RANCHO LA HABRA SPECIFIC PLAN

PARTIALLY RECIRCULATED DRAFT EIR

SCH NO. 2015111045

CITY OF LA HABRA

November 2019

Metis Environmental Group

TABLE OF CONTENTS

EXECUTIVE SUMMARY ES-1

ES.1 Introduction ES-1

ES.2 Project Location ES-1

ES.3 Project Description ES-1

ES.4 Anticipated Discretionary Actions and Approvals ES-10

ES.5 Environmental Impacts and Mitigation Measures ES-11

CHAPTER 1 INTRODUCTION 1-1

1.1 Overview of the Rancho La Habra Specific Plan 1-4

1.2 Environmental Review 1-7

1.3 Definitions of Key CEQA Terminology 1-19

1.4 Format of the Partially Recirculated Draft EIR 1-20

1.5 References 1-21

CHAPTER 2 PROJECT DESCRIPTION 2-1

2.1 Project Setting 2-1

2.1.1 Project Location 2-1

2.1.2 General Plan Designations and Zoning 2-2

2.1.3 La Habra Hills Specific Plan 2-2

2.2 Project Objectives 2-9

2.2.1 Project Objectives of the City of La Habra 2-9

2.2.2 Applicant's Project Objectives 2-9

2.3 Project Characteristics 2-10

2.3.1 Overview 2-10

2.3.2. Discretional Actions and Approvals 2-11

2.3.3 General Plan Amendment 2-12

2.3.4 Change of Zone 2-15

2.3.5 Amendment to the La Habra Hills Specific Plan 2-15

2.3.6 Rancho La Habra Specific Plan and Proposed Site Development 2-15

2.3.7 Vesting Tentative Tract Map 17485 2-37

2.3.8 Development Agreement 3-37

2.3.9 Design Review 3-37

2.3.10 Proposed Community Facilities District 3-38
2.3.11 Vacate an Existing Deed Restriction 3-38
2.4 References 2-39

CHAPTER 3 SETTING, IMPACTS, AND MITIGATION MEASURES 3-1
3.1 Introduction 3-1
3.1.1 Format of Detailed Environmental Analyses 3-1
3.5 Biological Resources 3.5-1
3.5.1 Introduction 3.5-1
3.5.2 Applicable Plans, Policies, and Regulations 3.5-4
3.5.3 Environmental Setting 3.5-11
3.5.4 Significance Criteria 3.5-77
3.5.5 Project Impacts and Mitigation Measures 3.5-78
3.5.6 References 3.5-106
3.7 Traffic and Circulation 3.7-1
3.7.1 Introduction 3.7-1
3.7.2 Applicable Plans, Policies, and Regulations 3.76
3.7.3 Environmental Setting 3.7-15
3.7.4 Significance Criteria 3.7-25
3.7.5 Project Impacts and Mitigation Measures 3.7-26
3.7.6 References 3.7-105
3.8 Air Quality 3.8-1
3.8.1 Introduction 3.8-1
3.8.2 Applicable Plans, Policies, and Regulations 3.8-4
3.8.3 Environmental Setting 3.8-15
3.8.4 Significance Criteria 3.8-30
3.8.5 Project Impacts and Mitigation Measures 3.8-31
3.5.6 References 3.8-54
3.9 Greenhouse Gas Emissions 3.9-1
3.9.1 Introduction 3.9-1
3.9.2 Applicable Plans, Policies, and Regulations 3.9-2
3.9.3 Environmental Setting 3.9-17
3.9.4 Significance Criteria 3.9-19
3.9.5 Project Impacts and Mitigation Measures 3.9-20
3.9.6 References 3.9-37

3.10 Energy Resources 3.10-1
3.10.1 Introduction 3.10-1
3.10.2 Applicable Plans, Policies, and Regulations 3.10-1
3.10.3 Environmental Setting 3.10-9
3.10.4 Significance Criteria 3.10-11
3.10.5 Project Impacts and Mitigation Measures 3.10-12
3.10.6 References - Energy Resources 3.19-16
3.11 Noise and Vibration 3.11-1
3.11.1 Introduction 3.11-1
3.11.2 Applicable Plans, Policies, and Regulations 3.11-7
3.11.3 Environmental Setting 3.11-17
3.11.4 Significance Criteria 3.11-24
3.11.5 Project Impacts and Mitigation Measures 3.11-24
3.11.6 References - Air Quality 3.11-47

CHAPTER 6 CUMULATIVE IMPACTS 6-1
6.1 Definitions 6-1
6.2 CEQA Requirements and Approach to Cumulative Analysis 6-1
6.3 Analysis of Cumulative Impacts 6-6
6.3.1 Biological Resources 6-6
6.3.2 Traffic and Circulation 6-16
6.3.3 Air Quality 6-18
6.3.4 Greenhouse Gas Emissions 6-21
6.3.5 Energy Resources 6-22
6.3.6 Noise 6-23

CHAPTER 8 MITIGATION MONITORING AND REPORTING PROGRAM 8-1

List of Figures

Figure ES-1 Project Location ES-3
Figure ES-2 Proposed Land Use ES-7
Figure 1-1 Project Location 1-5
Figure 2-1 Project Site 2-3
Figure 2-2 Existing General Plan Designations 2-5
Figure 2-3 Existing Zoning Designations 2-7
Figure 2-4 Proposed General Plan Designations 2-13
Figure 2-5 Proposed Land Use 2-17
Figure 2-6 Existing Soil Reuse Areas 2-27
Figure 2-7 Proposed Soil Deep Fill Areas 2-29
Figure 2-8 Proposed Mechanically Stabilized Earth (MSE) Walls 2-31
Figure 2-9 Mechanically Stabilized Earth Wall 2-33
Figure 2-10 Conceptual Phasing Plan 2-35
Figure 2-11 Deed Restriction Boundaries 2-41
Figure 3.5-1 Grading Footprint 3.5-3
Figure 3.5-2 Vegetation Alliances 3.5-13
Figure 3.5-3 Tree Inventory 3.5-25
Figure 3.5-4 Critical Habitat 3.5-37
Figure 3.5-5 CAGN Survey 3.5-49
Figure 3.5-6 Least Bell's Vireo Survey 3.5-53
Figure 3.5-7 Bay Survey Area 3.5-55
Figure 3.5-8 Pond Turtle Survey 3.5-59
Figure 3.5-9 Waters of the US 3.5-61
Figure 3.5-10 Waters of the US – Detail 3.5-63
Figure 3.5-11 Section 401 and Porter-Cologne Waters 3.5-65
Figure 3.5-12 Waters of the State/Porter-Cologne Act Impacts 3.5-71
Figure 3.5-13 Soil Mapping 3.5-73
Figure 3.5-14 Post-Construction Habitat 3.5-89
Figure 3.7-1 Key Intersections and Roadway Segments 3.7-17
Figure 3.7-2 Existing Transit 3.7-23
Figure 3.8-1 South Coast Air Basin Ozone Trends 3.8-25
Figure 3.8-2 South Coast Air Basin Average 24-Hour Concentration PM_{10} Trend 3.8-25
Figure 3.8-3 South Coast Air Basin Annual Average Concentration PM_{10} Trend 3.8-26
Figure 3.8-4 South Coast Air Basin 24-Hour Average Concentration $PM_{2.5}$ Trend 3.8-27
Figure 3.8-5 South Coast Air Basin Annual Average Concentration $PM_{2.5}$ Trend 3.8-28
Figure 3.8-6 South Coast Air Basin 8-Hour Average Carbon Monoxide Trend 3.8-29
Figure 3.8-7 South Coast Air Basin 24-Hour Average Nitrogen Dioxide Trend (Based on Federal Standard) 3.8-30

Figure 3.8-8 South Coast Air Basin 24-Hour Average Nitrogen Dioxide Trend (Based on State Standard) 3.8-30
Figure 3.9-1 Projected Global Warming Impacts in California, 2070-2099 (As Compared with 1961-1990) 3.9-19
Figure 3.11-1 Typical Vibration Sources and Sensitivities 3.11-7
Figure 3.11-2 Noise Monitoring Locations 3.11-19
Figure 3.11-3 Noise Receiver Locations 3.11-27
Figure 6-1 Cumulative Project Locations 6-7
Figure 6-2 Rancho La Habra - West Coyote Hills Pre-Development Setting 6-11
Figure 6-3 Rancho La Habra - West Coyote Hills Pre-Development Setting 6-13

List of Tables

Table ES-1 Land Use Acreage by Planning Area ES-9
Table ES-2 Number and Size of Dwelling Units by Planning Area ES-9
Table ES-3 Summary of Significant Unavoidable Traffic Impacts ES-13
Table 1-1 Summary of NOP Comment Letters 1-9
Table 2-1 Land Use Acreage by Planning Area 2-19
Table 2-2 Number and Size of Dwelling Units by Planning Area 2-20
Table 3.5-1 Existing MCVII Vegetation Alliances on Project Site (acres) 3.5-19
Table 3.5-2 Summary of Project Site Tree Inventory 3.5-27
Table 3.5-3 Special-Status Plants: Potential Occurrence on the Project Site 3.5-28
Table 3.5-4 Native Vegetation Alliances Within Designated Critical Habitat on the Project Site 3.5-36
Table 3.5-5 Special-Status Wildlife Species with Potential to Occur on Project Site 3.5-40
Table 3.5-6 Special-Status Bats with Potential to Occur on Project Site 3.5-52
Table 3.5-7 Jurisdictional Waters of the United States on Project Site 3.5-58
Table 3.5-8 Waters of the State/California Department of Fish and Wildlife Jurisdiction on Project Site 3.5-70
Table 3.5-9 Project Impacts on On-Site MCVII Vegetation Alliances (Acres) 3.5-81
Table 3.5-10 Project Impacts on Jurisdictional Waters 3.5-99
Table 3.7-1 Level of Service Criteria for Signalized Intersections 3.7-3
Table 3.7-2 Level of Service Criteria for Unsignalized Intersections 3.7-4
Table 3.7-3 Roadway Link Capacities – Orange County Intersections 3.7-4
Table 3.7-4 Roadway Link Capacities – Los Angeles County Intersections 3.7-5
Table 3.7-5 Level of Service Criteria for City of La Habra Roadway Segments 3.7-13
Table 3.7-6 Level of Service Criteria for City of La Mirada Roadway Segments 3.7-14
Table 3.7-7 Level of Service Criteria for City of La Habra Intersections 3.7-14
Table 3.7-8 Level of Service Criteria for City of La Mirada Intersections 3.7-15
Table 3.7-9 Existing Key Roadway Segment Operating Conditions 3.7-19
Table 3.7-10 Existing Intersection Peak Hour Operating Conditions 3.7-21
Table 3.7-11 Project Construction-Related Traffic Generation 3.7-28
Table 3.7-12 Project Trip Generation Forecasts 3.7-33
Table 3.7-13 Existing Plus Project Intersection Analysis – Local Methodologies 3.7-36
Table 3.7-14 Existing Plus Project Intersection Analysis – Caltrans Methodology 3.7-41
Table 3.7-15 Existing Plus Project Roadway Segment Levels of Service 3.7-45
Table 3.7-16 Year 2023 Peak Hour Intersection Analysis – Local Methodologies 3.7-50
Table 3.7-17 Year 2023 Peak Hour Intersection Analysis – Caltrans Methodology 3.7-56
Table 3.7-18 Year 2023 Roadway Segment Level of Service Summary 3.7-60
Table 3.7-19 Year 2035 Peak Hour Intersection Analysis – Local Methodologies 3.7-66
Table 3.7-20 Year 2035 Peak Intersection Analysis – Caltrans Methodology 3.7-75
Table 3.7-21 Year 2035 Roadway Segment Level of Service Summary 3.7-78

Table 3.7-22 Existing Plus Project Freeway Mainline Analysis 3.7-87
Table 3.7-23 Year 2023 Cumulative Plus Project Freeway Mainline Analysis 3.7-88
Table 3.7-24 Year 2035 Cumulative Plus Project Freeway Mainline Analysis 3.7-88
Table 3.7-25 Existing Plus Project Merge/Diverge Analysis 3.7-91
Table 3.7-26 Year 2023 Cumulative Plus Project Merge/Diverge Analysis 3.7-91
Table 3.7-27 Year 2035 Cumulative Plus Project Merge/Diverge Analysis 3.7-92
Table 3.7-28 Peak Hour Intersection Left-Turn Queuing Analysis 3.7-95
Table 3.7-29 Existing Plus Project Peak Hour Intersection Analysis – Congestion Management Program (CMP) 3.7-98
Table 3.7-30 Year 2023 Peak Hour Intersection Analysis – Congestion Management Program (CMP) 3.7-98
Table 3.7-31 Year 2035 Peak Hour Intersection Analysis – Congestion Management Program (CMP) 3.7-99
Table 3.8-1 Federal and State Ambient Air Quality Standards for Criteria Pollutants 3.8-5
Table 3.8-2 Attainment Status of Criteria Pollutants in South Coast Air Basin 3.8-7
Table 3.8-3 Project Area Air Quality Monitoring Summary, 2016-2018 ..... 3.8-18
Table 3.8-4 Existing Golf Course Daily Emissions (Pounds Per Day) 3.8-30
Table 3.8-5 Daily Emissions Significance Criteria (Pounds Per Day) 3.8-33
Table 3.8-6 Construction Equipment Assumptions (8 Hours Per Day) 3.8-35
Table 3.8-7 Daily Project Construction Emissions (Without Mitigation) 3.8-35
Table 3.8-8 Daily Project Operations Emissions 3.8-38
Table 3.8-9 Daily Project Construction Emissions (With Mitigation) 3.8-39
Table 3.8-10 Maximum Daily Disturbed Acreage During Project Grading 3.8-41
Table 3.8-11 Localized Emissions from Peak Project Construction Activity Without Best Available Control Measures (BACMs) or Mitigation 3.8-43
Table 3.8-12 Peak Localized Operational Emissions 3.8-44
Table 3.8-13 Localized Emissions from Peak Project Construction Activity With Best Available Control Measures (BACMs) and Mitigation 3.8-45
Table 3.8-14 Carbon Monoxide Modeling Results at High-Volume Los Angeles Intersections 3.8-46
Table 3.9-1 Net Total Project Greenhouse Gas Emissions (Annual) 3.9-26
Table 3.9-2 Project Consistency with State of California 2017 Climate Change Scoping Plan 3.9-27
Table 3.9-3 Project Implementation of Applicable Greenhouse Gas Reduction Measures in La Habra Climate Action Plan 3.9-30
Table 3.11-1 Common Sound Levels and Their Noise Source Characteristics 3.11-4
Table 3.11-2 Construction Vibration Damage Criteria 3.11-9
Table 3.11-3 Groundborne Vibration Sensitivity Criteria 3.11-9
Table 3.11-4 Land Use and Noise Exposure Compatibility (CNEL) 3.11-10
Table 3.11-5 Caltrans Criteria for Vibration Damage Potential 3.11-11

Table 3.11-6 Caltrans Criteria for Vibration Annoyance Potential 3.11-11
Table 3.11-7 City of La Habra Residential Exterior and Interior Noise Standards 3.11-16
Table 3.11-8 Long-Term Noise Measurements in Project Site Vicinity 3.11-21
Table 3.11-9 Short-Term Noise Measurements in Project Site Vicinity 3.11-22
Table 3.11-10 Existing Traffic Noise in Project Site Vicinity 3.11-23
Table 3.11-11 Measured Noise from Area Commercial Activities 3.11-23
Table 3.11-12 Average Daily Noise Levels along Idaho Street and Beach Boulevard 3.11-26
Table 3.11-13 Outdoor to Indoor Noise Level Reduction of Proposed Construction 3.11-31
Table 3.11-14 Vibration Source Levels for Construction Equipment 3.11-33
Table 3.11-15 Comparison of Forecast Future Year (2035) Traffic Noise Levels (in DBA) With and Without Project 3.11-35
Table 3.11-16 Comparison of Demolition and Crushing Construction Noise with Existing Noise Levels 3.11-40
Table 3.11-17 Comparison of Grading Operations Noise to Existing Noise Levels 3.11-41
Table 3.11-18 Comparison of Infrastructure and Building Construction Noise to Existing Noise Levels 3.11-43
Table 3.11-19 Contribution of Construction Traffic to Area Traffic Noise in AM Peak Hour 3.11-44
Table 6-1 Cumulative Projects List 6-3
Table 6-2 Daily Criteria Pollutant Emissions by County, 2015 and 2040 6-19
Table 8-1 Mitigation Monitoring and Reporting Requirements 8-3

List of Exhibits

Exhibit 3.5-A Plant Species Compendium 3.5-112
Exhibit 3.5-B Tree Inventory 3.5-115
Exhibit 3.5-C Wildlife Compendium 3.5-145

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

In accordance with Section 15123 of the California Environmental Quality Act (CEQA) Guidelines, this chapter provides a summary of the proposed Rancho La Habra Specific Plan, its environmental effects, and the mitigation measures to be implemented to address the proposed project's significant effects. This chapter also summarizes the technical analyses completed for CEQA. The summary includes a brief description of proposed development, project objectives, City of La Habra (City) and other agency approvals needed to implement the project, areas of controversy/issues to be resolved, and a summary of alternatives to the proposed Specific Plan.

In addition, this chapter summarizes (1) potential environmental impacts that would result from the proposed Specific Plan for each of the issues addressed in the Partially Recirculated Draft EIR; (2) the level of significance of environmental impacts prior to implementation of any applicable mitigation measures; (3) mitigation measures that would be implemented to avoid or reduce significant environmental impacts; and (4) the level of significance of impacts after mitigation measures are implemented.

The purpose of the analyses contained in the Draft EIR and this Partially Recirculated Draft EIR is to provide information to decision makers and the public, and to define and quantify the physical environmental changes that would result from implementation of the proposed Specific Plan.

ES.2 PROJECT LOCATION

The Rancho La Habra Specific Plan (Specific Plan) is located in the southern portion of the City of La Habra, which is in the northern portion of Orange County (see **Figure ES-1**). The City of Fullerton is located to the south and the City of Brea is to the east in Orange County. Within Los Angeles County, the City of La Mirada is located to the west of La Habra, with the cities of Whittier to the northwest and La Habra Heights to the north. Major regional roadways in the area include Beach Boulevard to the west and Imperial Highway to the north of the Project site. Beach Boulevard provides regional access to the Interstate 5 freeway (I-5), approximately 4.5 miles to the south. Imperial Highway also provides regional access to the State Route 57 freeway (SR-57), approximately 5 miles to the east.

ES.3 PROJECT DESCRIPTION

The project site is the current site of the Westridge Golf Club, which is adjacent to Beach Boulevard and the existing Westridge Plaza shopping center. The Westridge Golf Club was

developed along with the Westridge residential community to the south pursuant to the La Habra Hills Specific Plan, which was adopted in 1992. The currently proposed Rancho La Habra Specific Plan would remove the 150.8-acre project site from the La Habra Hills Specific Plan and develop the existing golf course with 402 residential dwelling units, including 277 single-family homes and 125 multi-family residences, along with either 20,000 square feet of commercial development (e.g., specialty grocery, restaurant, or general retail uses) or an additional 46 multi-family dwelling units. Also proposed are open space areas that would include public parks and private recreational areas, a community center, a habitat conservation area, passive recreational uses including trails, picnic areas and tot lots on the approximately 150.8-acre site.

The applicant, Lennar Homes of California (Lennar), is requesting that the City of La Habra approve the following:

- General Plan Amendment
- Amendment to the existing La Habra Hills Specific Plan
- Rancho La Habra Specific Plan
- Change of Zone
- Vesting Tentative Tract Map 17845
- Development Agreement with the City of La Habra
- Design Review for Planning Areas 1-4 and 6. Design review for Planning Area 6 is anticipated as a future application.
- Establishment of a Community Facilities District or another financing mechanism

In addition, the applicant is requesting the California Department of Fish and Wildlife to vacate existing deed restrictions that were previously established on the Project site and approve a new Streambed Alteration Agreement. An existing deed restriction for habitat areas created within the Project site was established as mitigation for impacts related to previous construction of the existing golf course and adjacent residential areas to the south pursuant to the La Habra Hills Specific Plan. Vacation of these deed restrictions and approval of a new Streambed Alteration Agreement by the Department of Fish and Wildlife is a necessary prerequisite for development of the Project site to proceed as proposed in the Rancho La Habra Specific Plan.

ES.3.1 PROJECT OBJECTIVES

Objectives of the proposed project, including the underlying purpose of the project are presented below, pursuant to CEQA Guidelines Section 15124(b), which requires an EIR to include a "statement of objectives sought by the proposed project." As noted in CEQA Guidelines Section 15124(b), a "clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings."

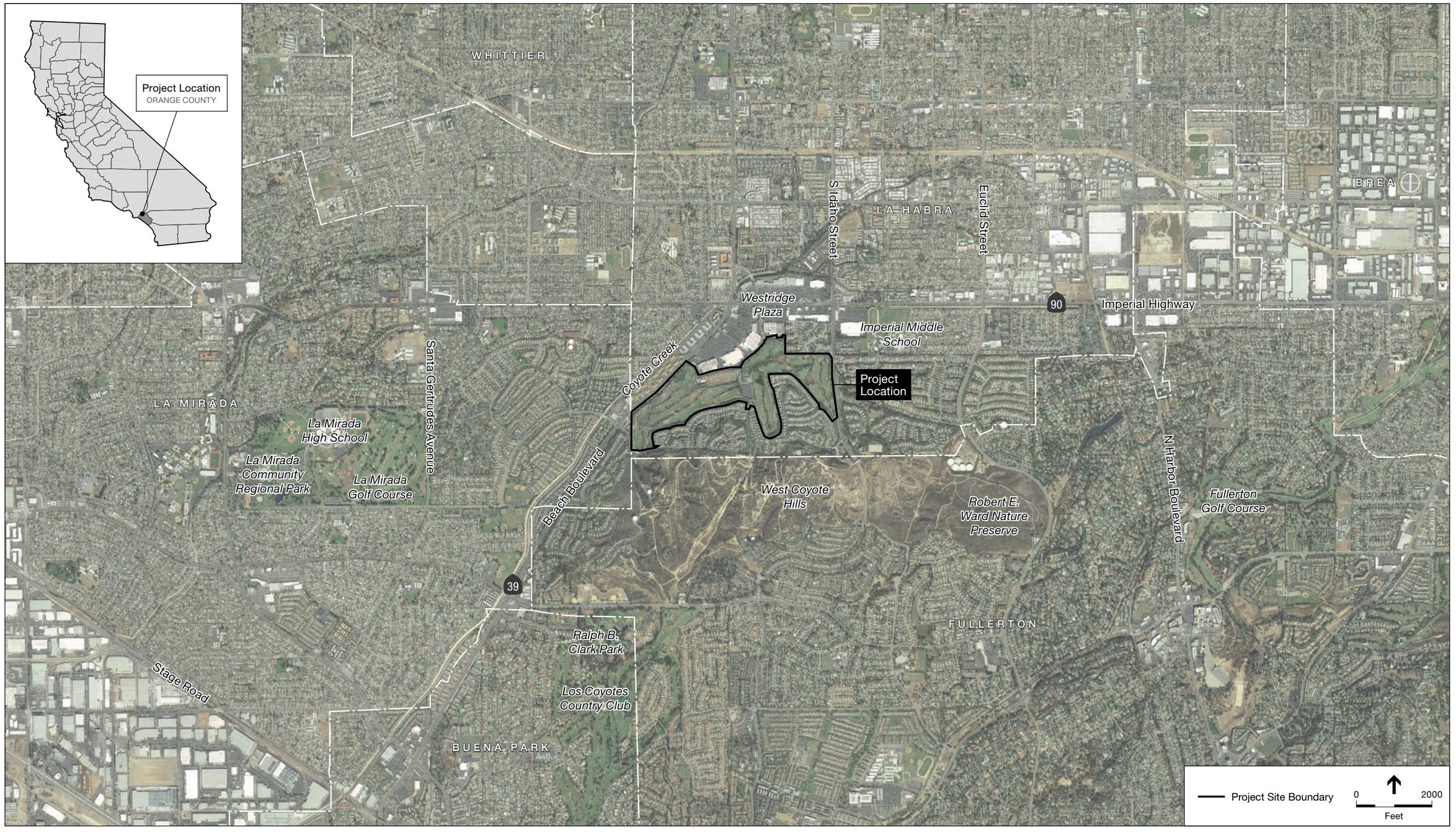


Figure ES-1: Project Location

RANCHO LA HABRA SPECIFIC PLAN EIR

Source: Google Earth

The project objectives that have been identified by the Lead Agency (City of La Habra), as well as those identified by the Specific Plan applicant, Lennar Homes of California, are identified below.

a. Project Objectives of the City of La Habra

The City's overarching objectives for the proposed Rancho La Habra Specific Plan are to:

- Ensure that the long-term planned use of the project site is consistent with the goals, objectives, and other provisions of the City's General Plan, recognizing that state law grants the City the authority to amend the General Plan and approve a specific plan consistent with the *amended* General Plan; and
- Meet the requirements of state law and local ordinances to provide the public and decision-makers with a thorough and objective evaluation of the physical and environmental effects that would result from the proposed Rancho La Habra Specific Plan and related actions, implement all feasible mitigation measures and consider a reasonable range of alternatives to the proposed project that would avoid or reduce any significant environmental effects, and otherwise comply with the provisions of the CEQA and local practices to implement CEQA.

b. Applicant's Project Objectives

The applicant, Lennar Homes of California, has established the following project objectives for its proposed Specific Plan development:

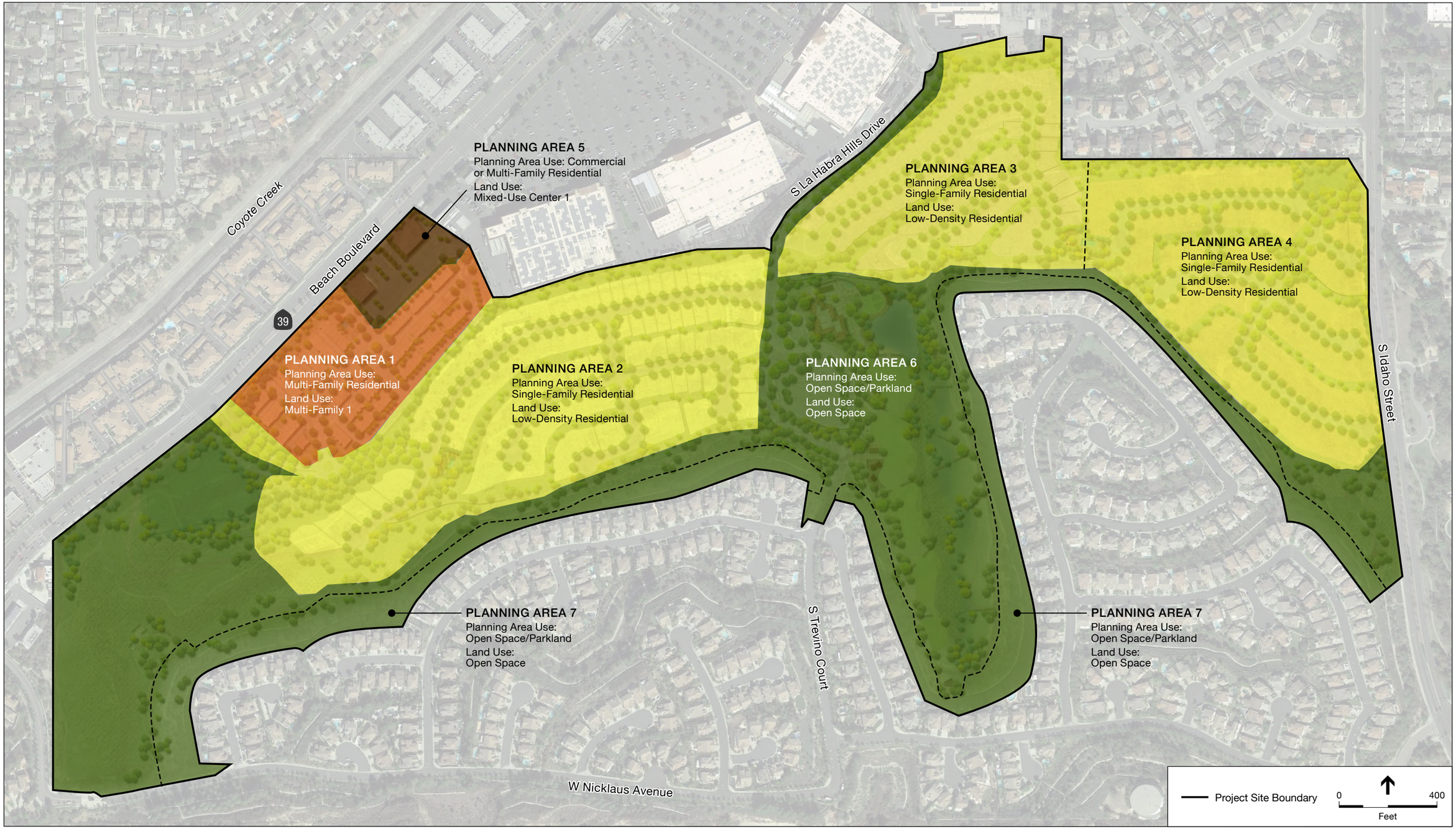
- Implement the City's Housing Element by providing new development that provides a range of new housing types, sizes, and prices for existing and future residents of the city;
- Provide new housing opportunities for city residents that provide fiscal benefit to the City, whereby revenues from the new development exceed public expenditures needed to serve and maintain the development;
- Provide a range of public park and recreational facilities, such as a Community Center, open turf, playground areas, picnicking and quiet enjoyment space, trail systems with fitness facilities and view overlooks, and nature trails with educational signage, that exceed the City's local park code requirements for the proposed project;
- Create a network of trails throughout the residential neighborhoods that provide connections to existing City and regional trails east and west of the project site and to the Westridge Plaza Shopping Center located north of the project site;
- Improve the aesthetic character of the Beach Boulevard and Idaho Street frontages through landscape design consistent with the City's goals and objectives;
- Preserve, restore, and conserve natural habitat on the project site to the extent practicable considering the other competing project objectives;

- Reduce the demand for potable water compared to the existing golf course water demand; and
- Redevelop the golf course property for a "higher and better use."[1]

ES.3.2 PROPOSED FUTURE DEVELOPMENT

As shown in **Figure ES-2**, **Table ES-1**, and **Table ES-2**, the Rancho La Habra Specific Plan defines seven Planning Areas. Planning Area 1 is proposed for the multi-family residential development, while Planning Areas 2 through 4 are proposed for single-family residential neighborhoods. Planning Area 5 is a 2.64-acre building pad located along Beach Boulevard designed to accommodate either 20,000 square feet of commercial development or an additional 46 multi-family dwelling units. Planning Area 6 consists of areas proposed for public parkland, including the conversion of the existing clubhouse to a City-owned Community Center, public streets, and public open space areas. Planning Area 7 encompasses the slope separating the existing Westridge neighborhood from the golf course. The existing Westridge neighborhood south of the project site, which was developed as part of the La Habra Hills Specific Plan, retains an easement over the 19.38-acre vegetated slope, along with the obligation for slope maintenance.

