mitigation measures. The project would not include any land use or zoning change and would therefore be consistent with the adopted General Plan and Community Plan land use and zoning designations. Therefore, the project would be consistent with the growth projections used in the development of the CAP.

Step 2: CAP Strategies Consistency – The second step of the CAP consistency review is to review and evaluate the project's consistency with the applicable strategies and actions of the CAP. As stated in the CAP Checklist, "Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Office or project comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures" (City of San Diego 2017). The Checklist also states that non-building infrastructure projects such as roads and pipelines are not subject to Step 2. Because the project is limited to reclassification of the project roadway and implementation of the project design feature and three traffic mitigation measures, the project is not subject to the requirements of Step 2 of the Checklist because "such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved".

Step 3: Project CAP Conformance Evaluation – The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The project would be consistent with the existing General Plan and Community Plan land use and zoning designations. Therefore, Step 3 is not applicable to the project.

Therefore, the project would not conflict with the City's CAP.

4.4.3.3 Significance of Impacts

The project is consistent with all applicable goals and policies and aimed at reducing GHG emissions from land use and development, including the City's CAP. Impacts would be less than significant.

4.4.3.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.5 Noise

This section evaluates potential construction and operational noise impacts associated with the Black Mountain Road Community Plan Amendment (project). The following discussion is based on the Noise Analysis prepared by RECON and included as Appendix E.

4.5.1 Existing Conditions

Noise measurements and traffic counts were taken at the locations of the project design feature traffic mitigation measures on June 28, 2017 to document ambient noise levels. Noise readings were measured over 5-minute intervals with "A" frequency fast time weighting. Primary sources of noise surrounding these four locations include vehicular traffic. The 1-hour average sound level (L_{eq}) at MM-TRA-1 was 60.7, at MM-TRA-2 was 67.1, at MM-TRA-3 was 63.9, and the project design feature was 71.1.

4.5.2 Regulatory Framework

4.5.2.1 Traffic Noise

The project would not generate additional traffic or increase vehicle miles traveled during its operational phase. However, implementation of the project would result in a future redistribution of vehicles on the roadway network in the vicinity of the project, and would therefore result in a change in vehicle traffic noise levels adjacent to these roadways. The noise section of the City of San Diego's (City's) Significance Determination Thresholds for the California Environmental Quality Act identifies thresholds for traffic noise and states that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 A-weighted decibel (dB(A)) increase, the impact would not be considered significant.

4.5.2.2 Municipal Code – Construction Noise Level Limits

Section 59.5.0404 of the City's Noise Abatement and Control Ordinance states that:

- A. It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. . . .
- B. . . . it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m.

The project construction would be restricted to between the hours of 7:00 A.M. and 7:00 P.M. and construction noise levels may not exceed 75 dB(A) $L_{eq(12)}$ as assessed at or beyond the property line of a property zoned residential.

4.5.3 Issue 1: Ambient Noise Levels and Exceedance of City's Adopted Ordinances

Would the project result in or create a significant increase in the existing ambient noise levels which exceed the City's noise ordinance?

4.5.3.1 Threshold

According to the City's CEQA Significance Determination Thresholds, a project would have a significant noise impact if it would result in:

- Exposure of people to construction noise levels that exceed the City's adopted Noise Ordinance, San Diego Municipal Code, Section 5.9.5.0404 (i.e., 75 dB(A) L_{eq});
- Exposure of people to transportation noise levels that exceed the sound level limits as presented in Table K-2 of the City's Significance Determination Thresholds and as identified as Table 4.5-1.

Table 4.5-1 Traffic Noise Significance Thresholds (dB[A] CNEL)			
Structure or Proposed Use that would be Impacted by Traffic Noise	Interior Space	Exterior Useable Space*	General Indication of Potential Significance
Single-family detached	45 dB	65 dB	Structure or outdoor useable area is <50 feet from the center of the closest (outside) lane on a street with existing or future ADTs >7,500
Multi-family, school, library, hospital, day care center, hotel, motel, park, convalescent home	Development Services Department ensures 45 dB pursuant to Title 24	65 dB	
Office, church, business, professional uses	n/a	70 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >20,000
Commercial, retail, industrial, outdoor spectator sports uses	n/a	75 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >40,000
ADT = average daily trips *If a project is currently at or exceeds the significance thresholds for traffic noise described above and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.			

4.5.3.2 Impacts

a. Construction Noise

The project would require signalization of the intersection of Sundance Avenue and Twin Trails Drive (MM-TRA-1), construction of an auxiliary lane on eastbound State Route 56 (SR-56) between Camino Del Sur and Black Mountain Road (MM-TRA-2), construction of an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (MM-TRA-3), and restriping/widening of a segment of Black Mountain Road (project design feature). Construction of these roadway improvements would require heavy duty construction equipment that could include backhoes, crawler tractors, excavators, graders, loaders, rollers, scrapers, and signal boards. The footprints of these roadway improvements are located adjacent to residential uses. Therefore, construction noise impacts associated with activities required for these improvements were modeled utilizing SoundPlan Essential.

Installation of a new traffic signal under MM-TRA-1 would require a drill for drilling holes at the corners for the signal posts and a crane or similar equipment for lifting the poles into place. Noise associated with the signal installation would be minimal when compared to the other traffic improvements, as much of the time taken to install a new signal is associated with wiring and a minimal amount of equipment. Noise levels due to operation of a crane or a drill were modeled at the adjacent residential receiver with the center of activities consisting of the intersection center. Hourly average noise levels from a crane and a drill would be 78 dB(A) L_{eq} at 50 feet, or a sound power level (LPW) of approximately 118 dB(A) from the center of construction activity. As shown in Table 4.5-2, construction noise levels at residential receivers adjacent to MM-TRA-1 would be equal to or less than the 75 dB(A) L_{eq} threshold.

Table 4.5-2 MM-TRA-1 Construction Noise Levels	
Receiver	Construction Noise Level [dB(A) L_{eq}]
1	62
2	72
3	74
4	67
5	68
6	75
7	75
8	64
9	68
10	74
11	72
12	65
13	59
14	67
15	72
16	63

A variety of noise-generating equipment – such as backhoes, front-end loaders, rollers, pavers, and concrete saws, along with others – would be used during construction of MM-TRA-2, MM-TRA-3, and the project design feature. Maximum noise levels for this type of equipment would be 85 to 90 dB(A) at a distance of 50 feet, with hourly average noise levels lower due to breaks and movement of equipment. For the project, the loudest phase of construction would be the excavation phase and would include dozers, loaders, and excavators. Construction noise levels were calculated based on all three pieces of equipment being active simultaneously. To reflect the linear nature of roadway construction activities, equipment was modeled as an area source distributed over the footprint of each traffic improvement area. Hourly average noise levels would be 82 dB(A) L_{eq} at 50 feet, or an LPW of approximately 114 dB(A) from the center of construction activity when assessing the loudest pieces of equipment working simultaneously. As shown in Tables 4.5-3 through 4.5-5, noise levels at nearby residential receivers during construction of MM-TRA-2, MM-TRA-3, and the project design feature would be equal to or less than the 75 dB(A) L_{eq} threshold.

Table 4.5-3 MM-TRA-2 Construction Noise Levels	
Receiver	Construction Noise Level [dB(A) L_{eq}]
1	51
2	57
3	60
4	57
5	59
6	66
7	55
8	59
9	61
10	56

Table 4.5-4 MM-TRA-3 Construction Noise Levels	
Receiver	Construction Noise Level [dB(A) L_{eq}]
1	62
2	67
3	67
4	67
5	67
6	67
7	66
8	66
9	67
10	67
11	67
12	66
13	65
14	66
15	66
16	62

Table 4.5-5 Project Design Feature Construction Noise Levels	
Receiver	Construction Noise Level [dB(A) L_{eq}]
1	62
2	65
3	68
4	69
5	70
6	71
7	71
8	71
9	71
10	69
11	67
12	63

b. Operational Noise Analysis

Methodology

The project would reclassify a 1.3-mile segment of Black Mountain Road from a 6-lane Primary Arterial to a 4-lane Major, widen a portion of northbound Black Mountain Road north of the SR-56 westbound off-ramp to accommodate restriping of the bridge segment that crosses over SR-56 (project design feature), and implement three traffic mitigation measures (MM-TRA-1 through MM-TRA-3). Consequently, the project would not generate additional traffic or increase vehicle miles traveled during its operational phase. However, implementation of the project would result in a future redistribution of vehicles on the roadway network in the vicinity of the project, and would therefore result in a change in vehicle traffic noise levels adjacent to these roadways. A significant impact would occur if the project resulted in or created a significant increase in the existing ambient noise levels. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response. The City's Significance Determination Thresholds state that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 dB(A) increase, the impact would not be considered significant.

Off-site traffic noise was modeled using the Federal Highway Administration's Traffic Noise Prediction Model algorithms and reference levels. Traffic noise levels were calculated at 50 feet from the centerline of the affected roadways to determine the noise level increase associated with the project. Additionally, the following assumptions were utilized in the noise model:

- MM-TRA-1: The intersection of Sundance Avenue and Twin Trails Drive was modeled to address the change from a stop-controlled intersection to a signalized intersection. As a worst-case analysis, San Diego Association of Governments (SANDAG) volumes were used to model future traffic noise on Sundance Avenue, as the SANDAG volumes were higher than identified in the traffic report.
- MM-TRA-2: Introduction of an auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road would shift some traffic closer to the residential uses to the south. Traffic noise levels were calculated at the closest sensitive receiver, which is 78 feet south of the existing SR-56 eastbound centerline and would be 72 feet south of the SR-56 centerline with construction of the auxiliary lane.
- MM-TRA-3: Introduction of an additional lane on the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would shift some on-ramp traffic closer to the residential uses to the north and therefore increase traffic noise levels at these uses. To determine the noise level increase associated with the project, traffic noise levels were calculated at the closest sensitive receiver, which is 136 feet north of the existing on-ramp centerline and would be 130 feet north of the on-ramp centerline with construction of the additional lane. Noise levels were calculated for the worst case AM peak hour with and without the project.
- Project Design Feature: Restriping the bridge segment of Black Mountain Road over SR-56 and slightly widening 0.15 mile of Black Mountain Road north of the bridge segment would

shift some traffic slightly to the east, away from the residential uses. Because this improvement would not result in an increase in noise levels at the adjacent sensitive uses, the change in noise levels due to this shift was not calculated.

Ambient Traffic Noise

The project would result in a future redistribution of vehicles on the roadway network in the vicinity of the project. However, the project would not substantially alter the vehicle volumes or classifications mix on local or regional roadways nor would the project alter the speed on an existing roadway. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes.

A significant impact would occur if the project resulted in or created a significant increase in the existing ambient noise levels. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response. The City's Significance Determination Thresholds state that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 dB(A) increase, the impact would not be considered significant (City of San Diego 2016).

The cumulative increases in noise levels between the existing condition and year 2050, without and with the project, are due to regional growth and are not attributed to the project, as the project itself would not result in any growth or trip generation. Off-site traffic noise impacts were determined by comparing year 2050 noise levels with and without implementation of the project. As shown in Table 4.5-6, existing noise levels due to vehicle traffic currently exceed the City's residential noise level limit of 65 Community Noise Equivalent Level (CNEL) adjacent to all roadway segments except Carmel Mountain Road south of Sundance Avenue, Sundance Avenue west of War Bonnet Street, and Camino Del Sure north of Park Village Road.

The redistribution of traffic that would occur under the project would result in slight increases and decreases in noise, ranging from -0.9 to 0.2 CNEL. However, these changes in noise levels would not be readily perceivable and would not exceed the City's significance threshold of a 3 dB(A) increase where noise currently exceeds 65 CNEL. Therefore, redistribution of traffic associated with the project would not result in a significant increase over existing ambient noise conditions.

**Table 4.5-6
Changes in Vehicle Traffic Noise Levels**

			Noise Level (CNEL)			Cumulative Δ dB	Direct Δ dB
			Existing	Year 2050 without Project	Year 2050 with Project		
Roadway	Segment						
1	Camino Del Sur	South of Carmel Valley Road	71.0	72.7	72.6	1.6	-0.1
2	Camino Del Sur	South of Wolverine Way - Fallhaven Road	71.7	73.4	73.2	1.5	-0.2
3	Camino Del Sur	North of SR-56 Westbound Ramps	72.7	74.3	74.2	1.5	-0.1
4	Camino Del Sur	South of SR-56 Eastbound Ramps	67.3	71.6	71.7	4.4	0.1
5	Carmel Valley Road	West of Black Mountain Road	70.9	73.1	73.1	2.2	0.0
6	Carmel Valley Road	East of Black Mountain Road	71.1	73.2	73.2	2.1	0.0
7	Black Mountain Road	North of Maler Road	69.4	71.2	71.4	2.0	0.2
8	Black Mountain Road	South of Oviedo Street	70.1	71.1	71.0	0.9	-0.1
9	Black Mountain Road	South of Carmel Mountain Road	69.0	70.0	69.8	0.8	-0.2
10	Black Mountain Road	Between Paseo Montalban and Twin Trails Drive	68.9	69.8	69.7	0.8	-0.1
11	Black Mountain Road	South of Twin Trails Drive	73.8	74.3	74.3	0.5	0.0
12	Black Mountain Road	Between SR-56 Westbound and eastbound ramps	73.4	74.0	73.9	0.5	-0.1
13	Black Mountain Road	North of Park Village Road - Adolphia Street	74.0	75.0	74.1	0.1	-0.9
14	Black Mountain Road	North of Canyonside Park Drive	73.4	74.6	73.9	0.5	-0.7
15	Black Mountain Road	Between Mercy Road and Babuta Road	74.3	75.5	74.8	0.5	-0.7
16	Black Mountain Road	South of Westview Parkway	73.1	74.4	73.7	0.6	-0.7
17	Westview Parkway	East of Black Mountain Road	66.4	68.0	67.1	0.7	-0.9
18	Carmel Mountain Road	Between Paseo Aldabra and Sundevil Way	68.8	69.0	69.0	0.2	0.0
19	Carmel Mountain Road	Between Paseo Montalban and SR-56 westbound ramps	70.7	70.9	70.9	0.2	0.0
20	Rancho Peñasquitos Boulevard	Between SR-56 ramps - Azuaga Street and Calle De Las Rosas	74.0	73.9	74.1	0.1	0.2
21	Rancho Peñasquitos Boulevard	Between Calle De Las Rosas and Via Del Sud	74.2	74.0	74.2	0.0	0.2
22	Rancho Peñasquitos Boulevard	Between Paseo Montril and I-15 southbound ramps	72.5	72.3	72.5	0.0	0.2
23	Poway Road	East of I-15 northbound ramps	76.2	76.9	76.9	0.7	0.0
24	Carmel Mountain Road	South of Sundance Avenue	58.3	67.2	67.3	9.0	0.1
25	Carmel Mountain Road	West of Sparren Avenue	65.7	66.8	67.0	1.3	0.2
26	Carmel Mountain Road	West of Black Mountain Road	66.5	67.5	67.6	1.1	0.1
27	Sundance Avenue	West of War Bonnet Street	56.1	57.4	57.5	1.4	0.1

**Table 4.5-6
Changes in Vehicle Traffic Noise Levels**

Roadway	Segment	Noise Level (CNEL)			Cumulative Δ dB	Direct Δ dB
		Existing	Year 2050 without Project	Year 2050 with Project		
28 Carmel Mountain Road	East of Freeport Road	67.9	68.9	68.9	1.0	0.0
29 Carmel Mountain Road	Between Peñasquitos Drive and Gerana Street	68.7	69.7	69.7	1.0	0.0
30 Carmel Mountain Road	Between I-15 southbound ramps and Peñasquitos Drive	71.3	72.0	72.0	0.7	0.0
31 Carmel Mountain Road	East of I-15 northbound ramps	72.5	73.2	73.2	0.7	0.0
32 Camino Del Sur	North of Park Village Road	58.1	67.6	67.4	9.3	-0.2
33 Park Village Road	East of Camino Del Sur	67.8	69.6	69.2	1.4	-0.4
34 Park Village Road	West of Black Mountain Road	71.0	71.0	71.0	0.0	0.0
35 Mercy Road	Between Chabola Road and Branicole Lane	70.1	71.3	71.0	0.9	-0.3
36 Mercy Road	North of Alemania Road	71.5	72.3	72.1	0.6	-0.2
37 Scripps Poway Parkway	East of I-15 northbound ramps	76.9	77.7	77.6	0.7	-0.1
SOURCE: Appendix B CNEL = Community Noise Equivalent Level Δ dB = change in decibels SR-56 = State Route 56 I-15 = Interstate 15						

Traffic Noise at Sensitive Receivers

MM-TRA-1: Traffic Signal

There is currently a stop sign at the intersection of Sundance Avenue and Twin Trails Drive. MM-TRA-1 would replace the stop sign with a traffic signal, which would change the traffic flow and therefore the traffic noise at the intersection. As shown in Table 4.5-7, implementation of MM-TRA-1 would decrease noise levels at the adjacent uses. This is because the traffic signal would improve the traffic flow. Therefore, no operational impacts associated with the installation of a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive would occur.

Table 4.5-7 MM-TRA-1 Noise Levels (CNEL)			
Receiver	Noise Level with Stop Sign	Noise Level with Traffic Signal	Difference
1	64	63	-1
2	68	65	-3
3	67	62	-5
4	63	60	-3
5	63	60	-3
6	67	62	-5
7	68	63	-5
8	64	63	-1
9	65	63	-2
10	68	64	-4
11	65	61	-5
12	61	58	-3
13	56	54	-2
14	62	59	-4
15	67	64	-3
16	64	63	-1
SOURCE: Appendix E			

MM-TRA-2: Auxiliary Lane

Introduction of an auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road under MM-TRA-2 would shift some traffic closer to the residential uses to the south, and therefore increase traffic noise levels at these uses. As shown in Table 4.5-8, introduction of the eastbound auxiliary lane would increase noise levels at the nearest residential uses to the south of SR-56 by less than 1 decibel (dB), which would not be readily perceivable. Noise levels at the residential uses north of SR-56 would decrease, because the additional auxiliary lane would shift freeway traffic further to the south.

Table 4.5-8 MM-TRA-2 Noise Levels (CNEL)						
Roadway	AM Peak Hour			PM Peak Hour		
	Without Auxiliary Lane	With Auxiliary Lane	Difference	Without Auxiliary Lane	With Auxiliary Lane	Difference
Westbound SR-56	75	75	0	71	71	0
Eastbound SR-56	75	76	<1	80	80	<1
SR-56-All Lanes	78	79	<1	80	80	<1
SOURCE: Appendix E						
Note: Differences may vary due to independent rounding.						