[1] The Appraisal Institute defines "highest and best use" as the "reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value."



RANCHO LA HABRA SPECIFIC PLAN EIR

Figure ES-2: Proposed Land Use

Source: Google Earth Pro; Carlson SLS; BrightView Design Group

Table ES-1
Land Use Acreage by Planning Area

	Planning Area 1	Planning Area 2	Planning Area 3	Planning Area 4	Planning Area 5	Planning Area 6	Planning Area 7	Total
Residential/Commercial Development								
Multi-Family Homes	8.60	-	-	-	-	-	-	**8.60**
Single Family Residential	-	14.20	7.90	12.50	-	-	-	**34.60**
Commercial or Multi-Family Homes	-	-	-	-	2.50	-	-	**2.50**
Open Space Uses								
Public Community Center/Parking	-	-	-	-	-	3.30	-	**3.30**
Public Park/Picnic Area/Pond	-	-	-	-	-	12.79	-	**12.79**
Public Linear Park/Multi-use Trails	-	-	-	-	-	12.77	-	**12.77**
Habitat Conservation Area	-	-	-	-	-	9.86	-	**9.86**
Private Open Space and Detention Basins	1.66	14.50	5.86	5.91	0.14	-	-	**28.07**
Existing Slope	-	-	-	-	-	-	19.38	**19.38**
Roads	0.30	6.98	3.10	5.18	-	3.41	-	**18.97**
Total Acres	**10.56**	**35.68**	**16.86**	**23.59**	**2.64**	**42.13**	**19.38**	**150.84**

Source: Rancho La Habra Specific Plan, 2019.

Table ES-2
Number and Size of Dwelling Units by Planning Area

Residential Planning Area	Minimum Lot Size	Number of Dwelling Units	Approximate Average Size of Dwelling Units	Number of Bedrooms
Planning Area 1	not applicable – multi-family	125	1,900 square feet	3/4
Planning Area 2	48'/54' x 80' (3,840 square feet)	115	2,700 square feet	4/5
Model Home Complex	47' x 70' (3,290 square feet)	3	2400 square feet	4
Planning Area 3	47' x 70' (3,290 square feet)	77	2,400 square feet	4
Planning Area 4	55' x 90' (4,950 square feet)	82	3,300 square feet	4/5
Planning Area 5	not applicable – multi-family (option)	46	1,900 square feet	3/4

Source: Rancho La Habra Specific Plan, 2019.

ES.4 ANTICIPATED DISCRETIONARY ACTIONS AND APPROVALS

Implementation of the proposed project will require the following discretionary actions and other approvals:

- City of La Habra
  - General Plan Amendment for the project site from: Open Space to Low Density Residential, Multi-Family 1, and Mixed-Use Center 1.
  - Amend the La Habra Hills Specific Plan to remove the Project site and all references to the golf course from the Specific Plan.
  - Approval of the Rancho La Habra Specific Plan.
  - Change of zone for the Project site from La Habra Hills Specific Plan to Rancho La Habra Specific Plan.
  - Development Agreement to vest the Project entitlements, define the terms and conditions under which the proposed project will be developed, and to define specific benefits to be provided to the City.
  - Vesting Tentative Tract Map to subdivide the property into single-family residential, multi-family residential, commercial retail, and open space lots, and to confer a vested right to proceed with development in compliance with the Vesting Tentative Tract Map.
  - Design Review, including proposed architectural design for each Planning Area;
  - Formation of a Community Facilities District, also known as a Mello-Roos District, or another mechanism for financing of improvements.
- California Department of Fish and Wildlife
  - Vacate an existing deed restriction within the Specific Plan area.
  - Section 1600 Streambed Alteration Agreement.
- U.S. Fish and Wildlife Service
  - Amended Biological Opinion.
- U.S. Army Corps of Engineers
  - Section 404 Nationwide Permit.
- Regional Water Quality Control Board
  - Section 401 Water Quality Certification.
- Department of Transportation (Caltrans) District 12
    - Encroachment permits and improvements within Caltrans rights-of-way.

a. Responsible and Trustee Agencies for the Rancho La Habra Specific Plan

The following identifies responsible agencies[2] and trustee agencies[3] for the proposed Rancho La Habra Specific Plan.

- Regional Agencies
  - Orange County Public Works Department (encroachment permit(s) and infrastructure improvements)
  - Orange County Sanitation District (Sewage Collection Permit)
  - Orange County Health Care Agency (Remedial Action Supervision)
- State Agencies
  - Santa Ana Regional Water Quality Control Board (National Pollution Discharge Elimination System (NPDES) Storm Water Permit NPDES Construction Permit; Section 401 Water Quality Certification)
  - Department of Transportation (Caltrans) District 12 (Encroachment Permit(s) and improvements within Caltrans rights-of-way)
  - California Department of Fish and Wildlife (Vacate Existing Deed Restriction; Section 1600 Streambed Alteration Agreement)
- Federal Agencies
  - U.S. Fish and Wildlife Service (Amended Biological Opinion)

ES.5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

ES.5.1 SIGNIFICANT UNAVOIDABLE IMPACTS

This EIR identifies the following Significant Unavoidable impacts that would result from development permitted by the proposed Specific Plan for those environmental issues addressed in this Partially Recirculated Draft EIR.

- **Traffic and Circulation** With respect to mitigation at intersections under the jurisdiction of the cities of Fullerton, Buena Park, and La Mirada, and Caltrans, under CEQA, a fair share monetary contribution is considered to be adequate mitigation if the fee is tied to a

[2] A "responsible agency" is a public agency, other than the lead agency, which has responsibility for carrying out or approving a project.

[3] A "trustee agency" is a state agency that has jurisdiction by law over natural resources affected by a project, that are held in trust for the people of the State of California.

reasonable plan that the relevant agency is committed to implementing. However, these cities and Caltrans do not have mitigation fund programs in place for improvements to which the proposed project can contribute. Therefore, because the City has no authority to implement the recommended traffic improvements, impacts remain *significant and unavoidable*. See **Table ES-3** for a summary of traffic impacts at specific intersections.

- **Air Quality Impact AQ-1:** Although the proposed project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, proposed housing and population growth would be inconsistent with the Air Quality Management Plan for the South Coast Air Basin.
- **Greenhouse Gas Emissions Impact GHG-1:** The proposed Rancho La Habra Specific Plan would result in a net increase in GHG emissions of 7,554.69 $MTCO_2e$ per year, which would exceed the SCAQMD's screening threshold of 3,000 $MTCO_2e$ per year even with implementation of Although Mitigation Measures GHG-1a, GHG-1b, GHG-1c, GHG-1d, GHG-1g, and GHG-1h, and GHG-1i. In addition, because the Project would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel and therefore be inconsistent with three goals and one policy of the regional RTP/SCS.
- **Greenhouse Gas Emissions Impact GHG-2:** Although Mitigation Measures GHG-1a, GHG-1b, GHG-1c, GHG-1d, GHG-1g, GHG-1h, and GHG-1i would achieve consistency with the City's Climate Action Plan and the CARB 2017 Scoping Plan, the Project would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel and therefore be inconsistent with three goals and one policy of the regional RTP/SCS.

ES.5.2 IMPACTS FOUND NOT TO BE SIGNIFICANT

The analyses undertaken during preparation of this EIR determined that no impacts would result in relation to the following.

a. Agricultural and Forestry Resources

The project site, currently developed as the Westridge Golf Club, is within an urban setting, and does not provide any opportunity for agricultural or forestry use. The site does not contain any "prime" agricultural land, and no such land exists in the project vicinity. In addition, no forestry resources occur on the project site or within the project environs. The project site and adjacent properties are designated as "Urban and Built-up Land" according to the California Department of Conservation, California Important Farmland Finder map system (2016). The City's current land designation for the project site is "Open Space – Parks, Flood Channels" (2014). The site is not designated for agricultural or forestry use and is not bound by a Williamson Act contract. Thus, implementation of the proposed project would have no impact on agricultural or forestry resources.

Table ES-3
Summary of Significant Unavoidable Traffic Impacts

		Jurisdiction	Significant Impact?	Included in Fee Program?	Can La Habra Independently Implement Mitigation?	Included in Fair Share?	Level of Significance
Intersections							
1.	Beach Boulevard at Rosecrans Avenue	La Mirada/Caltrans	Yes	No	No	Yes	SU
10.	Beach Boulevard at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
13.	Euclid Street at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
14.	Harbor Boulevard at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
15.	Beach Boulevard at Lambert Road	La Habra/ Caltrans	Yes	No	No	Yes	SU
20.	Beach Blvd at La Mirada Blvd/Malvern Ave	Buena Park/ Caltrans	Yes	No	No	Yes	SU
23.	Beach Boulevard at Artesia Boulevard	Buena Park/ Caltrans	Yes	No	No	Yes	SU
29.	Hacienda Road at Whittier Boulevard	La Habra/ Caltrans	Yes	No	No	Yes	SU
Roadway Segments							
M.	Imperial Highway between Euclid Street and Harbor Boulevard	La Habra/Caltrans	Yes	No	No	No	SU
X.	Beach Boulevard between Rosecrans Ave and La Mirada Blvd	Buena Park/Caltrans	Yes	No	No	No	SU
Freeway Mainline Segments							
	SR-57 southbound north of Imperial Hwy	Caltrans	Yes	No	No	No	SU
Freeway Merge-Diverge Movements							
	SR-57 southbound on-ramp (EB) from Imperial Hwy	Caltrans	Yes	No	No	No	SU
Left Turn Queueing							
10.	Beach Boulevard at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU

Notes: LTS = Less than Significant; SM = Significant but Mitigable; SU = Significant and Unavoidable

b. Mineral Resources

Neither the City's General Plan nor the State of California identify the project site or its environs as a potential location for mineral resources of State-wide, regional, or local significance. While the project site was formerly part of the 950-acre West Coyote Hills Oil Field, within which extraction activities ceased in 1995 prior to the construction of the existing golf course. All of the wells have been abandoned in accordance with California Division of Oil, Gas, and Geothermal Resources (DOGGR) regulations.

No significant mineral deposits are known to remain within La Habra, and no areas are designated as Mineral Resource Zones (MRZ). The City's General Plan does not identify significant mineral resources within the project site. Therefore, no impacts related to the availability of mineral resources would occur as a result of proposed project.

ES.5.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

a. Biological Resources

Threshold BIO-1: **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.**

Impact BIO-1.1: Site grading and construction would remove habitat for special-status plant and animal species including coastal sage scrub, riparian woodland, and riparian scrub vegetation alliances, as well as nesting habitat for birds. Construction activities and the use of parks, trails, and the Community Center could increase human foot traffic and result in direct encroachment into habitats that support special-status species and nesting birds including coastal sage scrub, riparian woodland, and riparian scrub vegetation alliances, degrading the quality of the habitat compared to existing conditions. Compliance with applicable regulatory requirements of federal and state law, along with implementation of Mitigation Measures BIO-1.1a through BIO-1.1c, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Mitigation Measure BIO-1.1a: Compensatory Replacement of Special-Status Species Habitat. Compensatory Replacement of Special-Status Species Habitat. The loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within the Project site shall be compensated

through on-site or off-site establishment/restoration/enhancement and/or off-site purchase of functionally equivalent or better habitat.

The determination of functional equivalency of on-site establishment/ restoration/enhancement and/or off-site purchase shall be made by the California Department of Fish and Wildlife for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas and by the City of La Habra for mitigation of loss of these habitats outside of existing deed-restricted areas and jurisdictional areas.

It is recognized, however, that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase/restoration/enhancement could be established to provide compensation for loss of (1) previous mitigation resulting from vacating existing deed restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be determined to be jurisdictional waters.

Compensation for lost on-site habitat with functionally equivalent or better habitat shall be detailed on an acreage-specific basis in a Habitat Mitigation and Monitoring Plan (HMMP), which shall be developed in coordination and compliance with State of California and federal regulatory agency requirements. Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet agencies' standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, the HMMP shall include:

- Baseline information, including the findings and conclusions of a Biological Assessment demonstrating that:
    - Off-site compensatory mitigation lands are functionally equivalent or better than the habitats lost on-site; and
    - On-site establishment of coastal sage scrub through restoration will result in functionally equivalent or better habitat than that lost on-site.
- Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration, or off-site habitat acquisition, creation, or enhancement); and

- Measurable performance standards and criteria, including but not limited to the overall amount or percent of cover and species diversity for restoration or enhancement in the Specific Plan development footprint that must meet state and federal regulatory resources agency approval and must be documented for City review at the end of the five-year monitoring period. Should the restoration or enhancement fail to meet success criteria as defined in the HMMP, implementation of remedial restoration shall be required.
- Contingency funds shall be established and deposited in escrow account(s) to ensure successful implementation of the HMMP, such funds to be refunded to the applicant at the time the HMMP performance criteria are met.
    - One account in an amount to be determined by the California Department of Fish and Wildlife (CDFW) to be held by CDFW for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas.
    - Should the HMMP being overseen by the California Department of Fish and Wildlife not be adequate to address mitigation of loss of coastal sage scrub habitat outside of existing deed-restricted areas, a second escrow account is to be established with the City of La Habra in an amount to be determined by the City.

Mitigation Measure BIO-1.1b: Construction Avoidance of Active Bird Nests.

Coastal Sage Scrub. If grading or soil disturbance of any kind is proposed within 50 feet of coastal sage scrub, or if upland conservation enhancement or restoration activities are proposed between March 1 and August 15, a qualified biologist shall conduct pre-construction nesting California gnatcatcher surveys. Surveys shall be conducted using USFWS focused survey protocol methods and shall be conducted during the spring breeding season during the year construction occurs. Where an active bird nest is located, a 500-foot radius surrounding the active nest shall not be disturbed until after the nest becomes inactive and the family group can be confirmed, by a qualified biologist familiar with the species, to have left the nest territory. Prior to initiating vegetation clearing of coastal sage scrub, a qualified biologist shall walk ahead of the clearing activities to flush any birds from the habitat to be cleared.

Riparian Woodland. Proposed removal of riparian woodland within the development footprint shall be scheduled to occur during the non-breeding season for birds, which is between August 15 and January 31. If

removal is scheduled to occur between February 1 and August 15, pre-construction breeding bird surveys shall be performed by a qualified biologist familiar with local bird species no later than 14 days prior to start of construction. If active nests are found during preconstruction surveys, a buffer of 250 feet shall be established and temporary fencing shall be placed to prevent encroachment into the buffer area by construction equipment or workers.

Mitigation Measure BIO-1.1c: Setbacks and Erosion Protection for Coastal Sage Scrub. All viewing areas, signage, benches, and other park features shall be located at least 50 feet from the edge of coastal sage scrub. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub habitats may be included in the setback, and shall be designed in coordination with a qualified biologist of the City's choosing to confirm that proposed fencing, signage, or efforts to reduce potential habitat encroachment would not create additional perches or vegetative features used by birds of prey compared to existing conditions. In addition, construction of proposed fencing or features intended to deflect potential human encroachment onto coastal sage scrub habitat shall be subject to erosion control strategies included in the required Storm Water Pollution Prevention Plan (SWPPP), which would establish Best Management Practices (BMPs) to reduce sedimentation and erosion and prevent construction pollutants from leaving the site and the erosion and sediment control plan to be reviewed and approved by the City of La Habra prior to issuance of grading permit (see Impact HWQ-1.1 in Section 3.13, *Hydrology and Water Quality*, of the Draft EIR). Posted park rules shall identify coastal sage scrub habitats in the conservation areas and shall state that encroachment onto coastal sage scrub areas is prohibited. Educational signage and other signs proposed in the upland conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting.

Signage in public access areas shall advise that access is to approved trails, from 7:00 a.m. to 9:00 p.m. Lighting poles shall be located no closer than 50 feet from conservation areas wherever feasible. Where lighting poles cannot be located outside of setback areas, such as along permitted trails within the upland habitat conservation area, such lighting poles shall be low level and designed so as to discourage birds of prey from using them as perches for hunting activities. All lighting shall be directed downward so as not to intrude into habitat areas after sundown. The lighting plan shall be reviewed by a biologist prior to installation and

submitted to the City for approval to confirm conformance with this measure.

Impact BIO-1.2: Development of the Rancho La Habra Specific Plan would require that existing deed restrictions intended to provide mitigation in perpetuity for loss of special-status species habitat associated with construction of the La Habra Hills Specific Plan, including the Westridge Golf Club (Project site), be vacated. Implementation of Mitigation Measure BIO-1.2, along with compliance with applicable regulatory requirements of state law, including replacement of existing deed-restricted areas through issuance of a new Streambed Alteration Agreement for Rancho La Habra, would compensate for the loss of previously provided mitigation within the Project site (deed-restricted areas) with functionally equivalent or better habitat. The impact would therefore be *significant but mitigable*.

Mitigation Measure BIO-1.2: Compensatory Replacement of Previously Provided Mitigation within Onsite Deed Restricted Areas. Compensatory Replacement of Previously Provided Mitigation within On-Site Deed-Restricted Areas. The loss of previously provided mitigation within on-site deed-restricted areas within the Project site shall be compensated through on-site establishment/restoration/enhancement and/or off-site purchase/restoration/enhancement of functionally equivalent or better habitat.

The determination of functional equivalency of on-site establishment/ restoration/enhancement and/or off-site purchase/restoration/ enhancement shall be made by the California Department of Fish and Wildlife.

It is recognized that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase/ restoration/enhancement could provide compensation for (1) loss of previous mitigation resulting from vacating existing deed-restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be classified as jurisdictional waters.

Compensation for loss of on-site deed-restricted areas with functionally equivalent or better habitat shall be detailed as set forth in Mitigation Measure BIO-1.1a.

Threshold BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and

Wildlife, Regional Water Quality Control Board, or U.S. Fish and Wildlife Service.

Impact BIO-2: Site preparation and grading would directly remove 5.765 acres of riparian and wetland habitats, including Arroyo Willow Forest, California Bulrush Marsh, Fremont Cottonwood Forest, Mixed Riparian Scrub Shrubland, and Southern Cattail Marsh Alliances, within the Project's grading footprint. In addition, sensitive natural habitats proposed to be avoided by the Project, specifically the coastal sage scrub preserved on the west side of the Project site, could be damaged or reduced in quality during construction. Compliance with applicable regulatory requirements of federal and state law, along with implementation of Mitigation Measures BIO-1.1a and BIO-2a through BIO-2c, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Mitigation Measure BIO-2a: Preventing Degradation of Natural Communities. The applicant shall avoid or minimize adverse effects on sensitive natural communities within the Project site. The measures described below shall be employed to avoid degradation of sensitive natural communities by maintaining water quality and controlling erosion and sedimentation during construction as required by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities. (See also Draft EIR Section 3.13, *Hydrology and Water Quality*, for discussion of NPDES requirements and requirements for preparation and implementation of a Storm Water Pollution Prevention Plan [SWPPP] and implementation of Best Management Practices [BMPs].)

The Project applicant shall comply with requirements of the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit. This shall include construction site inspection and control programs at all construction sites, with follow-up and enforcement consistent with each Permittee's respective Enforcement Response Plan, to prevent construction site discharges of pollutants and impacts on Beneficial Uses of receiving waters. The goal of Provision C.3 of the MS4 Permit is for the Permittee, such as the City of La Habra, to use its planning authorities to include appropriate source control, site design, and storm water treatment measures in new development projects to address both soluble and insoluble storm water runoff pollutant discharges and prevent increases in runoff flows from site development. This goal is to be accomplished primarily through the implementation of low impact development techniques. The Project applicant shall comply with local

municipal requirements and the local storm water program as mandated under the Municipal Stormwater Permit, including, at minimum, the following measures:

- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- Avoid excavation and grading if there is 0.5 inch of rain or more within 48 hours.
- Limit on-site construction routes and stabilize construction entrance(s) and exit(s).
- For any increase in impervious surface area, include establishment of vegetated swales and permeable pavement materials, preserve vegetation, re-plant with native vegetation, and evaluate and implement appropriate measures.
- Provide native vegetation buffer areas where appropriate and practicable to prevent pollutants from entering off-site native habitats or water bodies.
- Construct diversion dikes and drainage swales to channel runoff around the site and away from bodies of water.
- Use berms and drainage ditches to divert runoff around exposed areas.
- Place diversion ditches across the top of cut slopes.
- Prohibit use of fertilizers or pesticides in areas with a potential runoff into adjacent native habitats.

The applicant shall prepare and implement a maintenance program as approved by the City that includes maintenance of water quality pollution-control features such as swales, sediment traps, or other passive applications of pollution prevention measures required as part of NPDES permitting. The maintenance program shall address the management of lands adjacent to off-site coastal sage scrub habitat areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Install temporary silt fencing or vegetative plantings between development and adjacent sensitive natural communities, specifically off-site coastal sage scrub.
- Locate fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features,

and otherwise isolate construction work areas from any identified jurisdictional features including California Fish and Game Code, U.S. Army Corps of Engineers, and Regional Water Quality Control Board jurisdictional areas.

- Ensure on-going maintenance and management in perpetuity at no expense to the City for the preserved upland areas adjacent to the development footprint, along with provisions permitting the City to enforce management and maintenance requirements and recoup costs for enforcement should such enforcement be necessary. On-going maintenance and management of upland conservation areas shall be implemented in a manner consistent with the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit, and evidence of compliance with such permit conditions shall be provided to the City Engineer on a quarterly basis.
- Provide trash receptacles at appropriate locations and provide for regular litter removal.
- Maintain all improvements within the parks, trails, and Community Center in a safe and working condition.

Mitigation Measure BIO-2b: Conservation and Protection of Sensitive Habitats Avoided by Specific Plan Grading. For on-going conservation and protection of sensitive habitats that the Specific Plan proposes to avoid, the following requirements shall apply:

- A habitat conservation and protection plan for proposed upland conservation areas adjacent to the development footprint shall be prepared by a qualified biologist with implementation approved by the City of La Habra Community Development Director prior to approval of City grading permits. The habitat conservation and protection plan shall, at a minimum, include the following components to minimize the effect of night lighting on upland conservation area habitats adjacent to the development footprint.

  The following shall apply to any proposed lighting within 150 feet of the upland or riparian conservation areas:

  - Low-intensity streetlamps and low-elevation lighting poles shall be provided.
  - Internal silvering of the globe or external opaque reflectors shall be provided to direct light away from sensitive natural habitats.
  - Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into sensitive habitats.

Common area lighting plans shall be reviewed by the City for conformance with these measures prior to installation. Private lighting restrictions shall be enforced by the property owners' association as described below.

- CC&Rs, as well as residential and commercial leases within the Project site shall prohibit building occupants from creating outdoor feeding stations for feral cats to prevent feral cat colonies from establishing and to prevent the attraction of other predatory wildlife such as coyotes, red fox, raccoon, and opossums. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of this requirement.
- As part of Community Center and Project trail improvements, interpretive signage regarding the sensitive habitats and the dangers of unleashed domestic animals shall be provided to the satisfaction of the City. Such information shall be provided in the vicinity of the Community Center, along trails, and at wildlife viewing areas where public access is provided.

  In addition, information materials shall be prepared by the applicant for review and approval by the City regarding the sensitive habitats and the dangers of unleashed domestic animals within the Project site. Such materials shall be provided to each initial homeowner by the home builder(s), to successive homeowners by the property owners' association, and to renters of for-rent multi-family dwellings by the building owner.

  The property owners' association shall establish a pet policy prohibiting unleashed domestic animals outside of fully enclosed yard areas and have the right and obligation to impose fines for violation of the pet policy.

Mitigation Measure BIO-2c: Compensatory Mitigation for Loss of Riparian and Wetland Habitat. Loss of riparian and wetland habitat that cannot be avoided during site development shall be compensated with provision of functionally equivalent or better habitat, which may be provided as part of Mitigation Measure BIO-1.1a.

Threshold BIO-3: Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact BIO-3: Earth-moving and site grading proposed within the Specific Plan area would directly remove, and could damage or degrade during construction, wetland areas subject to Clean Water Act Section 401 and Section 404 within the Project site, along with lands subject to California Fish and Game Code Section 1602. However, in the course of compliance with applicable regulatory requirements of federal and state law, and with implementation of mitigation measures, no net loss of wetlands would occur, and impacts would be reduced to less than significant levels. The impact is therefore *significant but mitigable*.

Mitigation Measure BIO-1.1a: Compensatory Replacement of Special-Status Species Habitat

Mitigation Measure BIO-2c: Compensatory Mitigation for Loss of Sensitive Natural Communities

Threshold BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Impact BIO-4: No physical modifications to the existing 500-foot-wide vegetative interface between the Project site and West Coyote Hills habitat areas are proposed. However, wildlife viewing areas, kiosks, passive recreation structures, and lighting associated with proposed Specific Plan trail systems could impede localized movement of wildlife across that interface, resulting in a significant impact. Mitigation Measures BIO-4a and BIO-4b would protect the functionality of the existing 500-foot-wide vegetative interface, reducing impacts to less than significant. In addition, Mitigation Measure BIO-1.1a provides for enhancement of coastal sage scrub habitat in the southern portion of the Project site, which would benefit localized wildlife movement. The impact would therefore be *significant but mitigable*.

Mitigation Measure BIO-4a: Locations of Structures and Trail Features. Structures and trail features shall be situated to avoid obstructing the wildlife movement interface shown in **Figure 3.5-1**. Structures or facilities that would obstruct wildlife movement between the West Coyote Hills and the development footprint habitats shall not be placed within the interface between the Project site and adjacent undeveloped land in the West Coyote Hills.

Mitigation Measure BIO-4b: Maintenance of Vegetative Cover along Wildlife Movement Interface. Native vegetation along the existing 500-

foot-wide vegetative interface in the southern portion of the Project site shall be preserved so as to maintain cover available for wildlife using the interface to move between the West Coyote Hills and Project site habitats.

Threshold BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact BIO-5: Build-out of the Rancho La Habra Specific Plan would result in removal of trees and landscaping that provide avian nesting and roosting habitat throughout the grading footprint, conflicting with La Habra General Plan Policy BR 1.8, which encourages preservation of such resources in the City. Because Mitigation Measure BIO-5 provides for replacement of landscaping lost during site development that will provide equivalent or better habitat suitable for bird nesting and roosting, the Project would be consistent with General Plan policies and goals. In addition, removal of trees within the grading footprint during nesting bird season would adversely affect nesting birds. However, Mitigation Measure BIO-1.1b prohibits removal of trees with an active nest and establishes a protective buffer area around such trees until after the nest becomes inactive. Impacts would therefore be *significant but mitigable*.

Mitigation Measure BIO-5: Replacement of Bird Nesting and Roosting Habitat. All Project landscaping shall be in conformance with the approved Rancho La Habra Specific Plan, Landscape Plans, and plant palette and shall incorporate replacement for landscaping lost during development (combination of native and non-native plantings) that will provide equivalent or better habitat suitable for bird nesting and roosting for resident and migratory birds. Replacement for habitat lost during Project development may be in the form of landscaped slopes, street trees, preservation and enhancement of conservation habitat areas, and landscaping of the Community Center, park, and trail areas.

Threshold BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact BIO-6: Because the Specific Plan area is not located within a "sub-regional focus area" that would be protected by the Orange County Central and Coastal Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP), the Project would be consistent with the NCCP/HCP, and *no impact* would result.

b. Traffic and Circulation

Threshold TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Impact TRA-1.1: *Construction Traffic*. Development permitted by the proposed Specific Plan would add traffic to area roadways during construction. Although such traffic would be temporary, congestion in the area would increase. With preparation of a Construction Management Plan (Mitigation Measure TRA-1.1), the effects of Project-related construction traffic would be reduced to less than significant. Impact TRA-1.1 is therefore *significant but mitigable*.

Mitigation Measure TRA-1.1: Prior to issuance of a demolition, grading, or other permit, the applicant shall prepare and implement a Construction Management Plan, subject to approval of the City Engineer or their designee, to minimize construction-related traffic in the AM and PM peak hours, as well as to minimize disturbance to area residents. The Construction Management Plan shall, at a minimum:

- Include a proposed construction phasing plan.
- Identify proposed construction-related traffic controls and detours.
- Provide for traffic control for any street or lane closure, detour, or other disruption to traffic circulation to minimize the effects of such disruption.
- Limit the routes that construction vehicles may use for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e., lumber, tiles, piping, windows, etc.) to Beach Boulevard and Imperial Highway (via La Habra Hills Drive).[4]
- Limit the routes that construction vehicles may use to dispose of any construction debris removed from the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive).

[4] Both Beach Boulevard and Imperial Highway are identified in the La Habra General Plan as truck routes.

- Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts on adjacent streets.
- Specify requirements for the applicant to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material that may have been spilled, tracked, or blown onto adjacent streets or areas.
- Specify that hauling or transport of oversize loads will be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless otherwise approved in writing by the City Engineer.
- Specify that no hauling or transport shall be allowed during nighttime hours, weekends, or federal holidays.
- Prohibit use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway) for construction-related traffic.
- Require that haul trucks entering or exiting public streets shall at all times yield to public traffic.
- Specify that, if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer.
- Require that all construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur on-site.

The Construction Management Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Devices* as well as City of La Habra requirements.

The applicant shall coordinate with Caltrans staff regarding Project-related work that will occur along Beach Boulevard. All construction activities within Caltrans right-of-way shall be subject to issuance of an encroachment permit by Caltrans.