MM-TRA-3: Freeway On-Ramp Lane

Introduction of an additional lane on the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would move some on-ramp traffic closer to the residential uses to the north and therefore increase traffic noise levels at these uses. Traffic noise levels with and without the additional on-ramp lane were calculated at the nearest sensitive receiver, and the results are shown in Table 4.5-9. As shown in Table 4.5-9, introduction of the additional on-ramp lane would increase noise levels at the nearest residential uses to the north by less than 1 dB, which would not be readily perceivable. It should be noted that the dominant noise source at the residential uses adjacent to the MM-TRA-3 roadway improvement area is vehicle traffic on SR-56, and noise associated with vehicle traffic on the on-ramp does not contribute measurably to the overall ambient noise environment.

Table 4.5-9 MM-TRA-3 Noise Levels (CNEL)			
Roadway	Without Additional Lane	With Additional Lane	Difference
Westbound On-Ramp	54	55	<1
SOURCE: Appendix E			
Note: Difference may vary due to independent rounding.			

Project Design Feature

Residential uses are located west of the portion of Black Mountain Road that would be improved under the project design feature. However, the proposed restriping of the bridge segment of Black Mountain Road over SR-56 and slight widening of the segment of Black Mountain Road north of the bridge would shift some traffic slightly to the east, away from the residential uses. Therefore, implementation of the project design feature would not result in an increase in noise levels at the adjacent sensitive receivers and would not result in a perceptible change in the ambient noise environment.

4.5.3.3 Significance of Impacts**a. Construction Noise**

Noise levels at nearby residential receivers during construction of MM-TRA-1 through MM-TRA-3 and the project design feature would be equal to or less than the 75 dB(A) L_{eq} threshold. Therefore, impacts associated with construction noise would be less than significant.

b. Operational Noise***Ambient Traffic Noise***

Changes in ambient noise levels would not be readily perceivable and would not exceed the City's significance threshold of a 3 dB(A) increase where noise currently exceeds 65 CNEL. Therefore, redistribution of traffic associated with the project would not result in a significant increase over existing ambient noise conditions, and impacts would be less than significant.

Traffic Noise at Sensitive Receptors***MM-TRA-1: Traffic Signal***

Implementation of MM-TRA-1 would improve traffic flow at the intersection of Sundance Avenue and Twin Trails Drive, and thereby decrease noise levels at the adjacent uses. Impacts would be less than significant.

MM-TRA-2: Auxiliary Lane

Changes in noise levels associated with MM-TRA-2 would be less than 1 dB and would not be readily perceivable. Therefore, noise impacts associated with operation of MM-TRA-2 would be less than significant.

MM-TRA-3: Freeway On-Ramp Lane

Changes in noise levels associated MM-TRA-3 would be less than 1 dB and would not be readily perceivable. Therefore, noise impacts associated with operation of MM-TRA-3 would be less than significant.

Project Design Feature

Restriping of the bridge segment of Black Mountain Road over SR-56 and slight widening of the segment of Black Mountain Road north of the bridge would shift traffic slightly to the east, away from the residential uses. Therefore, implementation of the project design feature would not result in an increase in noise levels due to vehicle traffic on Black Mountain Road at the adjacent sensitive receivers, and impacts would be less than significant.

4.5.3.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.6 Biological Resources

This section evaluates potential biological resources impacts associated with the Black Mountain Road Community Plan Amendment (project). The following discussion is based on the Biological Technical Report prepared by RECON and included as Appendix F.

4.6.1 Environmental Setting

A general biological survey for the project design feature and MM-TRA-1 through MM-TRA-3 was conducted on November 3, 2017. Additionally, a jurisdictional waters delineation of MM-TRA-2 was conducted on November 10, 2017, according to the guidelines set forth by the U.S. Army Corps of Engineers (ACOE; 1987, 2008). As shown in Figure 4.6-1, the survey areas for the project design feature and MM-TRA-1 through MM-TRA-3 are adjacent to existing roads and development. The project roadway consists entirely of pavement associated with Black Mountain Road, and reclassification from a 6-lane Primary Arterial to a 4-lane Major would not require widening of this segment of Black Mountain Road. Therefore, the surveys of biological resources and were limited to the project design feature and MM-TRA-1 through MM-TRA-3.

4.6.1.1 Botany

Table 4-6-1 shows the acreages of vegetation communities and land cover types within the survey areas for the project design feature and MM-TRA-1 through MM-TRA-3, while Figures 4.6-2a through 4.6-2c show the distribution of vegetation communities and land cover types. The survey area of the project design feature consists of ornamental plantings and developed land (see Figure 4.6-2a). The survey area for MM-TRA-1 consists entirely of developed land and does not contain any vegetation (see Figure 4.6-2a). The survey area for MM-TRA-2 consists of coastal sage scrub, freshwater marsh, southern willow scrub (riparian scrub), ornamental plantings, and developed land (see Figure 4.6-2b). The survey area of MM-TRA-3 consists of ornamental plantings and developed land (see Figure 4.6-2c). A list of plant species observed is provided in Attachment 1 of Appendix F. A description of each of these vegetation communities and land cover types is provided below.

Table 4.6-1 Summary of Vegetation and Land Cover Types by Survey Area (acres)				
Vegetation Communities/ Land Cover Types	Survey Area			
	MM-TRA-1	MM-TRA-2	MM-TRA-3	Project Design Feature
Coastal Sage Scrub	--	3.24	--	--
Freshwater Marsh	--	0.15	--	--
Southern Willow Scrub	--	0.19	--	--
Ornamental Plantings	--	3.10	4.5	1.4
Developed Land	0.59	1.58	1.3	2.0
TOTAL	0.59	8.26	5.8	3.4

a. Coastal Sage Scrub

Coastal sage scrub occurs on the slopes adjacent to State Route 56 (SR-56) and within the survey area for MM-TRA-2. The coastal sage scrub habitat was created from the revegetation of the manufactured slopes and other disturbed areas after the construction of SR-56. Native plant species that have become established are typical of coastal sage scrub habitat and include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), and California encelia (*Encelia californica*).

b. Freshwater Marsh

Freshwater marsh has developed along the creek that flows under the SR-56 bridge within the MM-TRA-2 survey area. Natural and urban storm water runoff provides seasonal flows that support a dense stand of cattail (*Typha latifolia*) in the creek bed. Other plant species occurring along the margins of the stand of cattail include San Diego marsh elder (*Iva haysiana*), spiny rush (*Juncus acutus*), and wild celery (*Apium graveolens*). Freshwater marsh is considered a type of wetland habitat.

c. Southern Willow Scrub (Riparian Scrub)

A stand of willow trees has become established in the creek that flows beneath the SR-56 bridge both upstream and downstream from the freshwater marsh areas located in the MM-TRA-2 survey area. Trees of red willow (*Salix laevigata*), black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepis*) form a mixed stand of willows that dominate this habitat type. Mule fat shrubs (*Baccharis salicifolia*) along with spiny rush, cattail, and San Diego marsh elder occur in the understory of the trees. Southern willow scrub (riparian scrub) is considered a type of wetland habitat.

d. Ornamental Plantings

Non-native plant species were installed along slopes adjacent to the roadways of the MM-TRA-2, MM-TRA-3, and project design feature survey areas. Common plants installed in this land cover type include eucalyptus trees (*Eucalyptus* spp.), sea fig (*Carpobrotus edulis*), vanilla scented wattle (*Acacia redeolons*), plumbago (*Plumbago auriculata*), and Aleppo pine (*Pinus hallipensis*).

e. Developed Land (Disturbed Land)

Developed land refers to the existing paved roadways and development that occur within the four survey areas. These roadways include SR-56, Black Mountain Road, freeway on-ramps, and residential neighborhoods. No vegetation occurs on the developed areas.

4.6.1.2 Zoology

A list of the wildlife species detected in the survey areas is provided in Attachment 2 of Appendix F. A general discussion of wildlife usage in the survey areas is presented below.

a. Amphibians

Most amphibians require moisture for at least a portion of their lifecycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season. No amphibians were detected during field surveys, but common amphibians such as Pacific tree frog (*Pseudacris regilla*) and California toad (*Anaxyrus boreas halophilus*) have a moderate potential to occur in the freshwater marsh and southern willow scrub habitat along the creek beneath the SR-56 bridge.

b. Reptiles

The diversity and abundance of reptile species vary with habitat type. Many reptiles are restricted to certain plant communities and soil types although some of these species will also forage in adjacent communities. Other species are more ubiquitous using a variety of vegetation types for foraging and shelter. No reptile species were observed in the survey area. However, the sites may support common reptile species such as common side-blotched lizard (*Uta stansburiana*), San Diego alligator lizard (*Elgaria multicarinata webbia*), and western fence lizard (*Sceloporus occidentalis*).

c. Birds

The diversity of bird species varies with respect to the character, quality, and diversity of vegetation communities present on a site. High-quality vegetation communities typically support a moderate to high variety of bird species. The scrub and woodland habitats provide foraging and shelter opportunities for a wide variety of bird species. Disturbed and developed lands are used by bird species adapted to urban settings.

The most commonly observed species within the survey area include house finch (*Haemorhous mexicanus frontalis*), song sparrow (*Melospiza melodia*), yellow-rumped warbler (*Setophaga coronata*), and northern mockingbird (*Mimus polyglottos*).

d. Mammals

Most mammal species are nocturnal; therefore, their presence is detected during daytime surveys by observing their sign, such as tracks, scat, and burrows. One mammal species was detected within the MM-TRA-2 survey area of the SR-56 bridge: coyote (*Canis latrans*). There is the potential for small mammals such as mice, gophers, and ground squirrels to occur in the vegetated portions of the survey areas.

4.6.1.3 Sensitive Biological Resources

Species are considered sensitive if they are:

1. Covered species or narrow endemic species under the City of San Diego (City) Multiple Species Conservation Program (MSCP);

2. Listed by state or federal agencies as threatened or endangered or are proposed for listing;
3. Listed on California Rare Plant Rank 1B (considered endangered throughout its range) or California Rare Plant Rank 2 (considered endangered in California but more common elsewhere) of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (2007); or
4. Considered rare, endangered, or threatened by the California Natural Diversity Database (CNDDDB; State of California 2012), the City of San Diego's biology guidelines (City of San Diego 2012), or local conservation organizations or specialists.

Noteworthy plant species are considered to be those that are on California Rare Plant Rank 3 (more information about the plant's distribution and rarity needed) and California Rare Plant Rank 4 (plants of limited distribution) of the CNPS Inventory. Sensitive vegetation communities are those identified by the CNDDDB (Holland 1986) or identified by the City of San Diego (2012).

Under Section 3503 of the California Department of Wildlife (CDFW) Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs (CDFW 1991). The Migratory Bird Treaty Act of 1918 (MBTA) was established to provide protection to the breeding activities of migratory birds throughout the United States. The MBTA protects migratory birds and their breeding activities from take and harassment.

All wetland areas and non-wetland waters of the U.S. are considered sensitive. Wetlands and non-wetland waters are under the jurisdiction of the ACOE. Streambeds and associated vegetation are under the jurisdiction of CDFW. The City of San Diego defines wetlands as:

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation;
2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation; and
3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands (City of San Diego 2012).

Assessments for the potential occurrence of sensitive species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, and species occurrence records from other sites in the vicinity of the project site

a. Sensitive Vegetation Communities

Three vegetation communities identified in the survey area for MM-TRA-2 are considered sensitive or regulated by the City of San Diego (2012). Coastal sage scrub is a Tier II uncommon upland and

both freshwater marsh and southern willow scrub are considered wetland habitats. A discussion of each of these vegetation communities is provided in 4.6.2.1 above. The acreage of these vegetation communities is presented in Table 4.6-1, while the locations of these vegetation communities are shown in Figure 4.6-2a.

b. Sensitive Plant Species

Three sensitive plant species were observed in the survey areas. None of these three species is a federal or state listed species. Scattered individuals of Torrey pine (*Pinus torreyana* ssp. *torreyana*), a CNPS List 1B.2 and MSCP covered species, were planted along the slopes adjacent to SR-56 within the MM-TRA-2 survey area, but are not part of a natural population. San Diego marsh elder, a CNPS List 2B.2 species, occurs as scattered individuals along the creek beneath the SR-56 bridge within the MM-TRA-2 survey area. Scattered individuals of southwestern spiny rush, a CNPS List 4.2 species, occur along the margins of the freshwater marsh associated with the creek beneath the SR-56 bridge.

As the other survey areas occur adjacent to existing roadways that have been altered during the construction of these roads, no sensitive species are expected to occur in these areas. A list of sensitive plant species known to occur in the vicinity of the survey areas (within one mile) that are state or federally listed as threatened or endangered, considered a City of San Diego narrow endemic, or that have potential to occur based on species range are addressed in Attachment 3 of Appendix F.

c. Sensitive Wildlife Species

No sensitive wildlife species were detected during the surveys; however, nine species have a moderate potential to occur in low numbers within the coastal sage scrub habitat in the MM-TRA-2 survey area. Two sensitive lizard species, Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) and coastal whiptail (*Aspidoscelis tigris stejnegeri*), and two sensitive snake species, two-striped gartersnake (*Thamnophis hammondi*) and red diamond rattlesnake (*Crotalus ruber*), are CDFW species of special concern that may occur in the coastal sage scrub habitat.

Sensitive hawk species such as the Cooper's hawk (*Accipiter cooperi*) and sharp-shinned hawk (*Accipiter striatus velox*) have a moderate potential to nest in the willow scrub habitat beneath the SR-56 bridge. Other sensitive bird species such as the southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) and coastal California gnatcatcher (*Poliophtila californica californica*; federal listed threatened, CDFW species of species concern) may occur in the coastal sage scrub habitat; however, due to the proximity of the habitat to SR-56, the habitat beneath the bridge may be the only location where these two species have the potential to be found.

One sensitive mammal species, southern mule deer (*Odocoileus hemionus fuliginata*), has the potential to use the coastal sage scrub and riparian scrub habitats beneath the SR-56 bridge. As this area occurs in the upper part of a canyon surrounded by development, mule deer are not expected in large numbers.

The other survey areas are not expected to support sensitive wildlife species due to the lack of native habitat and the proximity to existing roadways and developed areas. A list of sensitive wildlife species known to occur in the vicinity of the survey areas (within one mile) that are federally listed threatened or endangered or that have potential to occur based on species range are addressed in Attachment 4 of Appendix F.

d. Wetlands

A jurisdictional waters delineation conducted in the MM-TRA-2 survey area identified wetlands associated with the creek that flows under the eastbound SR-56 bridge (Attachment 5 of Appendix F). Wetland waters of the U.S. (ACOE), waters of the state (CDFW and Regional Water Quality Control Board [RWQCB]), and City of San Diego all occur in this area. Wetland vegetation consists of the plant species found in the freshwater marsh and southern willow scrub (riparian scrub) habitats. A total of 0.32 acre of wetlands is located within the survey area of MM-TRA-2, consisting of 0.14 acre of freshwater marsh and 0.18 acre of southern willow scrub. The locations of these wetlands habitats are shown in Figure 4.6-3. No wetlands occur in the survey areas of the project design feature, MM-TRA-1, or MM-TRA-3.

4.6.2 Regulatory Framework

4.6.2.1 Multiple Species Conservation Program

The MSCP is a comprehensive habitat conservation planning program for San Diego County. A goal of the MSCP is to preserve a network of habitat and open space, thereby protecting biodiversity. Local jurisdictions, including the City, implement their portions of the MSCP through subarea plans, which describe specific implementing mechanisms.

The City of San Diego's MSCP Subarea Plan was approved in March 1997. The MSCP Subarea Plan is a plan and process for the issuance of permits under the federal and state Endangered Species Act (ESA) and the California Natural Communities Conservation Planning Act of 1991. The primary goal of the Subarea Plan is to conserve viable populations of sensitive species and to conserve regional biodiversity while allowing for reasonable economic growth.

Multi-Habitat Planning Area (MHPA) lands are those that have been included within the City's MSCP Subarea Plan for habitat conservation. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. MHPA lands are considered by the City of San Diego to be a sensitive biological resource. None of the four survey areas occur within or are immediately adjacent to the MHPA.

4.6.2.2 City of San Diego Environmentally Sensitive Lands Regulations

The purpose of the Environmentally Sensitive Lands (ESL) Regulations (Land Development Code [LDC] Sections 143.0101 – 143.0160) is to protect, preserve and, where damaged, restore environmentally sensitive lands and the viability of the species supported by those lands. The ESL

Regulations apply to all proposed development when environmentally sensitive lands, including sensitive biological resources, steep hillsides, floodplains, or coastal bluffs, are present. The regulations are designed to ensure that development occurs in a manner that protects natural resources and the natural and topographic character of the area, and retains biodiversity and interconnected habitats. Within the study area, ESL resources include sensitive habitats, sensitive species, and wetlands.

4.6.3 Impacts to Biological Resources

According to the City Significance Determination Thresholds, potential impacts to biological resources are assessed through review of the project's consistency with the City's ESL Regulations, Biology Guidelines, and MSCP Subarea Plan. Before a determination of the significance of an impact can be made, the presence and nature of the biological resources must be established. Thus, significance determination, pursuant to the City's Significance Determination Thresholds, precedes in two steps: (1) determine if significant biological resources are present; and (2) determine the sensitivity of identified biological resources in terms of direct, indirect, and cumulative impacts that would result from project implementation.

1. Sensitive biological resources are defined by the City of San Diego Municipal Code as:
 - Lands that have been included in the MHPA as identified in the City of San Diego MSCP Subarea Plan (City of San Diego 1997);
 - Wetlands (as defined by the Municipal Code, Section 113.0103);
 - Lands outside the MHPA that contain Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines (July 2002 or current edition) of the Land Development manual;
 - Lands supporting species or subspecies listed as rare, endangered, or threatened;
 - Lands containing habitats with narrow endemic species as listed in the Biology Guidelines of the Land Development manual; and
 - Lands containing habitats of covered species as listed in the Biology Guidelines of the Land Development manual.
2. Occurrence of any of the following situations associated with identified biological resources may indicate significant direct and indirect biological impacts.
 - A. Direct Impacts
 - Any encroachment in the MHPA is considered a significant impact to the preservation goals of the MSCP. Any encroachment into the MHPA (in excess of the allowable encroachment by a project) would require a boundary adjustment, which would include a habitat equivalency assessment to ensure that what would be added to the MHPA is at least equivalent to what would be removed.