Impact TRA-1.2: *Intersections, Existing Plus Project Condition – Local Methodologies*. The proposed Specific Plan would increase traffic at intersections on the surrounding roadway system. Project-related increases in intersection capacity utilization (ICU) and/or delay would exceed applicable thresholds for increased delay at one of the 32 intersections analyzed in the Project traffic study under Existing Plus Project conditions. Installation of traffic signals at the intersection of Walnut Street at

Imperial Highway would reduce Level of Service (LOS) to acceptable levels. Because Caltrans has committed to fully fund this signalization, no mitigation measure is required. Therefore, this impact would be *less than significant*.

Mitigation Measure TRA-1.2. The applicant shall pay city-wide traffic improvement fees.

Impact TRA-1.3: *State-Controlled Intersections, Existing Plus Project Condition – Caltrans Methodology*. Project-generated traffic increases would exceed applicable thresholds at 3 of the 19 state-controlled intersections analyzed in the Traffic Impact Analysis under Existing Plus Project conditions: Beach Boulevard/Artesia Boulevard, Hacienda Road/Whittier Boulevard, and Walnut Street/Imperial Highway. The remaining 16 state-controlled study intersections are forecast to continue to operate at an acceptable Level of Service (LOS) with the addition of Project-generated traffic to existing traffic. The implementation of improvements at the three affected intersections would fully mitigate the impacts of Project traffic, and the intersections would operate at an acceptable LOS during the AM and PM peak hours. Caltrans has committed to fund improvements at the intersection of Imperial Highway and Walnut Street. However, because the other two intersections are state-controlled, the City of La Habra cannot guarantee implementation of recommended mitigation measures. Therefore, this impact would remain *significant and unavoidable*.

Mitigation Measure TRA-1.3. The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersections:

- Beach Boulevard at Artesia Boulevard (within Buena Park)
- Hacienda Road at Whittier Boulevard (within La Habra)

Impact TRA-1.4: *Roadway Segments, Existing Plus Project Condition*. Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system. Along the nine roadway segments that would operate at unacceptable levels of service under Existing Plus Project conditions, Project-related traffic increases would not exceed applicable thresholds of significance for LOS and roadway volume to capacity ratio (v/c). Therefore, impacts along area roadway links would be *less than significant*.

Impact TRA-1.5: *Intersections, Year 2023 Cumulative Plus Project Condition – Local Methodologies*. Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system. Project-related

increases in intersection capacity utilization (ICU) and/or delay would exceed applicable thresholds for increased delay at 3 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis under Year 2023 Cumulative Plus Project conditions. Implementation of improvements at these three intersections (Beach Boulevard at Rosecrans Avenue, Walnut Street at Imperial Highway, and Beach Boulevard at La Mirada Boulevard/Malvern Avenue) would mitigate the effects of Project-related traffic on ICU and/or delay, and the intersections are forecast to operate at an acceptable Level of Service (LOS) during the AM and PM peak hours. Caltrans has committed to fund needed improvements at the intersection of Walnut Street and Imperial Highway. Because the remaining two affected intersections are outside of the City of La Habra, the City cannot require implementation of such improvements. Thus, the Project's impact would be *significant and unavoidable*.

Mitigation Measure TRA-1.5a: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of La Mirada for Project-related impacts at the following intersection:

- Beach Boulevard at Rosecrans Avenue

Mitigation Measure TRA-1.5b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts at the following intersection:

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue

Impact TRA-1.6: *State-Controlled Intersections, Year 2023 Cumulative Plus Project Condition – Caltrans Methodology*. Cumulative Project-generated traffic increases would exceed applicable thresholds at 5 of the 19 state-controlled intersections analyzed in the Rancho La Habra Traffic Impact Analysis. With the implementation of improvements, the state-controlled intersections of Beach Boulevard at Imperial Highway, Beach Boulevard at Artesia Boulevard, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway are forecast to operate at an acceptable Level of Service (LOS) during the AM and PM peak hours. Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway. The implementation of improvements at the intersection of Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project traffic; however, this intersection is still forecast to operate at unacceptable LOS F during the PM peak hour. Because these intersections are state-controlled, the City of

La Habra cannot guarantee implementation of recommended mitigation measures. Therefore, this impact would be *significant and unavoidable*.

Mitigation Measure TRA-1.6: The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersections:

- Beach Boulevard and La Mirada Boulevard-Malvern Avenue
- Hacienda Road at Whittier Boulevard
- Beach Boulevard at Artesia Boulevard

See **Mitigation Measure TRA-1.2** for mitigation at the intersection of:

- Beach Boulevard at Imperial Highway

Impact TRA-1.7: *Roadway Segments, Year 2023 Cumulative Plus Project Condition*. Fourteen of the 37 roadway segments analyzed in the Traffic Impact Analysis are forecast to operate at an unacceptable level of service on a daily basis in the Year 2023 with the Project. However, Project-generated traffic would not increase delays exceeding applicable thresholds along any of the roadway segments analyzed in the Traffic Impact Analysis under Year 2023 Cumulative Plus Project conditions. Impacts would therefore be *less than significant*.

Impact TRA-1.8: *Intersections, Year 2035 Cumulative Plus Project Condition – Local Methodologies*. Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system, resulting in increased intersection capacity utilization (ICU) and/or delay at area intersections. Project-related increases in ICU and/or delay would exceed applicable thresholds at 6 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis. Although an additional 12 of the 32 intersections analyzed in the Traffic Impact Analysis are forecast to operate at unacceptable Level of Service (LOS) E and/or LOS F during the AM and/or PM peak hour with the addition of Project traffic to cumulative traffic in 2035, Project-generated increases in ICU and/or delay would not exceed the applicable significance threshold. Implementation of improvements at the affected intersections of Beach Boulevard at Imperial Highway and Walnut Street at Imperial Highway, both of which are within the City of La Habra, would achieve acceptable levels of service in both the AM and PM peak hours. Although Caltrans has committed to fund improvements at the intersection of Walnut Street and Imperial highway, improvements at the intersection of Beach Boulevard at Imperial Highway would require Caltrans approval, which the City of La Habra cannot guarantee. In addition, implementation of

improvements at the affected intersections of Beach Boulevard at Rosecrans Avenue, Euclid Street at Imperial Highway, Beach Boulevard at Lambert Road, and Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project-generated traffic; however, these locations are still forecast to operate at unacceptable LOS E and/or LOS F during the AM and/or PM peak hours. Therefore, impacts of the Project would be *significant and unavoidable*.

See **Mitigation Measure TRA-1.2** for mitigation of impacts at the intersections of:

- Beach Boulevard at Imperial Highway

See **Mitigation Measure TRA-1.2** for mitigation of impacts at the intersection of:

- Beach Boulevard at Rosecrans Avenue

See **Mitigation Measure TRA-1.5b** for mitigation of impacts at the intersection of:

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue

Mitigation Measure TRA-1.8a: The applicant shall pay city-wide traffic improvement fees as well as fair share impact fees at the following intersection:

- Euclid Street at Imperial Highway

Mitigation Measure TRA-1.8b: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the intersection of:

- Beach Boulevard at Lambert Road

Impact TR-1.9 *State-Controlled Intersections, Year 2035 Cumulative Plus Project Condition – Caltrans Methodology*. Of the 19 state-controlled intersections analyzed, 8 intersections would operate at an unacceptable Level of Service (LOS) to which the Project would generate additional traffic in the Year 2035. Project-generated traffic increases would also cause a ninth state-controlled intersection to operate at an unacceptable LOS. With the implementation of improvements, the intersections of Beach Boulevard at Imperial Highway, Euclid Street at Imperial Highway, Harbor Boulevard at Imperial Highway, Beach Boulevard at Lambert Road, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, and Beach Boulevard at Artesia Boulevard would offset the impact of Project-generated traffic. However, these intersections would still operate at

unacceptable LOS E or F during the AM and/or PM peak hours. With implementation of improvements, the affected intersections of Beach Boulevard at Rosecrans Avenue, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway would operate at an acceptable LOS during the AM and PM peak hours. While Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway, the City of La Habra cannot ensure implementation of Mitigation Measure TRA-1.9 at other intersections. Therefore, this impact would be *significant and unavoidable*.

See **Mitigation Measure TRA-1.2** for mitigation of impacts at the intersection of:

- Beach Boulevard and Imperial Highway

See **Mitigation Measure TRA-1.3a** for mitigation of impacts at the intersections of:

- Hacienda Road and Whittier Boulevard
- Beach Boulevard and Artesia Boulevard

See **Mitigation Measure TRA-1.5a** for mitigation of impacts at the intersection of:

- Beach Boulevard at Rosecrans Avenue

See **Mitigation Measure TRA-1.6b** for mitigation of impacts at the intersections of:

- Beach Boulevard and La Mirada Boulevard/Malvern Avenue
- Harbor Boulevard and Imperial Highway

Mitigation Measure TRA-1.9: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersections:

- Euclid Street and Imperial Highway
- Beach Boulevard and Lambert Road

Impact TRA-1.10: *Roadway Segments, Year 2035 Cumulative Plus Project Conditions*. Eighteen of the 39 roadway segments analyzed in the Traffic Impact Analysis are forecast to operate at an unacceptable level of service on a daily basis in the Year 2035 with the Project. Project-generated traffic would have a significant impact along Imperial Highway between Euclid Street and Harbor Boulevard and along Beach Boulevard between Rosecrans

Avenue and La Mirada Boulevard. With implementation of recommended improvements, both Imperial Highway between Euclid Street and Harbor Boulevard and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard would operate at acceptable Level of Service (LOS) D or better under Year 2035 Cumulative Plus Project traffic conditions. However, because both of these roadway segments are on a state highway and require Caltrans approval, the City of La Habra cannot guarantee implementation of these improvements. Therefore, this impact would be *significant and unavoidable*.

Mitigation Measure TRA-1.10a: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following roadway segment:

- Imperial Highway between Euclid Street and Harbor Boulevard

Mitigation Measure TRA-1.10b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts along the following roadway segment:

- Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard

Impact TRA-1.11: *Freeway Mainline Segments*. Although the addition of Project-generated trips would not result in any new deficient service levels under Existing Plus Project, Year 2023 Cumulative Plus Project, or Year 2035 Cumulative Plus Project conditions, Project-generated traffic would increase traffic density along State Route 57 (SR-57) southbound south of Imperial Highway under Year 2023 Cumulative Plus Project conditions. Because the SR-57 freeway is controlled exclusively by the State of California and there is no mechanism by which the City of La Habra can construct or guarantee construction of any freeway improvements, the Project's impact would be *significant and unavoidable*.

Mitigation Measure TRA-1.11: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following freeway mainline segment:

- SR-57 southbound lanes south of Imperial Highway

Impact TRA-1.12: *Caltrans Freeway Ramp Junction Merge and Diverge Analysis*. Although the Project would not cause a change in level of service at any of the freeway ramps analyzed in the Rancho La Habra Traffic Impact Analysis, Project-generated traffic would increase the density of traffic merging onto the southbound State Route 57 (SR-57) freeway from Imperial Highway

under Year 2023 Cumulative Plus Project conditions. Because the SR-57 freeway is controlled exclusively by the State of California and there is no mechanism by which the City of La Habra can construct or guarantee construction of any improvements to this ramp junction, the Project's impact would be *significant and unavoidable*.

See **Mitigation Measure TRA-1.11**.

Impact TRA-1.13 *Left-Turn Queueing Analysis*. An analysis of queueing and available storage at the Project's primary access points and the intersection of Beach Boulevard at Imperial Highway indicated that adequate storage is provided under existing, Year 2023, and Year 2035 traffic conditions, except for the dual westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway. At that intersection, westbound left-turning vehicles would queue into the Imperial Highway through lane, causing vehicles to queue back to the La Habra Hills Drive/Imperial Highway intersection during the AM and PM peak hours. Such queueing occurs under existing, Year 2023, and Year 2035 conditions with and without Project-generated traffic during the AM peak hour under all traffic scenarios and during the PM peak hour under Year 2023 and Year 2035 traffic scenarios. The Project is forecast to contribute approximately 50 feet (i.e., three vehicles) to the already-deficient storage for the dual westbound left-turn lanes. The storage deficiency along the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway could be addressed by reallocating more green time to the westbound left-turn lanes. However, because this intersection is state-controlled, and the City of La Habra cannot guarantee Caltrans approval of this improvement, the impact would be *significant and unavoidable*.

Mitigation Measure TRA-1.13: The applicant shall pay to the City of La Habra the cost of reallocating additional green time to the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway to be distributed to Caltrans for Project-related queueing impacts at that intersection.

Threshold TRA-2: Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

Impact TRA-2: The proposed Specific Plan would increase traffic on the surrounding roadway system, resulting in increased intersection capacity utilization (ICU) and/or delay at area intersections. These increases would not

exceed applicable thresholds at any congestion management program location. However, the City of La Habra has undertaken traffic engineering studies that concluded any additional traffic generated by new development at the intersection of Beach Boulevard at Imperial Highway would have a significant impact for which fair share improvement fees would be required as mitigation. Since payment of such fees are required of the Project, this impact would be *significant but mitigable*.

See **Mitigation Measure TRA-1.2** for mitigation at the intersection of:

- Beach Boulevard at Imperial Highway

Threshold TRA-3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

Impact TRA-3: The Rancho La Habra Specific Plan would not result in any changes to air traffic patterns. Therefore, the Project would have *no impact*.

Threshold TRA-4: Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact TRA-4: Development proposed within the Specific Plan area would be subject to City of La Habra review of proposed roadway improvements, which would ensure that roadway design hazards are not created. *No impact* would result.

Threshold TRA-5: Result in inadequate emergency access.

Impact TRA-5: The Rancho La Habra Specific Plan provides for adequate emergency access to and within the Project site, both during construction and ongoing operations. However, lane closures could occur on adjacent roadways during infrastructure construction and La Habra Hills Drive would be closed during site grading, diverting traffic from Imperial Highway to the Westridge community via La Habra Hills Drive onto Beach Boulevard and Idaho Street. Thus, emergency access from Imperial Highway could be slightly slowed on a temporary basis. Mitigation Measure TRA-1.1, requiring implementation of a Construction Management Plan to ensure adequate emergency access during construction. The impact would therefore be *significant but mitigable*.

See **Mitigation Measure TRA-1.1**.

Threshold TRA-6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact TRA-6: The Rancho La Habra Specific Plan provides enhanced bicycle and pedestrian facilities within the Project site and implement applicable requirements for transit, bicycle, and pedestrian facilities. The impact would therefore be *less than significant*.

c. Air Quality

Threshold AQ-1: Conflict with or obstruct attainment of the applicable air quality plan.

Impact AQ-1: Although the Project would not increase the frequency or severity of existing air quality violations or cause or contribute to new violations, proposed housing and population growth would be inconsistent with the Air Quality Management Plan for the South Coast Air Basin. The resulting impact would be *significant and unavoidable*

No feasible mitigation measures are available to reduce Impact AQ-1 to a less than significant level. However, as discussed in Draft EIR Chapter 7, *Alternatives*, the following Project Alternatives would eliminate or reduce the identified significant impact in relation to air quality:

Alternative 1: No Project – No Development

Alternative 2: No Project – General Plan Build-Out

Alternative 3: Golf Course and Hotel

Alternative 4: Reduced Density Residential/Nine-Hole Golf Course

Alternative 5: Reduced Density Single-Family Development

Threshold AQ-2: Violate any air quality standard, contribute substantially to an existing or projected air quality violation.

Impact AQ-2.1: Development permitted by the proposed Rancho La Habra Specific Plan would result in the emission of criteria pollutants during construction and ongoing operations. Total daily construction emissions would exceed applicable daily emissions thresholds for nitrogen oxides (NO_X), resulting in a cumulatively considerable net increase of a criteria pollutant for which the region is in non-attainment. However, compliance with applicable South Coast Air Quality Management District (SCAQMD) rules and implementation of mitigation measures would reduce impacts to a less than significant level, and the impact would therefore be

significant but mitigable. Operational emissions would be below applicable thresholds, and their impact would therefore be *less than significant*.

Mitigation Measure AQ-2.1a: All off-road construction equipment, except scrapers, shall be equipped with engines that meet the U.S. Environmental Protection Agency (USEPA) Tier 4 Final Emission Standards. A minimum of three of the six scrapers involved in grading operations shall be equipped with engines that meet the USEPA Tier 4 Final Emission Standards. Tier 4 Final Emission Standards result in NO_X emission reductions greater than 90 percent from unmitigated levels.

Mitigation Measure AQ-2.1b: Vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour as a means of reducing dust and $PM_{10}/PM_{2.5}$ generation.

Impact AQ-2.2: Total daily emissions from grading activities would exceed applicable localized significance thresholds, indicating a local exceedance of an ambient air quality standard. However, compliance with applicable South Coast Air Quality Management District (SCAQMD) rules, including implementation of Best Available Control Measures (BACMs), along with implementation of mitigation measures, would reduce impacts to a less than significant level, and the impact would therefore be *significant but mitigable*. Operational emissions would be below applicable localized significance thresholds, and their impact would therefore be *less than significant*.

Mitigation Measure AQ-2.2: Soils exposed during grading operations shall be watered four times per day. In the event of drought conditions, defined as Water Shortage Stages 4 or 5 as determined by the City, use of non-water chemical stabilizers may be required by the City such that fugitive emissions reductions are comparable to watering four times per day. See also **Mitigation Measures AQ-2.1a** and **AQ-2.1b**, above.

Impact AQ-2.3: Project-generated traffic would not be sufficient to create a carbon monoxide (CO) "hot spot," nor will there be sufficient traffic along area roadways to generate a CO hot spot to which the Project might contribute emissions. The impact would therefore be *less than significant*.

Threshold AQ-3 **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**

Impact AQ-3: Project construction would result in significant nitrogen oxide (NO_X) emissions and significant nitrogen dioxide (NO_2) and respirable particulate matter (PM_{10})[5] emissions in relation to localized significance thresholds. Both of these impacts would be reduced to less than significant levels with implementation of mitigation measures, as discussed in relation to Impact AQ-2.2 (see Table 3.8-20). However, because the region is in attainment for both NO_X and NO_2, significant increases in NO_X and NO_2 in relation to South Coast Air Quality Management District (SCAQMD) thresholds would not represent a net increase of a criteria pollutant for which the region is in non-attainment. Thus, impacts in relation to Threshold AQ-3 would be *less than significant*.

Threshold AQ-4: Expose sensitive receptors to substantial pollutant concentrations.

Impact AQ-4: Based on the results of the localized significance thresholds and carbon monoxide (CO) "hot spot" analysis, the project would not expose sensitive receptors to substantial pollutant concentrations with implementation of Best Available Control Measures (BACMs) and localized significance thresholds-related Mitigation Measures AQ-2.1a, AQ-2.1b, and AQ-2.2. Although it is not feasible to provide a quantified analysis of Project-induced health impacts because current scientific, technological, and modeling limitations prevent quantification of expected adverse health consequences, health-based impacts would nonetheless be reduced to less than significant, as indicated by the results of the localized significance thresholds and CO "hot spot" analysis which indicate that impacts would be *significant but mitigable*.

See Mitigation Measures AQ-2.1a, AQ-2.1b, and AQ-2.2.

Threshold AQ-5: Create objectionable odors affecting a substantial number of people.

Impact AQ-5: The Rancho La Habra Specific Plan does not propose land uses having a potential for significant odor emissions. While some odors may be generated by diesel exhaust during Project construction activities, they would temporary in nature and not be likely to violate applicable South Coast Air Quality Management District (SCAQMD) regulations. Impacts would therefore be *less than significant*.

[5] Localized significance thresholds for $PM_{2.5}$ would not be exceeded, and impacts would be less than significant.

d. Greenhouse Gas Emissions

Threshold GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact GHG-1: Development of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 8,095.99 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year in 2026 and 7,554.69 $MTCO_2e$ per year in 2030, which would exceed the South Coast Air Quality Management District (SCAQMD) screening threshold of 3,000 $MTCO_2e$ per year. In addition to 2019 CALGreen building code requirements, Mitigation Measures GHG-1a through GHG-1i set performance standards for the installation of solar panels and electric vehicle (EV) charging stations within the Project site, require provision of subsidies for EV purchases and transit use by residents, provide subsidies for purchase of up to three electric school buses, and include requirements for use of electric landscape maintenance equipment in common open spaces. These measures would also increase shading in commercial areas by 10 percent and reduce heat gain in commercial and multi-family residential areas by 50 percent.

Implementation of these measures would achieve consistency with the City of La Habra's Climate Action Plan (CAP) and the 2017 California Air Resources Board Scoping Plan and would reduce GHG emissions. However, even if stationary source emissions were reduced to zero and mobile source emissions mitigated through application of feasible mitigation measures recommended in the Partially Recirculated Draft EIR, mobile source emissions would still exceed 3,000 $MTCO_2e$. In addition, because the Project would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel, the Project would be inconsistent with the regional RTP/SCS. Therefore, even with the implementation of mitigation measures, the impact would be *significant and unavoidable*.

Mitigation Measure GHG-1a: All new single-family homes shall have the following installed:

- Solar panels providing 1.5 watts (W) solar energy per square foot of building area (e.g., 2,000-square-foot home = 3 kilowatts [kW]) with a minimum 2 kW per home to the extent determined feasible by the City.
- Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other

efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating.

- A minimum of one single-port electric vehicle (EV) charging station that achieves a similar or better functionality as a Level 2 charging station.
- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the single-family property.

In addition, initial homebuyers within the Project site shall be provided with information regarding all current SCAQMD programs designed to encourage homeowners to use electrical lawnmowers and replace gasoline-powered yard maintenance equipment with electric-powered equipment.

Mitigation Measure GHG-1b: All new multi-family dwelling units shall be all electric, meaning that electricity is the only permanent source of energy for water heating, mechanical powering, space heating and cooling (i.e., heating, ventilation, and air conditioning [HVAC]), cooking, and clothes drying and there is no gas meter connection. All major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, and water heaters) provided and/or installed shall be electric-powered Energy Star-certified or of equivalent energy efficiency where applicable.

In addition, all new multi-family homes shall have the following installed:

- Solar panels providing 0.75 W solar energy per square foot of building area (e.g., 20,000-square-foot building = 15 kW), to the extent determined feasible by the City;
- Electric vehicle charging equipment that achieves a similar or better functionality as a Level 2 charging station for 5 percent of the total number of parking spaces; and
- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1c: The Project applicant or its designee shall establish and fund a dedicated account for the provision of subsidies for the purchase by homeowners within the first year of occupancy of a zero-emission vehicles (ZEV), as defined by the California Air Resources Board (CARB) equal to the provision of a $1,000 subsidy per residence, available

on a first-come, first-served basis, for up to 50 percent of the Project's for-sale dwelling units.

Mitigation Measure GHG-1d: All new non-residential buildings, including commercial buildings and the clubhouse/Community Center, shall have the following installed:

- Solar panels providing at least 1 W per square foot of building area (e.g., 20,000 square feet = 20 kW), unless the installation is impracticable as determined by the City. Solar panels for the Community Center may be installed within adjacent parking areas.
- Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating.
- Electric vehicle (EV) charging equipment that achieves a similar or better functionality as a Level 2 charging station with the minimum number of charging stations being no less than 7.5 percent of the total number of parking spaces. In the event that the installed charging stations provide superior functionality/technology than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour.
- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1e: The Project applicant or its designee shall provide a subsidy of $50,000 per bus for the replacement of up to a total of 3 diesel or compressed natural gas school buses with electric zero emission buses by the La Habra City School District, Lowell Joint School District, and/or Fullerton Joint Union High School District.

Mitigation Measure GHG-1f: Parks and open space within the Project site shall be designed to facilitate the use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1g: Contracts for maintenance of common open space within the Project site, as well as contracts for maintenance of

multi-family residential or commercial landscaped areas within Planning Area 5, shall include requirements for use of electric landscape equipment.

Mitigation Measure GHG-1h: Commercial and multi-family development shall implement sufficient measures to reduce heat gain by 50 percent (CAP Measure R3-A2).

Mitigation Measure GHG-1i: Commercial development shall exceed applicable City shading requirements by a minimum of 10 percent and plant low-emission trees (CAP Measure R3-A1).

Threshold GHG-2: Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Impact GHG-2: The Project would implement all applicable measures from the State of California's 2017 Scoping Plan and the City of La Habra's Climate Action Plan (CAP), including programs identified to reach GHG reduction targets through 2030 and 2035, respectively. Because Mitigation Measures GHG-1a, GHG-1b, GHG-1c, GHG-1d, GHG-1g, GHG-1h, and GHG-1i achieve consistency with the City's CAP and the 2017 Scoping Plan, the impact would be *significant but mitigable*.

e. Energy Resources

Threshold EN-1: Use large amounts of energy or fuel in a wasteful manner.

Impact EN-1.1: The Rancho La Habra Specific Plan would require energy during construction of proposed residential and commercial land uses. However, construction would comply with all federal, state, and/or local energy standards. Thus, the project's energy usage would not be considered "wasteful," and the impact would be *less than significant*.

Impact EN-1.2: The Rancho La Habra Specific Plan would require energy during operations of proposed residential and commercial land uses. However, proposed development would comply with all federal, state, and/or local energy standards. Thus, the project's energy usage would not be considered "wasteful," and the impact would be *less than significant*.

f. Noise and Vibration

Threshold NOI-1: Exposure of persons to or generation of noise levels in excess of established standards.

Impact NOI-1.1: Traffic along Beach Boulevard and Idaho Street would combine with commercial activities at the Westridge Plaza shopping center to exceed a Community Noise Equivalent Level (CNEL) of 60 A-weighted decibels (dBA), exposing future residential uses within the Project site to noise levels exceeding the City of La Habra's land use compatibility noise standard. The impact would be *significant but mitigable*.

Mitigation Measure NOI-1.1a: Noise barriers shall be constructed in the locations identified in the Rancho La Habra Noise and Vibration Analysis Report (Partially Recirculated Draft EIR Appendix L) as exceeding applicable noise standards.

Mitigation Measure NOI-1.1b: Exterior activity areas such as balconies shall be placed at the opposite side of buildings from the roadways within areas subject to a CNEL in excess of 60 dBA.

Impact NOI-1.2: Although currently proposed dwelling units would meet applicable interior noise standards, modifications to single-family and multi-family dwelling unit plans could be proposed prior to the submittal of building permit applications, and it is possible that such future dwelling unit plans might not meet applicable interior noise standards. The impact would be *significant but mitigable*.

Mitigation Measure NOI-1.2: To ensure that interior sound levels of future homes within the proposed project comply with the City's interior noise standards, the following requirements shall be met for residences on Lots 2, 3, 11, 12, 28, 29, 239, 278, and 279:

1. Windows and sliding glass doors shall be mounted in low air infiltration rate frames (0.5 cubic feet per minute/foot [cfm/ft.] or less per American National Standards Institute [ANSI] specifications).
2. Exterior doors of residences shall be solid core with perimeter weather-stripping and threshold seals.
3. Air conditioning or mechanical ventilation shall be provided to allow occupants to close doors and windows for the required acoustical isolation.
4. Roof or attic vents directly facing the traffic and commercial noise sources shall be baffled so that sound must take an indirect route when entering the attic space.

Threshold NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Impact NOI-2: Because local ground attenuation would provide sufficient dampening of vibration from construction equipment to below commonly used human perception and building damage thresholds within existing residential neighborhoods, the impact would be *less than significant*.

Threshold NOI-3: Result in a substantial permanent increase in ambient noise levels in the project vicinity or above levels existing without the project.

Impact NOI-3: The proposed Project would not directly cause applicable La Habra General Plan land use compatibility noise standards to be exceeded. While Project-related traffic would add to existing exceedances of the City's noise standards, such increases in roadway noise levels would be negligible. In all cases, the addition of Project-related traffic would result in less than a 1.0 dBA noise increase in roadway noise levels, which would not be audible. The addition of a retail store and a restaurant to the northwest portion of the Project site would have negligible noise effects. As a result, the impact would be *less than significant*.

Threshold NOI-4: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact NOI-4: Project-related demolition and crushing, site grading, and infrastructure and building construction would temporarily expose persons to noise levels substantially in excess of existing conditions. Even with implementation of Mitigation Measures NOI-4a through NOI-4j, construction noise levels would remain substantially above ambient conditions and would be clearly audible to area residents. The resulting impact would be *significant and unavoidable*.

Mitigation Measure NOI-4a: All construction equipment, stationary and mobile, shall be operated with closed engine doors, if so equipped, and shall be equipped with properly operating and maintained muffling devices, intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.

Mitigation Measure NOI-4b: During Project construction, each construction contractor shall properly maintain and tune all construction equipment to minimize noise emissions.

Mitigation Measure NOI-4c: Each construction contractor shall locate all stationary noise sources (e.g., generators, compressors) no closer than 50 feet from residential receptor locations to allow for natural dissipation of noise.

Mitigation Measure NOI-4d: The on-site operation of construction equipment that generates high levels of noise, such as large bulldozers, shall be conducted no closer than 100 feet from residential receptor locations to allow for natural dissipation of noise. Within 100 feet of residential receptor locations small bulldozers not exceeding 310 horsepower shall be used.

Mitigation Measure NOI-4e: Construction contractors shall select and use quieter tools or construction methods whenever feasible. Examples include using plasma cutters, which produce less noise than power saws with abrasive blades and ordering precut materials to specifications to avoid on-site cutting.

Mitigation Measure NOI-4f: The construction contractor shall maximize, as feasible, the use of enclosures such as four-sided or full enclosures with a top for compressors and other stationary machinery, and locate activities, such as metal stud and rebar cutting, within constructed walled structures to minimize noise propagation.

Mitigation Measure NOI-4g: The nearest edge of equipment staging areas shall be no closer than 330 feet from residential receptor locations.

Mitigation Measure NOI-4h: The nearest edge of outdoor materials storage areas shall be no closer than 50 feet from residential receptor locations.

Mitigation Measure NOI-4i: Electric power from a grid connection shall be used to run air compressors and similar power tools and to power any temporary equipment.

Mitigation Measure NOI-4j: The construction contractor shall post a contact name and telephone number of the owner's authorized representative on-site.