- Lands containing Tier I, II, IIIA, and IIIB habitats and all wetlands are considered sensitive and declining habitats. Impacts to these resources may be considered significant.
- Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to state or federally listed species and all narrow endemics should be considered significant.
- Certain species covered by the MSCP and other species not covered by the MSCP may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.

B. Indirect Impacts

The Significance Determination Thresholds indicate that depending on the circumstances, indirect effects of a project may be as significant as the direct effects of the project. Indirect effects include, but are not limited to, the following impacts:

- Introduction of urban meso-predators into a biological system
- Introduction of urban runoff into a biological system
- Introduction of invasive exotic plant species into a biological system
- Noise and lighting impacts
- Alteration of a dynamic portion of a system, such as stream flow characteristics or fire cycles
- Loss of a wetland buffer that includes no environmentally sensitive lands.

All biological resources within the project footprint area, including grading, the required Zone 1 Fuel Modification Zone (FMZ), and landscaping are considered a direct impact and 100 percent lost. There are no direct temporary impacts proposed as part of this project.

4.6.4 Issues 1, 2, and 3: Sensitive Species, Sensitive Habitat, and Wetlands

Would the project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)?

Would the project result in a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS?

Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

4.6.4.1 Threshold(s)

Refer to Section 4.6.3.

4.6.4.2 Impacts

a. Vegetation Communities

Direct impacts to vegetation communities and land cover types that would occur under each roadway improvement are presented in Table 4.6-2. The locations of these direct impacts are shown in Figures 4.6-4a through 4.6-4c.

Table 4.6-2
Summary of Vegetation Community and Land Cover Type Impacts
(acres)

Vegetation Communities/ Land Cover Types	Survey Area				
	MM-TRA-1	MM-TRA-2	MM-TRA-3	Project Design Feature	Total Impact
Coastal Sage Scrub					
Permanent	--	0.20	--	--	0.20
Construction Zone	--	1.06	--	--	1.06
Freshwater Marsh					
Permanent	--	0.01	--	--	0.01
Construction Zone	--	0.04	--	--	0.04
Southern Willow Scrub					
Permanent	--	--	--	--	--
Construction Zone	--	0.11	--	--	0.11
Ornamental Plantings					
Permanent	--	0.07	0.30	0.31	0.68
Construction Zone	--	0.30	0.55	0.25	1.10
Developed Land					
Permanent	0.001	0.20	--	0.02	0.22
Construction Zone	--	0.22	--	0.01	0.23
TOTAL	0.001	2.21	0.85	0.59	3.65

b. Sensitive Plants

The project has the potential to impact a low number of individuals (i.e., less than 10) of San Diego marsh elder and southwestern spiny rush, depending on the final project design and footprint. However, the potential small losses of these two species would not reduce overall population numbers, both locally or regionally. The project would only potentially affect a very small portion of the range of these species due to possible minor losses of suitable habitat, and adequate habitat for these species is conserved regionally under the MSCP.

c. Sensitive Wildlife

General Wildlife

Construction of the roadway improvements would have the potential to impact general wildlife species. While most birds species would be able to move out of the way during grading, small mammals and reptiles with low mobility may be inadvertently killed during construction. However, these species do not meet the criteria for sensitive species presented in Section 4.6.1.3.

Sensitive Wildlife

The Belding's orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, coastal California gnatcatcher, and southern mule deer are considered covered species

under the City of San Diego's MSCP (City of San Diego 1997). As the roadway improvement areas are located outside of the MHPA and are not adjacent to an MHPA preserve area, potential impacts to these species would not be considered significant. Potential impacts to non-covered species coastal whiptail, two-striped gartersnake, red diamond rattlesnake, and sharp-shinned hawk, if present, would likely only result in the loss of one individual of any of these species. Thus, the overall population level effect locally and regionally would be minimal for any of the species. Only a small fraction of the range of any of these four species would be affected and a very minor loss of habitat would occur. As the project occurs within existing road corridors where habitat for these species is marginal due to proximity to development and road edge effects, regional effects on these species would be very minor as adequate habitat for these species is conserved under the MSCP.

Nesting Birds

There is a potential for raptors and other birds to nest in the ornamental trees, shrubs, and in the native habitats within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3. However, the project applicant would be required to comply with restrictions associated with nesting bird species per Section 3503 of the California Fish and Game Code and the MBTA. Under Section 3503 of the CDFW Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs. The MBTA was established to provide protection to the breeding activities of migratory birds throughout the United States. The MBTA protects migratory birds and their breeding activities from take and harassment.

d. Wetlands

As shown in Table 4.6-2, expansion of the eastbound SR-56 bridge associated with MM-TRA-2 would potentially impact freshwater marsh (0.01 acre permanent and 0.04-acre construction zone) and southern willow scrub (0.11 acre construction zone). These are wetland habitats that are under the jurisdiction of the ACOE, RWQCB, CDFW, and City of San Diego.

4.6.4.3 Significance of Impacts

a. Vegetation Communities

Impacts to coastal sage scrub would be significant (Impact BIO-1).

Freshwater marsh and southern willow scrub are wetland habitats that are under the jurisdiction of the ACOE, Regional Water Quality Control Board (RWQCB), CDFW, and City of San Diego. See section 4.6.4.3d for a discussion of impacts on jurisdictional wetlands and mitigation.

b. Sensitive Plants

Impacts to sensitive plants would be less than significant.

c. Sensitive Wildlife

General Wildlife

Impacts to general wildlife would be less than significant.

Sensitive Wildlife

Belding's orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, coastal California gnatcatcher, and southern mule deer are considered covered species under the City MSCP. Consequently, impacts would be considered less than significant. Potential impacts to non-covered species coastal whiptail, two-striped gartersnake, red diamond rattlesnake, and sharp-shinned hawk would be less than significant.

Nesting Birds

Compliance with Section 3503 of the California Fish and Game Code and MBTA requirements regarding the protection of migratory birds and breeding activities would ensure that impacts to migratory or nesting birds would be less than significant.

d. Wetlands

Impacts to freshwater marsh and southern willow scrub would be significant (Impact BIO-2).

4.6.4.4 Mitigation, Monitoring, and Reporting

The impact analysis and corresponding mitigation measures presented in this EIR are based on conceptual designs of the project design feature and MM-TRA-1 through MM-TRA-3 that would be refined at a later date. Therefore, future implementation of the project design feature and MM-TRA-1 through MM-TRA-3 would require further refinements. These refinements would require compliance with the programmatic biological resources mitigation framework presented below. Compliance with this mitigation framework would include preparation of an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.

a. Vegetation Communities

MM-BIO-1a: Biological Technical Report

Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 shall be required to prepare a site-specific biological technical report consistent with the City's Biology Guidelines to ensure that potentially significant impacts to unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the area of potential effect.

MM-BIO-1b: Sensitive Habitat

Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall occur in accordance with the mitigation ratios specified within the City's Biology Guidelines as presented in Table 4.6-3.

Table 4.6-3 Mitigation Ratios for Impacts on Upland Vegetation Communities and Land Cover Types					
Tier	Habitat Type	Mitigation Ratios			
TIER I (rare uplands)	Southern Foredunes	Location of Impact	Inside Outside	Location of Preservation	
	Torrey Pines Forest			Inside	Outside
	Coastal Bluff Scrub			2:1	3:1
	Maritime Succulent Scrub			1 :1	2: 1
	Maritime Chaparral				
	Scrub Oak Chaparral				
	Native Grassland Oak Woodlands				
TIER II (uncommon uplands)	Diegan Coastal Sage Scrub	Location of impact	Inside* Outside	Location of Preservation	
	Diegan Coastal Sage Scrub/ Chaparral			Inside	Outside
				1:1	2:1
TIER IIIA (common uplands)	Chamise Chaparral	Location of impact	Inside* Outside	Location of Preservation	
	Southern Mixed Chaparral			Inside	Outside
				21:1	31.5:1
TIER IIIB (common uplands)	Non-native Grassland	Location of impact	Inside* Outside	Location of Preservation	
				Inside	Outside
				0.5:1	1.5:1
Notes: For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I or (2) occur outside of the MHPA within the affected habitat type (in-kind). For impacts on Tier II, IIIA, and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I — III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind). Project-specific mitigation will be subject to applicable mitigation ratios at the time of project submittal.					

Mitigation for Impacts to Wetlands

Please refer to mitigation measures MM-BIO-2a and MM-BIO-2b.

b. Sensitive Plants

No mitigation is required.

c. Sensitive Wildlife

No mitigation is required.

d. Wetlands

MM-BIO-2a: Wetland Habitat

Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive wetlands shall occur in accordance with the mitigation ratios specified within the City's Biology Guidelines as shown in Tables 4.6-4 and 4.6-5 below.

Table 4.6-4 Wetland Mitigation Ratios Including Biologically Superior Design	
Habitat Type	Mitigation Ratio
Riparian Habitats:	
- Oak riparian forest	3:1
- Riparian forest or woodland	3:1
- Riparian scrub	2:1
- Riparian scrub in the Coastal Overlay Zone	3:1
Freshwater Marsh	2:1
Freshwater Marsh in the Coastal Overlay Zone	4:1
Natural Flood Channel	2:1
Disturbed Wetland	2:1
Notes: Any impacts to wetlands must be mitigated "in-kind" and achieve a "no -net loss" of wetland function and values except as provided for in Section 3B (Economic Viability Option). Mitigation for vernal pools can range from 2:1 when no listed species are present, up to 4:1 when listed species with very limited distributions (e.g., <i>Pogogyne abramsii</i>) are present.	

Table 4.6-5 Wetland Mitigation Ratios for a Biologically Superior Project Outside of the Coastal Zone	
Habitat Type	Mitigation Ratio
Riparian Forest or Woodland (oak, sycamore, or willow)	6:1
Riparian Scrub	4:1
Freshwater Marsh	4:1
Natural Flood Channel (NFC)*	4:1
Disturbed Wetlands*	4:1
Notes: Mitigation must be provided within or adjacent to the MHPA. Any impacts to wetlands must be mitigated "in-kind" and achieve a "no -net loss" of wetland functions and values. Mitigation for vernal pools can range from 4:1 when no listed species are present, and up to 8:1 when listed species with very limited distributions (e.g., <i>Pogogyne abramsii</i>) are present. *Preference for these habitats is out-of-kind mitigation with better habitat. In-kind (e.g., NFC for NFC) could be considered where it would clearly benefit sensitive species and results in a biologically superior alternative.	

MM-BIO-2b: Wetland Habitat

Prior to the commencement of any construction-related activities on-site for projects impacting wetland habitat, the applicant shall provide evidence of the following, if applicable, to the Assistant Deputy Director (ADD)/Environmental Designee prior to any construction activity:

- Compliance with ACOE Section 404 nationwide permit;
- Compliance with the RWQCB Section 401 Water Quality Certification; and
- Compliance with the CDFW Section 1601/1603 Streambed Alteration Agreement.
- Compliance with City ESL wetland deviation process.

4.6.4.5 Significance after Mitigation**a. Vegetation Communities**

Implementation of MM-BIO-1 would reduce impacts on coastal sage scrub to a level less than significant.

d. Wetlands

Implementation of MM-BIO-2 would reduce impacts on wetlands to a level less than significant.

4.6.5 Issue 4: Migratory Wildlife

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

4.6.5.1 Threshold(s)

Refer to Section 4.6.3.

4.6.5.2 Impacts

The segment of Black Mountain Road north of the SR-56 westbound off-ramp to be widened under the project design feature consists of ornamental plantings surrounded by commercial uses and a U.S. Post Office to the east, and existing roadway and residential development to the west. The footprint of MM-TRA-1 consists of a paved intersection and the footprint of MM-TRA-3 consists of a manufactured slope surrounded by residential development and existing roadways. Consequently, the footprints of these roadway improvements do not support the movement of native resident wildlife species.

The footprint of MM-TRA-2 consists of existing open space area within a small canyon. Although it is reasonable to assume that wildlife may move locally through the footprint of MM-TRA-2, the site is restricted by residential development and paved roads to the east and west. Additionally, open

space and natural vegetation north of the footprint of MM-TRA-2 are completely surrounded by residential development and paved roads and do not connect to a larger open space area with high-quality habitat. Furthermore, impacts to the footprint of MM-TRA-2 would be temporary and would be revegetated per the mitigation measures presented above. Therefore, the project would not interfere with the movement of any native resident wildlife species, and impacts would be less than significant.

4.6.5.3 Significance of Impacts

Impacts to wildlife movement would be less than significant.

4.6.5.4 Mitigation, Monitoring, and Reporting

No mitigation would be required.

4.6.6 Issues 5, 6, and 7: Applicable Plans, MHPA Edge Effects, and Local Policies or Ordinances

Would the project result in conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Would the project result in introducing land use within an area adjacent to the MHPA that would result in adverse edge effects?

Would the project result in a conflict with any local policies or ordinances protecting biological resources?

4.6.6.1 Threshold(s)

Refer to Section 4.6.3.

4.6.6.2 Impacts

MHPA lands are those that have been included within the City's MSCP Subarea Plan for habitat preservation in order to maximize conservation of sensitive biological resources, including sensitive species. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. The project site and proposed roadway improvements do not contain MHPA lands, nor are they located directly adjacent to any MHPA lands. Furthermore, there are no other local, regional, or state conservation plans that have identified the project site or any of the proposed roadway improvement areas for preservation. Implementation of MM-BIO-1a, MM-BIO-1b, and MM-BIO-2 would ensure that the project is consistent with the City's ESL Regulations and Biology Guidelines.

4.6.6.3 Significance of Impacts

The project would not conflict with the City's MSCP Subarea Plan or any other approved local, regional, or state habitat conservation plans. Similarly, the project would not result in adverse edge effects to the MHPA, nor would it conflict with any local policies or ordinances protecting biological resources.

4.6.6.4 Mitigation, Monitoring, and Reporting

Implementation of MM-BIO-1a, MM-BIO-1b, and MM-BIO-2 would ensure that the project is consistent with the City's ESL Regulations and Biology Guidelines.

4.6.7 Issue 8: Invasive Species

Would the project result in an introduction of invasive species of plants into a natural open space area?

4.6.7.1 Threshold(s)

Refer to Section 4.6.3.

4.6.7.2 Impacts

A small amount of invasive plant species, consisting of scattered pampas grass, fan palms, and acacia, were identified in the survey area of MM-TRA-2 beneath the eastbound SR-56 bridge. Construction of MM-TRA-2 may result of removal of these invasive plant species during clearing and grubbing, and the impact footprint would be revegetated with native plant species. No invasive plant species were observed in the survey areas of the project design feature, MM-TRA-1, or MM-TRA-3. Ornamental vegetation removed during construction of the project design feature, MM-TRA-2, and MM-TRA-3 would be replaced with a palette of native plant species. Revegetation of the project design feature, MM-TRA-2, and MM-TRA-3 would be based on a conceptual landscape plan prepared in accordance with established guidelines that would not include any invasive or non-native plant species.

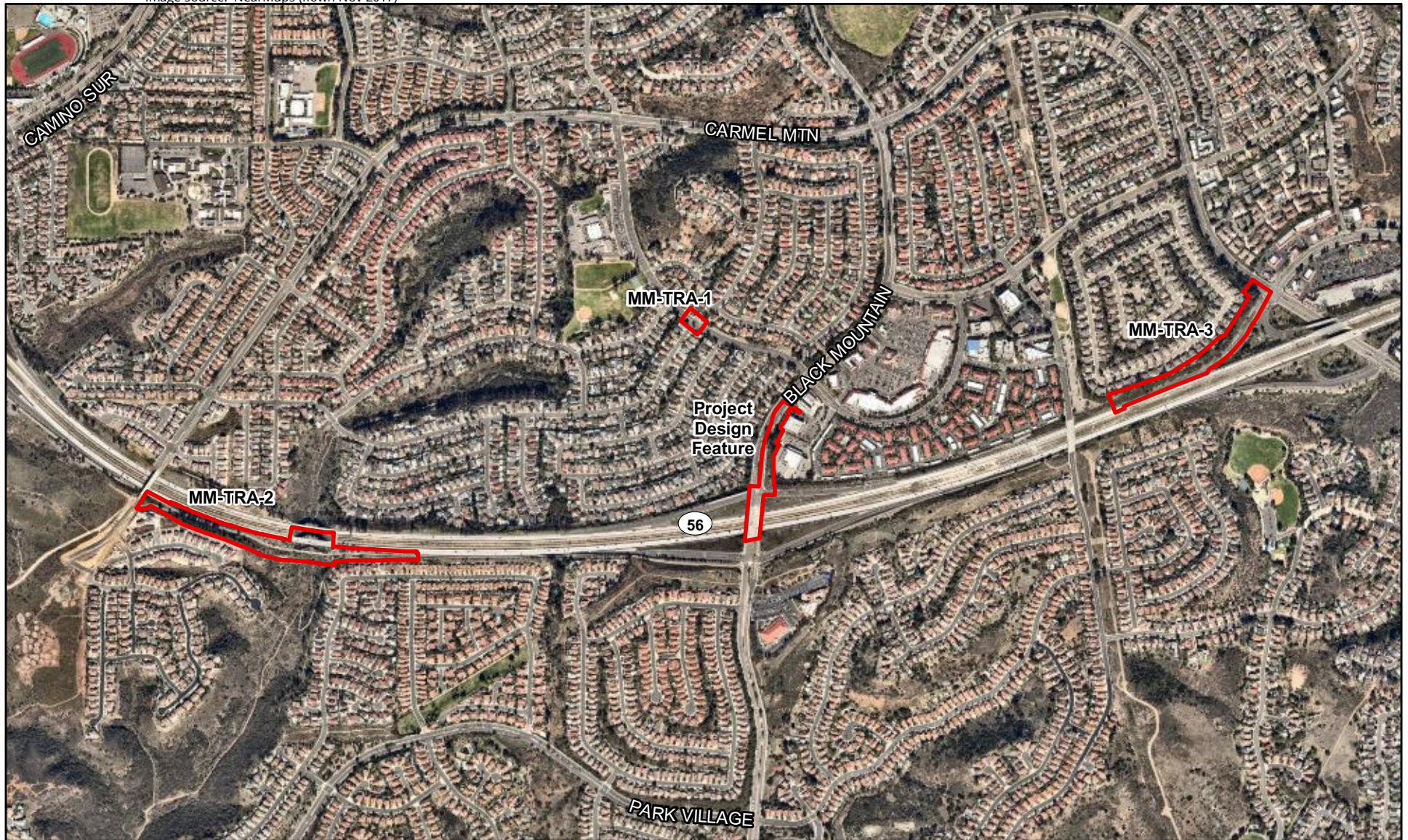
4.6.7.3 Significance of Impacts

Revegetation of the project design feature, MM-TRA-2, and MM-TRA-3 would consist entirely of native plant species and would not introduce any invasive species. No impact would occur.

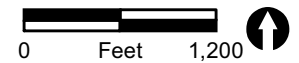
4.6.7.4 Mitigation, Monitoring, and Reporting

No mitigation would be required.

Image source: NearMaps (flown Nov 2017)



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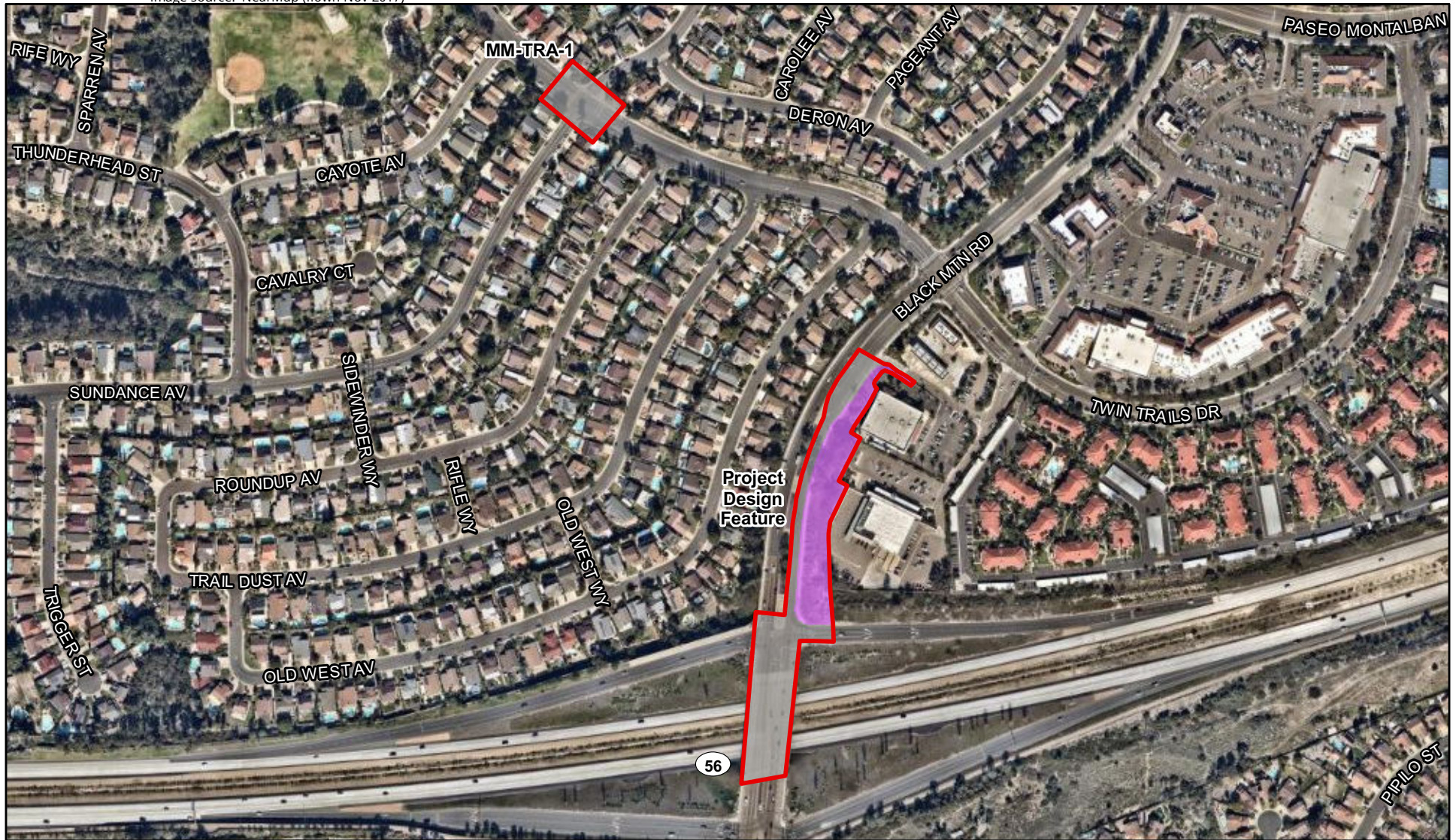

 Survey Area

FIGURE 4.6-1
Location of Project Design Feature and Traffic
Mitigation Survey Areas on Aerial Photograph

Image source: NearMap (flown Nov 2017)



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 Survey Area

Vegetation Community

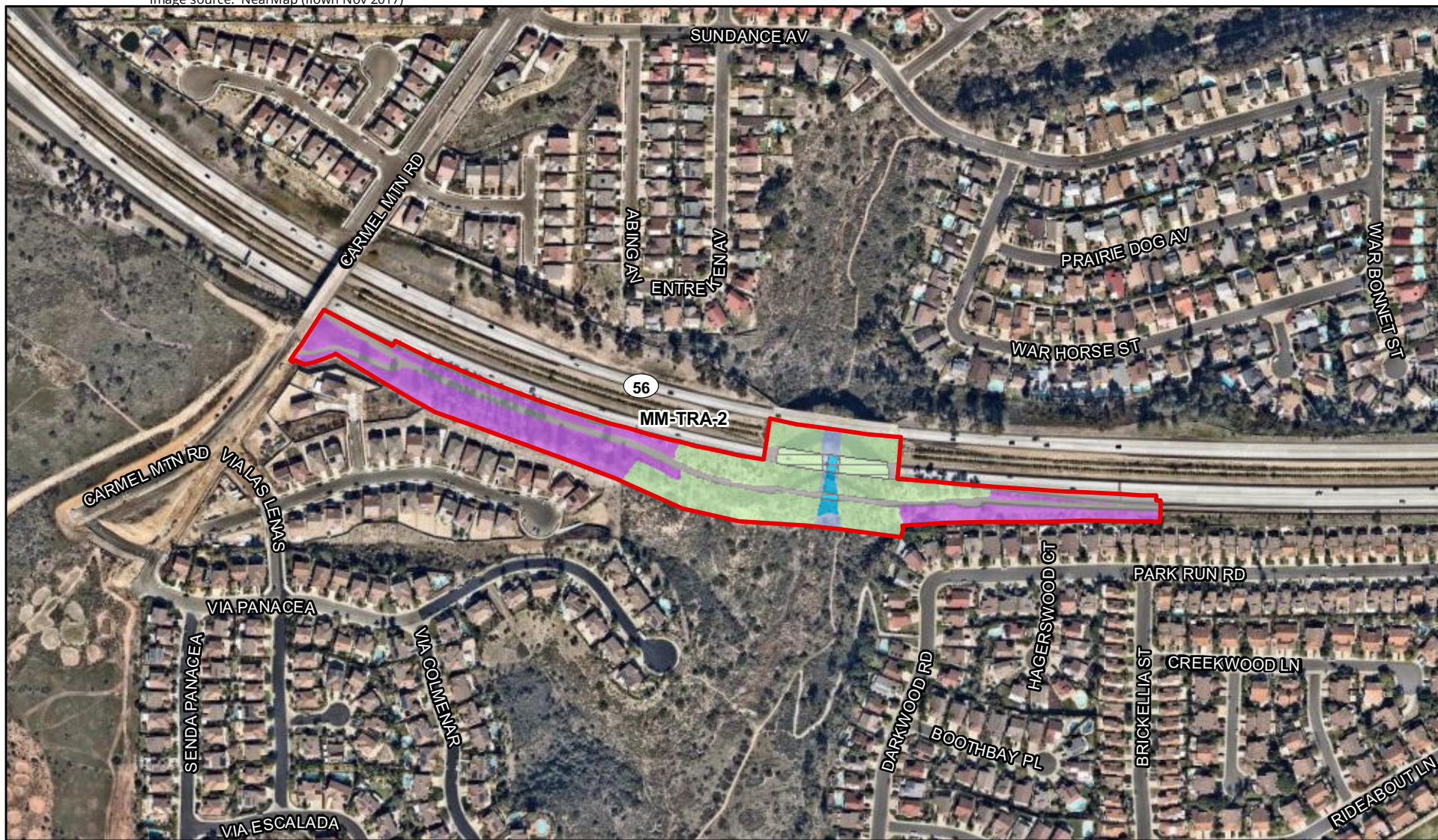
 Developed

 Ornamental Plantings

0 Feet 400 

FIGURE 4.6-2a
Vegetation Communities and Land Cover Types
within the Project Design Feature and MM-TRA-1 Survey Area

Image source: NearMap (flown Nov 2017)



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Survey Area

Vegetation Community

Coastal Sage Scrub

Coastal Sage Scrub (under bridge)

Developed

Freshwater Marsh

Freshwater Marsh (under bridge)

Ornamental Plantings

Southern Willow Scrub

Southern Willow Scrub (under bridge)




FIGURE 4.6-2b
Vegetation Communities and Land Cover Types
within the MM-TRA-2 Survey Area

Image source: NearMap (flown Nov 2017)




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 Survey Area

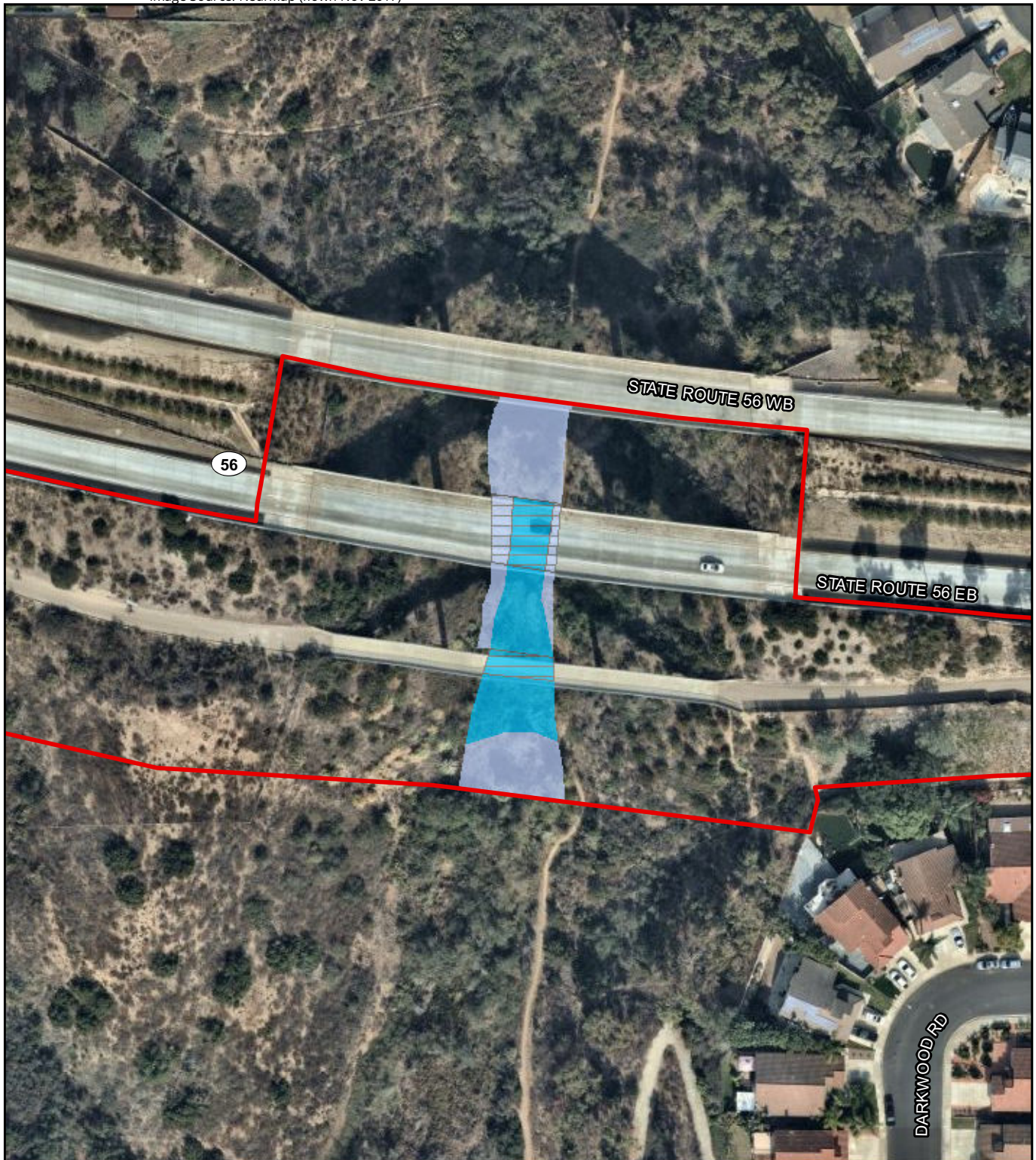
Vegetation Community

 Developed


 Ornamental Plantings

0 Feet 400 

FIGURE 4.6-2c
Vegetation Communities and Land Cover Types
within the MM-TRA-3 Survey Area



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 Survey Area

ACOE, CDFW, RWQCB, City of San Diego Wetland Jurisdictional Habitat





-  Freshwater Marsh
-  Freshwater Marsh (under bridge)
-  Southern Willow Scrub
-  Southern Willow Scrub (under bridge)

FIGURE 4.6-3
Location of Jurisdictional Waters
within the MM-TRA-2 Survey Area

Image source: NearMap (flown Nov 2017)



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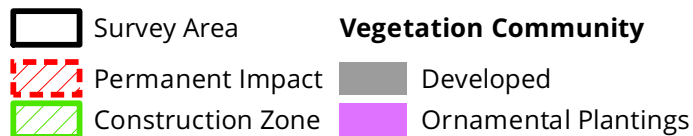
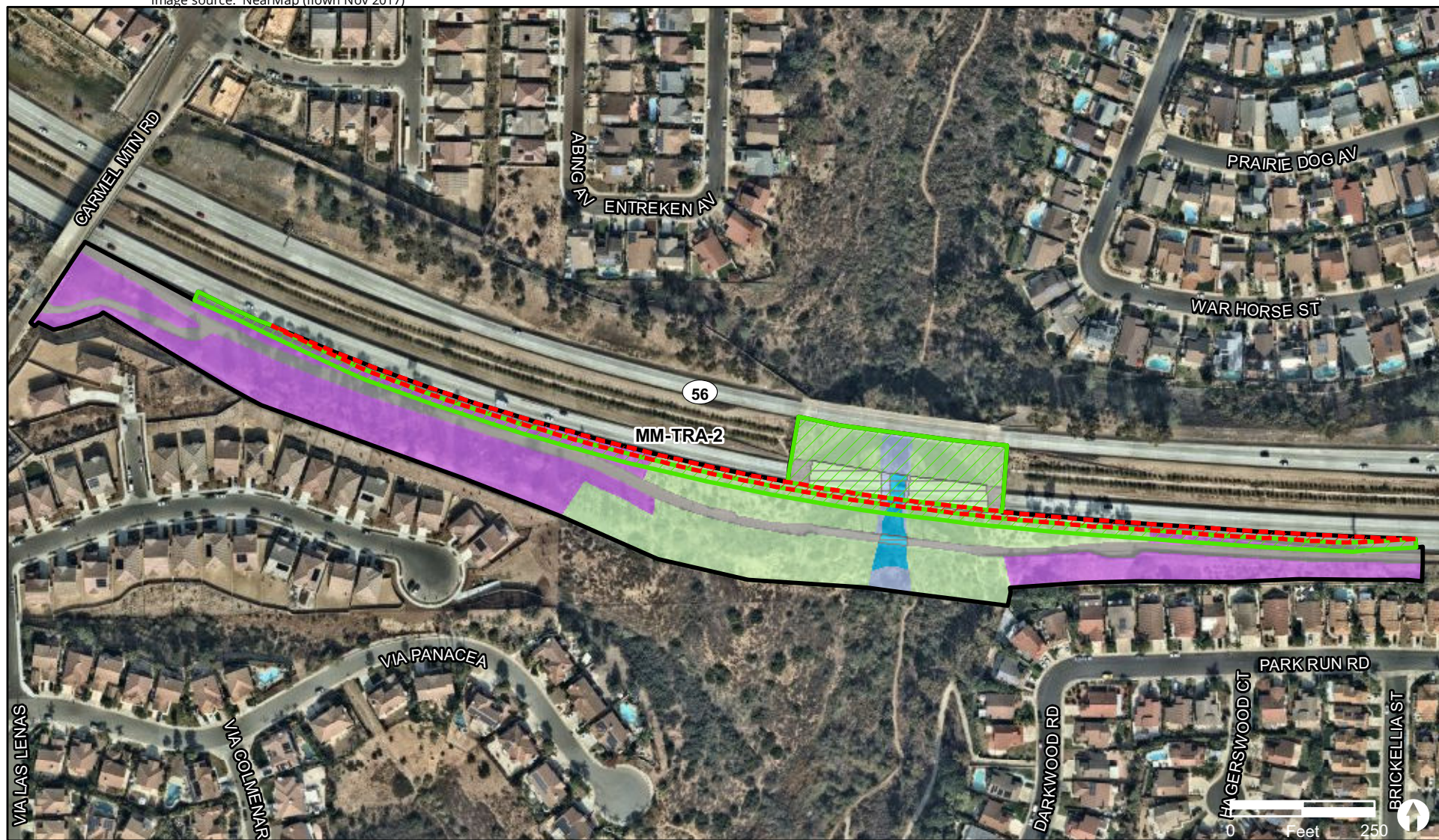


FIGURE 4.6-4a
Vegetation Community and Land Cover Type
Impacts at Project Design Feature and MM-TRA1