Threshold NOI-5: **For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.**

Impact NOI-5: Because the Project site is not within an airport land use plan, and there is no public or public use airport within two miles of the Project site, *no impact* would result.

Threshold NOI-6: **For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.**

Impact NOI-6: Because no private airstrips are located within two miles of the Specific Plan area, *no impact* would result.

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CHAPTER 1 INTRODUCTION

This Partially Recirculated Draft Environmental Impact Report (Partially Recirculated Draft EIR) is part of the environmental review process for the Rancho La Habra Specific Plan (Rancho La Habra, Specific Plan, or Project).

A Draft Environmental Impact Report (Draft EIR) for the Rancho La Habra Specific Plan was made available for public review and comment beginning on February 26, 2018 and ending on May 10, 2018. The City of La Habra (City) received 140 comments on the Draft EIR from state and local agencies, tribal authorities, interest groups, and the public.

The full Original Draft EIR is available for public viewing at the Community Development Department, 110 East La Habra Boulevard, La Habra, CA 90631, and on the City's website: www.labracity.gov

Pursuant to the provisions of California Environmental Quality Act (CEQA) Guidelines Section 15088.5(a), the City determined that a thorough response to the comments received by the City during the public review period necessitated the inclusion of significant new information, including:

- **Modifications to the Project Description** that were proposed by the applicant subsequent to the close of the public review period for the Draft EIR that modified the design of the proposed community center and adjacent park, requiring revisions to the Project's biological resources impact analysis.
- **New biological resources surveys, updated mapping and impact analysis, and an updated mitigation program** that were prepared to address CDFW's comments on the Draft EIR, along with an updated impact analysis addressing the modified design of the proposed community center and adjacent park. The updated biological resources analysis also included updating the mapping of vegetation communities to characterize vegetation alliances in accordance with *The Manual of California Vegetation*, Second Edition (Sawyer et al. 2009).
- **An updated traffic impact analysis**, which indicated that the Project would generate a substantially greater net increase in daily traffic than was originally disclosed in the Draft EIR and that new significant unavoidable impacts would occur at intersections in addition to those disclosed in the Draft EIR. The updated traffic impact analysis was based on updated traffic counts and updated traffic generation based on the 10th Edition of Trip Generation, published by the Institute of Transportation Engineers (ITE) (Washington D.C. 2012).
- **Updated air quality, greenhouse gas (GHG), energy, and noise analyses** that were prepared to reflect the increase in daily traffic generation indicated in the updated traffic impact analysis. The updated air quality and GHG analyses used the most recent California

Emissions Estimator Model™ (CalEEMod) v2016.3.2 and the 2017 version of the Emission Factor model (EMFAC) developed by the California Air Resources Board (CARB), both of which became available subsequent to preparation of air quality and GHG studies for the Draft EIR. The updated air quality, GHG, energy, and noise analyses also reflect slight revisions to construction scheduling proposed by the applicant subsequent to the close of the Draft EIR public review period.

As permitted by CEQA Guidelines Section 15088.5(c), only the following portions of the Draft EIR are being recirculated:

ES **Executive Summary**. Those portions of the Executive Summary related to biological resources, traffic and circulation, air quality, GHG emissions, energy, and noise have been updated and are included in the Partially Recirculated Draft EIR.

1. **Introduction**. The Introduction chapter has been updated to reflect recirculation of the Draft EIR.

2. **Project Description**. Chapter 2.0, *Project Description*, reflects minor revisions addressed in Section 3.5, *Biological Resources*, related to an existing deed restriction within the Specific Plan area (Project site).

3.5 **Biological Resources**. Section 3.5, *Biological Resources*, of the Partially Recirculated Draft EIR reflects updated resource surveys, impact analyses, and mitigation measures.

3.7 **Traffic and Circulation**. Section 3.7, *Traffic and Circulation*, of the Partially Recirculated Draft EIR reflects updated traffic counts, Project-related traffic generation, impact analyses, and mitigation measures.

3.8 **Air Quality**. Section 3.8, *Air Quality*, of the Partially Recirculated Draft EIR reflects updated impact analyses to address the increased Project-related traffic generation indicated in the updated Traffic Impact Analysis, as well as updated mitigation measures. A health risk assessment was also prepared for the Partially Recirculated Draft EIR.

3.9 **Greenhouse Gas Emissions**. Section 3.9, *Greenhouse Gas Emissions*, of the Partially Recirculated Draft EIR reflects updated impact analyses to address the increased Project-related traffic generation indicated in the updated Traffic Impact Analysis, as well as updated mitigation measures.

3.10 **Energy Resources**. Section 3.10, *Energy Resources*, of the Partially Recirculated Draft EIR was updated to address the increased Project-related traffic generation indicated in the updated Traffic Impact Analysis.

3.11 **Noise and Vibration**. Section 3.11, *Noise and Vibration*, of the Partially Recirculated Draft EIR reflects updated impact analyses to address the increased Project-related traffic generation indicated in the updated Traffic Impact Analysis, as well as updated mitigation measures.

6. **Cumulative Impacts**. Analysis of cumulative biological resources, traffic and circulation, air quality, GHG emissions, energy, and noise analyses have been updated and are included in the Partially Recirculated Draft EIR.

8. **Mitigation Monitoring and Reporting Program (MMRP)**. Biological resources, traffic and circulation, air quality, GHG emissions, energy, and noise mitigation measures and related implementation requirements are included in the Partially Recirculated Draft EIR.

9. **EIR Preparers**. The firms and individuals involved in preparation of the Partially Recirculated Draft EIR are identified in this chapter.

Appendices

Appendix C.	Rancho La Habra Specific Plan
Appendix F.	Biological Resources
Appendix H.	Traffic Impact Analysis
Appendix I.	Air Quality Analysis
Appendix J.	Greenhouse Gas Analysis
Appendix K.	Energy Analysis Report
Appendix L.	Acoustical Analysis and Vibration Study

All other sections of and appendices to the Draft EIR remain as previously circulated for public review and comment.

After reviewing comments on the Draft EIR related to environmental issues other than those identified above and determining the types of information that might need to be added to the Final EIR once it is prepared, the City concluded that responses to comments on these other environmental issues would merely clarify and amplify the analysis presented in the Draft EIR and would not constitute significant new information requiring inclusion in this Partially Recirculated Draft EIR pursuant to CEQA Guidelines Section 15088.5.

Because the Draft EIR has been revised in part and the City of La Habra, as lead agency, is recirculating only the revised portions of the EIR identified above, pursuant to CEQA Guidelines Section 15088.5 (f)(2), the City Habra is requesting that reviewers limit their comments on the Partially Recirculated Draft EIR to the revised portions of the EIR contained in this document.

Following the 57-day recirculated public review period, the City of La Habra will prepare responses to written comments that were received on the Draft EIR during the initial public review period as well as written comments received during the recirculation period that relate to the revised and recirculated portions of the Partially Recirculated Draft EIR. All comments

and responses to comments will be compiled into a Final EIR, as discussed below in Section 1.2(e).

1.1 OVERVIEW OF THE RANCHO LA HABRA SPECIFIC PLAN

1.1.1 PROJECT LOCATION

The Rancho La Habra Specific Plan provides for development of the existing Westridge Golf Course in the City of La Habra, which is in the northern portion of Orange County (refer to **Figure 1-1**). The City of Fullerton is located to the south and the City of Brea is to the east in Orange County. The City of La Mirada is located to the west of La Habra, in Los Angeles County, with the cities of Whittier to the northwest and La Habra Heights to the north, all in Los Angeles County. Major regional roadways in the area include Beach Boulevard to the west and Imperial Highway to the north. Beach Boulevard provides regional access to the Interstate 5 freeway (I-5), approximately 4.5 miles to the south. Imperial Highway also provides regional access to the State Route 57 freeway (SR-57), approximately 5 miles to the east.

The approximately 150.8-acre Specific Plan area (Project site) is located at 1400 South La Habra Hills Drive, which is east of Beach Boulevard, west of Idaho Street, and south of Imperial Highway, in La Habra. Direct access to the Specific Plan area (the existing Westridge Golf Course property) is currently from La Habra Hills Drive.

1.1.2 PROJECT CHARACTERISTICS

The Rancho La Habra Specific Plan proposes development of 402 dwelling units, consisting of 277 single-family homes and 125 multi-family residences, along with either 20,000 square feet of commercial development (e.g., specialty grocery, restaurant, or general retail uses) or an additional 46 multi-family dwelling units adjacent to Beach Boulevard (to the west) and the existing Westridge Plaza shopping center (to the north). The Specific Plan also proposes open space, trails, and parks on the approximately 150.8-acre Project site. Included as part of the Project's proposed parkland is conversion of the existing golf clubhouse facility to a City-owned Community Center.

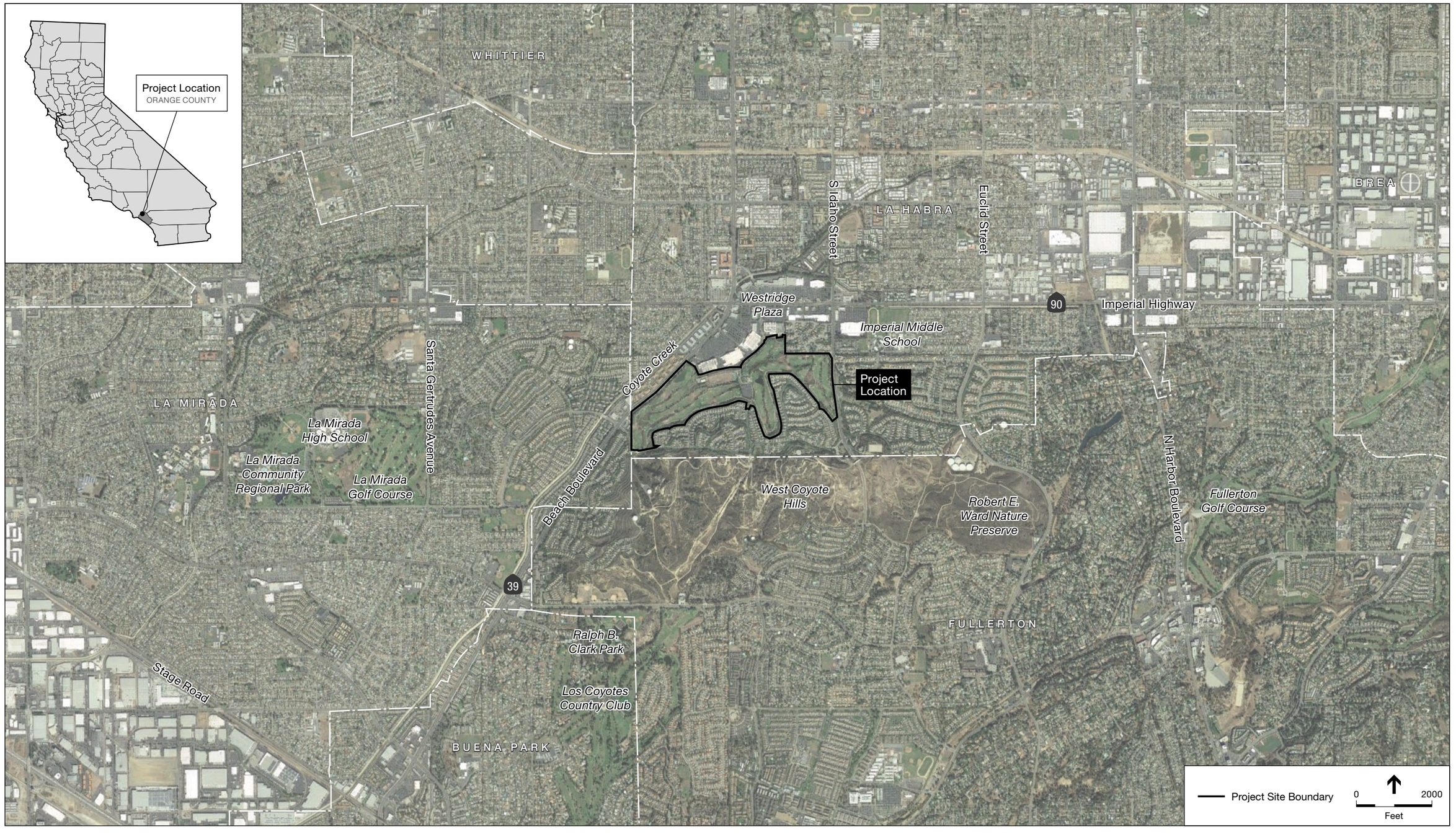

Figure 1-1: Project Location

Source: Google Earth

Development of the Project requires several approvals that are being requested by the applicant, including:

- General Plan Amendment
- Change of Zone
- Rancho La Habra Specific Plan
- Amendment to the La Habra Hills Specific Plan
- Vesting Tentative Tract Map 17845
- Development Agreement
- Design Review
- Community Facilities District
- Vacate the Deed Restriction previously established for certain mitigation areas pursuant to Streambed Alteration Agreement # 5-465-95, along with issuance of a new Streambed Alteration Agreement to compensate for the habitat lost within the existing Deed Restricted Areas.

See Chapter 2, *Project Description*, for descriptions of each of these required approvals.

1.2 ENVIRONMENTAL REVIEW

Because proposed development of the Rancho La Habra Specific Plan and the other approvals listed above require discretionary actions by a public agency, including the City, the Specific Plan and related actions constitute a "project" under CEQA and must be evaluated for their potential to create adverse environmental effects.

Consistent with CEQA requirements, this EIR assesses the direct and indirect environmental impacts associated with the physical changes that would result from implementation of the proposed Rancho La Habra Specific Plan and related actions. Additionally, this EIR sets forth all feasible mitigation measures and evaluates a reasonable range of alternatives to address identified significant impacts. The City is required to consider the information provided in this Partially Recirculated Draft EIR, along with any other relevant information, in making its decisions regarding the Project.

1.2.1 PURPOSE AND INTENDED USE OF THIS EIR

Pursuant to the provisions of CEQA Guidelines Section 15121(a), this EIR is intended as an informational document to inform public agency decision-makers and the general public of the significant environmental effects of the proposed Rancho La Habra Specific Plan and related actions, identify possible ways to avoid or minimize those significant effects, and describe

reasonable alternatives to the Project that might avoid or lessen significant environmental effects. As a public disclosure document, an EIR does not recommend approval or denial of the project or determine whether the project is "good" or "bad." The EIR's purpose is to provide information regarding the physical environmental changes that would result from the actions being considered by the City to aid in the agency's decision-making process.

California CEQA Guidelines provide the following information regarding the purpose of an EIR:

- **Project Information and Environmental Effects.** An EIR is an informational document that will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (CEQA Guidelines Section 15121(a)).
- **Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to enable decision-makers to make an intelligent decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines Section 15151).

1.2.2 RANCHO LA HABRA ENVIRONMENTAL REVIEW PROCESS

a. Notice of Preparation

Pursuant to the requirements of CEQA, the City, as Lead Agency, prepared and distributed a Notice of Preparation (NOP). The NOP, which is included in Draft EIR Appendix D, indicated that an EIR was being prepared and asked members of the public and public agencies to provide input on the types of environmental analyses that should be included in the EIR being prepared by the City.

The City distributed the NOP on November 13, 2015, for a 30-day review period. The NOP was distributed to public agencies, utility and service providers, adjacent jurisdictions, and interested parties in the Project area. Comments received on the NOP are included in Draft EIR Appendix E and summarized in **Table 1-1**.

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
1. Gabrieleño Band of Mission Indians – Kizh Nation: November 16, 2015	
The Gabrieleño Band of Mission Indians – Kizh Nation commented that, while the Project site may have previously been developed, the possibility exists that unknown, yet significant cultural resources may be encountered during ground-disturbing activities. Assembly Bill (AB) 52 requires that Lead Agencies consult with Native American Tribes who can prove and document traditional and cultural affiliation with the area of a proposed project. The following mitigation measures are therefore requested to be incorporated into the EIR: • Obtain the service of a qualified Native American monitor or monitors during construction-related ground-disturbing activities. • If native vegetation is to be removed, permit Native American monitors or an authorized representative of the Tribe to visit the area to distinguish native vegetation. All plants preferred by the Tribe shall be made available to the Tribe prior to removal.	3.6 Cultural Resources
2. Fullerton Joint Union High School District: December 1, 2015	
The District asked to be included in "all mailings, communications, meetings, and conversations" that affect schools for the Project. The District noted that statutory development fees would be required at the time of building permits and stated that discussion of the Project should also include the La Habra School District and Lowell Joint School District.	3.15.4 Public Schools
3. South Coast Air Quality Management District (SCAQMD): December 7, 2015	
The SCAQMD commented that, when the Draft EIR is available for public review, a copy should be provided directly to the SCAQMD, along with all appendices related to air quality and GHG emissions. The SCAQMD also stated that (1) the SCAQMD's 1993 Air Quality Handbook should be used in the preparation of the air quality analysis for the Project, (2) the most recent update of CalEEMod land use emissions software should be used to quantify Project impacts, and (3) the EIR should identify any potential adverse air quality impacts that could occur from all phases of the Project and all air pollutant sources related to the Project, including demolition (if any), construction, and operations. In addition to recommending analysis of regional air quality impacts, the SCAQMD recommended that localized air quality impacts be analyzed based on localized significance thresholds (LSTs). The SCQAMD noted that, in the event that the Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be implemented to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures should also be discussed.	3.8 Air Quality 3.9 Greenhouse Gas Emissions

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
4. La Habra City School District: December 11, 2015	
The District noted that the Project would increase student enrollment and could create the need for additional classroom space. The letter noted that the District's position is for development to "mitigate 100% of the cost of facilities needed to house the students that are generated by the development." The letter cited the need for alternative funding sources to supplement state bonds and development impact fees. The District's letter encouraged the developer of the Project to work with the District to achieve appropriate mitigation solutions for the students. Areas of concern include direct, indirect, and cumulative impacts related to: • Need for additional school facilities and support services; • Traffic and parking relative to existing and future schools; • Safe routes for students to school; • Operation of new and existing facilities, including programs offered, to accommodate students from the Project; • Infrastructure, utilities, and/or storm water treatment arising from the construction of new facilities or the alteration of existing facilities; and • Deficiencies of fees paid as compared to revenue required to construct new school facilities to accommodate students from the Project.	3.15.4 Public Schools
5. City of Fullerton: December 14, 2015	
The following areas of concern were noted in the City of Fullerton's letter: • Biological Resources – Potential impacts on habitat for specified bird species including the gnatcatcher, cactus wren, Cooper's hawk, red-shouldered hawk, and great horned owl should be studied. • Land Use and Planning – Cumulative impacts of the nearby West Coyote Hills development should be considered. • Traffic - The traffic study and intersections proposed have been reviewed by the City's Traffic Engineer and no additional intersections or traffic studies are recommended. • Air Quality - Potential impacts during the Project grading and construction should be studied for their effects on air quality in the City of Fullerton.	3.5 Biological Resources 3.2 Land Use and Planning 3.7 Traffic and Circulation 3.8 Air Quality
6. Caltrans District 12: December 14, 2015	
• Caltrans noted the following comments: • A traffic impact study is necessary to determine the Project's near-term and long-term impacts on State of California facilities – existing and proposed – and to propose appropriate mitigation measures. • Any facilities within Caltrans' right-of-way that would be affected due to the Project need to be analyzed. • Analyses within Caltrans' right-of-way need to reference the latest Highway Capacity Manual (HCM 2010 Edition). For the interrupted flow, 95th percentile queue lengths need to be considered. For uninterrupted flow, basic freeway, diverge, merge, and weaving need to be considered. • The Project would significantly affect SR-39, Beach Boulevard, and SR-90, Imperial Highway. • The analysis shall include an intersection capacity analysis (by the HCM methodology) pertaining to the street intersections along SR-39 and SR- 90.	3.7 Traffic and Circulation

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
• Any and all mitigation measures in case of significant impacts on the state highway system need to be addressed. • Any work within Caltrans right-of-way will require an encroachment permit.	
7. Southern California Association of Governments (SCAG): December 14, 2015	
SCAG undertook an evaluation of the consistency of the Project with the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and noted the following: • SCAG's adopted growth forecasts indicate only a 100-household increase for the City between 2020 and 2035, with a 500-person decrease in total population due to decreasing household size. • SCAG recommended that the City review 2012 RTP/SCS Program EIR Mitigation Measures "for guidance, as appropriate."	3.2 Land Use and Planning 3.3 Population and Housing
8. Shute Mihaly & Weinberger: December 14, 2015	
This letter was submitted by Shute Mihaly & Weinberger on behalf of its client, the Westridge Community Association (Westridge), which is a non-profit mutual benefit corporation made up of owners of homes located in La Habra, between the southern boundary of the Project and the City's southern boundary. The letter identified the following issues that need to be addressed in the EIR: • **Cumulative Impacts**. The letter noted that cumulative impacts are "exceptionally important" since the City of Fullerton approved the 757-unit West Coyote Hills project immediately to the south of the Westridge neighborhood. The letter noted that Westridge residents will be almost completely surrounded by the two projects, which will create many of the same types of impacts (e.g., grading, air quality, noise, traffic, visual resources, and biological resources). • **Noise**. The letter stated that compliance with zoning and plan designations is a minimum and does not mean that a project has no significant impact or requires no mitigation since the local noise ordinance exempts all construction activities conducted between 7:00 a.m. and 8:00 p.m., Monday through Saturday. The letter additionally stated that the EIR must use a metric that accurately reflects noise created by the Project as compared to baseline conditions, noting that a noise metric that averages noise levels might not be appropriate. The letter stated that the EIR for the Project needs to consider the full range of sound levels that would cause impacts, both from short-term peaks during construction work on this and other nearby sites and from long-term occupancy of the Project, stating that daily or even hourly averages might not be sufficient to analyze the impacts on neighboring communities such as Westridge. The letter further noted that noise impacts translate into additional health impacts, and that if substantial increases in noise would occur as the result of the Project, the EIR would need to discuss the health effects of those noise impacts. The comment letter stated that CEQA requires implementation of all feasible measures that would reduce the Project's impacts, even if they do not completely avoid significant impacts, and that the EIR needs to address all aspects of noise impacts created by the Project and mitigate significant effects, even if such measures go beyond the City's existing noise ordinance. • **Visual Resources**. The letter stated that the EIR needs to analyze the impacts of the Project on aesthetics, including scenic vistas, scenic resources, and the "juxtaposition of the proposed development with the existing community,"	6. Cumulative Impacts 3.11 Noise and Vibration 3.4 Aesthetic Resources 3.7 Traffic and Circulation 3.8 Air Quality 3.5 Biological Resources 3.14 Geology, Soils, and Seismicity 7. Alternatives

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
including clear graphics showing pre- and post-Project visual conditions. The letter cited the court in *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas,*29 Cal. App. 4th 1597, 1606 (1994), which stated that it is "self-evident" that replacing open space with a subdivision will have an adverse effect upon "views and the beauty of the setting." The letter noted that the EIR needs to also consider how to mitigate such impacts in an urban environment "that is already short on open space." Included in the analysis should be the impact of new lighting on the Project site's surroundings, including quantifying both baseline and post-development levels of light reaching surrounding homes. The letter noted that the EIR needs to analyze whether the installation of street lights, house-mounted lights, or other Project-related lighting next door to existing homes would have a substantial adverse effect on human beings, including human health. In addition, the EIR needs to identify mitigation for these effects, and also evaluate the effectiveness of shields and other measures to minimize spillover of lighting onto adjacent properties. • **Traffic and Transportation**. The letter stated that the EIR needs to provide a comprehensive analysis of the Project's traffic impacts, noting that traffic in the area is already frequently congested. The letter requested that the EIR not only address delay at intersections, but also "assess the change in quality of life that residents will experience" to determine whether neighborhood streets will be "seriously impacted" as the result of the Project and cumulative projects. The letter also stated that the EIR needs to clearly identify the amount of parking that would be provided for residents, visitors, and users of the proposed commercial site, and identify and describe the Project's connection to public transit. The letter noted that it did not appear that the Project included a robust transit program, and that one should be developed to mitigate the Project's significant impacts. **Air Quality**. The letter requested that the EIR contain a thorough analysis of Project-related and cumulative impacts on air quality, with particular attention to identifying each source of emissions that would be generated by the Project, including regular use of maintenance equipment. Analysis of construction-related increases in toxic air contaminants and criteria air pollutant emissions associated with heavy off-road equipment, as well as the mobilization of dust and other particulate matter, was identified as being needed for the EIR. The letter stated that construction-related impacts are a particular concern in light of the site's historical use for oil production and the known existence of contaminated soils on-site. As a result, the letter noted that the EIR needs to consider both alternatives and mitigation measures that would avoid mobilizing contaminated soils and protect construction workers and nearby residents. **Biological Resources**. The letter noted that the La Habra General Plan, which was adopted in 2015, identifies the Westridge Golf Course as one of the "[f]ew areas of the City [that] support sensitive biological resources," and that these resources were created and protected as mandatory mitigation for the La Habra Hills Specific Plan development. The letter asserted that any impact on these resources is not only attributable to the Project but would also represent a potential violation of the Mitigation and Monitoring Plan adopted for the La Habra Hills Specific Plan. The letter stated that the EIR needs to consider alternatives that avoid, or at least minimize, biological impacts because on-site resources "may be impossible to mitigate locally."	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
A full analysis of the Project-specific and cumulative effects on biological resources impacts was requested. The letter stated that the biological resources study needs to be based on detailed field studies completed at appropriate times of the year for each species potentially found in the area. The letter further stated that consultation with the U.S. Fish and Wildlife Service and state Department of Fish and Wildlife is needed, and that deferral of mitigation measures until subsequent regulatory permitting processes would not be appropriate. • **Geologic Impacts and Slope Stability**. The letter noted that portions of the Project site are very steep, and that altering the terrain below the Westridge community could destabilize the hillside separating the Project site from Westridge. Thus, the letter stated that the EIR needs to disclose whether the applicant would be required to undertake hill-stabilizing measures and what those measures would be. The letter further stated that the EIR should analyze whether landslides or liquefaction at the Project site following construction could pose any hazards to residents, both on-site and on adjacent properties. • **Alternatives**. The letter stated that the EIR must clearly articulate the Project's objectives, recognizing that the existing Westridge Golf Course is one of the only remaining large areas of open space in La Habra. The letter stated that the EIR needs to include a discussion of alternatives that would lessen the significant impacts of the Project, including (1) alternative locations, (2) considerably less intensive levels of Project site development, and (3) other options for meeting housing demands.	
9. California Department of Fish and Wildlife (CDFW): December 15, 2015	
CDFW stated that it submitted its comments pursuant to its authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines Section 15386), as well as its authority as a Responsible Agency (CEQA Guidelines Section 15381) in relation to aspects of the Project that come under the purview of the California Endangered Species Act (Fish and Game Code Section 2050 *et seq.*) and Fish and Game Code Section 1600 *et seq*. CDFW's letter offered the following specific comments: • Waters of the state have been identified on the eastern portions of Westridge Golf Course. Despite landscaping and street paving, these streams may be periodically subject to inundation and, as such, are a component of the stream bed and channel. Any Project activity that would divert or obstruct the natural flow of, or change or use material from the bed, channel, or bank (which may include associated riparian resources) of a river or stream, including an activity that seeks to exclude the stream from its floodplain, such as installation of fill to bring portions of the site out of the 100-year flood zone, could trigger the need for notification to CDFW pursuant to Fish and Game Code Section 1600 *et seq.* as well as the need for a Lake and Streambed Alteration Agreement. Such an agreement would be subject to CEQA. CDFW as a Responsible Agency under CEQA may consider the City's EIR for the project. To minimize additional requirements by CDFW for a streambed alteration agreement, the EIR prepared by the City should "fully identify the potential impacts to the stream or riparian resources, including flood plain exclusion, and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of a Lake and Streambed Alteration Agreement." Because the Project would "create a significant amount of ground disturbance," the CDFW letter expressed concern over potential Project impacts in relation to storm	3.5 Biological Resources 3.13 Hydrology and Water Quality 6.0 Cumulative Impacts

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
water quality and hydrology. CDFW stated that the EIR should analyze the efficacy of Low Impact Development options to minimize storm water impacts, including: o Site layout with regard to sensitive resources, including off-site native habitat; o The use of pervious surfaces (crushed aggregate, turf block, unit pavers, pervious concrete and asphalt) as alternatives to impervious surfaces; and o Structure roof spouts emptying over pervious surfaces. • The letter stated that if runoff cannot be dispersed through these measures, the EIR should consider directing runoff to facilities designed to detain and treat runoff, such as detention or bio-retention basins. • An additional CDFW concern regarding the Project involves direct and cumulative impacts on birds, particularly migratory species, through inadvertent bird strike. The CDFW letter also set forth the following general comments: • CDFW considers adverse impacts on a species protected by the California Endangered Species Act (CESA), for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the project is prohibited, except as authorized by state law (Fish and Game Code, Sections 2080, 2085). • To enable CDFW to adequately review and comment on the Project, it recommends the EIR include: o A complete discussion of the purpose and need for, and description of, the Project, including all staging areas and access routes. o A range of feasible alternatives to avoid or otherwise minimize impacts on sensitive biological resources. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate. • To provide a complete assessment of the flora and fauna, the EIR should include: o Information on the regional setting, with emphasis on resources that are rare or unique to the region. o A thorough, recent floristic-based assessment of special-status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts off-site. o A current inventory of the biological resources associated with each habitat type on-site and within the area of potential effect. o An inventory of rare, threatened, endangered, and other sensitive species on-site and within the area of potential effect. CDFW requires focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. • To provide a thorough discussion of direct, indirect, and cumulative impacts expected, the following should be addressed in the EIR: o A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The drainage discussion should address: ▪ Project-related changes on drainage patterns on-site and downstream; ▪ Volume, velocity, and frequency of existing and post-Project surface flows; ▪ Polluted runoff;	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
▪ Soil erosion and/or sedimentation in streams and water bodies; and ▪ Post-Project fate of runoff from the Project site. The discussions should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential resulting impacts on the habitat, if any, supported by the groundwater. o Discussions regarding indirect Project impacts on biological resources. o Impacts on, and maintenance of, wildlife corridor/movement areas. o The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas and may inadvertently contribute to wildlife-human interactions. o Cumulative effects of the Project in combination with past, present, and anticipated future projects. • The EIR should include measures to fully avoid and otherwise protect Rare Natural Communities from Project-related impacts. • The EIR should include mitigation measures for adverse Project-related impacts on sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. • For proposed preservation and/or restoration, the EIR should include measures to protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. • CDFW recommends that measures be taken to avoid Project impacts to nesting birds. Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act. Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory non-game birds. • CDFW noted that it generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts on rare, threatened, or endangered species. • Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: o The location of the mitigation site; o The plant species to be used, container sizes, and seeding rates; o A schematic depicting the mitigation area; o Planting schedule; o A description of the irrigation methodology; o Measures to control exotic vegetation on-site; o Specific success criteria; o A detailed monitoring program; o Contingency measures should the success criteria not be met; and	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
○ Identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity.	
10. Lowell Joint School District: December 15, 2015	
The District requested that it be included in in both written and verbal dialogue with the City regarding the Project.	3.15.4 Public Schools
11. Soboba Band of Luiseno Indians: December 24, 2015	
The Soboba Band of Luiseno Indians stated that it did not have any specific concerns regarding known cultural resources within the Project site and requested that the appropriate consultation continue to take place between concerned tribes, Project proponents, and local agencies. The Soboba Band of Luiseno Indians also requested that approved Native American Monitor(s) be present during any future ground-disturbing proceedings, including surveys and archaeological testing, associated with the Project, and will defer to Gabrieleño Tribal Consultants who are in closer proximity to the Project.	3.6 Cultural Resources
12. California Public Utilities Commission (CPUC): December 28, 2015	
The CPUC noted that it has jurisdiction over the safety of highway-rail crossings in California, and that the California Public Utilities Code requires CPUC approval for the construction or alteration of crossings. The CPUC letter recommended that language be added to the Specific Plan so that any future development adjacent to or near a rail right-of-way is planned with the safety of the rail corridor in mind.	3.7 Traffic and Circulation

b. Scoping Meetings

Pursuant to Section 15082(c)(1) of the CEQA Guidelines, the City hosted public scoping meetings on November 17, 2015 and December 8, 2015 to provide an opportunity for members of the public and public agencies to provide input on the scope and content of the environmental information and analysis to be included in the EIR for the Rancho La Habra Specific Plan. Issues that members of the public raised at the November 17, 2015 and December 8, 2015 scoping meetings[1] include the following:

- Traffic on surrounding roadways
- Loss of the golf course; loss of open space
- Loss of views
- Light pollution
- Air pollutant and GHG emissions
- Potential for methane and sulfur to create odors

[1] Written comments from both meetings and a full transcript of the December 2, 2015 scoping meeting are provided in Draft EIR Appendix D.

- Noise effects on adjacent residents
- Noise, trash, and safety issues related to future use of the clubhouse and a community facility
- Increased crime
- Loss of biological habitat
- Effects on property values; costs to Westridge residents
- Poor walkability of proposed housing to adjacent commercial uses
- Need for more townhomes to address housing affordability
- Water use and availability
- Impacts on already-overcrowded schools
- Potential contamination of groundwater due to existing contaminants under the golf course
- Maintenance responsibilities (who will be responsible for maintenance?)
- Dust during construction and grading
- Impacts on City services
- Potential costs to the people of La Habra
- Seismic safety and slope stability
- Overdevelopment of commercial space

c. Public Review of the Draft EIR

The City of La Habra prepared the Rancho La Habra Specific Plan Draft EIR in compliance with CEQA and circulated it for public review from February 26, 2018 through May 10, 2018. During the public review period, the public was encouraged to submit comments and/or questions to the City on the Draft EIR.

The City undertook the following actions to inform the public of the availability of the Draft EIR and to assist in the document's review:

- The Draft EIR was delivered to the State Clearinghouse and the public review period started on February 26, 2018.
- A notice of the availability of the Draft EIR was posted on the City's website, and written notice was sent to various governmental agencies and to organizations and individuals that had previously expressed an interest in the Rancho La Habra planning and environmental review processes.

- A general overview and summary of the Draft EIR was provided in an informational presentation held by the City on March 22, 2018.

A total of 140 comment letters or emails providing comments on the Draft EIR were received by the City, with one hundred and twenty-eight (128) letters and emails from private individuals; four (4) letters from representatives of the Westridge Community Association; six (6) letters from local public agencies; and six (6) letters from federal agencies, state agencies, and Tribal authorities. Responses to all comments that address substantive environmental concerns comments in each of these letters and emails will be provided in the Final EIR.

d. Availability and Review of the Partially Recirculated Draft EIR

The City filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this Partially Recirculated Draft EIR has been completed and is available for review. A Notice of Availability of the EIR was published concurrently with distribution of this document. The Partially Recirculated Draft EIR for the proposed Rancho La Habra Specific Plan is being distributed directly to agencies, organizations, and interested groups and persons for comment during the formal public review period in accordance with Sections 15085, 15086, and 15087 of the CEQA Guidelines.

The Partially Recirculated Draft EIR is also available for review at the following locations:

- La Habra City Hall, City Clerk and Community Development counters, 110 East La Habra Boulevard, La Habra, CA 90631
- La Habra Public Library, 221 East La Habra Boulevard, La Habra, CA 90631
- City website (lahabracity.gov)

Materials included in the reference sections in this Draft EIR are available for review at La Habra City Hall, 110 East La Habra Boulevard, La Habra, CA 90633.

The public review period begins on November 22, 2019 and ends at 5:00 p.m. on January 17, 2020 (by which time comments on the Draft EIR need to be received by the City). During this review period, written comments regarding the content, analyses, and conclusions of the Draft EIR may be submitted to the City. These comments should focus upon the sufficiency of this Draft EIR in identifying and analyzing the possible impacts of the proposed Rancho La Habra Specific Plan and ways in which significant effects on the environment might be avoided or mitigated (CEQA Guidelines Section 15204(a)).

Comments on the Partially Recirculated Draft EIR should be sent to:

Mr. Andrew Ho, Community and Economic Development Director
City of La Habra
110 East La Habra Boulevard
La Habra, CA 90631
andrewh@lahabraca.gov

e. Preparation and Review of the Final EIR

Following the close of the public review period for the Partially Recirculated Draft EIR, the City will prepare a Final EIR in conformance with CEQA and the CEQA Guidelines. Pursuant to CEQA Guidelines Section 15132, the Final EIR will consist of:

- The original Draft EIR (without the sections that have been superseded and replaced by the corresponding sections of this Partially Recirculated Draft EIR). The Notice of Preparation and comments are included as part of the original Draft EIR;
- The Partially Recirculated Draft EIR;
- Comments and Responses to Comments on the original Draft EIR received during the original public comment period;
- Comments and Responses to Comments on the Partially Recirculated Draft EIR, received during the 45-day public comments period;
- Corrections or additions, if any, to the portions of the original Draft EIR that were not recirculated;
- Corrections or additions to the Partially Recirculated Draft EIR, if any; and
- Other information necessary as determined by the Lead Agency.

The Final EIR will provide the basis for City decision-makers, such as the La Habra Planning Commission and City Council, to consider the environmental implications of the Project, as well as possible ways to mitigate any potential significant environmental impacts and alternatives to the Project.

1.3 DEFINITIONS OF KEY CEQA TERMINOLOGY

Less-than-Significant Impact: A physical environmental effect that would result directly or indirectly from a proposed project and not exceed any identified significance threshold.

Mitigation: Actions that address an adverse environmental impact by either (1) avoiding the impact; (2) reducing or minimizing the magnitude, scope, or intensity of the impact; or

(3) compensating for the impact by replacing or substituting for the [natural] resource, or ecological functions, that would be impaired, suspended, or eliminated.

Significance Criteria, Significance Thresholds: The criteria used in this EIR to determine whether an impact is or is not "significant." These criteria are based on (a) CEQA-stipulated "mandatory findings of significance," which are specific conditions that the State Legislature and the Secretary of Resources have determined constitute a significant effect on the environment and are listed in CEQA Guidelines Section 15065; (b) the criteria outlined in CEQA Guidelines Appendix G; and/or (c) commonly accepted practice and the independent judgment of the Lead Agency in instances where the CEQA Guidelines do not set forth a relevant criterion.

Significant Impact: Any substantial adverse change in physical environmental conditions, such as land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance, that would result either directly or indirectly due to implementation of a proposed project (CEQA Guidelines Section 15382). An economic or social change by itself is not typically considered to be a significant impact, even if the change would be substantial. However, social or economic changes related to a physical environmental change may be considered in determining whether the physical change is significant (CEQA Guidelines Section 15382). A significant impact represents a physical environmental effect that would result directly or indirectly from a proposed project and would exceed an identified significance threshold.

Significant Unavoidable Impact: Those significant adverse environmental impacts for which either no mitigation is feasible, or implementation of all feasible mitigation would not reduce the impact to a less-than-significant level.

1.4 FORMAT OF THE PARTIALLY RECIRCULATED DRAFT EIR

Following this Chapter 1, *Introduction*, the Partially Recirculated Draft EIR is organized as follows:

- **Chapter 2, *Project Description*,** describes in detail the Project's background and setting, Project objectives, and proposed site development. Chapter 2 also identifies the specific public agency approvals and actions required to implement the Project.
- **Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*,** discusses in detail, for each of the environmental topics included in the Partially Recirculated Draft EIR, the regulatory setting, existing conditions, applicable plans and policies, significance criteria, environmental impacts of the Project, and mitigation measures recommended for the Project.
- **Chapter 6, *Cumulative Impacts*,** provides an analysis of the combined (cumulative) biological resources, traffic and circulation, air quality, GHG emissions, energy, and noise

impacts of the proposed project in combination with other past, present, and reasonably foreseeable projects

- **Chapter 8, *Mitigation Monitoring and Reporting Program (MMRP)*,** sets forth an implementation strategy for each biological resources, traffic and circulation, air quality, GHG emissions, energy, and noise mitigation measure to ensure that adopted mitigation measures are successfully implemented. For each of these mitigation measures, this chapter identifies the timing of when the mitigation measure is to be implemented, the party responsible for implementing the mitigation measure, the agency with the power to monitor and enforce implementation of the mitigation measure, and agency responsible for determining compliance with specified mitigation measures
- **Chapter 9, *Report Preparers*,** identifies the authors of the EIR, including City staff and the EIR consultant team, as well as the organizations and other persons that were consulted during preparation of this EIR.

Appendices to this Partially Recirculated Draft EIR are as follows:

- Appendix C. Rancho La Habra Specific Plan
- Appendix F. Biological Resources
- Appendix H. Traffic Impact Analysis
- Appendix I. Air Quality Analysis
- Appendix J. Greenhouse Gas Analysis
- Appendix K. Energy Analysis Report
- Appendix L. Acoustical Analysis and Vibration Study

All other sections of and appendices to the Draft EIR remain as previously circulated for public review and comment.

1.5 REFERENCES

California Environmental Quality Act (CEQA) Sections 21082.1(c)(2) and (3); CEQA Guidelines Sections 15084(e) and 15090(a)(3).

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CHAPTER 2 PROJECT DESCRIPTION

The purpose of this chapter is to provide a description of the Project—the proposed Rancho La Habra Specific Plan and related actions—to the public, reviewing agencies, and local decision-makers. California Environmental Quality Act (CEQA) Guidelines Section 15124 requires that a complete project description contain the following:

(a) A detailed map showing the precise site location on a regional map and boundaries of the proposed project;

(b) A statement of objectives sought by the proposed project, which should include the underlying purpose of the project;

(c) The general description of the project's technical, economic, and environmental characteristics;

(d) The intended uses of the environmental impact report (EIR), including a list of agencies that are expected to use the EIR in their decision-making; a list of permits and other approvals required to implement the project; and a list of related environmental review and consultation requirements required by federal, state, and local laws, regulations or policies;[1] and

(e) If the Lead Agency must make more than one decision, a listing of all its decisions subject to CEQA.

2.1 PROJECT SETTING

2.1.1 PROJECT LOCATION

a. Regional Location

The 150.8-acre Rancho La Habra Specific Plan area (Project site) is located in the City of La Habra (City), which is in the northern portion of Orange County. Adjacent cities include Fullerton to the south and Brea to the east in Orange County, along with Whittier to the northwest, La Mirada to the southwest, and La Habra Heights to the north in Los Angeles County. Major regional roadways in the area include Beach Boulevard to the west and Imperial Highway to the south of the Specific Plan area. Beach Boulevard (State Route [SR] 39 provides regional access to Interstate 5 (I-5), approximately 4.5 miles to the south. Imperial Highway (SR-90) provides regional access to State Route 57 (SR-57), approximately 5 miles to the east.

[1] The required listing of related environmental review and consultation requirements is provided in the Applicable Plans, Policies, and Regulations sections in Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, along with a listing of relevant federal, state, and local laws, regulations, and policies.

b. Project Site and Vicinity

The Rancho La Habra Specific Plan area is the site of the existing Westridge Golf Club, which is located east of Beach Boulevard, west of Idaho Street, and south of Imperial Highway at 1400 South La Habra Hills Drive in La Habra. Direct access to the project site is from La Habra Hills Drive. The project site and environs are illustrated in **Figure 2-1**.

2.1.2 GENERAL PLAN DESIGNATIONS AND ZONING

a. General Plan

The City of La Habra General Plan designates the Project site as Open Space (Parks, Flood Channels), and indicates that the site is the "Westridge Golf Club." The General Plan describes the Open Space classification as "Characterized by buildings, facilities, and recreational areas within City-owned mini, neighborhood, and community parks. Also includes landscape buffers and flood control channels, which typically are not developed as recreational open space, but do represent a resource to the community." The existing General Plan designations for the site and surrounding area are shown in **Figure 2-2**.

b. Zoning

The project site is currently zoned "La Habra Hills Specific Plan," which identifies the project site as Planning Area "E," for which the land use designation is Open Space/Golf Course. The La Habra Hills Specific Plan was adopted by the City in 1992 and continues to serve as the zoning regulatory document for the project site (see Section 2.1.3, below). The existing zoning for the site and surrounding area are shown in **Figure 2-3**.

2.1.3 LA HABRA HILLS SPECIFIC PLAN

The Project site was originally part of the 915-acre West Coyote Hills oil field operated by Chevron Corporation. The oil field was located in the cities of La Habra and Fullerton. In 1992, the City of La Habra adopted the La Habra Hills Specific Plan to create a master-planned community on the 380 acres of the former oil field located within the city limits. The La Habra Hills Specific Plan provided a development plan consisting of four residential neighborhoods totaling 700 residential dwelling units, an 18-hole golf course, a 29.5-acre community park, and 2.6 acres of open space. The residential component of the La Habra Hills Specific Plan was ultimately built out with a total of 556 single-family dwelling units.

The northern portion of the La Habra Hills Specific Plan area was developed as the Westridge Golf Club. The privately-owned golf course, clubhouse, restaurant, pro shop, and driving range are open to the public. While located adjacent to the Westridge community, the golf course is not part of the Westridge community or its homeowners' association.

Figure 2-1: Project Site

Source: Google Earth

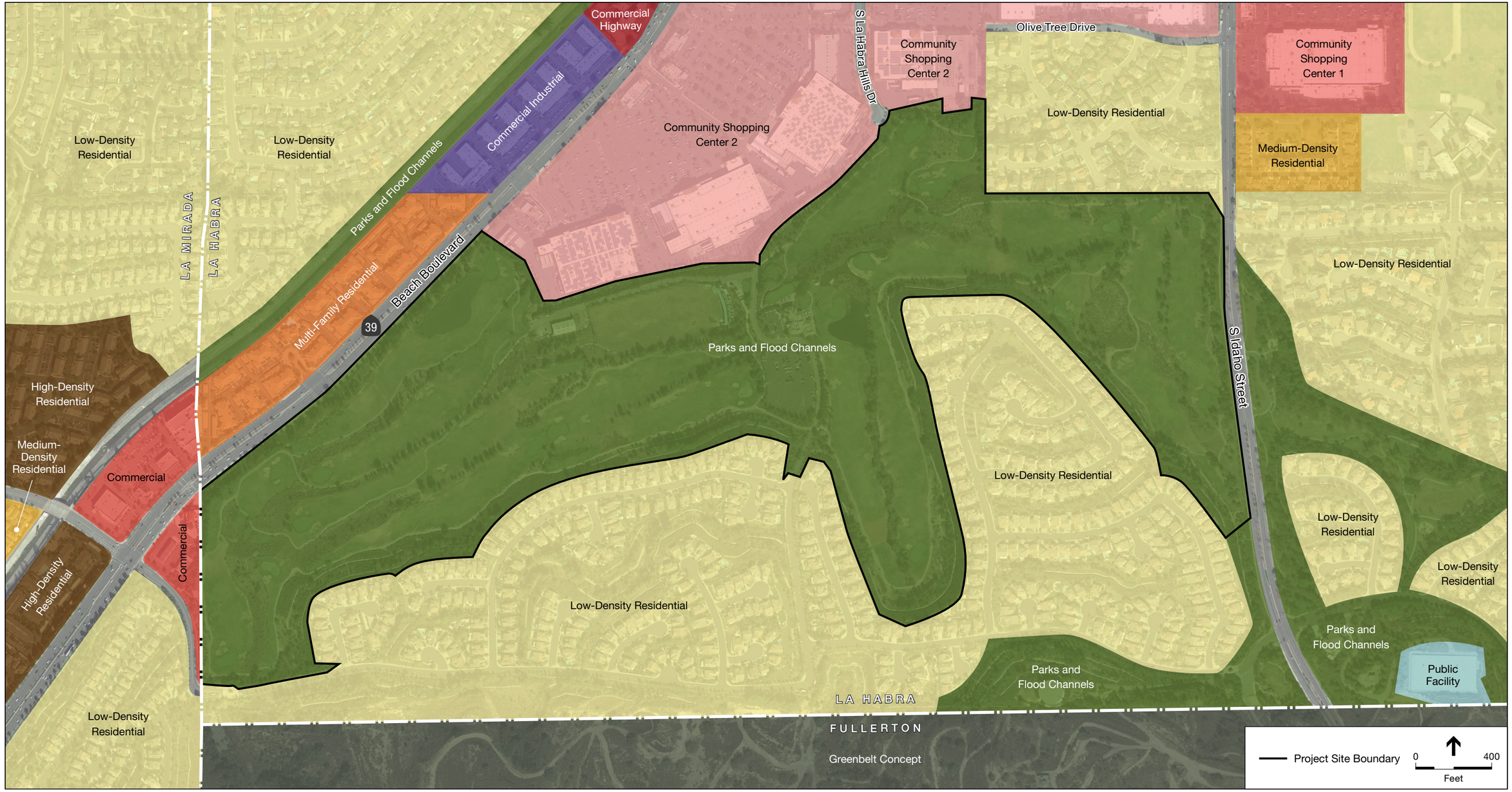
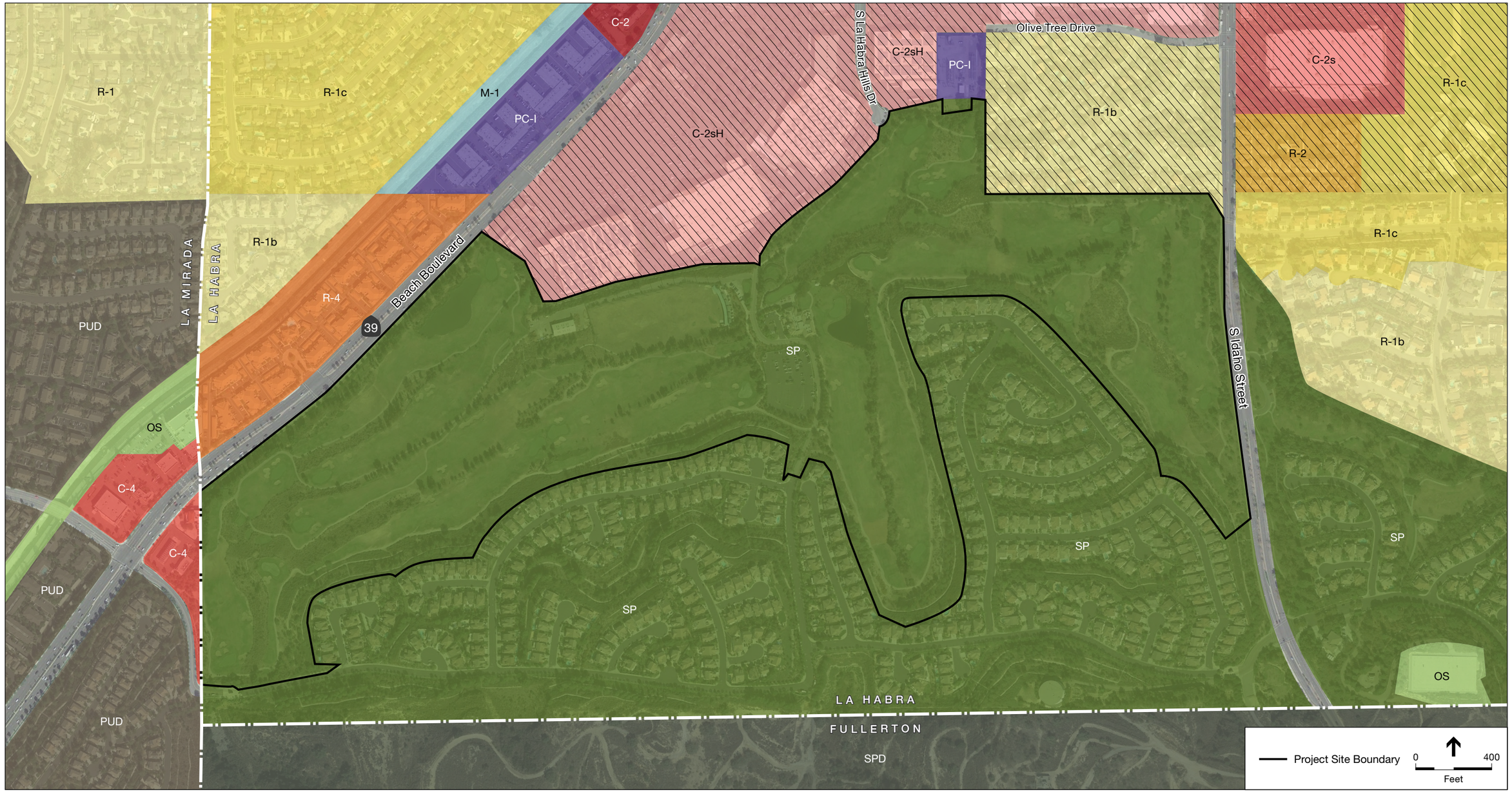


Figure 2-2: Existing General Plan Designations

Source: Google Earth; City of La Habra; City of La Mirada; City of Fullerton



FULLERTON ZONING:

- SPD Specific Plan District

LA MIRADA ZONING:

- R-1 Single-Family Residential
- C-4 General Commercial
- PUD Planned Unit Development
- OS Open Space

LA HABRA ZONING:

- R-1b One-Family Dwelling
- R-1c One-Family Dwelling
- R-2 Two-Family Dwelling
- R-4 Multiple Family Dwelling
- C-2s Community Shopping Center 1
- C-2sH Community Shopping Center High Density
- C-2 Commercial
- M-1 Light Manufacturing
- PC-I Planned Commercial Industrial
- OS Open Space
- SP La Habra Hills Specific Plan
- Planned Unit Development

Figure 2-3: Existing Zoning Designations

Source: Google Earth; City of La Habra; City of La Mirada; City of Fullerton

2.2 PROJECT OBJECTIVES

The following identifies the objectives of the proposed Project, including its underlying purpose, pursuant to CEQA Guidelines Section 15124(b), which requires an EIR to include a "statement of objectives sought by the proposed project." As noted in CEQA Guidelines Section 15124(b), a "clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings."

The following subsections identify project objectives that have been identified by the Lead Agency (City of La Habra), as well as those identified by the Specific Plan applicant, Lennar Homes of California.

2.2.1 PROJECT OBJECTIVES OF THE CITY OF LA HABRA

The City's overarching objectives in reviewing the proposed Rancho La Habra Specific Plan and related requests are to:

- Ensure that the long-term planned use of the project site is consistent with the goals, objectives, and other provisions of the City's General Plan, recognizing that state law grants the City the authority to amend the General Plan and approve a specific plan consistent with the *amended* General Plan; and
- Meet the requirements of state law and local ordinances to provide the public and decision-makers with a thorough and objective evaluation of the physical and environmental effects that would result from the proposed Rancho La Habra Specific Plan and related actions, implement all feasible mitigation measures and consider a reasonable range of alternatives to the proposed project that would avoid or reduce any significant environmental effects, and otherwise comply with the provisions of CEQA and local practices to implement CEQA.

2.2.2 APPLICANT'S PROJECT OBJECTIVES

The applicant, Lennar Homes of California, has identified the following objectives for the proposed Rancho La Habra development:

- Provide new housing opportunities for City residents that provide fiscal benefit to the City, whereby revenues from the new development exceed public expenditures needed to serve and maintain the development;
- Provide new housing opportunities for city residents that provide fiscal benefit to the City, whereby revenues from the new development exceed public expenditures needed to serve and maintain the development;
- Provide a range of public park and recreational facilities, such as a Community Center, open turf, playground areas, picnicking and quiet enjoyment space, trail systems with fitness

facilities and view overlooks, and nature trails with educational signage, that exceed the City's local park code requirements for the proposed project;

- Create a network of trails throughout the residential neighborhoods that provide connections to existing City and regional trails east and west of the project site and to the Westridge Plaza Shopping Center located north of the project site;
- Improve the aesthetic character of the Beach Boulevard and Idaho Street frontages through landscape design consistent with the City's goals and objectives;
- Preserve, restore, and conserve natural habitat on the project site to the extent practicable considering the other competing project objectives;
- Reduce the demand for potable water compared to the existing golf course water demand; and
- Redevelop the golf course property for a "higher and better use."[2]

2.3 PROJECT CHARACTERISTICS

2.3.1 OVERVIEW

Lennar Homes of California (the applicant) is requesting approval by the City of several discretionary actions, including the approval of a General Plan Amendment, Change of Zone, La Habra Hills Specific Plan Amendment, Rancho La Habra Specific Plan, Vesting Tentative Tract Map 17845, Development Agreement, Design Reviews for Planning Areas 1-4 and 6, and the formation of a Community Facilities District. The applicant is also requesting that the California Department of Fish and Wildlife vacate an existing deed restriction placed on the property as part of a mitigation agreement that applies to the original development of the Westridge Golf Club.

The project site is the approximately 150.8-acre Westridge Golf Club property in La Habra. The Rancho La Habra Specific Plan proposes the following development on the project site: 402 dwelling units, consisting of 277 single-family homes and 125 multi-family residences; either a maximum of 20,000 square feet of commercial development (e.g., specialty grocery, restaurant) or up to an additional 46 multi-family dwelling units[3] adjacent to Beach Boulevard and the existing Westridge Plaza Shopping Center; and open space, trails, and public parks.

[2] The Appraisal Institute defines "highest and best use" as the "reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value."

[3] Although the Specific Plan indicates the alternative to 20,000 square feet of commercial use as an additional 46 multi-family dwelling units, Vesting Tentative Map 17845 indicates and provides vested rights for 41 multi-family dwelling units.

2.3.2 DISCRETIONARY ACTIONS AND APPROVALS REQUIRED TO IMPLEMENT THE PROPOSED PROJECT

The proposed Project will require the following discretionary actions and other approvals:

- City of La Habra
  - General Plan Amendment 18-01 for the project site from: Open Space to Low Density Residential, Multi-Family 1, and Mixed-Use Center 1.
  - Amend the La Habra Hills Specific Plan (Amendment 3) to remove the Project site and golf course references from the Specific Plan.
  - Approve the Rancho La Habra Specific Plan.
  - Change of Zone 18-01 from "La Habra Hills Specific Plan" to "Rancho La Habra Specific Plan."
  - Development Agreement to vest the project entitlements, define the terms and conditions under which the Project will be developed, and to define specific benefits to be provided to the City.
  - Vesting Tentative Tract Map 17845 to divide the property into single-family residential, multi-family residential, commercial retail, and open space lots, and to confer a vested right to proceed with development in compliance with the Vesting Tentative Tract Map.
  - Design Review, including proposed architectural design for each Planning Area (Specific Plan Design Reviews 18-01 through 18-05 for Planning Areas 1-4 and 6, respectively). Design review for Planning Area 5 is anticpated to be a future application.
  - Formation of a Community Facilities District, also known as a Mello Roos District, for financing of improvements.
- California Department of Fish and Wildlife
  - Vacate an existing deed restriction within the Specific Plan area
  - Section 1600 Streambed Alteration Agreement
- U.S. Fish and Wildlife Service
  - Amended Biological Opinion
- U.S. Army Corps of Engineers
  - Section 404 Nationwide Permit
- Regional Water Quality Control Board
  - Section 401 Water Quality Certification
- Department of Transportation (Caltrans) District 12
  - Encroachment permits and improvements within Caltrans rights-of-way

a. Responsible and Trustee Agencies for the Rancho La Habra Specific Plan

The following identifies responsible agencies[4] and trustee agencies[5] for the proposed Rancho La Habra Specific Plan.

- Regional Agencies
  - Orange County Public Works Department (encroachment permit(s) and infrastructure improvements)
  - Orange County Sanitation District (Sewage Collection Permit)
  - Orange County Health Care Agency (Remedial Action Supervision)
- State Agencies
  - Santa Ana Regional Water Quality Control Board (National Pollution Discharge Elimination System (NPDES) Storm Water Permit NPDES Construction Permit; Section 401 Water Quality Certification)
  - Department of Transportation (Caltrans) District 12 (Encroachment Permit)
  - California Department of Fish and Wildlife (Vacate Deed Restriction; Section 1600 Streambed Alteration Agreement)
- Federal Agencies
  - U.S. Fish and Wildlife Service (Amended Biological Opinion)

2.3.3 GENERAL PLAN AMENDMENT

The applicant proposes to change the General Plan designation of the Project site from Open Space to Low Density Residential, Multi-Family 1, and Mixed-Use Center 1 as illustrated in **Figure 2-4**. In addition, the applicant proposes that the text of the General Plan be amended to remove references to the Westridge Golf Club and to modify discussion of biological resources within the existing golf course to reflect the proposed Project. The proposed General Plan Amendment is provided in Appendix A.