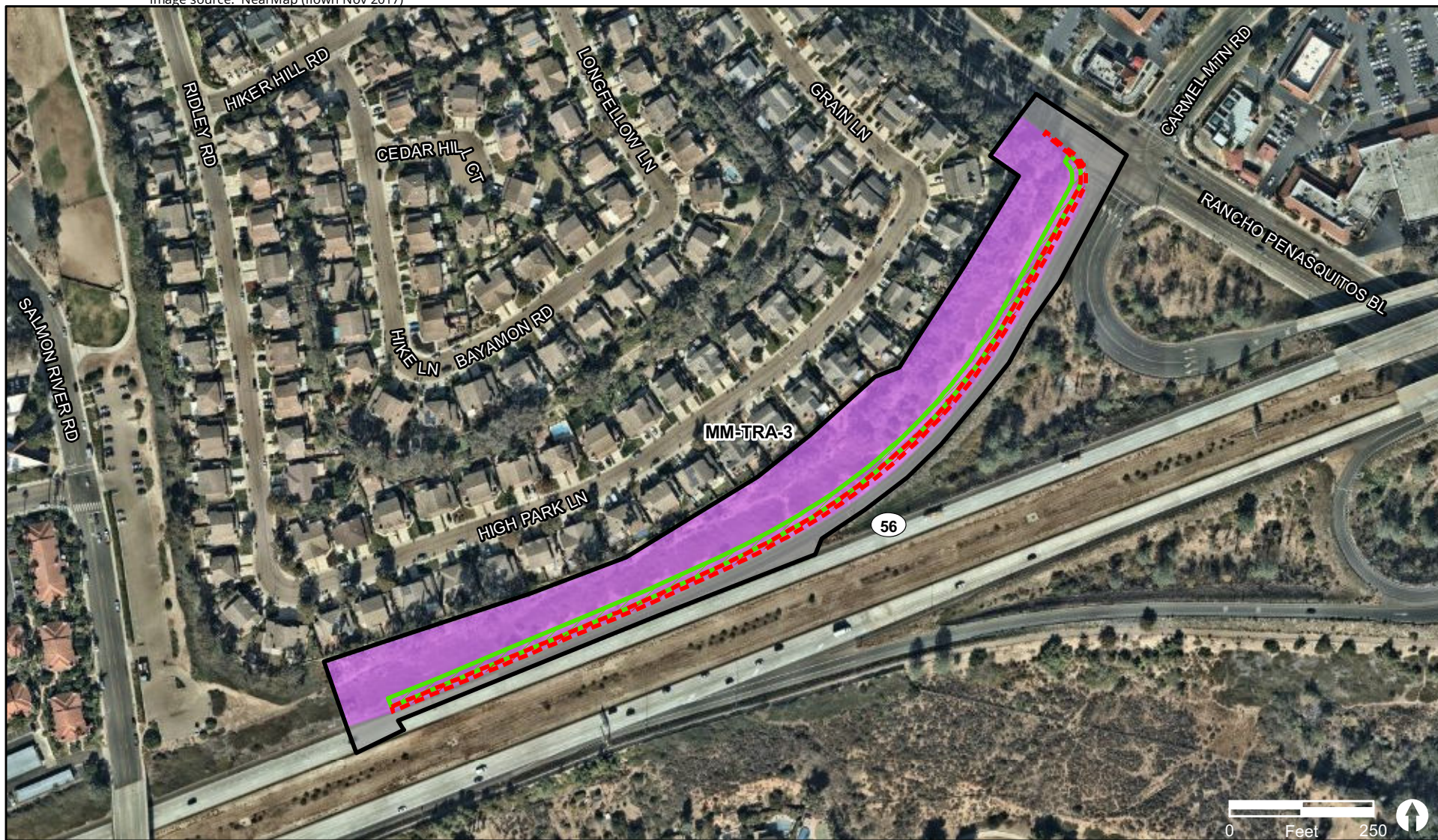
Image source: NearMap (flown Nov 2017)



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FIGURE 4.6-4b
Vegetation Community and Land Cover Type
Impacts at MM-TRA-2



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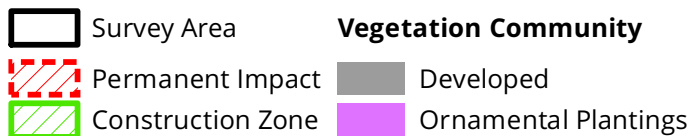


FIGURE 4.6-4c
Vegetation Community and Land Cover Type
Impacts at MM-TRA-3

4.7 Cultural Resources

The section evaluates potential cultural resources impacts associated with the Black Mountain Road Community Plan Amendment Project (project). The following discussion is based on the Archaeological Resources Survey prepared by RECON and included as Appendix G.

4.7.1 Existing Conditions

4.7.1.1 Known Prehistoric/Historic Resources

a. Cultural Setting

The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; the Archaic, lasting from about 8,500 to 1,500 years ago (A.D. 500) and manifested by the cobble and core technology of the La Jolla Complex; and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., A.D. 500 to 1769) and represented by the Cuyamaca Complex. This latest complex is marked by the appearance of ceramics, small arrow points, and cremation burial practices.

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex, as identified by Rogers (1938, 1939, 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting (Warren et al. 1993:III-33).

The Archaic Period in coastal San Diego County is represented by the La Jolla Complex, a local manifestation of the widespread Millingstone Horizon. This period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jolla Complex along the coast and the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jolla sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. The La Jolla assemblage is dominated by rough, cobble-based choppers and scrapers, and slab and basin metates. Elko series projectile points appeared by about 3,500 years ago. Large deposits of marine shell at coastal sites argue for the importance of shellfish gathering to the coastal Archaic economy.

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge that suggest the ethnohistoric Kumeyaay. The Later Prehistoric Period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from the work of D. L. True at Cuyamaca Rancho State Park (True 1970). The Cuyamaca Complex is characterized by the

presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic “Yuman bow pipes,” ceramic rattles, miniature pottery various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert Side-Notched (more common) and Cottonwood Series projectile points.

Ethnohistory

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. Settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984a and 1984b). Their economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools was made of locally available and imported materials. A simple shoulder-height bow was utilized for hunting. Numerous other flaked stone tools were made including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars, manos, metates, and pestles typically made of locally available fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets using either coiled or twined construction. The Kumeyaay also made pottery, utilizing the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brown ware, but some were decorated (Meighan 1954; May 1976, 1978).

Spanish/Mexican/American Periods

The Spanish Period (1769–1821) represents a time of European exploration and settlement. Military and naval forces along with a religious contingent founded the San Diego Presidio, the pueblo of San Diego, and the San Diego Mission in 1769 (Rolle 1998). The mission system used forced Native American labor and introduced horses, cattle, other agricultural goods, and implements. Native American culture in the coastal strip of California rapidly deteriorated despite repeated attempts to revolt against the Spanish invaders (Cook 1976). One of the hallmarks of the Spanish colonial scheme was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made to meritorious or well-connected individuals.

In 1821, Mexico declared its independence from Spain. During the Mexican Period (1822–1848), the mission system was secularized by the Mexican government and these lands allowed for the dramatic expansion of the rancho system. The southern California economy became increasingly based on cattle ranching.

The Mexican period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican–American War (1846–1848; Rolle 1998). Just prior to the signing of the Treaty of Guadalupe Hidalgo, gold was discovered in the northern California Sierra–Nevada foothills, the news was published on March 15, 1848, and the California Gold Rush ensued the following year. The great influx of Americans and Europeans eliminated many remaining vestiges of Native American culture. California became a state in 1850.

The American homestead system encouraged settlement beyond the coastal plain into areas where Indians had retreated to avoid the worst of Spanish and Mexican influences (Carrico 1987; Cook 1976). A rural community cultural pattern existed in San Diego County from approximately 1870 to 1930. These communities were composed of an aggregate of people who lived on scattered farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986; Pourade 1963).

b. Records Search

A records search was conducted by the South Coastal Information Center at San Diego State University in order to determine if previously recorded prehistoric or historic cultural resources occur on, or within a one-mile radius, of the project design feature, MM-TRA-2 and MM-TRA-3. Land within the footprint of MM-TRA-1 consists of an existing paved intersection and was not included in the record search.

The record search determined that there have been 41 archaeological investigations in the immediate vicinity of the project design feature, MM-TRA-2, and MM-TRA-3, and 79 cultural resources recorded within a one-mile radius of these proposed roadway improvements (Appendix G: Confidential Appendix). The cultural resources consist of 51 prehistoric sites, 22 prehistoric isolated artifacts, two historic foundations/homestead sites, and four multicomponent sites (prehistoric and historic). Prehistoric sites include bedrock milling features, lithic scatters, ceramic scatters, shell scatters, and ground stone artifacts. One prehistoric site (CA-SDI-10909) is recorded within the proposed footprint of MM-TRA-2. CA-SDI-10909 was recorded in 1988 as a lithic scatter with over 100 cores and flakes, a scraper, and a mano (Corum and Laylander 1988).

A letter was also sent to the Native American Heritage Commission (NAHC) requesting they search their Sacred Lands files to identify spiritually significant and/or sacred sites or traditional use areas in the vicinity of the project design feature, MM-TRA-2, and MM-TRA-3. The NAHC Sacred Lands files did not identify any spiritually significant and/or sacred sites or traditional use areas in the vicinity of these roadway improvements

c. Field Inspection

An on-site field survey of the footprints of the project design feature, MM-TRA-2, and MM-TRA-3 was conducted on December 6, 2017, by RECON archaeologist Carmen Zepeda-Herman accompanied by Gabe Kitchen, a Native American representative from Red Tail Monitoring and Research. The spacing between the field personnel was 5 meters. The survey areas were inspected for evidence of archaeological materials such as flaked and ground stone tools, ceramics, milling features, and historic features. Photographs were taken to document the environmental setting and general conditions. Historic aerial photographs were also checked in order to see past development within and near the project design feature, MM-TRA-2 and MM-TRA-3. Land within the footprint of MM-TRA-1 consists of an existing paved intersection and was not surveyed.

The on-site field survey of the footprints of the project design feature, MM-TRA-2, and MM-TRA-3 determined that there were no structures on-site, and no cultural material was identified. Land within the footprint of the project design feature consists of a manufactured slope that has been

landscaped with eucalyptus trees. The slope was manufactured for the commercial buildings along the east side of Black Mountain Road. During the field survey of MM-TRA-2, the mapped location of CA-SDI-10909 was closely inspected, and no cultural material associated with this prehistoric site was identified. The footprint of MM-TRA-2 was impacted in the past during the construction of State Route 56 (SR-56) and the bike path along its southern side flank. The manufactured slopes along SR-56 are covered in coastal sage scrub, and the top soil has been removed and pushed aside during construction of the bike path and adjacent residential development. Land beneath the bridge section of SR-56 within the footprint of MM-TRA-2 was disturbed during the original construction of the state route, including installation of bridge columns within the creek canyon. Land within the footprint of TRA-3 consists of a manufactured slope for the residential development north of the access ramp.

4.7.2 Regulatory Framework

4.7.2.1 Federal

a. National Historic Preservation Act of 1966 and National Register of Historic Places

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their significance at the local, state, or federal level. Listing on the NRHP provides recognition that a property is historically significant to the nation, the state, or the community. Properties listed (or potentially eligible for listing) on the NRHP must meet certain significance criteria and possess integrity of form, location, or setting. Barring exceptional circumstances, resources generally must be at least 50 years old to be considered for listing on the NRHP.

Criteria for listing on the NRHP are stated in Title 36, Part 60 of the Code of Federal Regulations (36 Code of Federal Regulations 60). A resource may qualify for listing if there is quality of significance in American history, architecture, archaeology, engineering, and culture present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association; and where such resources:

- Are associated with events that have made a significant contribution to the broad patterns of history.
- Are associated with the lives of persons significant in the past.
- Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- Have yielded, or may be likely to yield, information important in prehistory or history.

Eligible properties must meet at least one of the NRHP criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character,

the degree to which the original historic fabric has been retained, and the reversibility of changes to the property. The fourth criterion is typically reserved for archaeological and paleontological resources. These criteria have largely been incorporated into the California Environmental Quality Act (CEQA) Guidelines (Section 15065.5).

4.7.2.2 State

a. California Register of Historic Resources (Public Resources Code Section 5020 et seq.)

Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the California Register of Historic Resources (CRHR) as are State Historical Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

b. California Environmental Quality Act

For the purposes of CEQA, a significant historical resource is one that qualifies for the CRHR or is listed in a local historic register or deemed significant in an historical resources survey, as provided under Section 5025.1(g) of the Public Resources Code. A resource that is not listed in or is not determined to be eligible for listing in the CRHR, is not included in a local register or historic resources, or is not deemed significant in an historical resources survey may nonetheless be deemed significant by a CEQA lead agency.

As indicated above, the California criteria (State CEQA Guidelines Section 15065.5) for the registration of significant architectural, archaeological, and historical resources on the CRHR are nearly identical to those for the NRHP. Furthermore, CEQA Section 21083.2(g) defines the criteria for determining the significance of archaeological resources. These criteria include definitions for a “unique” resource, based on its:

- Containing information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Having a special and particular quality such as being the oldest or best available example of its type.
- Being directly associated with a scientifically recognized important prehistoric or historic event or person.

c. Native American Burials (Public Resources Code Section 5097 et seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and designates the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to a

year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

4.7.2.3 Local

a. City of San Diego Municipal Code: Historical Resources Regulations

In January 2000, the City's Historical Resources Regulations (Regulations), part of the San Diego Municipal Code (Chapter 14, Article 3, Division 2: Purpose of Historical Resources Regulations or Sections 143.0201-143.0280), were adopted, providing a balance between sound historic preservation principles and the rights of private property owners. The Regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these are the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Historical resources, in the context of the City's Regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the city. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These are usually over 45 years old, and they may have been altered or still be in use.

Historic Resources Guidelines are incorporated in the City's Land Development Code by reference. These Guidelines set up a Development Review Process to review projects in the City. This process is composed of two aspects: the implementation of the Historical Resources Regulations and the determination of impacts and mitigation under CEQA.

Compliance with the Historical Resources Regulations begins with the determination of the need for a site-specific survey for a project. Section 143.0212(b) of the Regulations requires that historical resource sensitivity maps be used to identify properties in the City that have a probability of containing archaeological sites. These maps are based on records maintained by the South Coastal Information Center of the California Historic Resources Information System, as well as site-specific information in the City's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City shall require a survey. In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a one-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. A historic property (built environment) survey can be required on a project if the properties are over 45 years old and appear to have integrity of setting, design, materials, workmanship, feeling, and association.

Section 143.0212(d) of the Regulations states that if a property-specific survey is required, it shall be conducted according to the Guidelines criteria. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and precisely where it is located.

b. Historical Resources Register

The City provides a broader set of criteria for eligibility for the City's Historical Resources Register. As stated in the City's Historical Resources Guidelines, "Any improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria:"

- Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;
- Is identified with persons or events significant in local, State, or national history;
- Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;
- Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing on the State Register of Historical Resources; or
- Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

If a resource is not listed in, or determined eligible for listing in, the California Register, not included in a local register, or not deemed significant in a historical resource survey, City criteria states that it may nonetheless be historically significant.

c. General Plan Historic Preservation Element

The Historic Preservation Element of the General Plan provides guidance on archaeological and historic site preservation in San Diego, including the roles and responsibilities of the Historical Resources Board, the status of cultural resource surveys, the Mills Act, conservation easements, and other public preservation incentives and strategies. A discussion of criteria used by the Historical Resources Board to designate landmarks is included, as is a list of recommended steps to strengthen historic preservation in San Diego. The Element sets a series of goals for the City for the preservation of historic resources, and the first of these goals is to preserve significant historical resources. These goals are realized through implementation of policies that encourage the identification and preservation of historical resources.

City General Plan Policies HP-A.1 through HP-A.5 are associated with the overall identification and preservation of historical resources. This includes policies to provide for comprehensive historic resource planning and integration of such plans within City land use plans. These policies also focus

on coordinated planning and preservation of tribal resources, promoting the relationship with Kumeyaay/Diegueño tribes. Historic Preservation policies HP-B.1 through HP-B.4 address the benefits of historical preservation planning and the need for incentivizing maintenance, restoration, and rehabilitation of designated historical resources.

4.7.3 Impacts to Historic Resources

Historical resources significance determination, pursuant to the City's CEQA Significance Determination Thresholds, consists first of determining the sensitivity or significance of identified historical resources and, secondly, determining direct and indirect impacts that would result from project implementation. The City's 2016 CEQA Significance Determination Thresholds have been adapted to guide a programmatic assessment of the proposed project and accordingly, impacts related to historical resources would be significant if implementation of the proposed project could result in:

- 1) An alteration, including the adverse physical or aesthetic effects and/or the destruction of a historic building (including an architecturally significant building), structure, object or site;
- 2) A substantial adverse change in the significance of a prehistoric archaeological resource, a religious or sacred use site, or the disturbance of any human remains, including those interred outside of formal cemeteries; or
- 3) A substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code (PRC) Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC section 5020.1(k); or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. The City's CEQA Significance Determination Thresholds define a significant historical resource as one that qualifies for the CRHR or is listed in a local historic register or deemed significant in a historical resource survey, as provided under Section 5024.1(g) of the PRC, although even a resource that is not listed in or determined eligible for listing in the CRHR, not included in a local register, or not deemed significant in a historical resource survey may nonetheless be historically significant for the purposes of CEQA. The City's Historical Resources Guidelines state the significance of a resource may be determined based on the potential for the resource to address important research questions as documented in a site-specific technical report prepared as part of the environmental review process.

The City's CEQA Significance Determination Thresholds define a significant historical resource as one which qualifies for the CRHR or is listed in a local historic register or deemed significant in a historical resource survey, as provided under Section 5024.1(g) of the PRC, although even a resource that is not listed in, or determined eligible for listing in, the CRHR, not included in a local register, or not deemed significant in a historical resource survey may nonetheless be historically significant for purposes of CEQA. The City's Historical Resources Guidelines state the significance of a resource may be determined based on the potential for the resource to address important research questions as documented in a site-specific technical report prepared as part of the environmental review process.

Research priorities for the prehistoric, ethnohistoric, and historic periods of San Diego history are discussed in Appendix A to the City's Historical Resources Guidelines. As a baseline, the City has established the following criteria to be used in the determination of significance under CEQA:

- An archaeological site must consist of at least three associated artifacts/ecofacts (within a 50-square-meter area) or a single feature and must be at least 45 years of age. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site including site size, type and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostics, and datable material; artifact and ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance.
- The determination of significance for historic buildings, structures, objects, and landscapes is based on age, location, context, association with an important person or event, uniqueness, and integrity.
- A site will be considered to possess ethnic significance if it is associated with a burial or cemetery; religious social or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the mythology of a discrete ethnic population.

4.7.4 Issue 1: Prehistoric/Historic Resources

Would the project result in the alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site?

4.7.4.1 Threshold

Refer to Section 4.7.3.

4.7.4.2 Impacts

The footprints of the project design feature, MM-TRA-2, and MM-TRA-3 have been disturbed by construction of SR-56 or commercial developments. Consequently, the possibility of significant cultural resources, including buried deposits, being present within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3 is considered low. All areas have been disturbed in the past, and the degree of disturbance by past grading operations suggests that no cultural resources remain intact. Therefore, construction of the project design feature, MM-TRA-2, and MM-TRA-3 would not result in the alteration of, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), a structure.