[4] A "responsible agency" is a public agency, other than the lead agency, which has responsibility for carrying out or approving a project.

[5] A "trustee agency" is a state agency that has jurisdiction by law over natural resources affected by a project, that are held in trust for the people of the State of California.

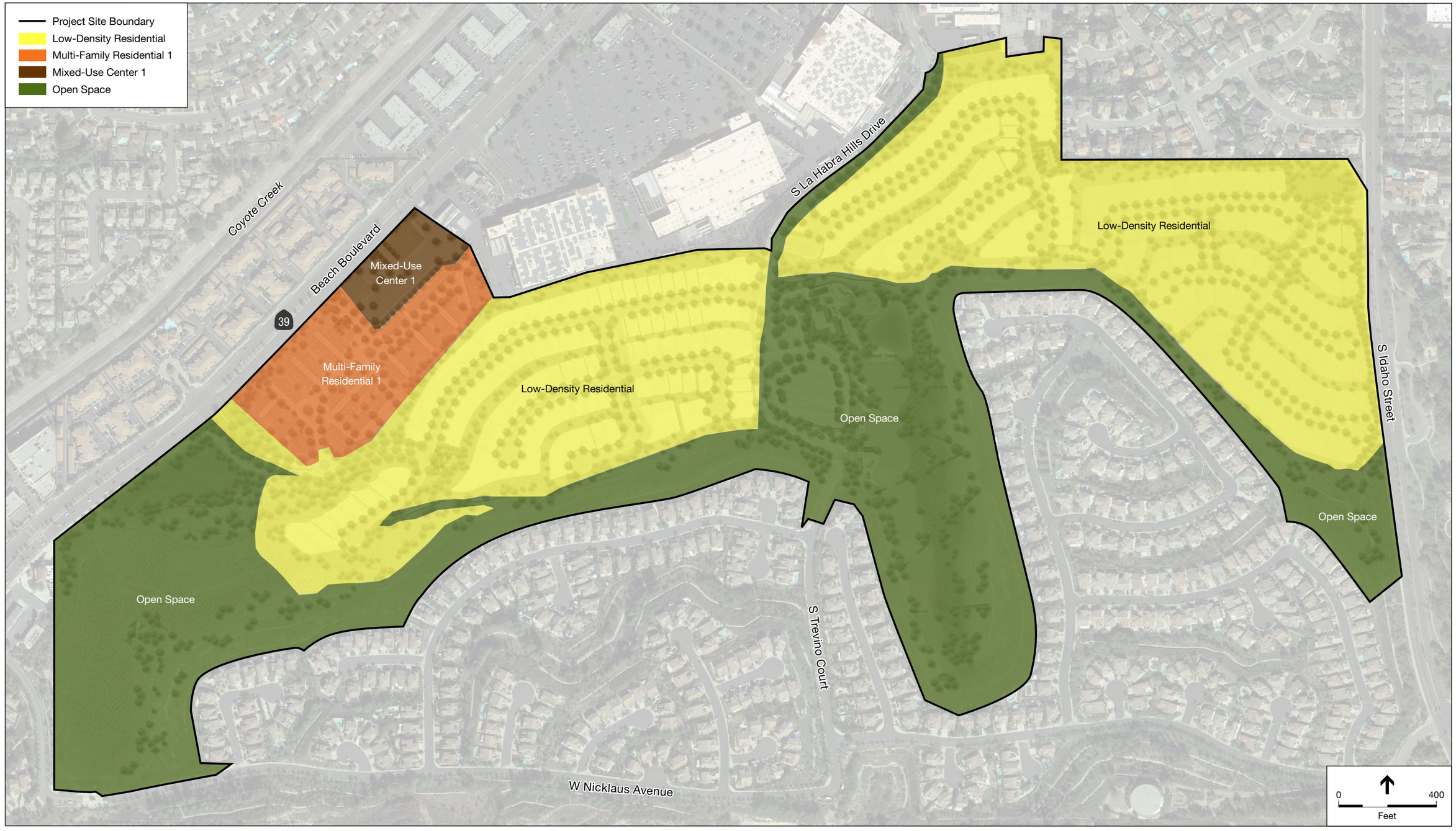


Figure 2-4: Proposed General Plan Designations

Source: Google Earth; Carlson SLS; BrightView Design Group

2.3.4 CHANGE OF ZONE

The applicant proposes a Change of Zone from "La Habra Hills Specific Plan" to "Rancho La Habra Specific Plan" for the portion of the La Habra Hills Specific Plan open space/golf course that is within the boundaries of the Rancho La Habra Specific Plan.

2.3.5 AMENDMENT TO THE LA HABRA HILLS SPECIFIC PLAN

An amendment to the 1992 La Habra Hills Specific Plan is proposed to remove the 150.8-acre project site from the approved La Habra Hills Specific Plan. The text and graphics of the La Habra Hills Specific Plan would be revised to remove all text, table, and graphic references to the golf course and thereby describe the residential and remaining open space portions of the Specific Plan as it was ultimately developed. A copy of the proposed La Habra Hills Specific Plan Amendment is provided in Partially Recirculated Draft EIR Appendix B.

2.3.6 RANCHO LA HABRA SPECIFIC PLAN AND PROPOSED SITE DEVELOPMENT

A specific plan is a tool for the systematic implementation of a city's general plan. It is intended to establish a link between implementing the provisions of the general plan and site-specific development within the specific plan area (e.g., Rancho La Habra). In general, a specific plan is intended to provide for the orderly and efficient development of an area, covering land use and design requirements for private development, public services and facilities, and circulation and streetscape improvements in public areas.

The Rancho La Habra Specific Plan would establish residential, mixed-use, and open space and recreational land use designations for the project site and serve as the zoning for the Specific Plan area. The proposed Specific Plan is provided in Partially Recirculated Draft EIR Appendix C.

Pursuant to the requirements of state law and the requirements of the City, the proposed Rancho La Habra Specific Plan provides detail for the following:

- The distribution, location, and extent of the uses of land within the 150.8 acres covered by the Specific Plan, including residential, commercial, and open space uses.
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, and other essential facilities proposed to be located within the area covered by the proposed Specific Plan, as well as off-site infrastructure.
- Standards and criteria by which development would proceed, along with standards for the conservation, development, and utilization of natural resources.

- A program of implementation measures that includes regulations and programs necessary to carry out the implementation of the Specific Plan.
- A statement of consistency between the Specific Plan and the City General Plan.

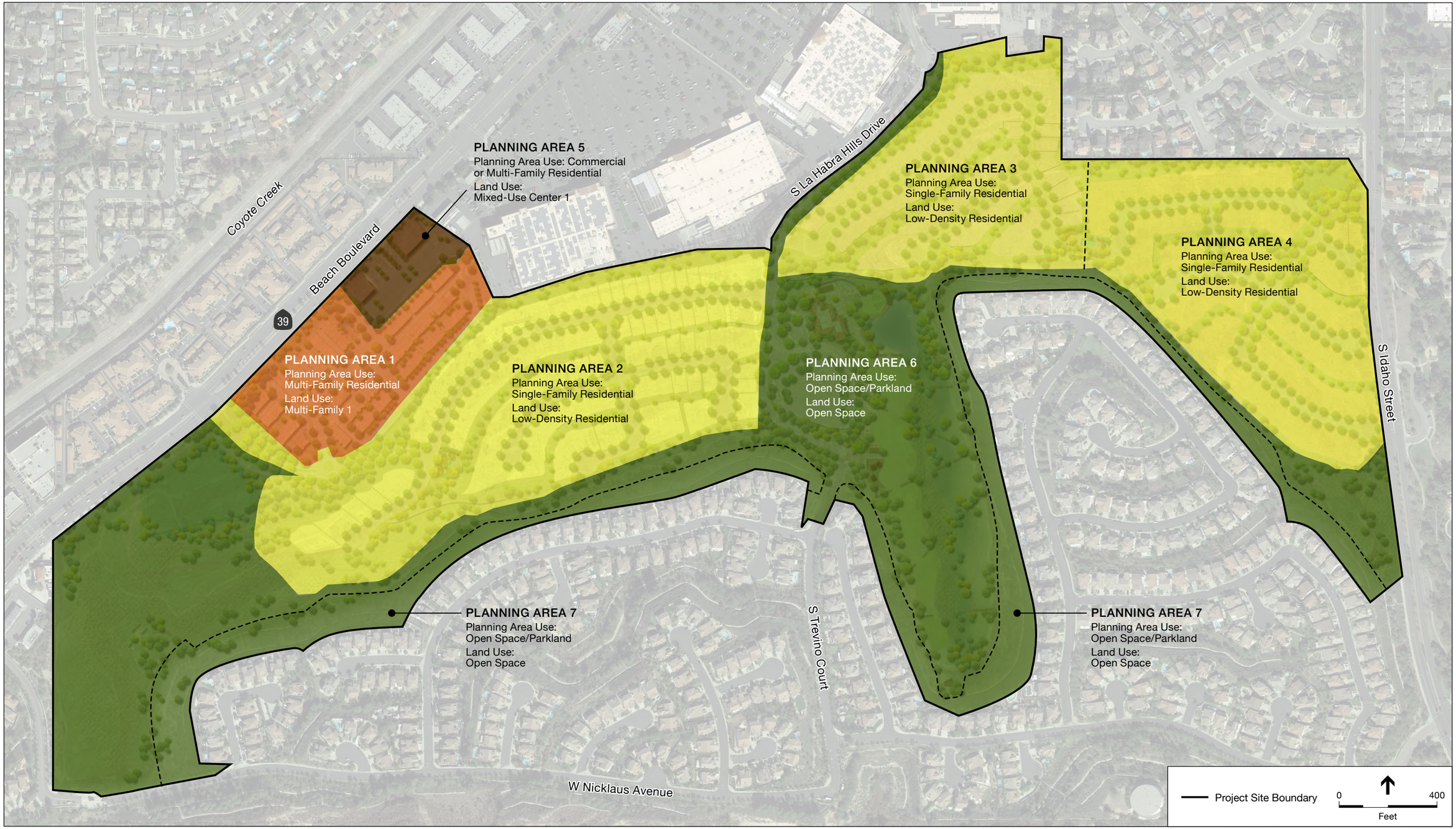
a. Land Use Plan

As noted above, the Rancho La Habra Specific Plan sets forth a development plan for a 402-home community, consisting of 277 single-family homes and 125 multi-family residences, along with either a maximum of 20,000 square feet of commercial development (e.g., specialty grocery, restaurant, or general retail uses) or up to an additional 46 multi-family dwelling units adjacent to Beach Boulevard and the existing Westridge Plaza Shopping Center (see **Figure 2-5**). In addition, the Specific Plan provides for development of trails and parkland, along with hillside open space and a habitat conservation area.

As shown in **Figure 2-5** and **Table 2-1**, the Rancho La Habra Specific Plan defines seven Planning Areas. Planning Area 1 is proposed for the multi-family residential development, while Planning Areas 2 through 4 are proposed for single-family residential neighborhoods. Planning Area 5 is a 2.64-acre mixed-use building pad located along Beach Boulevard designed to accommodate either 20,000 square feet of commercial development or up to an additional 46 multi-family dwelling units. Planning Area 6 consists of areas proposed for public parkland, including the conversion of the existing clubhouse to a City-owned Community Center, public streets, and public open space areas. Planning Area 7 encompasses the slope separating the existing Westridge neighborhood from the golf course. The existing Westridge neighborhood south of the project site, which was developed as part of the La Habra Hills Specific Plan, retains an easement over the 19.38-acre vegetated slope, along with the obligation for slope maintenance.

The seven proposed Planning Areas are further described as follows:

- Planning Area 1 consists of 10.56 acres along Beach Boulevard. Planning Area 1 is proposed to include 125 multi-family dwelling units, ranging in size from 1,600 square feet to 2,000 square feet, with a maximum density of 11.8 dwelling units per acre.
- Planning Area 2 consists of 35.68 acres within the western portion of the site. Planning Area 2 is proposed for 118 single-family detached dwellings ranging in size from approximately 2,500 square feet to almost 3,000 square feet on minimum 3,840-square-foot lots, for an overall density of approximately 3.3 dwelling units per acre.
- Planning Area 3 consists of 16.86 acres within the northern portion of the site. Planning Area 3 is proposed for 77 single-family detached dwellings ranging in size from approximately 2,375 to 2,675 square feet on minimum 3,290-square-foot lots, for an overall density of approximately 4.57 dwelling units per acre.



RANCHO LA HABRA SPECIFIC PLAN EIR

Figure 2-5: Proposed Land Use

Source: Google Earth Pro; Carlson SLS; BrightView Design Group

Table 2-1
Land Use Acreage by Planning Area

	Planning Area 1	Planning Area 2	Planning Area 3	Planning Area 4	Planning Area 5	Planning Area 6	Planning Area 7	Total
Residential/Commercial Development								
Multi-Family Homes	8.60	-	-	-	-	-	-	**8.60**
Single Family Residential	-	14.20	7.90	12.50	-	-	-	**34.60**
Commercial or Multi-Family Homes	-	-	-	-	2.50	-	-	**2.50**
Open Space Uses								
Public Community Center/Parking	-	-	-	-	-	3.30	-	**3.30**
Public Open Space and Parkland	-	-	-	-	-	28.86	-	**28.86**
Habitat Conservation Area	-	-	-	-	-	9.86	-	**9.86**
Private Open Space and Detention Basins	1.66	14.50	5.86	5.91	0.14	-	-	**28.07**
Existing Slope	-	-	-	-	-	-	19.38	**19.38**
Roads	0.30	6.98	3.10	5.18	-	3.41	-	**18.97**
Total Acres	**10.56**	**35.68**	**16.86**	**23.59**	**2.64**	**42.13**	**19.38**	**150.84**

Source: Rancho La Habra Specific Plan, 2019.

- Planning Area 4 consists of 23.59 acres within the eastern portion of the site. Planning Area 4 is proposed for 82 single-family detached dwellings ranging in size from just over 3,000 square feet to approximately 3,600 square feet on minimum 4,950-square-foot lots, for an overall density of approximately 3.48 dwelling units per acre.
- Planning Area 5 consists of 2.64 acres located along Beach Boulevard adjacent to the existing Westridge Plaza Shopping Center. The proposed Specific Plan provides the option for Planning Area 5 to be developed with either 20,000 square feet of commercial development (e.g., specialty grocery, restaurant, or general retail uses), or up to 46 multi-family dwelling units to a maximum density of 18 dwelling units per acre.
- Planning Area 6 consists of 42.13 acres of open space, parkland, and street rights-of-way.
- Planning Area 7 consists of 19.38 acres of existing vegetated slope within the Specific Plan boundaries that is now being and will continue to be maintained by the Westridge homeowners' association.

Residential Development

The Rancho La Habra Specific Plan proposes three single-family residential neighborhoods (Planning Areas 2 through 4) and one multi-family residential neighborhood (Planning Area 1). In addition, Planning Area 5 includes an option for 20,000 square feet of commercial

development or up to an additional 46 dwelling units. **Table 2-2** provides additional information on this proposed housing development.

Table 2-2
Number and Size of Dwelling Units by Planning Area

Residential Planning Area	Minimum Lot Size	Number of Dwelling Units	Approximate Average Size of Dwelling Units	Number of Bedrooms
Planning Area 1	not applicable – multi-family	125	1,900 square feet	3/4
Planning Area 2	48'/54' x 80' (3,840 square feet)	115	2,700 square feet	4/5
Model Homes	47' x 70' (3,290 square feet)	3	2400 square feet	4
Planning Area 3	47' x 70' (3,290 square feet)	77	2,400 square feet	4
Planning Area 4	55' x 90' (4,950 square feet)	82	3,300 square feet	4/5
TOTAL WITHOUT OPTIONAL PLANNING AREA 5 RESDENTIAL		**402**		
Planning Area 5	not applicable – multi-family (option)	46	1,900 square feet	3/4
TOTAL WITH OPTIONAL PLANNING AREA 5 RESDENTIAL		**448**		

Source: Rancho La Habra Specific Plan, 2019.

Residential architecture for Rancho La Habra is proposed to vary among the Planning Areas. As currently proposed, housing within each of the single-family detached neighborhoods would be designed with at least three floor plans, three elevations per floor plan, and three color palettes per elevation to provide a varied streetscape. Forward living spaces are proposed to be integrated into the design of the homes. Varied roof planes, projections, and architectural detailing are also proposed to be integrated into the design to create visual interest on all four sides of the homes.

The Rancho La Habra Specific Plan (Appendix C) includes design guidelines and development standards to guide and regulate the proposed residential development.

Commercial Development with Option for Multi-Family Residential

The Rancho La Habra Specific Plan provides two options for development of Planning Area 5. This 2.64-acre area along Beach Boulevard, adjacent to the existing Westridge Plaza Shopping Center, could be developed with either up to 20,000 square feet of commercial development (e.g., specialty grocery, restaurant, or general retail uses) or up to an additional 46 multi-family dwelling units at a maximum density of 18 dwelling units per acre. For each environmental issue addressed in this Partially Recirculated Draft EIR, the "worst case" scenario in terms of environmental impacts, either 20,000 square feet of commercial or up to 46 additional dwelling units within Planning Area 5, has been analyzed to provide the most conservative assessment of environmental impacts.

For the commercial development option, direct access from Beach Boulevard would be provided by a driveway dedicated to the commercial site and separate monument signage would be provided along Beach Boulevard. For the residential development option, access would occur through Planning Area 1 and the access to Beach Boulevard would be limited to emergency access only.

b. Infrastructure

Roadways and Access

Primary access to the Specific Plan area is proposed to be provided at four locations:

- The primary entrance would be provided from Beach Boulevard at a full signalized access to be constructed opposite the entrance to the Hillsborough Park Apartments on the west side of the project site.
- The second entry to the project site would be from the north on La Habra Hills Drive, at the existing entry to the Westridge Golf Club.
- The third, eastern entry to the community would be via a full access signalized access to be constructed opposite Sandlewood Avenue at Idaho Street.
- The final entry would be a proposed left-turn-in/right-turn-in and right-turn-out-only unsignalized driveway along Beach Boulevard (serving the proposed specialty grocery store / restaurant / other retail pads) should Planning Area 5 be developed with commercial uses.

La Habra Hills Drive would be a public street (non-gated) extending south through the proposed Community Center and public park. Farther to the south, La Habra Hills Drive would extend to the Westridge neighborhood as a public street and would continue to provide access to that community. Access to Rancho La Habra's proposed residential neighborhoods would be gated, and all internal streets (other than La Habra Hills Drive extending to the Westridge Community) would be private.

A gated emergency vehicle access drive is proposed between Planning Areas 3 and 4 adjacent to the recreation facility. Another emergency vehicle access is proposed through Planning Area 5. Both of these emergency accesses are proposed to be controlled with gates or bollards that could be removed by first responders in case of an emergency.

Water Facilities

The City would serve as the water utility agency for the proposed Rancho La Habra development. As detailed in the proposed Specific Plan (Appendix C), a system of 8-inch water lines would be installed to serve the proposed development. Connections to the City's existing water system would be made at Beach Boulevard (two connection points), La Habra Hills

Drive, and Idaho Street. No off-site water facilities are proposed to be constructed as part of Specific Plan development.

Wastewater Facilities

The La Habra Hills Specific Plan area is within the service area of the Orange County Sanitation District (OCSD). As detailed in the proposed Specific Plan (Appendix C), a system of 8-inch sewer lines would be installed to serve the proposed development. Connections to the OCSD's existing sewer system would be made at Beach Boulevard (two connection points) and Idaho Street. Off-site facilities to be constructed as part of Specific Plan development include a 10-inch sewer line within La Habra Hills Drive, connecting to an existing 36-inch OCSD sewer line in Imperial Highway.

Drainage Facilities

The project site drains in three general directions. The area west of La Habra Hills Drive/ Trevino Court generally drains to the west toward Beach Boulevard. The central area, encompassing Planning Area 3 and the Community Center/park, drains north toward the cul-de-sac of La Habra Hills Drive. The eastern portion of the site, encompassing Planning Area 4, drains to the northeast corner of the project site, adjacent to the proposed Idaho Street entry.

In order to treat urban runoff and ensure that peak storm flows following site development are no greater than pre-development conditions, several water quality and detention basins are proposed:

- Planning Area 2 includes an open vegetated basin with an additional media filter, an underground storage basin for treatment prior to discharge into the existing storm drain system under Beach Boulevard. To relieve the existing constraint at the single storm drain found under Beach Boulevard, a second 48-inch storm drain will be installed across Beach Boulevard.
- Planning Area 3 includes an underground modular wetland system that provides treatment and detention functions prior to discharge of flows into the existing storm drain in La Habra Hills Drive.
- Planning Area 4 includes an open vegetated basin with an additional media filter for treatment prior to discharge into the existing storm drain system near Idaho Street.

c. Parks and Open Space

Public Parks and Open Space

The Rancho La Habra Specific Plan provides for a variety of public park, recreation, and open space amenities totaling 38.72 acres within Planning Area 6 as follows:

- Public Community Center – 3.30 acres
  - Approximately 22,500 square feet of building area providing indoor banquet, dining, kitchen, meeting, and office facilities in the existing Westridge Golf Club clubhouse, which is proposed to be converted to a public community center
  - Outdoor banquet, dining, and gathering space
  - Play areas, open turf
  - Event lawn
  - Parking for daily use and special events
- Public Park and Picnic Area – 12.79 acres
  - A southerly extension of the Community Center and Park facility
  - Terraced multi-purpose play areas
  - Picnic areas, including benches and tables, with shade trees and views of the San Gabriel Mountains
- Public Linear Park – 12.77 acres
  - 2.6 miles of trails proposed to traverse throughout the community, with connections to Idaho Street and Beach Boulevard
  - Benches, shade trees, viewing overlooks, and exercise equipment
- Conservation Area – 9.86 acres
  - Preservation, restoration and enhancement of locally rare native coastal sage habitat

Private Parks and Recreational Amenities

In addition to public open space and recreational areas, private parkland and recreational amenities are proposed, including the following:

- Planning Area 1:
  - Pool and spa
  - Restrooms and showers
  - Barbeque and picnic facility
  - Shade structure
- Planning Area 2:
  - Pool, wading pool, and spa
  - Restrooms and showers
  - Barbeque and picnic facility

  - Shade structure
- Planning Areas 3/4:
  - Lap pool and spa
  - Restrooms and showers
  - Shade structure
- Multiple Planning Areas:
  - Passive turf play areas
  - Shade trees
  - Bench seating
  - Children's play structures
  - Trail connections

d. On-Site Demolition

Specific Plan development would require removal of a large parking lot, golf cart paths, maintenance yard, and driving range. Demolition of these facilities is anticipated to generate approximately 170,000 cubic yards of concrete, asphalt, and masonry. Instead of hauling these materials to a landfill, the applicant is proposing an on-site crushing operation to reduce the concrete, asphalt, and masonry generated from demolition operations to a size appropriate for use in deep fills or as road base. The crushing operation is proposed to be located within the northern portion of the Project site near La Habra Hills Drive.

In addition, site clearing prior to grading operations would involve removal of existing ornamental vegetation within the golf course. Materials generated from demolition that cannot be crushed or reused on-site would be exported to an approved landfill or recycling center.

e. Grading Plan

Earthwork within the Project site is proposed to be balanced, meaning the overall cut and fill quantities would generally equal each other after accounting for earthwork shrinkage and spoils from constructing footings and utility trenches, except for import of "select" backfill material needed for retaining wall construction. Site grading is proposed to occur at a single time over an approximately 11-month period. Total earthwork would be approximately 3,400,000 cubic yards.

f. Soil Management Plan

Development of the Westridge neighborhood and golf course pursuant to the La Habra Hills Specific Plan required extensive grading of an abandoned oil field. As a result, approximately

426,000 cubic yards of soil containing total petroleum hydrocarbons (TPH), a chemical compound associated with crude oil, was placed in several low-lying locations beneath the existing golf course. Placement of the soils containing TPH occurred pursuant to regulatory approvals granted by the Orange County Health Care Agency (OCHCA),[6] which means that soils containing petroleum hydrocarbons were placed at depths appropriate for the proposed golf course and other types of recreational facilities. However, the depths at which soils were placed, while appropriate for the existing golf course use, do not meet requirements for the residential uses proposed in the Rancho La Habra Specific Plan, and therefore need to be placed deeper below the ground surface.

The Rancho La Habra Specific Plan proposes to place a minimum of 20 feet of additional fill, clear of soils containing TPH, over existing soils containing TPH, and to compact those overlying soils to over 90 percent to comply with residential development standards. The Rancho La Habra Specific Plan project includes a proposed Soils Management Plan that addresses these items and meets OCHCA standards and requirements. The proposed Soil Management Plan involves the following steps:

1. Remove "clean" overburden soils and segregate for reuse as cover.

2. Remove crude oil-impacted soil from Reuse Area 1 (RUA 1), Reuse Area 2 (RUA 2), and the eastern portion of Reuse Area 3 (RUA 3) and place the soil in one of four identified fill locations (see **Figures 2-6** and **2-7** for locations of existing and proposed soil reuse areas, respectively).

3. Collect confirmation soil samples from former reuse areas upon completion to verify removal and facilitate closure.

4. Upon completing placement of crude oil-impacted soils into deep fill locations, place a minimum of 20 feet of "clean" (i.e., less than 100 milligrams per kilogram [mg/kg] TPH) cover soil.

    (a) RUA 1 is the largest of the reuse areas and is located in the central portion of what was formerly Closure Phase A, in the western portion of the golf course. It is estimated that RUA 1 contains approximately 220,000 cubic yards of crude oil-impacted soil.

    (b) RUA 2 is located east of RUA 1, beneath the golf course driving range, and contains an estimated 30,000 cubic yards of crude oil-impacted soil.

    (c) RUA 3 is located in the far western portion of the subject property and contains an estimated 176,000 cubic yards of crude oil-impacted soil.

[6] After reviewing the project file, the Department of Toxic Substances Control (DTSC) declined to take jurisdiction over the project site. Therefore, review and authority over the handling of hazardous materials are the responsibility of OCHCA.

On-site grading would require removal of all previously placed fill material until either bedrock or suitable material is reached. Once grading for the proposed project reaches bedrock or suitable material, the approximately 260,000 cubic yards of TPH-affected soil removed from RUA 1, RUA 2, and the eastern margin of RUA 3 would be placed in one of four pre-designated deep fill locations in accordance with standards previously established by OCHCA and the Regional Water Quality Control Board (RWQCB). Additional fill, consisting of "clean" (less than 100 mg/kg TPH) soil would be placed over the deep fills at a minimum thickness of 20 feet and compacted to over 90 percent to comply with residential development standards established by the State to protect public health. The majority of RUA 3 would not be affected by development as the portion of the subject property overlying RUA 3 is to be designated as open space and would not be subject to grading and construction.

g. Retaining Walls

As noted above, proposed grading would be balanced on-site with the exception of the need to import up to approximately 15,000 cubic yards of suitable soils for the construction of several retaining walls, which would be designed as "Mechanically Stabilized Earth" (MSE) walls, illustrated below (see **Figures 2-8** and **2-9**). The walls would range in height up to 23 feet, with the tallest wall occurring on Lot 274, which would be located within the multi-family housing site, north of the project entry from Beach Boulevard. MSE walls are not vertical walls, but rather canted back at a slight angle. The walls rely on geo-grid, which extends back into the hillside behind the wall, and gravity for stability. MSE walls include planting pockets that would be planted with landscape material consistent with the design guidelines included in the Specific Plan in order to minimize visual impacts and enhance the aesthetic character of the walls.