4.7.4.3 Significance of Impacts

No prehistoric or historic buildings, structures, or objects or sites were identified within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3, and it is considered unlikely that resources would be discovered during construction. Therefore, impacts would be less than significant.

4.7.4.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.7.5 Issue 2: Religious/Sacred Uses

Would the project result in any impact to existing religious or sacred uses within the potential impact area?

4.7.5.1 Threshold

Refer to Section 4.7.3.

4.7.5.2 Impacts

As described in Section 4.7.1 above, no cultural resources, including religious or sacred uses, were identified within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3. All areas have been disturbed in the past, and the degree of disturbance by past grading operations suggests that no cultural resources remain intact. Furthermore, the NAHC Sacred Lands files search conducted for the project did not identify any spiritually significant and/or sacred sites or traditional use areas in the vicinity of the project design feature, MM-TRA-2, and MM-TRA-3.

4.7.5.3 Significance of Impacts

No religious or sacred uses were identified within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3, and it is considered unlikely that resources would be discovered during construction. Therefore, impacts would be less than significant.

4.7.5.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.7.6 Issue 3: Human Remains

Would the project result in the disturbance of any human remains, including those interred outside of formal cemeteries?

4.7.6.1 Threshold

Refer to Section 4.7.3.

4.7.6.2 Impacts

No known burial sites or cemeteries exist within the vicinity of the project design feature, MM-TRA-2, and MM-TRA-3, and it is not expected that human remains would be discovered during construction. In the unlikely event of the discovery of human remains during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 5097.98) and state Health and Safety Code (Section 7050.5) shall be undertaken.

4.7.6.3 Significance of Impacts

No known burial sites or cemeteries exist within the vicinity of the project design feature, MM-TRA-2, and MM-TRA-3, and it is not expected that human remains would be discovered during construction. Therefore, impacts would be less than significant.

4.7.6.4 Mitigation, Monitoring, and Reporting

No mitigation is required.

4.8 Tribal Cultural Resources

This section evaluates potential impacts to tribal cultural resources associated with the Black Mountain Road Community Plan Amendment Project (project). The analysis is based in part on information provided in the records search prepared by the South Central Information Center (SCIC), the Native American Heritage Commission (NAHC) Sacred Lands File search, and consultation with California Native American tribes traditionally and culturally affiliated with the project area who have requested consultation pursuant to California Public Resources Code Section 21080.3.1.

4.8.1 Existing Conditions

No tribal cultural resources are known to exist on the project site. As described in Section 4.7.1, on-site field survey of the footprints of the project design feature, MM-TRA-2, and MM-TRA-3 determined that there were no structures on-site, and no cultural material was identified. Land within the footprint of the project design feature consists of a manufactured slope that has been landscaped with eucalyptus trees. The slope was manufactured for the commercial buildings along the east side of Black Mountain Road. The footprint of MM-TRA-2 was impacted in the past during the construction of State Route 56 (SR-56) and the bike path along its southern side flank. The manufactured slopes along SR-56 are covered in coastal sage scrub, and the top soil has been removed and pushed aside during construction of the bike path and adjacent residential development. Land beneath the bridge section of SR-56 within the footprint of MM-TRA-2 was disturbed during the original construction of the state route, including installation of bridge columns within the creek canyon. Land within the footprint of TRA-3 consists of a manufactured slope for the residential development north of the access ramp.

4.8.2 Regulatory Framework

4.8.2.1 Federal

United States Code, Title 25, Sections 3001 et seq.

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

4.8.2.2 State

California Health and Safety Code, Section 7050.5

This code requires that if human remains are discovered in the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the

excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

California Public Resources Code, Sections 5020–5029.5

This code continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

Public Resources Code Sections 5097-5097.994

Native American Historic Resource Protection Act; Archaeological, Paleontological, and Historical Sites; Native American Historical, Cultural, and Sacred Sites (Public Resources Code [PRC] Section 5097-5097.994) specifies the procedures to be followed in the event of the unexpected discovery of human remains on non-federal public lands. California PRC 5097.9 states that no public agency or private party on public property shall “interfere with the free expression or exercise of Native American Religion.” The code further states that:

No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine . . . except on a clear and convincing showing that the public interest and necessity so require. County and city lands are exempt from this provision, except for parklands larger than 100 acres.

California Public Resources Code, Section 5024.1

The California Register of Historical Resources (CRHR) is the state version of the NRHP program. The CRHR was enacted in 1992 and became official January 1, 1993. The CRHR was established to serve as an authoritative guide to the state’s significant historical and archaeological resources. Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. California Environmental Quality Act (CEQA) identifies a historic resource as a property that is listed on—or eligible for listing on—the National Register of Historic Places (NRHP), CRHR, or local registers. NRHP-listed properties are automatically included on the CRHR.

The CRHR also includes properties that: have been formally determined eligible for listing or are listed in the NRHP; are registered State Historical Landmark Number 770 and above; are points of historical interest that have been reviewed and recommended to the State Historical Resources Commission for listing; or are City- and County-designated landmarks or districts (if criteria for designation are determined by Office of Historic Preservation to be consistent with CRHR criteria).

Assembly Bill 52

Assembly Bill 52 (AB 52), the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. Projects subject to AB 52 are those that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration on or after July 1, 2016. AB 52 adds tribal cultural resources to the specific cultural resources protected under CEQA. Under AB 52, a tribal cultural resource is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American Tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a tribal cultural resource. AB 52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Senate Bill 18

Senate Bill 18 (SB 18) requires local (City and County) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (cultural places) through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage for the purpose of protecting, or mitigating impacts to, cultural places. SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.).

4.8.3 Issue 1: Tribal Cultural Resources

Would the project result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

4.8.3.1 Thresholds

The City of San Diego (City) has not yet prepared thresholds of significance for potential impacts to Tribal Cultural Resources. Therefore, for purposes of this environmental impact report (EIR), guidance provided by issue questions listed in CEQA Appendix G are utilized to evaluate the potential for significant impacts to tribal cultural resources. Impacts related to tribal cultural resources would be significant if implementation of the project would:

1. Result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
 - b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.8.3.2 Impacts

The records search conducted by the South Coastal Information Center at San Diego State University identified one prehistoric site (CA-SDI-10909) within the proposed footprint of MM-TRA-2 (see Section 4.7.1.1). CA-SDI-10909 was recorded in 1988 as a lithic scatter with over 100 cores and flakes, a scraper, and a mano (Corum and Laylander 1988). During the field survey of MM-TRA-2, the mapped location of CA-SDI-10909 was closely inspected, and no cultural material associated with this prehistoric site was identified. The records search did not identify any cultural resources within the footprints of the project design feature or MM-TRA-3. Furthermore, the Native American Heritage Commission Sacred Lands files search conducted for the project did not identify any spiritually significant and/or sacred sites or traditional use areas in the vicinity of the project design feature, MM-TRA-2, and MM-TRA-3. The possibility of significant cultural resources, including buried deposits, being present within these footprints is considered low. All areas have been disturbed in the past, and the degree of disturbance by past grading operations suggests that no cultural resources remain intact.

The City completed consultation with the Native American tribes consistent with the requirements of AB 52 and SB 18. Tribes who are traditionally and culturally affiliated with the geographic area of the project were invited to consult regarding potential impacts to tribal cultural resources. The City received responses from the Lipay Nation of Santa Ysabel and the Jamul Indian Village of Kumeyaay Nation requesting consultation on the project. During tribal consultation, both tribes concurred with the findings of the Archaeological Resources Survey (Appendix G). Consequently, consultation was closed on February 21, 2018, with a finding of no tribal cultural resources.

4.8.3.3 Significance of Impacts

Consultation was closed on February 21, 2018 with a finding of no tribal cultural resources, and it is considered unlikely that resources would be discovered during construction. Therefore, no impact would occur.

4.8.3.4 Mitigation

No mitigation is required.

Chapter 5.0

Significant Unavoidable Environmental Effects/Irreversible Changes

This section addresses significant environmental impacts that cannot be avoided and irreversible environmental changes that would be involved should the Black Mountain Road Community Plan Amendment (project) be implemented.

5.1 Significant Environmental Effects Which Cannot Be Avoided if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2 (b), any significant unavoidable impact of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the applicant's willingness to implement all feasible mitigation measures, must be identified in the EIR. As discussed in Chapter 4, Environmental Analysis, of this EIR, implementation of the project would result in significant impacts related to the following issue areas: transportation/circulation and biological resources. Incorporation of mitigation measures would reduce the project's significant impacts to less than significant, except for the following impacts related to transportation/circulation:

- **Impact TRA-1:** Black Mountain Road south of Twin Trails Drive: Volume to capacity (V/C) ratio increases to 0.939 and operates at level of service (LOS) E. Per the Transportation Impact Study, mitigation was not identified to improve roadway segment operations on Black Mountain Road south of Twin Trails Drive. Mitigation for this roadway segment would require widening of Black Mountain Road that would be inconsistent with the project's objectives to maintain consistency with the community's current transportation network, maintain consistency with the City goals to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel, and to preserve the existing character of the community.
- **Impact TRA-2:** Black Mountain Road north of Park Village Road – Adolphia Street: V/C ratio increases to 0.886 and operates at LOS E. Per the Transportation Impact Study, mitigation was not identified to improve roadway segment operations on Black Mountain Road north of Park Village Road – Adolphia Street. Mitigation for this roadway segment would require widening of Black Mountain Road that would be inconsistent with the project's objectives to maintain consistency with the community's current transportation network, maintain consistency with the City goals to encourage use of transit and other forms of alternative transportation as opposed to vehicular travel, and to preserve the existing character of the community.

- **Impact TRA-4:** Eastbound State route 56 (SR-56) between Camino del Sur and Black Mountain Road (PM peak hour): V/C ratio increases to 1.104 and operates at LOS F. Implementation of MM-TRA-2 would reduce impacts on eastbound SR-56 between Camino Del Sur and Black Mountain Road. However, SR-56 is under the jurisdiction of California Department of Transportation (Caltrans), and the City of San Diego (City) does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour) would remain significant and unavoidable.
- **Impact TRA-5:** Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): Average delay increases from approximately 21 minutes to approximately 24 minutes. Implementation of MM-TRA-3 would reduce impacts on the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp to a level less than significant. However, the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would remain significant and unavoidable.

Table S-1 in the Executive Summary summarizes the project's significant environmental impacts and mitigation measures that would reduce impacts to below a level of significance. Chapter 10, Mitigation Monitoring and Report Program, lists the project-specific mitigation measures.

5.2 Irreversible Environmental Changes which Would Result if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2(c):

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The project would convert small amounts of undeveloped land to transportation uses, which would be a permanent change. Once construction occurs, reversion of the land to its original condition would be nearly impossible. Besides the conversion of undeveloped land to transportation uses, implementation of the project would also involve the consumption of natural resources as well as energy derived from non-renewable sources, such as fossil fuels. Non-renewable resources generally include biological habitat, agricultural land, mineral deposits, water bodies, and some energy sources. The project would result in significant impacts to vegetation communities (Impact

BIO-1) and wetlands (Impact BIO-2). However, the project would restore these resources through implementation of MM-BIO-1a, MM-BIO-1b, and MM-BIO-2.

Implementation of the project would also require the irreversible consumption of natural resources and energy. Natural resource consumption would include lumber and other forest products, asphalt, steel, copper, other metals, and water. Building materials, while perhaps recyclable in part at some long-term future date, would for practical purposes be considered permanently consumed. Energy derived from non-renewable sources, such as fossil fuels, would be consumed during construction.

Chapter 6.0

Growth Inducement

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(d) requires that an environmental impact report:

Discuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included are projects, which would remove obstacles to population growth (for example, a major expansion of a waste water treatment plant might allow for more construction in service areas). Increases in the population might tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. . . . It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Based on the City's Significance Determination Thresholds, a project would have a significant impact to growth inducement if a project would:

1. Induce substantial population growth in an area.
2. Substantially alter the planned location, distribution, density, or growth rate of the population of an area.
3. Include extensions of roads or other infrastructure not assumed in the community plan or adopted Capital Improvement Program project list, when such infrastructure exceeds the needs of the project and could accommodate future development.

According to the City's Significance Determination Thresholds, the first step is to determine if the project is growth inducing. More specifically, would the project foster economic or population growth, or construct new infrastructure facilities where none previously existed.

6.1 Project Effects on Growth

The project is limited to the reclassification of the project roadway from a 6-lane Primary Arterial to a 4-lane Major, introduction of a traffic signal (MM-TRA-1), minor construction associated with the project design feature, MM-TRA-2, and MM-TRA-3, and amendments to three local Public Facilities Financing Plans. The project would not construct any residential, commercial, or other structures that could induce growth nor would the community plan amendment alter the planned location, distribution, density, or growth rate of the population in the surrounding area. The project does not propose any roadway extensions or introduction of new roads nor would the project extend or introduce new infrastructure, such as water or wastewater pipelines. The project design feature and required traffic mitigation measures would be identified in the amendments to the three local Public Facilities Financing Plans affected by the project. Therefore, the project would not induce population growth either directly or indirectly. No impact would occur.

Chapter 7.0

Cumulative Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15130(a) requires a discussion of cumulative impacts of a project “when the project’s incremental effect is cumulatively considerable.” Cumulatively considerable, as defined in CEQA Guidelines Section 15065(c), “means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” According to CEQA Guidelines Section 15130, the discussion of cumulative effects “need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness.”

The following evaluation of cumulative impacts considers reasonably foreseeable projects in the vicinity of the project. According to CEQA Guidelines Section 15130(b)(1), the discussion of cumulative effects is to be based on either (a) “a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those impacts outside the control of the agency,” or (b) “a summary of projections contained in an adopted plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.” This cumulative impact analysis uses the list method. A brief description of these projects is presented in Table 7-1.

Table 7-1
Cumulative Projects

Project Name	Location	Description/Status
Merge 56 Development	South of State Route 56 (SR-56) between the southern terminus of Camino Del Sur to the west and the southern terminus of Carmel Mountain Road to the east.	A Community Plan Amendment (CPA) consisting of two major project components. The first component is a 41.34-acre mixed-use development (including internal private road improvements) that consists of a mixed-use center containing commercial, office, hotel, and residential uses on a triangular-shaped property, including 525,000 square feet (sf) of commercial, office, theater/cinema, and hotel uses and 242 residences (i.e., 158 multi-family and 84 single-family). The second component is comprised of 31 acres of public road improvements to complete undeveloped segments of Camino Del Sur and Carmel Mountain Road, Circulation Element roads. Final environmental impact report (EIR) was completed in December 2017. The CPA was approved in May 2018.
Rhodes and Grus Investments	West of the intersection of Carmel Mountain and Camino Del Sur	A CPA to the Rancho Peñasquitos Community Plan (RPCP) to redesignate 26 acres from Low Density Residential and Open Space to Medium – High Density Residential, allowing for multi-family residential development at 22 to 45 dwelling units per acre (resulting in 575 to 1,177 dwelling units). CPA was initiated in November 2013; no development application has been filed.
Preserve at Torrey Highlands	South of Torrey Santa Fe Road and west of future Camino Del Sur	A CPA to the Torrey Highlands Subarea Plan (THSP) was initiated in September 2013 to redesignate approximately 11.1 acres from Commercial Limited to Employment Center to allow for the development of 450,000 sf of commercial office space. An application has subsequently been filed on the property and is under review at the City.
Carmel Mountain/Del Mar Mesa Natural Resources Management Plan (NRMP) and CPAs	Del Mar Mesa Preserve, west of Camino Del Sur	Amendments to the THSP, RPCP and Del Mar Mesa Specific Plan initiated to add multi-use trail alignments within the communities that would connect to the Del Mar Mesa Preserve area. The proposed NRMP would result in the consolidation of trail alignments into existing built trails that connect Deer Canyon and other areas to the Del Mar Mesa Preserve. The NRMP was approved in 2015.

Table 7-1
Cumulative Projects

Project Name	Location	Description/Status
KB Homes Residential	Carmel Mountain Road south of Sundance Drive and north of Via Las Lenas, north and south of SR-56	Development of 94 single-family homes on Units 1, 2 and 6 of Rhodes and Grus Investments project and extension of Carmel Mountain Road from northern site boundary to Via Las Lenas. Under construction.
Torrey Meadows Drive Overcrossing	West of Camino Del Sur interchange along SR-56	Two-lane overcrossing of SR-56 to provide access to a neighborhood park, elementary and high schools, and the local mixed use center for the properties south of SR-56. Construction is pending.
Pacific Village	West of I-15 and north of SR-56, adjacent and east of Carmel Mountain Road.	Redevelopment of a 41.45-acre site with 324 units for sale and 277 apartments for rent (601 dwelling units total). The existing 332 apartment units on-site, known as Peñasquitos Village, would be demolished. Approved by City Council on March 5, 2018.

This cumulative analysis also relies on regional planning documents and associated CEQA documents to serve as an additional basis for the analysis of the broader, regional cumulative effects of the project, such as air quality and greenhouse gas emissions. The regional planning documents used in this analysis include the City of San Diego (City) General Plan, Rancho Peñasquitos Community Plan (RPCP), and San Diego Air Pollution Control District (SDAPCD) Regional Air Quality Standards (RAQS). These plans have been discussed throughout this Environmental Impact Report (EIR) and are incorporated by reference in the appropriate sections of the cumulative analysis below.

7.1 Cumulative Effects Found To Be Significant

7.1.1 Transportation/Circulation

The impact analysis presented in Section 4.2, Transportation/Circulation, is cumulative in nature. Volume forecasting conducted for the Transportation Impact Study included traffic that would be generated by the Merge 56 Development, Rhodes and Grus Investments, and Preserve at Torrey Highlands CPAs, and also included ambient growth to analyze traffic conditions in 2050. As described in Section 4.2, the project would result in the following significant and unavoidable impacts related to traffic:

- **Impact TRA-1:** Black Mountain Road south of Twin Trails Drive: volume to capacity (V/C) ratio increases from 0.634 to 0.939, and segment operations would decrease from level of service (LOS) C to LOS E.

- **Impact TRA-2:** Black Mountain Road north of Park Village Road – Adolphia Street: V/C ratio increases from 0.732 to 0.886, and segment operations would decrease from LOS C to LOS E.

The project would also result in the following significant impacts that could be mitigated to a level less than significant:

- **Impact TRA-3:** Sundance Avenue and Twin Trails Drive (AM peak hour): the project would increase average delay from 38.8 seconds to 46.4 seconds, and intersection operations would continue to operate at LOS E.
- **Impact TRA-4:** Eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour): the project would increase the V/C ratio from 1.098 to 1.104 and segment operations would continue to operate at LOS F.
- **Impact TRA-5:** Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): the project would increase an average delay from approximately 21 minutes to 24 minutes.

Implementation of MM-TRA-1 would reduce impacts at the intersection of Sundance Avenue and Twin Trails Drive (Impact TRA-3) to a level less than significant. Although implementation of MM-TRA-2 would reduce impacts on eastbound State Route 56 (SR-56) between Camino Del Sur and Black Mountain Road (Impact TRA-4) to a level less than significant, SR-56 is under the jurisdiction of California Department of Transportation (Caltrans), and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Similarly, although implementation of MM-TRA-3 would reduce impacts on the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (Impact TRA-5) to a level less than significant, this on-ramp is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain. Therefore, impacts to eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour) (Impact TRA-4) and Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (Impact TRA-5) would remain significant and unavoidable. Therefore, implementation of the project would result in cumulatively considerable and unavoidable impacts related to transportation/circulation.

7.2 Cumulative Effects Found Not To Be Significant

7.2.1 Land Use

As described in Section 4.1, Land Use, implementation of the project General Plan Amendment and Community Plan Amendment (CPA) would ensure consistency with the General Plan and RPCP. The project would not conflict with the City's General Plan; RPCP goals, policies, and objectives; Environmentally Sensitive Lands Regulations; or Historical Resource Regulations. Similarly, the project roadway and proposed roadway improvements do not contain Multi-Habitat Planning Area (MHPA) lands nor are they located directly adjacent to any MHPA lands, and therefore would not conflict with the City's Multiple Species Conservation Program Subarea Plan. Furthermore, project

construction is limited to roadway improvements associated with the project design feature, MM-TRA-2, and MM-TRA-3. These roadway improvements would be designed consistent with the alignments of the existing roadway facilities and would not create new intersections, on- or off-ramps, or otherwise create new vehicular access. Furthermore, the project does not propose to extend or introduce new infrastructure, such as water or wastewater pipelines.

Other CPAs presented in Table 7-1 would be required to comply with the City General Plan and applicable community plan. Projects that are not consistent with the General Plan land use designation or zoning would require implementation of a General Plan amendment, community plan amendment, and/or zone change. Projects that require a General Plan amendment and/or community plan amendment are required to demonstrate conformance with pertinent goals, policies, and recommendations. Therefore, when considered with other foreseeable projects, the project would not result in a significant cumulative impact due to an inconsistency or conflict with an adopted land use plan, land use designation, or policy.

7.2.2 Air Quality

As a regional issue, the cumulative study area for air quality impacts encompasses the San Diego Air Basin (SDAB) as a whole. Therefore, the cumulative analysis addresses regional air quality plans and policies, such as the RAQS, as well as the project's contribution to a net increase of any criteria pollutant for which the SDAB is listed as a non-attainment area. The SDAB is currently classified as a federal non-attainment area for ozone (O_3). At the state level, the SDAB is classified a non-attainment area for O_3 , particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$).

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by San Diego Association of Governments (SANDAG) in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the General Plan would not conflict with the RAQS. As described in Section 4.3.4, the project would not result in land use changes that would alter growth as forecasted in the General Plan and would be consistent with the growth assumptions of the RAQS. Therefore, the project would not conflict with or obstruct implementation of the RAQS.

Construction of the project, along with construction of other cumulative projects listed in Table 7-1 would be short term and temporary in nature. Maximum daily construction emissions are projected to be less than the applicable thresholds for all criteria pollutants, and construction of the project design feature and MM-TRA-1 through MM-TRA-3 would not expose sensitive receptors to substantial pollutant concentrations. The project would not result in any operational emissions, and redistribution of vehicular traffic associated with operation of the project would not expose sensitive receptors to substantial pollutant concentrations. Consequently, the project would not generate any operational emissions that could contribute to cumulative impact. Therefore, when considered with other foreseeable projects, implementation of the project would not result in significant cumulative impacts related to air quality, and the project would result in a less than significant cumulative impact.

7.2.3 Greenhouse Gas Emissions

Global climate change is, by its nature, a cumulative issue. To address greenhouse gas (GHG) emissions and to create a method of evaluating a project's consistency with GHG reduction strategies, the City developed its Climate Action Plan (CAP) corresponding CAP Consistency Checklist. A project's consistency with the CAP would allow for a finding of a less than significant impact associated with GHG emissions with GHG emissions. As described in Section 4.4.3, the project would not include any land use or zoning change and would therefore be consistent with the adopted General Plan and Community Plan land use and zoning designations. Therefore, the project would be consistent with the growth projections used in the development of the CAP. Additionally, Section 4.4.3 determined that Steps 2 and 3 of the CAP Checklist were not applicable to the project. Cumulative projects listed in Table 7-1 would also need to demonstrate consistency with the CAP and implement measures to reduce GHG emissions as necessary. Compliance of the project and projects listed in Table 7-1 with the CAP would ensure the cumulative GHG emissions would be less than significant. Therefore, when considered with other foreseeable projects, implementation of the project would not result in significant cumulative impacts related to GHG emissions, and the project would result in a less than significant cumulative impact.

7.2.4 Noise

As described in Section 4.5.4, noise levels at nearby residential receivers during construction of MM-TRA-1 through MM-TRA-3 and the project design feature would be equal to or less than the 75 A-weighted decibel average sound level (dB(A) L_{eq}) threshold. Due to the varied schedules and for construction of cumulative projects listed in Table 7-1, it is unlikely construction activities would overlap, thereby avoiding significant cumulative noise impacts on sensitive receptors.

Changes in ambient noise levels associated with project would not be readily perceivable and would not exceed the City's significance threshold of a 3 dB(A) increase where noise currently exceeds 65 Community Noise Equivalent Level. Consequently, redistribution of traffic associated with the project would not result in a significant increase over existing ambient noise conditions and would not contribute to a cumulatively considerable traffic noise impact. Additionally, cumulative projects listed in Table 7-1 would be required to comply with the City's Noise Ordinance and the General Plan Noise Compatibility Guidelines. Therefore, when considered with other foreseeable projects, implementation of the project would not result in significant cumulative impacts related to noise, and the project would result in a less than significant cumulative impact.

7.2.5 Biological Resources

Projects that comply with the Multiple Species Conservation Program (MSCP) as specified by the City's Subarea Plan and its implementing ordinances are not expected to result in a significant cumulative impact for those biological resources adequately covered by the MSCP, including vegetation communities. The project site and proposed roadway improvements do not contain Multi-Habitat Planning Area (MHPA) lands identified in the MSCP, nor are they located directly adjacent to any MHPA lands. Therefore, the project would not conflict with any of the goals and policies of the City's MSCP Subarea Plan. Additionally, implementation of mitigation measures MM-

BIO-1 and MM-BIO-2 would reduce impacts associated with sensitive vegetation communities and wetlands to a level that is less than significant. All other impacts associated with biological resources would be less than significant. Cumulative projects listed in Table 7-1 would also need to comply with the MSCP and mitigate for impacts to biological resources as necessary. Therefore, when considered with other foreseeable projects, implementation of the project would not result in significant cumulative impacts related biological resources and the project would result in a less than significant cumulative impact.

7.2.6 Cultural Resources

Historical and archeological resources are non-renewable resources. Any direct impact would contribute to a cumulative loss of cultural resources. As described in Section 4.7.4, no prehistoric or historic buildings, structures, objects or sites, or religious or sacred uses were identified within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3, and it is considered unlikely that resources would be discovered during construction. Construction of cumulative projects listed in Table 7-1 that would require ground-disturbing activities within intact native soils could inadvertently adversely affect historical and archaeological resources. However, these projects would implement appropriate mitigation measures to reduce historical resources impacts to less than significant. When considered with other foreseeable projects, cumulative impacts to historical resources would not be considerable.

7.2.7 Tribal Cultural Resources

Like cultural and historical resources, any direct impact to tribal cultural resources would contribute to a cumulative loss. Under Assembly Bill 52, which established this new category of resources under CEQA, lead agencies are required to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. The City received responses from the Iipay Nation of Santa Ysabel and the Jamul Indian Village of Kumeyaay Nation requesting consultation on the project. During tribal consultation, neither tribe has to date identified any known tribal cultural resources within the footprints of the project design feature, MM-TRA-2, and MM-TRA-3. Construction of cumulative projects listed in Table 7-1 that would require ground-disturbing activities within intact native soils could inadvertently adversely affect tribal cultural resources. However, these projects would implement appropriate mitigation measures to reduce tribal cultural resources impacts to less than significant. When considered with other foreseeable projects, cumulative impacts to tribal cultural resources would not be considerable.

Chapter 8.0

Effects Found Not to Be Significant

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) briefly describe potential environmental effects that were determined not to be significant and, therefore, were not discussed in detail in the EIR. Based on initial environmental review, the City of San Diego (City) determined that Black Mountain Road Community Plan Amendment Project (project) would not have the potential to cause significant impacts associated with the areas discussed below.

8.1 Agricultural Resources

Review of the State Farmland Mapping and Monitoring Program (FMMP) Important Farmland Maps determined that the entire project roadway and the construction footprints of the project design feature and MM-TRA-3 are designated as “Urban and Built Up Land.” The segment of MM-TRA-2 east of the existing bridge is designated as “Urban and Built Up Land”, while the bridge segment is classified as “Other Land.” The segment west of the bridge is designated as “Grazing Land” and is zoned for agricultural uses as AR-1-1. The FMMP defines Grazing Land as “land on which the existing vegetation is suited to the grazing of livestock.” However, the segment of MM-TRA-2 identified as Grazing Land by the FMMP and zoned as AR-1-1, as well as the surrounding undeveloped areas with the same FMMP classification and zoning, are not used for grazing or any other farming activities. Furthermore, grazing activities would not be compatible with the existing State Route 56 (SR-56) freeway located adjacent to the MM-TRA-2 footprint and nearby residential development. Therefore, conversion of Grazing Land to transportation uses associated with the project would not result in the loss of active farmland or the conversion of adjacent active farmland. Overall, impacts to agricultural resources would be less than significant.

8.2 Geologic Conditions

The project would not construct any residential, commercial, or other structures that could expose people to geological hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards. Future roadway and bridge features associated with the project design feature, MM-TRA-2, and MM-TRA-3 would be designed consistent with City and California Department of Transportation (Caltrans) safety standards regarding geologic hazards. Risk associated with exposure to geologic hazards for motorists traveling on Black Mountain Road, SR-56, and the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would remain unchanged compared to the existing condition. Construction of the project design feature, MM-TRA-2, and MM-TRA-3 would comply with applicable National Pollutant Discharge Elimination System permit requirements to implement best management practices to prevent wind and water erosion of soils, either on- or off site. Therefore, impacts related to geologic conditions would be less than significant.

8.3 Growth Inducement

The project is limited to the reclassification of the project roadway from a 6-lane Primary Arterial to a 4-lane Major, introduction of a traffic signal (MM-TRA-1), minor construction associated with the project design feature, MM-TRA-2, and MM-TRA-3, and amendments to three local Public Facilities Financing Plans. The project would not construct any residential, commercial, or other structures that could induce growth, nor would the community plan amendment alter the planned location, distribution, density, or growth rate of the population in the surrounding area. The project does not propose any roadway extensions or introduction of new roads nor would the project extend or introduce new infrastructure, such as water or wastewater pipelines. The project design feature and required traffic mitigation measures would be identified in the amendments to the three local Public Facilities Financing Plans affected by the project. Therefore, the project would not induce population growth either directly or indirectly. No impact would occur.

8.4 Health and Safety

The project would not construct any residential, commercial, or other structures that could expose people to wildland fires. Risk associated with exposure to wildfire for motorists traveling on Black Mountain Road, SR-56, and the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp would remain unchanged compared to the existing condition. Construction associated with the project design feature, MM-TRA-2, and MM-TRA-3 would not occur within 0.25 mile of an existing school. The project would not impede emergency response on Black Mountain Road, SR-56, Rancho Peñasquitos Boulevard, or other nearby roadways. Construction associated with the project design feature, MM-TRA-2, and MM-TRA-3 would include implementation of traffic control plans to maintain vehicular access, including emergency response. The project would not expose people to toxic substances, such as pesticides or herbicides, and none of the project components are located near any public or private airports. Therefore, impacts related to health and safety would be less than significant.

8.5 Mineral Resources

The California Geological Survey, formerly the California Division of Mines and Geology, classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975 and designates lands containing significant aggregate resources. Mineral resource zones have been designated to indicate the significance of mineral deposits. The construction footprints of MM-TRA-2 and MM-TRA-3 are designated Mineral Resource Zone 2 (MRZ-2), while the project roadway and the construction footprint of the project design feature are designated MRZ-3 (City of San Diego 2008). MRZ-2 is designated on lands where significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. Lands classified as MRZ-3 are areas of undetermined mineral resource significance. Although the construction footprints of MM-TRA-2 and MM-TRA-3 are identified as having the potential to contain mineral resources, these areas are not currently utilized for mineral resource extraction. Similarly, land surrounding the construction footprints of MM-TRA-2 and MM-TRA-3 designated as MRZ-2 are developed as SR-56 and residential uses. Future mining operations at these locations would be

infeasible due to their relatively small size and location immediately adjacent to SR-56 and residential development. Therefore, impacts on mineral resources would be less than significant.

8.6 Public Services and Facilities

The project would not construct any residential, commercial, or other structures that would require fire or police protection services. Construction associated with the project design feature, MM-TRA-2, and MM-TRA-3 would include implementation of traffic control plans to maintain vehicular access, including fire and police emergency response. Similarly, the project would not result in an increase in population that would increase demand for schools, parks and recreation facilities, or any other public services facilities such as libraries. Therefore, impacts related to public services and facilities would be less than significant.

8.7 Public Utilities

The project would not construct any residential, commercial, or other uses that would require water or wastewater services nor create new opportunities for population growth and corresponding demand for water or wastewater services. Construction of the project design feature, MM-TRA-2, and MM-TRA-3 would generate minimal amount of solid waste that would require disposal at regional landfills. Potential impacts on landfills would be minimized by recycling construction and demolition waste as possible. The project would not construct any residential, commercial, or other uses that would generate solid waste nor create new opportunities for population growth and corresponding solid waste generation. Therefore, impacts related to public utilities would be less than significant.

8.8 Visual Effects and Neighborhood Character

The project would not construct any residential, commercial, or other structures that would obstruct views or otherwise change the scenic character of the surrounding area. Reclassifying the project roadway from a 6-lane Primary Arterial to a 4-lane Major would prevent future roadway widening that could substantially alter the existing visual quality or neighborhood character of the surrounding area. Installation of a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive (MM-TRA-1) would not substantially alter the existing visual character and would be consistent with other signalized intersections within the surrounding area. Project construction would be limited to the project design feature, MM-TRA-2, and MM-TRA-3 and would not result in substantial changes to the existing landform or impact any distinctive or landmark trees. The scenic quality and character of the future auxiliary lane on eastbound SR-56 between Camino Del Sur and Black Mountain Road, including the expanded bridge features (MM-TRA-2), would be consistent with the existing freeway and bridge features within the construction footprint. Similarly, introduction of an additional Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (MM-TRA-3) would be consistent with the existing scenic quality and character of the interchange. Similarly, widening of northbound Black Mountain Road north of the bridge to accommodate a transition taper would result in minimal visual changes and would be consistent with the existing scenic quality and

character of this roadway segment. Therefore, impacts related to visual effects and neighborhood character would be less than significant.

8.9 Hydrology

Review of Federal Emergency Management Agency mapping determined that the footprints of the project design feature and MM-TRA-1 through MM-TRA-3 are not located within the 100-Year Floodplain. Although introduction of the project design feature, MM-TRA-2, and MM-TRA-3 would result in a slight increase of impervious surfaces, these roadway improvements would be designed to convey runoff consistent with the existing drainage patterns of Black Mountain Road (project design feature), Eastbound SR-56 (MM-TRA-2), and the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (MM-TRA-3). Furthermore, additional runoff generated by the paved surfaces associated with the project design feature, MM-TRA-2, and MM-TRA-3 would be negligible and would not impact the existing storm drain system. Therefore, impacts related to hydrology would be less than significant.

8.10 Water Quality

The project would ensure the protection of water quality during construction of the project design feature, MM-TRA-2, and MM-TRA-3 by complying with applicable National Pollutant Discharge Elimination System permit requirements regarding implementation of best management practices. The widening of a small segment of Black Mountain Road (project design feature) and completed expansions of a segment of eastbound SR-56 (MM-TRA-2) and the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (MM-TRA-3) would be similar in nature to the existing roadways and would not increase the potential for water quality impacts beyond current conditions. Therefore, impacts related to water quality would be less than significant.

Chapter 9.0

Project Alternatives

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an environmental impact report (EIR) compare the effects of a “reasonable range of alternatives” to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The “range of alternatives” is governed by the “rule of reason,” which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines “feasible” to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, while also taking into account economic, environmental, social, technological, and legal factors.

The project purpose limits the number of feasible alternatives that could be considered for the project. Given the fact that the project is a reclassification of the roadway, the only feasible alternative to the project would be to expand the project roadway to a 6-lane Primary Arterial consistent with the Rancho Peñasquitos Community Plan (RPCP) (No Project Adopted Plan (6-lane Primary Arterial) Alternative). Therefore, this chapter only analyzes the No Project Adopted Plan (6-lane Primary Arterial) Alternative in comparison to the potential environmental impacts associated with the project (Table 9-1).