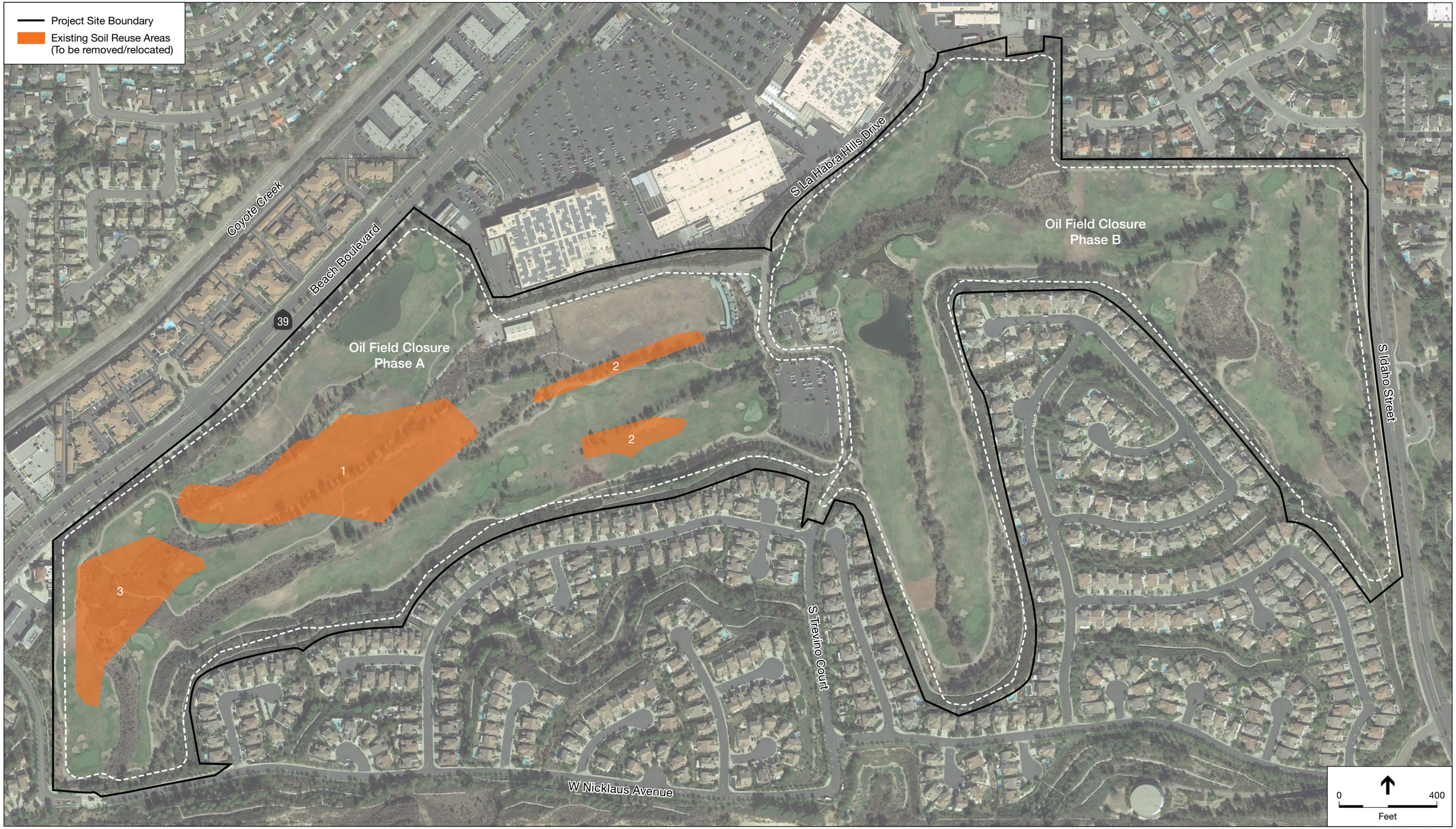


Figure 2-6: Existing Soil Reuse Areas

Source: Google Earth; EEI

Figure 2-7: Proposed Soil Deep Fill Areas

Source: Google Earth; EEI

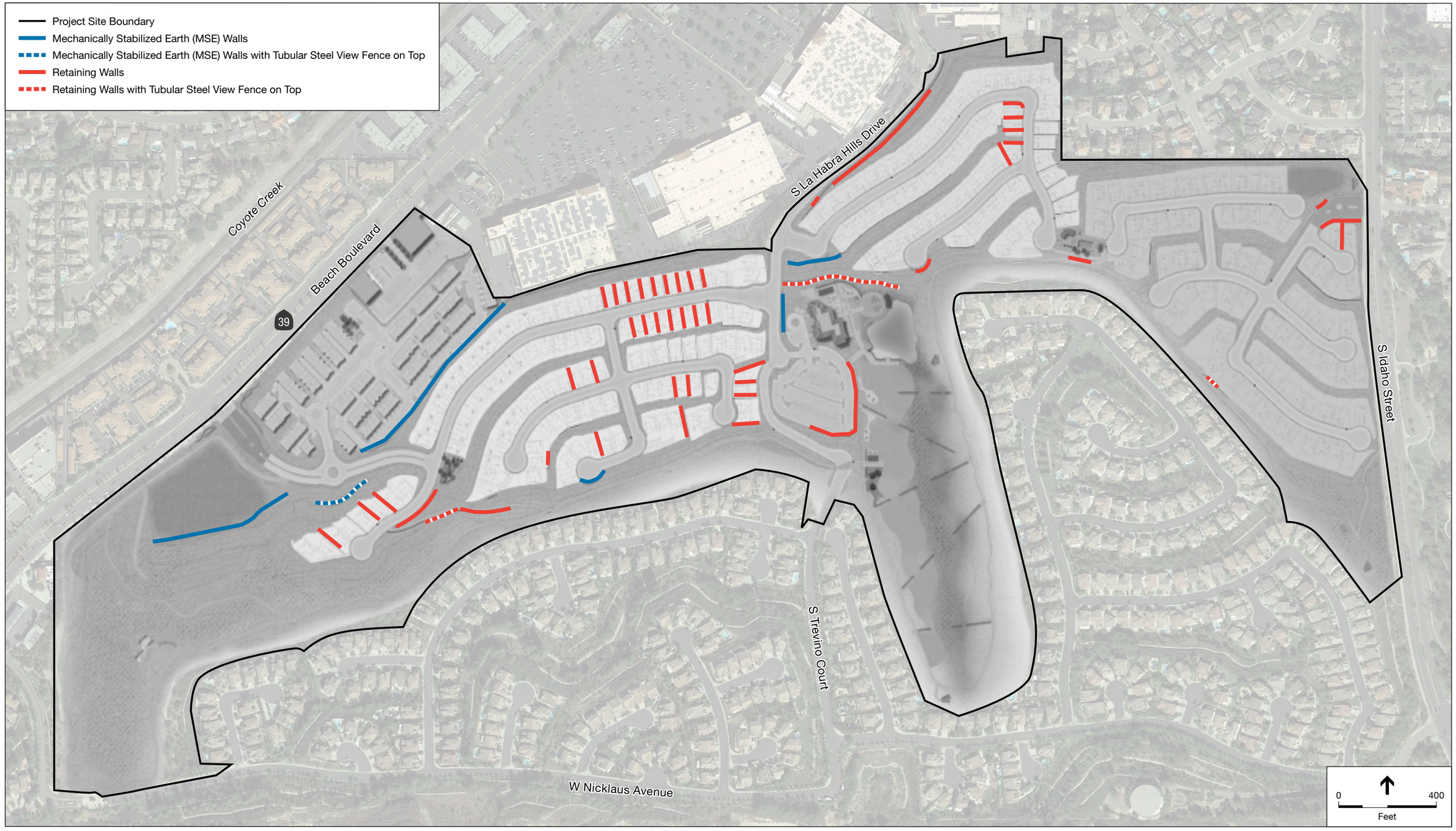


Figure 2-8: Proposed Mechanically Stabilized Earth (MSE) Walls

Source: Google Earth; Carlson SLS; BrightView Design Group

Figure 2-9 Mechanically Stabilized Earth Wall

h. Development Phasing

The Rancho La Habra Specific Plan outlines the sequence in which the land development and infrastructure improvements are likely to occur (see **Figure 2-10**). Construction activities would occur in increments described below over approximately six years and subject to unforeseen changes to land development circumstances, weather, economic conditions, and market conditions.

- **Site Clearing and Crushing.** Existing infrastructure improvements, such as the driving range, restrooms, parking lot, La Habra Hills Drive, and landscaping will be removed. All material capable of being crushed will be during this phase.
- **Grading.** The entire site will be graded in one continuous operation, which is expected to occur over approximately 11-month period. The grading phase includes geotechnical remediation, hazards remediation, and creation of "blue top" lots.
- **Retaining Wall Construction.** Retaining walls will be constructed During site grading.
- **Temporary Utility Relocation.** Existing utilities serving the Westridge neighborhood that cross the Project site will be temporarily relocated and remain operational throughout Project development. Temporary utility relocations include sewer, domestic water, and storm drain.
- **Land Development.** During and immediately following grading activities, utility improvements will be made. The temporarily relocated utilities will be replaced with permanent utility connections. To the extent they occur in graded slopes, those improvements will be made during grading. The remaining utilities located within planned

roadway rights-of-way would be installed immediately following the completion of grading activities. Storm drain utility improvements include the planned detention basins, storm drain extension under Beach Boulevard, and water quality treatment BMPs.

- **La Habra Hills Drive.** As soon as grading is complete and utilities have been installed in La Habra Hills Drive, the roadway would be paved and re-opened for residents of the Westridge community to use as access.
- **Community Center.** Community Center improvement would be commenced following grading and utility improvements and would be timed to ensure safe access and use of the facilities without construction equipment conflicts.
- **Public Park South of Community Center.** The park south of the Community Center and pond would be completed following grading and utility improvements and the start of construction of the Community Center. Construction timing will ensure safe access and use of the facilities without construction equipment conflicts.
- **Linear Park and Trails.** Construction of the Linear Park and trails would commence following grading and utility improvements and the start of construction of the Community Center. Trails will be completed in segments and dedicated to the City as they are completed. Timing for trail construction and completion will be designed to ensure safe access and use of the facilities without construction equipment conflicts.
- **Traffic Signals.** Prior to model home opening, planned modifications to the Beach Boulevard entry and Idaho Street entry would be made.
- **Model Homes.** Once utilities have been installed, the entry roadways to the Model Home sites would be paved and models constructed. The Model homes are planned to begin with the construction of Planning Area 1 Model Homes. Following partial completion of Planning Area 1 Model Homes, construction will start on Planning Area 2, 3, and 4 models.
- **Home Construction.** Homes would be constructed in increments within each Planning Area. Each increment would consist of approximately 6 to 10 single family homes or two multi-family buildings.
- **Private Recreation Facilities:**
    - **Planning Area 1**. Completion estimated near occupancy of construction phase 2 (immediately adjacent to recreation facility) and once safe access can be provided.
    - **Planning Area 2**. Completion estimated near model opening.
    - **Planning Areas 3 and 4**. Completion estimated when safe access can be accommodated.

***Note:** Planning Area 5 may be developed as Commercial or Multi-Family; Site Plan shows PA 1 and PA 5 jointly as Multi-family residential.*

Figure 2-10: Phasing Plan
Source: SMP (09/17/2019).

2.3.7 VESTING TENTATIVE TRACT MAP 17845

Vesting Tentative Tract Map 17845 is proposed to subdivide the project site into 359 parcels for development of Single Family Residential, Multi-Family Residential, Commercial (with and option for Multi-Family Residential), Community Recreation, Open Space, Entry Gates, and streets.

A Vesting Tentative Map is similar to a regular tentative tract map, except that approval of a Vesting Tentative Map confers a vested right to proceed with development in substantial compliance with the ordinances, policies, and standards in effect at the time the vesting map is deemed complete. Such development would also need to be in compliance with the Rancho La Habra Specific Plan and the provisions of any Development Agreement adopted for the proposed development.

2.3.8 DEVELOPMENT AGREEMENT

The applicant has proposed to enter into a Development Agreement with the City to provide a legal instrument that establishes a commitment whereby the City, as the land management agency for the site, agrees to permit the applicant or its successors to develop the Specific Plan under agreed-upon terms, and commits the applicant to the provision of specified public improvements, facilities, services, and other benefits. The Development Agreement would constitute a legal contract between the City and the applicant and commit both parties to the agreed-upon development program for the site, including the proposed Specific Plan. The Development Agreement would be binding and would exempt the Project once it is approved from future changes to codes, plans, resolutions, and voter-approved initiatives that might otherwise cause a different development scenario in the future.

2.3.9 DESIGN REVIEW

Concurrent with the Specific Plan, the applicant is requesting Design Review approvals for proposed single- and multi-family housing in Planning Areas 1-4 and for the clubhouse and park in Planning Area 6. The City Design Review process provides for review of the following:

- Site plans for single-family residential lot and multi-family residential development areas, including:
    - Off-street parking and circulation areas;
    - Points of ingress and egress for vehicles and pedestrians;
    - Location and design of landscaped areas;
    - Location, height, and design of walls;
    - Location and design of trash storage areas;
    - Location of public utilities installations and all external mechanical equipment; and

  - Location and design of signage.
- Architectural design, including:
  - Building elevations;
  - Exterior finish materials and colors; and
  - Roof materials and pitches.

As noted above, housing within each of the three single-family detached neighborhoods would be designed with three floor plans (nine total floor plans), three elevations per floor plan, and three color palettes per elevation to provide a varied streetscape. Multi-family development is planned as row townhomes oriented around motor courts or alleys. Each residence will be provided with its own two-car garage. Multi-family buildings are also proposed to be separated by landscaped walking paseos.

The Rancho La Habra Specific Plan (Partially Recirculated Draft EIR Appendix C) includes design guidelines to guide proposed residential and commercial development. These guidelines, along with proposed site plans for multi-family development and proposed plotting of detached housing on single-family residential lots, constitute the basis for the applicant's Design Review approval request.

2.3.10 PROPOSED COMMUNITY FACILITIES DISTRICT

Formation of Community Facilities District pursuant to the Mello-Roos Community Facilities Act of 1982 (Government Code Sections 53311-53368.3) or a similar mechanism is proposed to fund construction of public infrastructure described in the Specific Plan. Formation of a Landscape and Lighting District pursuant to the Landscape and Lighting District Act of 1972 (Streets and Highways Code Section 22500) or a similar mechanism to fund ongoing maintenance of certain facilities may also be considered.

2.3.11 VACATE AN EXISTING DEED RESTRICTION

In 2009, as part of the regulatory approval process for construction of the existing golf course, a deed restriction was recorded that covered approximately 11.43 acres of "Conservation Area" distributed in various locations within the golf course property (see **Figure 2-11**). The deed restriction, which is included in Appendix F, states that it is intended to "provide mitigation in perpetuity for impacts on 18 acres of highly disturbed coastal sage scrub habitat that resulted from the construction of the Westridge community and golf course pursuant to the La Habra Hills Specific Plan." The deed restriction was established as a condition of the Section 1603 Agreement (dated May 30, 1995) issued by the California Department of Fish and Game (File No. 5-465-94). Although the "Department of Fish and Game" has been re-named as the California Department of Fish and Wildlife, the terms of the deed restriction are unchanged and remain in effect.

The applicant for the proposed Rancho La Habra Specific Plan is requesting that the California Department of Fish and Wildlife vacate the Deed Restriction previously established for certain mitigation areas pursuant to Streambed Alteration Agreement # 5-465-95, along with issuance of a new Streambed Alteration Agreement to compensate for the habitat lost within the existing Deed Restricted Areas. **Figure 2-11** identifies the location of existing deed-restricted areas in relation to lands proposed for grading. **Figure 3.5-14** illustrates the location of the proposed onsite conservation area.

2.4 REFERENCES

Lennar Homes of California, *Rancho La Habra Specific Plan*, October 24, 2019.

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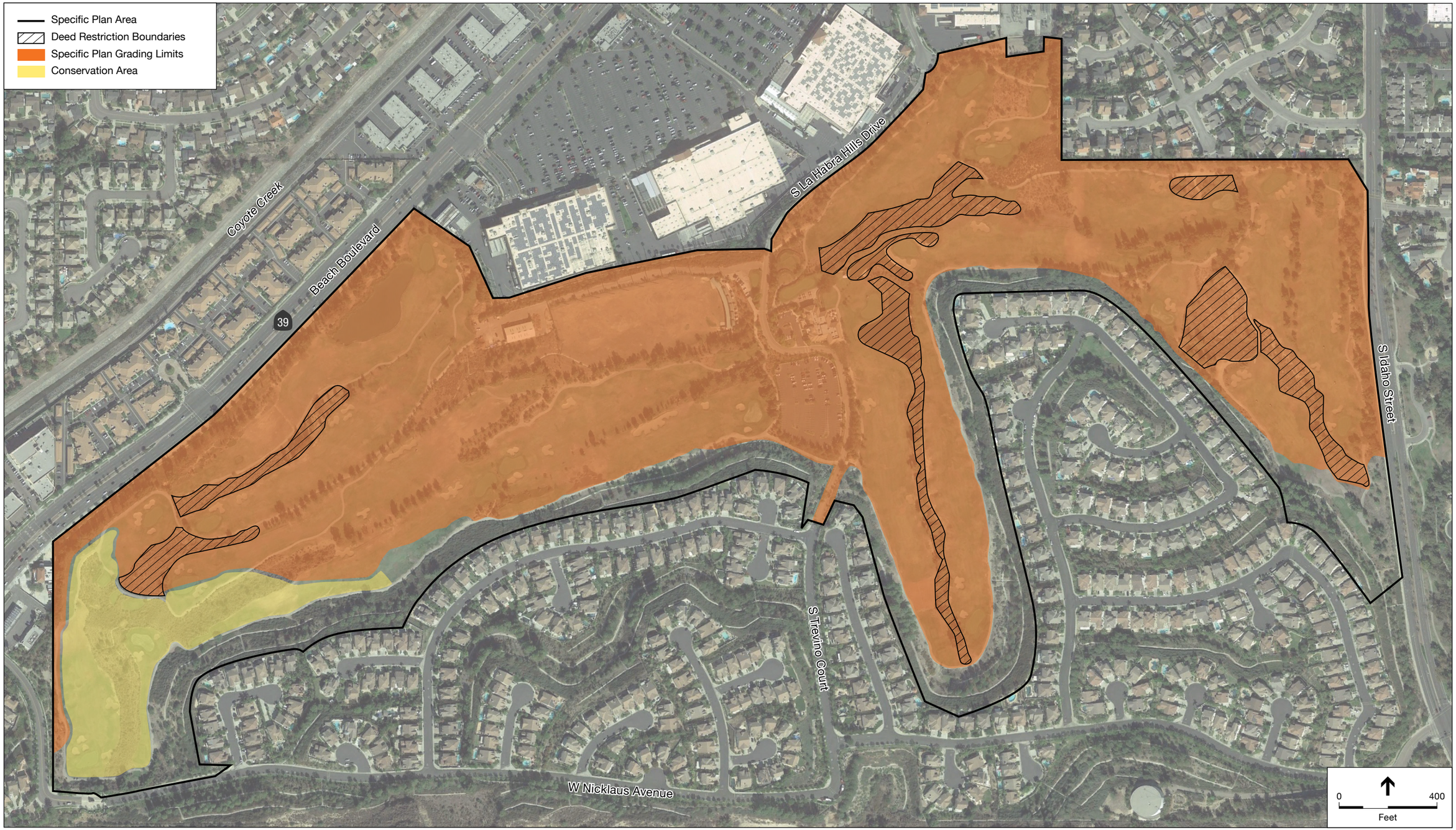

Figure 2-11: Deed Restriction Boundaries

Source: Google Earth Pro; Carlson SLS; LSA

CHAPTER 3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.1 INTRODUCTION

This chapter focuses upon evaluating the significant environmental effects of the Rancho La Habra Specific Plan and related requested actions (collectively referred to as the "proposed project"), which are described in Chapter 2, *Project Description*. This chapter describes the existing physical environmental setting (also referred to as "baseline") for each environmental topic addressed in the Partially Recirculated Draft EIR, and the impacts that would result from the proposed Project. Because existing federal, state, and local regulations would also shape how the Specific Plan is implemented and provide requirements for avoiding and reducing environmental impacts, a discussion of relevant plans, programs, and policies pertinent to each environmental issue addressed in this chapter is provided. Finally, this chapter identifies feasible mitigation measures to reduce the significant impacts of the proposed project.

3.1.1 FORMAT OF DETAILED ENVIRONMENTAL ANALYSES

The following sections in the Partially Recirculated Draft EIR address environmental impacts for issues determined to have the potential for significant effects:

3.5 Biological Resources	3.9 Greenhouse Gas Emissions
3.7 Traffic and Circulation	3.10 Energy Resources
3.8 Air Quality	3.11 Noise and Vibration

This Partially Recirculated Draft Environmental Impact Report (Partially Recirculated Draft EIR) evaluates the direct and indirect impacts resulting from construction and ongoing operations of the proposed project. Under the California Environmental Quality Act (CEQA), EIRs are intended to focus their discussion on significant impacts and may limit discussion of other impacts to a brief explanation of why the impacts are not significant, such as in Section 3.1.1 above in relation to agricultural/forestry resources and mineral resources.

Each environmental topic section addressed in detail in this chapter generally includes the following main subsections:

- *Introduction*, outlining what the section will address and providing definitions of technical terms used in the section.
- *Applicable Plans, Policies, and Regulations*, describing federal, state, and local plans, policies, and regulations that implementation of the proposed Rancho La Habra Specific Plan must address and would thus shape its implementation.

- *Environmental Setting*, describing the existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.
- *Significance Criteria*, setting forth the thresholds of significance (significance criteria) used to determine whether impacts are "significant."
- *Project Impacts and Mitigation Measures*, setting forth and analyzing one or more impact statements for each identified significance threshold. The analysis of each impact statement is organized as follows:
    - A statement of the impact being analyzed, along with the EIR's conclusion about the significance of the impact.
    - A description of the methodology used to analyze the impact and determine whether it would be significant or less than significant.
    - An impact assessment that evaluates the changes to the physical environment that would result from the proposed project.
    - A significance conclusion comparing identified impacts of the proposed project to the relevant significance threshold and presenting a determination on the significance of each impact prior to the implementation of any required mitigation.
    - All feasible mitigation measure(s) for each impact determined to be significant. Mitigation measures include enforceable actions to:
        - avoid a significant impact;
        - minimize the severity of a significant impact;
        - rectify an impact by repairing, rehabilitating, or restoring the affected physical environment;
        - reduce or eliminate the impact over time through preservation and/or maintenance operations during the life of the project; and/or
        - compensate for the impact by replacing or providing substitute resources or environmental conditions.
    - Actions to be taken to ensure effective implementation of required mitigation measures.
    - Analysis of the effectiveness of identified mitigation measure(s) to avoid or reduce significant impacts to a less-than-significant level.
- *References*, listing the background information used to prepare the analysis in the section.

This EIR identifies all thresholds, impacts, and mitigation measures with an alpha-numeric designation that corresponds to the environmental topic addressed in each section (e.g., "3.5" for Section 3.5, *Biological Resources*). The numbering of thresholds, impacts, and mitigation measures is accomplished as follows:

- The significance thresholds are provided with numbers related to the section in which they are found. For example, biological resources significance thresholds in Section 3.5, *Biological Resources*, are numbered **Threshold BIO-1** through **Threshold BIO-6**.
- Impacts are numbered based on the environmental threshold they address. For example, **Impact BIO-5** provides analysis in relation to **Threshold BIO-5**.
- Where more than one impact is analyzed in relation to a specific threshold, each impact is provided with a unique number. For example, the two impacts analyzed in relation to **Threshold BIO-1** (candidate, sensitive, or special-status species) are numbered **Impact BIO-1.1** and **Impact BIO-1.2**.
- Similarly, each mitigation measure is numbered to correspond to the impact and threshold that it addresses. For example:
    - **Mitigation Measures BIO-1.1a, BIO-1.1b,** and **BIO-1.1c** address **Impact BIO-1.1**, which analyzes **Threshold BIO-1.1**;
    - **Mitigation Measure BIO-5** (bird nesting and roosting) addresses **Impact BIO-5**, which analyzes **Threshold BIO-5**.

a. Environmental Setting/Baseline

"Environmental Setting" subsections describe current conditions with regard to the environmental resource area reviewed. CEQA Guidelines Section 15125 states that "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, from both a local and regional perspective. The environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed project and its alternatives."

The CEQA Guidelines and case law recognize that the date for establishing an environmental baseline cannot be rigid (see CEQA Guidelines Sections 15146, 15151, and 15204). In some instances, information is presented in the environmental setting that differs from the precise time of the Notice of Preparation (NOP). This information is considered representative of baseline conditions. Furthermore, environmental conditions may vary from year to year, and in some cases, it is necessary to consider conditions over a range of time periods.

The NOP for this EIR was published in November 2015. Except as specified otherwise within the document, any reference to "existing" conditions throughout this EIR refers to the baseline condition as of 2015. Where technical studies or other baseline information refer to a date other than 2015, an explanation of the validity of the baseline information in relation to 2015 baseline conditions is provided.

b. Thresholds of Significance/Significance Criteria

CEQA Guidelines Section 15382 defines a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

The "Significance Criteria" subsections provide the specific thresholds of significance by which impacts are judged to be significant or less than significant in this EIR. These include identifiable quantitative or qualitative standards or sets of criteria pursuant to which the significance of each given environmental effect can be determined. Exceedance of a threshold of significance normally means the effect will be determined to be "significant" (CEQA Guidelines Section 15064.7(a)). However, an iron-clad definition of a "significant" effect is not always possible because the significance of an activity may vary with the setting (CEQA Guidelines Section 15064(b)). Therefore, a Lead Agency has the discretion to determine whether to classify an impact described in an EIR as "significant," depending on the nature of the area affected. The thresholds of significance used to assess the significance of impacts are based on those provided in Appendix G of CEQA Guidelines.

c. Impact Significance Classifications

The following classifications are used throughout the impact analysis in this EIR to describe the level of significance of environmental impacts:

- **Significant Impact** - A significant impact is defined by Section 15382 of the CEQA Guidelines as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself "shall not be considered a significant effect on the environment … [but] may be considered in determining whether the physical change is significant." As defined in this EIR, a significant impact exceeds the defined significance criteria and therefore requires mitigation.
- **No Impact –** No adverse effect on the environment would occur, and mitigation measures are not required.
- **Less-than-Significant Impact –** The impact does not reach or exceed the defined threshold (criterion) of significance. Therefore, no mitigation is required.
- **Significant but Mitigable Impact –** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. Feasible mitigation measures, including standard conditions of approval, when implemented, will reduce the significant impact to a less-than-significant level.

- **Significant and Unavoidable Impact –** The impact reaches or exceeds the defined threshold (criterion) of significance, and mitigation is therefore required. However, application of all feasible mitigation measures and standard conditions of approval would not reduce the impact to a less-than-significant level.

While CEQA requires that an EIR identify all feasible mitigation to avoid or reduce the significant impacts of a project, it also permits public agencies to approve a project even though it would result in one or more significant unavoidable environmental effects. For a Lead Agency to approve project with one or more significant unavoidable impacts, it must first prepare a statement of overriding considerations, which identifies the specific economic, legal, social, technological, or other benefits of the project, including region-wide or state-wide environmental benefits, that outweigh its significant unavoidable effects and thereby warrant its approval (Public Resources Code Section 21083; CEQA Guidelines Section 15093). The statement of overriding considerations must be supported by substantial evidence in the record (CEQA Guidelines Section 15093(a)).

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3.5 BIOLOGICAL RESOURCES

3.5.1 INTRODUCTION

a. Overview

This section identifies existing biological resources and the physical changes that would result from Specific Plan build-out, along with mitigation measures to avoid or reduce significant impacts. The description of biological resources includes plants, wildlife, protected species and their habitats, and jurisdictional resources subject to federal, state, and local laws, policies, or conservation plans that apply to some or a part of the proposed development footprint.

While numerous plant and wildlife species were observed during numerous biological surveys, some species may not have been identifiable at the time of year the surveys were performed. Therefore, the likelihood of a species occurring was determined based on whether (1) the species was directly observed; (2) suitable habitat was found; (3) there are documented occurrences within 5 miles of the Project site; and (4) the species is known to occur in the West Coyote Hills, which is located just south of the Project site.'

b. Definitions

- **Bed** and **Bank** refer to parts of a stream or drainage feature. A stream bed is the channel bottom that represents the physical confine of normal water flow. The lateral confines or channel margins are known as the stream bank or river bank.
- **Canopy**, in the context of this section of the EIR, refers to the layer of leaves, branches, and stems of trees that covers the ground when viewed from above.
- **Conservation Agreement** refers to an agreement between a permittee and a regulatory agency establishing the parameters, including funding mechanisms, habitat values to be conserved, monitoring, and adaptive management, to maintain functions and values as conservation habitat.
- **Conservation Areas** refer to portions of the Project site that the Specific Plan proposes to be preserved as dedicated natural habitat.
- **Deciduous** refers to trees or shrubs that shed their leaves annually.
- **Degradation** is a decline in habitat quality due to physical changes to the environment that leads to reduced survival and/or reproductive success in a population. The decline is typically related to changes in food availability and/or presence and quality of vegetation needed for roosting or nesting or during migration.
- **Dripline** refers to the outer extent of vegetated canopy where the over story is projected to the ground level to establish a specific locational point or boundary.

- **Emergent Wetland** refers to a wetland type characterized by herbaceous plants rooted underwater and emerging into air (e.g., cattails, rushes), excluding mosses and lichens. This vegetation is present for most of the growing season, meaning that emergent wetland vegetation is perennial. This term also refers to the reed-like vegetation that can be found in a transition zone between golf course ponds and upland areas and is contingent upon the continued or persistent presence of water either above or below ground.
- **Ephemeral** refers to a plant, animal, or water within a water course that appears temporarily or on a seasonal basis.
- **Grading Footprint** encompasses areas where earth-moving, excavation, remediation, and deposition of engineered fill for building and infrastructure development would occur, removing all existing soils and substrate, including vegetation. **Figure 3.5-1** identifies the grading footprint proposed by the Specific Plan.
- **Habitat** refers to the physical environment in which a plant or animal species could occur for all or a portion of its life stages.
- **Habitat Restoration** refers to the practice of renewing and restoring degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action.
- **In-Kind Replacement** occurs when the conservation value of replacement habitat must be consistent with the conservation values of the habitat being lost or requiring replacement to meet the "no net loss of sensitive habitats" performance standard established in this EIR.
- **Jurisdictional Area** refers to areas subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) pertaining to drainage features and adjacent habitat areas within the Project site.
- **Monitoring** refers to regular observation of a habitat over time, resulting in a collection of data that is used to verify compliance with conservation agreement goals and objectives and can also be used to identify when adaptive management may be required as a corrective measure to improve the quality or quantity of conservation habitats.
- **Nesting Habitat** includes trees and shrubs on the Project site that used by bird species during the breeding season.
- **Perennial** refers to a plant or animal that can be observed during all times of the year, and also to a water course that carries water year-round.
- **Predation** refers to a biological interaction in which a predator, an organism that is hunting, feeds on its prey.
- A **Riparian Zone** or **Riparian Area** is the interface between land and a river or stream. Plant habitats and communities along the river margins and banks that depend on water in the river or stream or groundwater associated with the river or stream are called riparian vegetation.

LSA

LEGEND

- Project Boundary
- Deed Restricted Areas
- Grading Footprint

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SOURCE: Bing (2014); Glenn Lukos Associates (8/2019)

I:\LEN1802\GIS\MXD\Grading Footprint.mxd (8/27/2019)

FIGURE 3.5-1

Rancho La Habra

Development Footprint

- **Roosting Habitat** encompasses areas where individual birds or bats use trees for resting and cover during non-breeding season.
- **Special-Status Habitat** refers to plant communities or physical features that have the potential to support plant or wildlife species listed or proposed for listing under either the California Endangered Species Act or the federal Endangered Species Act.
- **Special-Status Species** are plant and animal species that are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act; species that are listed or proposed for listing as threatened or endangered and species of special concern under the California Endangered Species Act plants designated with a California Rare Plant Ranking (CRPR) by the California Native Plant Society (CNPS) (CNPS 2016); species that are on the United States Watchlist of Birds of Conservation Concern; and species that are fully protected in California under the California Fish and Game Code.
- **Substrate** refers to the surface or material on or from which an organism lives, grows, or obtains its nourishment.
- **Third-Party Entity** is an entity other than the property owner that would be retained on a contract basis to maintain conservation areas, parks, or other features.
- **Upland** refers to land that is at a higher elevation than the adjacent alluvial plain, stream, or water course.