Table 9-1 Comparison of the No Project Adopted Plan (6-lane Primary Arterial) Alternative to the Project		
Environmental Issue	Project	No Project Adopted Plan (6-lane Primary Arterial) Alternative Impacts
Land Use	LS	Greater than the Project <ul style="list-style-type: none"> • Would require partial right-of-way acquisitions from numerous properties on both sides of the project site that would reduce the size of backyards adjacent to the project roadway and result in land use conflicts. No feasible mitigation. • Impacts would be inconsistent with numerous goals and policies in the City of San Diego General Plan and the Rancho Peñasquitos Community Plan. No feasible mitigation.
Transportation/ Circulation	SU	Less than the Project <ul style="list-style-type: none"> • Introduction of one additional lane in each direction on Black Mountain Road would improve circulation patterns compared to the project.
Air Quality	LS	Greater than the Project <ul style="list-style-type: none"> • Would require a larger construction footprint resulting in greater amount of pollutant emissions.
Greenhouse Gas Emissions	LS	Greater than the Project <ul style="list-style-type: none"> • Would require a larger construction footprint resulting in greater amount of greenhouse gas emissions. Mitigation would be feasible.
Noise	LS	Greater than the Project <ul style="list-style-type: none"> • Would require a larger construction footprint resulting in greater amount of temporary noise. Mitigation would be feasible. • Would introduce roadway lanes adjacent to sensitive receptors that would generate greater levels of noise. Mitigation may be infeasible.
Biological Resources	SM	Greater than the Project <ul style="list-style-type: none"> • Would require larger amount of construction resulting in greater impacts to biological resources. Mitigation would be feasible.
Cultural Resources	LS	Greater than the Project <ul style="list-style-type: none"> • Would require larger amount of construction resulting in increased potential to unearth unknown cultural resources during excavation and grading activities. Mitigation would be feasible.
Tribal Cultural Resources	LS	Greater than the Project <ul style="list-style-type: none"> • Would require larger amount of construction resulting in increased potential to unearth unknown tribal cultural resources during excavation and grading activities. Mitigation would be feasible.
LS = Less Than Significant SM = Significant and Mitigable SU = Significant and Unavoidable		

9.1 No Project Adopted Plan (6-lane Primary Arterial) Alternative

9.1.1 Description

The No Project Adopted Plan (6-lane Primary Arterial) Alternative would not process a General Plan Amendment (GPA) to Figure LU-2, Land Use and Street System Map, in the Land Use and Community Planning Element of the General Plan to reclassify the project roadway from a Prime Arterial to a Major Arterial, or a CPA for the RPCP to reclassify the project roadway from a 6-lane Primary Arterial to a 4-lane Major¹. Similarly, this alternative would not require the traffic mitigation measures recommended in the Transportation Impact Study (TIS) and would not require amendments to the Rancho Peñasquitos, Black Mountain Ranch, and Pacific Highlands Ranch Public Facilities Financing Plans. Under this alternative, the project segment of Black Mountain Road would retain its current classification and would eventually be widened to a 6-lane Primary Arterial consistent with the current classification in the General Plan and the RPCP. Potential impacts associated with this roadway widening are presented below.

9.1.2 Environmental Analysis

Implementation of the No Project Adopted Plan (6-lane Primary Arterial) Alternative would result in fewer traffic circulation impacts compared to the project. The addition of one lane in each direction would improve the level of service on numerous intersections, street segments, freeway segments, and freeway on-ramps throughout the traffic study area compared to operations under the project. Additionally, it is not anticipated that this alternative would require any traffic mitigation. Consequently, traffic impacts associated with the No Project Adopted Plan (6-lane Primary Arterial) Alternative would be less compared to the project.

Implementation of the No Project Adopted Plan (6-lane Primary Arterial) Alternative would require expansion of Black Mountain Road from Twin Trails Drive to the southern boundary of the Rancho Peñasquitos community. An initial high-level analysis of right-of-way acquisitions associated with widening to a 6-lane Primary Arterial determined that expansion of the roadway would likely require partial property acquisitions from approximately 100 parcels that would reduce the size of backyards adjacent to the project roadway and bring the edge of the expanded roadway closer to existing homes that could result in land use conflicts associated with shifting the roadway closer to adjacent sensitive noise receptors and a lack of adequate space for sound walls. These partial property acquisitions associated with No Project Adopted Plan (6-lane Primary Arterial) Alternative would result in disruptions to the existing character of the surrounding community. Therefore, land use impacts associated with the No Project Adopted Plan (6-lane Primary Arterial) Alternative would

¹The City of San Diego General Plan and Rancho Peñasquitos Community Plan use different nomenclature for roadway classifications. Consequently, the GPA would reclassify the project roadway as a Major Arterial, and the CPA would reclassify the project roadway as a 4-lane Major.

be greater than under the project, and no feasible mitigation exists to address the disruptions created by roadway expansion. Impacts would be significant and unavoidable.

Expansion of the project roadway to six lanes would require a construction footprint encompassing 1.3 mile stretches along both sides of Black Mountain Road that would be much larger than the collective construction footprints of the project design feature and MM-TRA-1 through MM-TRA-3 that would be implemented under the project. Therefore, construction of the No Project Adopted Plan (6-lane Primary Arterial) Alternative would generate larger amounts of both air quality and greenhouse gas (GHG) emissions compared to the project. However, it is anticipated that feasible mitigation would exist to reduce construction impacts related to air quality and GHG to a level less than significant, if required.

Operational impacts associated with air quality under the No Project Adopted Plan (6-lane Primary Arterial) Alternative would be similar to the project since this alternative would not generate new vehicle trips, and all intersections would be anticipated to operate at acceptable level of service. Similarly, the No Project Adopted Plan (6-lane Primary Arterial) Alternative is not a development project and would simply expand an existing roadway to be consistent with the existing General Plan and Community Plan. Therefore, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would be consistent with the growth projections used in the development of the City of San Diego's (City's) Climate Action Plan. Therefore, operational impacts associated with air quality and GHG under the No Project Adopted Plan (6-lane Primary Arterial) Alternative would be similar to the project.

The larger construction footprint required for expansion of the project roadway to six lanes would also generate a greater amount of noise compared to the project. Additionally, the project roadway is located adjacent to a far larger number of homes that would qualify as sensitive receptors that may be affected by construction noise compared to the project. However, it is anticipated that feasible mitigation would exist to reduce construction impacts related to noise to a level less than significant, if required.

The No Project Adopted Plan (6-lane Primary Arterial) Alternative would also result in greater operational noise impacts by shifting the roadway closer to a larger number of adjacent sensitive receptors. Additionally, partial property acquisitions from adjacent homes and right-of-way requirements may not allow for enough space to construct sound walls necessary to mitigate operational noise resulting from the shift of the roadway toward adjacent sensitive receptors. Although unlikely, it is possible that some proposed sound walls would be infeasible depending on slope conditions, proximity of some homes to widened roadway, and ultimate design of the 6-lane Primary Arterial. Consequently, some operational noise impacts under the No Project Adopted Plan (6-lane Primary Arterial) Alternative would be significant and unavoidable.

The larger construction footprint required to expand the project roadway to six lanes would impact a larger amount of natural vegetation that may be used as habitat by sensitive species and nesting and migratory birds. A larger amount of natural vegetation exists along both sides of the 1.3 mile stretch of Black Mountain Road that would be larger than the collective amount within the construction footprints of the project design feature, MM-TRA-2, and MM-TRA-3 that would be implemented under the project. Although these impacts could be mitigated to a level less than significant, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would require a greater

amount of revegetation and monitoring than the project. Similarly, the larger construction footprint required to expand the project roadway to six lanes would have greater potential to unearth cultural resources during construction, including resources that may qualify as tribal cultural resources under Assembly Bill 52. Although these impacts could be mitigated to a level less than significant, the No Project Adopted Plan (6-lane Primary Arterial) Alternative may require preservation of cultural resources, which is not required under the project due to the unlikelihood of encountering such resources during construction of the project design feature, MM-TRA-2, and TRA-3.

9.1.3 Conclusion

Implementation of the No Project Adopted Plan (6-lane Primary Arterial) Alternative would have fewer impacts related to transportation/circulation than the project. However, impacts related to land use would be greater than the project and would be significant and unavoidable due to a large number of property acquisitions that would disrupt community character. Although unlikely, operational impacts associated with noise may be significant and unavoidable if noise walls were determined to be infeasible due to slope conditions, proximity of some homes to widened roadway, and ultimate design of the 6-lane Primary Arterial. Impacts related to air quality, greenhouse gases, biological resources, cultural resources, and tribal cultural resources would be greater compared to the project.

The No Project Adopted Plan (6-lane Primary Arterial) Alternative would not meet the objectives of the project. Expanding the project roadway to six lanes would not be consistent with the project objective of amending the RPCP Circulation Element to be consistent with the current transportation network within the community. The RPCP area is built out, and the Transportation Impact Study prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at level of service (LOS) D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately 20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on Interstate 15 (I-15) have been improved by implementation of the I-15 Express Lanes Project that was not anticipated when the RPCP was adopted in 1993. Planning that ultimately lead to development of the I-15 Express Lanes Project began in 1995 with a detailed corridor study looking at transit, freeway, and regional arterial improvements that might be needed for the I-15 corridor (Caltrans 2003). The completed I-15 Express Lanes Project introduced four “managed lanes,” accommodates Rapid bus service, and utilizes an Integrated Corridor Management system that is designed to efficiently guide drivers around incidents with the least amount of impact to local streets in order to reduce delays and improve travel time reliability (SANDAG 2018b). Since Black Mountain Road runs parallel to I-15, improved freeway operations on I-15 have decreased the likelihood that motorists would travel on Black Mountain Road during AM and PM peak hours to avoid congestion on I-15. Consequently, these upgrades associated with the I-15 Express Lanes Project that were not anticipated in 1993 when the RPCP was adopted have diminished the need to expand the project roadway to a 6-lane Primary Arterial. Similarly, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the project objective of amending General Plan Figure LU-2 and the RPCP Circulation Element to be consistent with the goals of the City’s Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel that were developed after adoption of the RPCP. Furthermore, the No Project

Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the project objective to preserve the existing character of the community because it may require partial property acquisitions from up to approximately 100 parcels that would be needed to expand the project roadway to six lanes.

9.2 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires that an EIR identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify which of the other alternative is environmentally superior. Based on the analysis of the other alternative considered, the project would be environmentally superior to the alternative because it would have fewer impacts on land use, air quality, greenhouse gases, noise, biological resources, cultural resources, and tribal cultural resources. Although significant and unavoidable impacts related to transportation/circulation would occur under the project (see Section 4.2.4), the No Project Adopted Plan (6-lane Primary Arterial) Alternative would have a greater level of impact to a larger number of environmental categories than the project. Additionally the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not meet the project goals of reclassifying the circulation network to be consistent with the current transportation network. The RPCP area is built out, and the Transportation Impact Study prepared for the project determined that in the existing condition, all intersections (57 of 57) and the majority of roadway segments (35 of 37) within the traffic study area operate at LOS D or better during AM and PM peak hours. It should be noted that these existing traffic operations were documented approximately 20 years after approval of the RPCP and without expansion of the project roadway to a 6-lane Primary Arterial. Additionally, traffic conditions on I-15 have been improved by implementation of the I-15 Express Lanes Project that was not anticipated when the RPCP was adopted in 1993, which has diminished the need to expand the project roadway to a 6-lane Primary Arterial (see Sections 3.2 and 9.1.3). Similarly, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the goals of the City's Mobility Element and Climate Action Plan that encourage use of transit and other forms of alternative transportation as opposed to vehicular travel that were developed after adoption of the RPCP. Furthermore, the No Project Adopted Plan (6-lane Primary Arterial) Alternative would not be consistent with the project objective to preserve the existing character of the community. Therefore, the project is considered environmentally superior to the alternative.

Chapter 10.0

Mitigation Monitoring and Reporting Program

Section 15097 of the California Environmental Quality Act (CEQA) Guidelines requires that a Mitigation Monitoring and Reporting Program (MMRP) be adopted upon certification of an Environmental Impact Report (EIR; including associated Findings), to ensure that the associated mitigation measures are implemented. Table 10-1 identifies the mitigation measures and specifies the entity (or entities) responsible for monitoring and reporting. The impact analysis and corresponding mitigation measures presented in this EIR are based on conceptual designs of the project design feature and MM-TRA-1 through MM-TRA-3 that would be refined at a later date. Therefore, future implementation of the project design feature and MM-TRA-1 through MM-TRA-3 would require further design refinements and would be required to comply with the programmatic biological resources mitigation framework presented below in Table 10-1. Compliance with this mitigation framework would include preparation of an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.

Pursuant to Public Resources Code Section 21081.6, an MMRP is only required for impacts identified as significant or potentially significant in the EIR analysis. Accordingly, based on the evaluation in Chapter 4 of the EIR, Environmental Analysis, this MMRP addresses the following potentially significant impacts requiring mitigation: transportation/circulation and biological resources. The environmental analysis in Chapter 4 of the EIR resulted in the identification of a mitigation framework to reduce potentially significant impacts for the noted issue areas. The MMRP addresses only the issue areas identified above as significant, with an overview of the applicable MMRP requirements for these issues provided in Table 10-1.

Table 10-1
Mitigation Monitoring and Reporting Program

Potential Significant Impact	Mitigation Measures	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility	Significance After Mitigation
Transportation/Circulation				
Impact TRA-3: Sundance Avenue and Twin Trails Drive (AM peak hour): average delay increases from 38.8 to 46.4 seconds and continues to operate at level of service (LOS) E.	MM-TRA-1: Install a traffic signal at the intersection of Sundance Avenue and Twin Trails Drive.	Timing for implementation of MM-TRA-1 is uncertain.	City of San Diego	Less than Significant
Impact TRA-4: Eastbound SR-56 between Camino del Sur and Black Mountain Road (PM peak hour): volume-to-capacity ratio increases from 1.098 to 1.104 and continues to operate at LOS F.	MM-TRA-2: Construct a continuous auxiliary lane on eastbound State Route 56 (SR-56) between Camino Del Sur and Black Mountain Road.	SR-56 is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain.	City of San Diego	Significant and Unavoidable
Impact TRA-5: Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp (AM peak hour): average delay increases from approximately 21 minutes to approximately 24 minutes.	MM-TRA-3: Construct an additional on-ramp lane at the Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp.	The Rancho Peñasquitos Boulevard/SR-56 westbound on-ramp is under the jurisdiction of Caltrans, and the City does not have control over the timing and implementation of the recommended mitigation, making the timely completion of such mitigation uncertain.	City of San Diego	Significant and Unavoidable

Table 10-1
Mitigation Monitoring and Reporting Program

Potential Significant Impact	Mitigation Measures	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility	Significance After Mitigation
Biological Resources				
Impact BIO-1: Vegetation Communities (coastal sage scrub)	MM-BIO-1a: Biological Technical Report Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 shall be required to prepare a site-specific biological technical report consistent with the City's Biology Guidelines to ensure that potentially significant impacts to unique, rare, endangered, sensitive, or fully protected species of plants or animals, if present within the area of potential effect.	The analysis of impacts to coastal sage scrub are based on a conceptual design of MM-TRA-2 that would be refined at a later date. Therefore, future implementation of MM-TRA-2 would require further refinements. These refinements would require compliance with the project's programmatic biological resources mitigation framework. Compliance with this mitigation framework would include preparation of an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.	City of San Diego	Less than Significant
	MM-BIO-1b: Sensitive Habitat Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive upland Tier I, II, IIIA, or IIIB habitats shall occur in accordance with the mitigation ratios specified within the City's	The analysis of impacts to coastal sage scrub is based on a conceptual design of MM-TRA-2 that would be refined at a later date. Therefore, future implementation of MM-TRA-2 would require further refinements. These refinements would require compliance with the project's programmatic biological resources mitigation framework. Compliance with this mitigation framework would include preparation of	City of San Diego	Less than Significant

Table 10-1
Mitigation Monitoring and Reporting Program

Potential Significant Impact	Mitigation Measures	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility	Significance After Mitigation
	<p>Biology Guidelines as presented in Section 4.6.4.4.</p> <p><u>Mitigation for Impacts to Wetlands</u></p> <p>Please refer to Mitigation Measures MM-BIO-2a and MM-BIO-2b.</p>	an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.		
Impact BIO-2: Wetlands (freshwater marsh and southern willow scrub)	<p>MM-BIO-2a: Wetland Habitat</p> <p>Any future discretionary actions associated with the future construction of the project design feature and MM-TRA-1 through MM-TRA-3 resulting in impacts to sensitive wetlands shall occur in accordance with the mitigation ratios specified within the City's Biology Guidelines as shown in Section 4.6.4.4.</p>	The analysis of impacts to coastal sage scrub is based on a conceptual design of MM-TRA-2 that would be refined at a later date. Therefore, future implementation of MM-TRA-2 would require further refinements. These refinements would require compliance with the project's programmatic biological resources mitigation framework. Compliance with this mitigation framework would include preparation of an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.	City of San Diego	Less than Significant
	<p>MM-BIO-2b: Wetland Habitat</p> <p>Prior to the commencement of any construction-related activities on-site for projects impacting wetland habitat the</p>	The analysis of impacts to coastal sage scrub is based on a conceptual design of MM-TRA-2 that would be refined at a later date. Therefore, future implementation of MM-TRA-2 would require further refinements. These	City of San Diego	Less than Significant

**Table 10-1
Mitigation Monitoring and Reporting Program**

Potential Significant Impact	Mitigation Measures	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility	Significance After Mitigation
	<p>applicant shall provide evidence of the following, if applicable, to the Assistant Deputy Director (ADD)/Environmental Designee prior to any construction activity:</p> <ul style="list-style-type: none"> • Compliance with ACOE Section 404 nationwide permit; • Compliance with the RWQCB Section 401 Water Quality Certification; and • Compliance with the CDFW Section 1601/1603 Streambed Alteration Agreement. • Compliance with City Environmentally Sensitive Lands wetland deviation process. 	<p>refinements would require compliance with the project's programmatic biological resources mitigation framework. Compliance with this mitigation framework would include preparation of an updated biological technical report to document biological conditions, analyze potential impacts, and propose site-specific mitigation measures.</p>		

Chapter 11.0

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Chapter 12.0

Individuals and Preparers Consulted

A list of individuals, preparers, and agencies consulted during the preparation of the EIR include the following:

City of San Diego

Development Services Department

- E. Shearer-Nguyen, Environmental Analysis Section
- Ann French Gonsalves, Land Development Review, Transportation

Planning Department

- Michael Prinz, Long Range Planning
- Angela Abeyta, Plan - Facilities Financing

RECON Environmental, Inc.

Environmental Analysis and Report Preparation

- Lee Sherwood, Principal
- Nick Larkin, Project Manager
- Gerry Scheid, Senior Biologist
- Carmen Zepeda-Herman, Senior Archaeologist
- Jesse Fleming, Air Quality and Greenhouse Gas Analyst
- Stacey Higgins, Senior Production Specialist
- Eija Blocker, Production Specialist
- Frank McDermott, GIS/UAV Coordinator

KOA Corporation

Traffic Impact Study

- Arnold Torma, Senior Engineer

California Department of Transportation (Caltrans)

Caltrans District 11 Planning

- Vanessa De La Rosa, Transportation Planner