3.5.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of biological resources-related federal, state, and local laws, regulations, orders, or plans, which are described below.

a. Federal Plans, Policies, and Regulations

Federal Endangered Species Act of 1973

The federal Endangered Species Act (16 United States Code [USC] § 1531 et seq.) and subsequent amendments provide guidance for conserving federally listed species and the ecosystems upon which they depend. The applicable sections of the federal Endangered Species Act are:

- Section 7, which requires federal agencies to consult with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS), as appropriate, to ensure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered fish, wildlife, or plant species or result in the destruction or adverse modification of designated critical habitat for any such species. As part of the consultation, the USFWS and NMFS will issue a Biological Opinion and may

include an incidental take statement for wildlife species to exempt the Section 9 take prohibition. A nexus for Section 7 consultation at the Project site would occur as a result of initiation of a federal permitting process such as pursuit of a permit from the USACE.

- Section 9 and its implementing regulations, which prohibit the "take" of any fish or wildlife species listed under the federal Endangered Species Act as endangered or threatened, unless otherwise authorized by federal regulations. Section 9 also prohibits a number of specified activities with respect to endangered and threatened plants.
- Section 10, which provides a process by which non-federal entities may obtain an Incidental Take Permit from the USFWS or NMFS for otherwise lawful activities that might incidentally result in "take" of endangered or threatened species, subject to specific conditions.

These provisions are applicable because, on April 12, 1995, the USFWS issued a Biological Opinion (1-6-95-F-17) for "take" authorization of two pairs associated with direct and indirect impacts on the coastal California gnatcatcher (*Polioptila californica californica*) on the previous Westridge Golf Course development (previously known as the Chevron La Habra Hills Oil Field).

Critical Habitat

Critical habitat includes areas identified under Section 4 of the federal Endangered Species Act (15 USC § 1531–1544, Federal Endangered Species Act Section 3(5)(A)). Designated critical habitats are described in 50 Code of Federal Regulations (CFR) Parts 17 and 226. Critical habitats are those areas determined by the Secretary of the Interior to be essential for the conservation of the species, with physical and biological features[1] that are essential to the conservation of the species that may require special management consideration or protection.

Clean Water Act

The federal Clean Water Act (33 USC § 1251 et seq.) serves as the primary federal law protecting the quality of the nation's surface waters, including aquatic resources. Relevant sections include:

- Under Section 401 as it is implemented in California, projects that propose activities that would result in the discharge of a fill material into waters of the United States are required to obtain certification from the RWQCB. Discharge of fill into non-federal waters of the State are addressed through notification in accordance with the Waste Discharge Requirements of the Porter-Cologne Water Quality Act.

[1] The designation of critical habitat for gnatcatcher uses the term "primary constituent element." The new critical habitat regulations (81 FR 7214) replace this term with "physical and biological features." This shift in terminology does not change the approach used in conducting the analysis for this EIR. In this consultation, the term "physical and biological features" is used to mean primary constituent elements.

- Under Section 402, all point source discharges including, but not limited to, construction-related storm water discharges to surface waters are regulated through the National Pollutant Discharge Elimination System (NPDES) program. Project sponsors must obtain an NPDES permit from the State Water Resources Control Board (SWRCB). Point sources are discussed and addressed in Draft EIR Section 3.13, *Hydrology and Water Quality*.
- Under Section 404, the USACE regulates the discharge of dredged and fill materials into the waters of the United States, and the U.S. Environmental Protection Agency (USEPA) defines the policy and guidance and provides oversight of the USACE administration. Project sponsors must obtain a permit from the USACE for discharges of dredged or fill materials into proposed aquatic resources over which the USACE determines it will assert jurisdiction.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act of 1918 (16 USC § 703–712) prohibits the take of nests, eggs, birds, or any parts thereof (listed at 50 CFR Part 10.13 as modified by 75 Federal Register 9281). The Migratory Bird Treaty Act and the Migratory Bird Treaty Reform Act of 2004 are regulated by the USFWS Division of Migratory Bird Management. Section 703 makes it unlawful to take any migratory bird.

The Migratory Bird Treaty Reform Act of 2004 amends Sections 703 to 712 such that 94 non-native bird species that have been introduced by humans to the United States or its territories are excluded from protection. Only species considered native in 1918 are included.

b. State Plans, Policies, and Regulations

California Endangered Species Act

The California Endangered Species Act (California Fish and Game Code § 2050–2085) prohibits the take of any fish, wildlife, or plant species listed as endangered or threatened, or designated as candidates for listing under the act. Take refers to mortality or injury of the listed species itself and not the modification of a listed species' habitat. Comparable to the federal Endangered Species Act process, the California Endangered Species Act contains a procedure for the CDFW to issue a Section 2081 Incidental Take Permit authorizing the take of listed and candidate species incidental to an otherwise lawful activity, subject to specified conditions, including that the take impacts are fully mitigated.

California Fish and Game Code

Other applicable elements of the California Fish and Game Code can be divided into three sections, all of which are enforced by the CDFW:

1. **Fully Protected Species:** Sections 3511, 4700, 5050, and 5515 designate 37 fully protected species and prohibit the take or possession at any time of such species with certain limited exceptions. As of the date of distribution of this Partially Recirculated Draft EIR, there are no fully protected species present within the Project site.
2. **Bird Protections:** Sections 3503, 3503.5, and 3513 protect birds. Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by code or any regulation made pursuant thereto. Section 3503.5 prohibits the take, possession, or destruction of any nests, eggs, or birds in the orders Falconiformes (New World vultures, hawks, eagles, ospreys, and falcons, among others) or Strigiformes (owls). Section 3513 prohibits the take or possession of any migratory non-game bird, or part thereof, as designated in the Migratory Bird Treaty Act. To avoid violation of the take provisions, it is generally required that project-related disturbance at active nesting territories be reduced or eliminated in nesting habitat during the breeding season.
3. **Lake and Streambed Alterations:** Section 1600 et seq. requires notifying the CDFW prior to any project activity that might (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If, after this notification, the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will need to be obtained. These provisions are relevant because portions of the Project site are subject to deed restrictions established as part of a 1600 agreement to mitigate for impacts that occurred during construction of the Westridge development including construction of the golf course within the Project site.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code § 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. The California Native Plant Protection Act gives the CDFW the power to designate native plants as "endangered" or "rare" and prohibits the take of such plants with certain exceptions.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code § 13000 et seq.) established nine RWQCBs to oversee water quality on a day-to-day basis at the local and/or regional level. Their duties include preparing and updating water quality control plans and issuing Section 401 water quality certifications. The Porter-Cologne Act grants ultimate authority to the SWRCB over state water rights and water quality policy. The definition of waters under the jurisdiction of the State of California is broad and includes any surface water or groundwater, including saline waters within the boundaries of the state.

Isolated waters that may not be subject to regulations under federal law are considered to be "waters of the State" and regulated accordingly by the RWQCB.

c. Local Plans, Policies, and Regulations

The Conservation/Natural Resources Element of the City of La Habra General Plan presents a number of policies and programs relating to the protection of the city's natural resources and provides goals for sustainable ecosystems. La Habra General Plan policies relevant to biological resources include the following:

Chapter 6, Conservation/Natural Resources

> **BR 1.1 Biological Resource Protection**. Conserve and protect wildlife ecosystems, riverine corridors, and sensitive habitat areas including the sensitive plant species areas within the Westridge Golf Course.
>
> **BR 1.2 Natural Community Conservation Plan and Habitat Conservation Plan**. Continue to participate in and support the policies of the Central and Coastal Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) as a multispecies/multi-habitat reserve system and long-term management program that primarily protects coastal sage scrub and the species that utilize coastal sage scrub habitat.
>
> **BR 1.3 Regional Conservation Programs**. Consult with Los Angeles County and other regional agencies in the development and implementation of conservation plans for properties adjoining the City to assure that they are compatible with the City's conservation programs and do not adversely impact the diversity or health of its natural resources.
>
> **BR 1.4 Riparian Habitat Integrity**. Work with the Orange County Flood Control District (OCFCD) to maintain open space areas along and within the established creek corridors and flood control channels for the protection of riparian habitats, consistent with requirements to maintain the integrity of these lands for storm water and flood control management.
>
> **BR 1.5 Riparian Restoration**. Work with federal, state, and/or local agencies to restore riparian communities along and within the established creek corridors and flood control channels where appropriate and feasible.
>
> **BR 1.6 Urban Forest**. Build upon existing streetscapes and develop an urban forest along the City's commercial and mixed-use streets and in neighborhoods that provides avian habitat, sequesters carbon monoxide emissions, is conducive to pedestrian activity, and provides shade.

BR 1.7 Urban Forest Management. Manage and care for publicly-owned trees located in parks, parkways, and medians.

BR 1.8 Tree Preservation. Encourage the preservation of trees in existing and new development projects that are suitable nesting and roosting habitat for resident and migratory bird species.

BR 1.10 Landscaping. Encourage landscaping that minimizes the need for herbicides and pesticides and that provides food, water, habitat, and nesting sites for birds and other beneficial insects that help maintain the environmental resources and restore the larger ecosystem.

BR 1.11 Native Plant Use. Encourage the use of native and drought tolerant plant materials, including native tree species, in public and private landscaping and revegetation projects.

d. Site-Specific Requirements: Existing Deed Restrictions and Streambed Alteration Agreement

Construction of the Westridge Golf Club pursuant to the 1992 La Habra Hills Specific Plan involved impacts on biological resources resulting in the need to provide mitigation. Mitigation was provided as part of a Streambed Alteration Agreement dated February 23, 1995 in the form of a deed restriction granted by the golf course property owner in favor of the California Department of Fish and Game (now the CDFW) that was recorded on November 9, 2009. The original acreage requirement for the deed restriction was 11.43 acres in satisfaction of Conditions of Approval 5 and 11 of California Fish and Game Code Section 1603, Streambed Alteration Agreement ("Agreement Regarding Proposed Stream or Lake Alteration" No. 5-465-94) "to protect fish and wildlife in perpetuity." A total of 10.97 acres were actually included in the legal description for the various parcels located throughout the golf course as part of the recorded documentation.

In addition to requiring the protection of the wildlife species and created habitat within the deed-restricted areas, Streambed Alteration Agreement Condition of Approval 5 provides that:

> . . . the golf course owners or their successors and assignees, shall be responsible for maintenance of the mitigation sites for the life of the project.

The "mitigation sites" encompass the areas that are encumbered by the deed restriction and are shown in **Figure 3.5-1**. The deed-restricted areas within the Project site are also shown in **Figure 3.5-2** in relation to existing vegetation and habitat types.

These provisions are relevant because the Project would require that existing deed restrictions be vacated and that a new Streambed Alteration Agreement be issued because existing deed-restricted areas would no longer serve their intended purpose, nor would they be sustainable

once the Project site is graded to accommodate development under the Rancho La Habra Specific Plan. (See further discussion under Impact BIO-1.2, below.)

3.5.3 ENVIRONMENTAL SETTING

a. Biological Resources Literature Review and Survey Methodology

Literature Review

Study of on-site biological resources began with a review of relevant available literature, including general biological resources technical information and previous biological resources studies conducted for the Project site and surrounding lands, as follows:

- California Natural Diversity Database (CNDDB) RareFind (CDFW 2016g). A CDFW species account database that inventories status and locations of rare plants and wildlife in California was used to identify any sensitive plant communities and special-status plants and wildlife that may exist within a 3-mile radius of the Project site. A CNDDB search was performed assessing a 3-mile radius around the Project site. CNDDB records are generally used as a starting point when determining what special-status species, if any, may occur in a particular area. However, these records may be old, or lack data not yet entered, and do not represent all of the special-status species that could be in that particular area.
- 2007 map of USFWS critical habitat. This map was reviewed to determine species with critical habitat mapped in the general vicinity of the Project site.
- Online California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2016). A search was conducted to determine the distribution and habitats of special-status vascular plants in the vicinity of the Project site.
- Biological Survey of the West Coyote Hills, La Habra Sphere of Influence (Hanes and Weintraub 1989). This biological survey identifies the historical flora and fauna composition within the Project site prior to the development of the golf course and the adjacent residences.
- La Habra Hills Specific Plan Final Environmental Impact Report (1992 Final EIR) (Environmental Perspectives 1992). This 1992 Final EIR identified the impacts and mitigation measures associated with the development of the golf course and adjacent residences (Westridge community), including the loss of coastal sage scrub (CSS), mitigation for impacts to the coastal California gnatcatcher (CAGN), and coordination with the resource agencies (i.e., CDFW, USACE, USFWS, and RWQCB).
- Other pertinent maps, scientific literature, websites, and regional flora and fauna field guides.
- La Habra Hills Specific Plan Final Environmental Impact Report (Environmental Perspectives 1992 FEIR)

- Results of Protocol Coastal California Gnatcatcher Surveys for the Westridge Golf Club (Glenn Lukos Associates [GLA] 2013).
- Habitat Assessment and Focused Surveys for Special-Status Plants, Westridge Golf Club (GLA 2018a).
- Jurisdictional Determination/Delineation for Westridge Golf Club (GLA 2018b).
- Mapping of Vegetation Alliances at Westridge Golf Club (GLA 2018c).
- Results of Focused Surveys for Special-Status Bats at the Westridge Golf Course (GLA 2018d).
- Results of Protocol Least Bell's Vireo Surveys for the Westridge Golf Course (GLA 2018e).
- Results of Protocol Surveys for the Western Pond Turtle at the Westridge Golf Club (GLA 2018f).
- Coastal California Gnatcatcher Breeding Season Protocol Survey Report, Rancho La Habra Project (Kidd Biological, Inc. 2016).
- Preliminary Tree Inventory Survey (ValleyCrest Tree Care Services[2] 2015).

Field Survey Methods

A number of individual surveys on the Project site were completed. This section summarizes and describes the methods used to conduct field surveys within and immediately adjacent to the Project site.

Vegetation

On July 5, 2018, Glenn Lukos Associates (GLA) biologist April Nakagawa updated the vegetation communities to characterize the vegetation alliances in accordance with *A Manual of California Vegetation*, Second Edition (MCVII) (Sawyer et al. 2009). On July 27, 2018, GLA Senior Biologist Tony Bomkamp conducted a site review to finalize the proposed changes to the vegetation mapping. MCVII provides a more accurate characterization of the vegetation alliances. Assigned areas to the proper alliance were established in the MCVII but, in some cases, the habitat did not fit into an alliance; therefore, judgment on the best fit was made. Deviations for the Wetlands and Open Water community type were made because the vegetation did not conform to the MCVII alliance descriptions. All plant species encountered in the field were identified using plant field and taxonomical guides such as *The Jepson Manual: Vascular Plants of California*, Second Edition (Baldwin et al. 2012) and then recorded. As set forth in GLA's August 21, 2018 Technical Memorandum (Habitat Assessment and Focused Surveys for Special-Status Plants, Westridge Golf Club for Rancho La Habra Project, La Habra, California; GLA 2018a), focused botanical surveys were conducted on May 16 and July 27, 2019. The surveys included an assessment for habitat suitability based on personal knowledge

[2] Currently known as BrightView.

LSA

LEGEND

- Project Boundary
- Study Area
- Grading Footprint
- Deed Restriction Boundaries
- Wildlife Movement Interface

Vegetation Alliances

- Arroyo Willow Forest Alliance[1]
- Black Sage Shrubland Alliance[2]
- Brittlebush Scrub Shrubland Alliance[2]
- California Buckwheat Shrubland Alliance[2]
- California Bulrush Marsh Alliance
- California Sagebrush Shrubland Alliance[2]
- Coyote Brush Scrub Shrubland Alliance[2]
- Fremont Cottonwood Forest Alliance[1]
- Mixed Riparian Scrub Shrubland Alliance[1]
- Mixed Scrub Shrubland Alliance[2]
- Mulefat Thicket Shrubland Alliance
- Southern Cattail Marsh Alliance

Other

- Ornamental
- Open Water
- Golf Course
- Native Landscaping
- Developed

[1]Least Bell's Vireo Habitat
[2]Coastal California Gnatcatcher Habitat

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SOURCE: Bing (2014); Glenn Lukos Associates (8/2019)

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FIGURE 3.5-2

Rancho La Habra

Existing Vegetation Alliances

and information obtained from available literature and database reviews, including the results from previous focused botanical surveys, the CNDDB, USFWS critical habitat, and the CNPS Inventory of Rare and Endangered Plants of California. The detailed methodology is provided in the GLA Technical Memorandum.

Tree Inventory

A preliminary tree inventory was conducted by ValleyCrest Tree Care Services on November 19, 2014, to establish a baseline condition of the type and health of tree species on the Project site.[3] A qualified arborist surveyed the Project site on foot by walking methodically across the property. Any inaccessible or restricted areas were surveyed using binoculars. The trees were evaluated for health and structural condition of the trunk and canopy. The trunk diameter was measured using diameter tape, and multi-trunk trees were measured at the base for simplicity. Trunk diameter was otherwise measured at a point 24 inches above ground level.

Jurisdictional Delineation

On July 27 and September 6, 2018, GLA Senior Biologist and Regulatory Specialist Tony Bomkamp examined the Project site to determine the limits of (1) USACE jurisdiction pursuant to Section 404 of the Clean Water Act; (2) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code; and (3) RWQCB jurisdiction pursuant to the Waste Discharge Requirements of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The delineation was conducted based on the 2015 definition of the "Waters of the United States" Rule and is provided in Partially Recirculated Draft EIR Appendix F.

Wildlife Surveys

General wildlife surveys were conducted on foot and with binoculars within the Project site on November 5, 2014, by VCS Environmental biologists Wade Caffrey and Shawn Gatchel-Hernandez. The purpose of the general survey was to note those species observed, ascertain general site conditions, and identify habitat areas that could be suitable for special-status wildlife species.

Bats

Surveys were conducted in all areas of potentially suitable habitat to determine whether any trees on the Project site were potential roost sites. Focused surveys were conducted by GLA biologist Jeff Ahrens on July 10, 2018; GLA biologists Stephanie Cashin and April Nakagawa on July 23 and July 30, 2018; and Mr. Ahrens and Ms. Cashin on August 29, 2018. All surveys were conducted beginning at least 30 minutes before dusk and extended for approximately 2 hours after full darkness. Potential roost trees were surveyed visually and with the aid of the Seek

[3] Subsequent to the November 19, 2014 tree survey, a number of on-site trees have died. The 2014 tree survey is nevertheless used in this document as the baseline condition in order to present a worst-case analysis of impacts related to on-site tree removal.

Thermal Pro during darkness to look for emerging bats. Acoustic surveys continued for approximately 2 hours after dark. Equipment included (1) Wildlife Acoustics Echometer Touch 2 Pro bat detectors used to record bat echolocation calls, (2) a Seek Compact Pro thermal imager attached to an iPhone to assist in detecting emerging bats from existing roosts, and (3) Sonobat 4.2.2 bat analysis software to process acoustic files.

Coastal California Gnatcatcher

Three separate protocol CAGN surveys were conducted for the Project site: by GLA in 2013, by Cadre Environmental in the fall of 2014, and by Kidd Biological, Inc. in the spring of 2016.

Prior to conducting the surveys, the biologists reviewed available and relevant data on biological characteristics, sensitive habitats, and species potentially present on or adjacent to the Project site. Additionally, aerial photography, a United States Geological Survey (USGS) topographic map, and digital orthorectified color aerial photographs were examined.

GLA biologists conducted protocol CAGN presence/absence surveys in 2013 in accordance with the USFWS survey guidelines (1997). Any incidental observations of CAGN were also recorded during non-focused surveys.

Ruben Ramirez (USFWS Permit 780566-12) of Cadre Environmental conducted protocol CAGN presence/absence surveys in accordance with the guidelines (USFWS 1997). Surveys that began on October 15, 2014, including surveys conducted on October 29 and November 6 and 12, 2014, generally followed the non-breeding season USFWS protocol guidelines.

The biologist slowly traversed the biological survey area, stopping at approximately 100-foot intervals to listen for CAGN. If no CAGN were detected within 5 to 10 minutes, the biologist made "pishing" sounds and played an audio recording of CAGN vocalizations. The recording was played for several seconds at each interval, followed by a brief pause to listen for a response. If any CAGN individuals were detected, additional observations including sex, age, breeding status, and behavioral characteristics were documented, consistent with protocol requirements.

An additional seasonal survey for CAGN was conducted by Kelly Rios (Permit Number TE-018909-4) of Kidd Biological, Inc. Surveys were conducted during the breeding season and consisted of six surveys performed at least 1 week apart between April 6 and May 12, 2016, generally between 7:30 a.m. and 12:00 p.m.

Least Bell's Vireo

Focused protocol surveys for the least Bell's vireo (*Vireo bellii pusillus*) were conducted by GLA biologists Tony Bomkamp, Jeff Ahrens, and April Nakagawa. Surveys were conducted

according to the 2001 survey guidelines issued by the USFWS.[4] These guidelines stipulate that a minimum of eight visits be conducted within areas of suitable habitat, with at least 10 days between each site visit.

Protocol surveys were conducted on May 16 and 26, June 5, 15, and 25, and July 5, 16, and 26, 2018, with an added visit on July 27, 2018. All surveys were conducted between dawn and 11:00 a.m. in accordance with USFWS guidelines. All suitable areas were covered on foot by walking slowly and methodically through the riparian habitat areas. The presence or absence of least Bell's vireo was determined by identifying all birds by sight and call, aided by the use of binoculars. No taped vocalizations were used to elicit a response from least Bell's vireo or any other species potentially present.

Western Pond Turtle

Focused protocol surveys for the western pond turtle were conducted by GLA biologists Tony Bomkamp, Jeff Ahrens, and April Nakagawa on June 5, 15, and 25, and July 5, 2018. Protocol surveys were conducted in accordance with the USGS Western Pond Turtle (*Emys marmorata*) Visual Survey Protocol for the Southcoast Ecoregion (2006). Surveys were performed during the time of greatest western pond turtle activity, typically during the breeding season (May through July). All suitable areas were first surveyed from afar for the presence of basking or underwater western pond turtles using binoculars. Then target areas were approached slowly and quietly on foot while listening for any splash of water that might indicate the presence of unseen turtles. The water was also visually surveyed with binoculars for the presence of swimming turtle, streamside refugia, and banks for the presence of basking turtles.

b. Golf Course and Related Activities on and Near Project Site

The Rancho La Habra Specific Plan area is comprised of an 18-hole golf course known as the Westridge Golf Club. The Westridge Golf Club is a privately owned facility open to the public. It includes a lighted driving range that is open until 10:00 p.m., access roads, parking areas, a clubhouse/meeting facility with pro shop, bar and grill, and outdoor patio seating areas. The golf course includes grassy fairways and cart paths punctuated by groupings of landscape trees, three golf course ponds, and natural habitats created during golf course construction, and is surrounded by a perimeter of planted ornamental landscaped areas and slopes.

The golf course is open 7 days a week. Activity begins at or before 6:00 a.m., when the clubhouse opens, and continues until 10:00 p.m., when the driving range closes. Golfing activity includes individual and group use of the driving range, the 18-hole course, and the cart paths, and the occasional individual foray into natural habitats to seek golf balls. The existing conditions within the Project site include ongoing maintenance of greens and landscaping,

[4] USFWS guidelines for least Bell's vireo surveys recommend surveys of up to 50 hectares (approximately 120 acres) and no more than 3 linear kilometers (approximately 1.8 miles) per day, depending on site conditions (e.g., density and width of vegetation).

traffic and noise associated with regular golf course use and events, which attract large groups, and lighting and music at the driving range and clubhouse until approximately 10:00 p.m.

The Project site is nearly entirely surrounded by urban uses. Shopping centers and commercial development, parking lots, roads, and residential development nearly enclose the site and effectively isolate it from undeveloped lands in the vicinity, except for the undeveloped lands to the south in the West Coyote Hills. A 500-foot wide area in the southwestern corner of the Specific Plan area comprises the only existing functional interface between on-site natural habitats and the undeveloped lands supporting similar habitat to the south in the West Coyote Hills (see **Figure 3.5-2**). This interface is bisected by a gate-guarded paved street (West Nicklaus Avenue), open split-rail fencing, and ornamental landscaping that limit large animal movement between the West Coyote Hills and the existing golf course.

c. Vegetation on and Near the Project Site

Vegetation Cover/Habitat Assessment

A total of 17.66 acres of existing MCVII vegetation alliances mapped by GLA (2018c) are shown in **Figure 3.5-2** and listed in **Table 3.5-1**. The amount of area in each habitat type and corresponding vegetation alliance were aligned to their best match. During the field surveys, all plant species observed were recorded and compiled into a compendium that is provided in **Exhibit 3.5-A** at the end of this section. A description of each vegetation alliance is provided below. The remaining portions of the approximately 150.80-acre site consist of other features, primarily golf course turf and ornamental trees, as well as asphalt streets and parking area, concrete golf cart paths, sidewalks, and a golf course clubhouse.

Each of the vegetation alliances within the Project site is situated within an existing golf course that accommodates daily foot traffic and human disturbance, including noise and lighting associated with the existing driving range. As such, existing vegetation alliances within the site provide limited habitat function in comparison with more natural occurrences of these vegetation types when they occur within larger regional contexts. The vegetation alliances areas are distributed within the golf course as fragmented, small patches with a large ratio of "edge" to area of habitat. The most important function of the various vegetation alliances present in the Project site is provision of suitable habitat for the CAGN. The CAGN habitat occurs most commonly within the western portion of the golf course, where the areas of CSS are most expansive and are in proximity to existing CSS habitat on the West Coyote Hills property.

Table 3.5-1
Existing MCVII Vegetation Alliances on Project Site (acres)

MCVII Vegetation Alliances	Deed-Restricted	Non-Deed-Restricted	Total
Coastal Sage Scrub			
Black Sage Scrub Shrubland Alliance	1.34	0.06	1.40
California Brittlebush Scrub Shrubland Alliance	-	2.84	2.84
California Buckwheat Scrub Shrubland Alliance	-	0.40	0.40
California Sagebrush Shrubland Alliance	1.12	0.50	1.62
Coyote Brush Scrub Shrubland Alliance	1.02	1.30	2.32
Mixed Scrub Shrubland Alliance	2.18	0.84	3.02
Coastal Sage Scrub Subtotal	*5.66*	*5.94*	*11.60*
Riparian Woodland			
Arroyo Willow Forest Alliance	0.12	0.09	0.21
Fremont Cottonwood Forest Alliance	1.91	0.71	2.62
Riparian Woodland Subtotal	*2.03*	*0.80*	*2.83*
Riparian Scrub			
Mixed Riparian Scrub Shrubland Alliance	0.56	0.95	1.51
Mulefat Thicket Shrubland Alliance	0.17	0.02	0.19
Riparian Scrub Subtotal	*0.73*	*0.97*	*1.70*
Emergent Wetland			
California Bulrush Marsh Herbaceous Alliance	0.03	0.30	0.33
Southern Cattail Marsh Alliance	0.06	-	0.06
Open Water	1.15	-	1.15
Emergent Wetland Subtotal	*1.24*	*0.30*	*1.54*
Vegetation Alliance Subtotal	***9.66***	***8.02***	***17.66***
Other			
Developed	0.09	10.52	10.61
Golf Course	0.36	75.60	75.96
Native Landscaping		1.32	1.32
Non-Jurisdictional Golf Course Water		1.10	1.10
Ornamental	0.87	43.27	44.14
Other Subtotal	***1.32***	***131.81***	***133.13***
Project Site Total	**10.98**	**139.82**	**150.80**

Notes:
MCVII = Manual of California Vegetation, Second Edition
Numbers may not add due to rounding
Source: GLA 2018c.

California Sagebrush Scrub Shrubland Alliance (*Artemisia californica*) areas that accounted for 1.62 acres occur in the western and central portions of the golf course (GLA 2018c). Species planted as part of the golf course landscaping, a portion of which was planted as habitat mitigation restoration for the La Habra Hills Specific Plan, includes other species that have colonized these areas. Based on the Relevé cover data collection method (Minn DNR 2013), California sagebrush accounts for greater than 50 percent cover with other CSS species present, including coyote brush, California brittlebush, California buckwheat, giant wild rye (*Elymus condensatus*), black sage, lemonade berry, and laurel sumac. Nonnative species include summer mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), hottentot fig (*Carpobrotus edulis*), horehound (*Marrubium vulgare*), and Bermuda grass (*Cynodon dactylon*). Membership rules for the California sagebrush series are provided in the MCVII (p. 386):

> Artemisia californica >*60% relative cover in the shrub canopy;* Artemisia californica >*3 times cover of* Baccharis pilularis *and other shrub species;* Artemisia californica >*60% relative cover in the shrub canopy, or* Malosma laurina *or* Diplacus aurantiacus *sometimes* >*30% relative cover. The Rarity Ranking for the California sagebrush series is GS S5.*

California Brittlebush Scrub Shrubland Alliance (*Encelia californica*) areas account for 2.84 acres, which occur at the western end of the golf course and consist of species planted as part of the previous golf course landscaping as well as additional species that have colonized. California brittlebush is dominant in these areas, accounting for greater than 50 percent cover. Other species include California sagebrush, coyote brush, giant wild rye, black sage, lemonade berry, and laurel sumac. Non-native species include summer mustard, Australian saltbush (*Atriplex semibaccata*), horehound, and Bermuda grass, all of which occur in very low percentages (e.g., 1 to 3 percent). Membership rules for the California brittlebush series are provided as follows in the MCVII (p. 498):

> Encelia californica *at least 30% relative cover in the shrub canopy. The Rarity Ranking for the California encelia series is G4 S3.*

California Buckwheat Scrub Shrubland Alliance (*Eriogonum fasciculatum*) areas account for 0.40 acre, occur near the eastern end of the golf course, and consist of species planted as part of the golf course landscaping as well as additional species that have colonized. California buckwheat is dominant in this area, covering approximately 30 percent, along with other CSS species, including California sagebrush, giant wild rye, coyote brush, mulefat, and lemonade berry. Membership rules for California buckwheat scrub are provided as follows in the MCVII (p. 528):

> Eriogonum fasciculatum >*5% absolute cover in the shrub canopy;* Eriogonum fasciculatum >*2% absolute cover in the shrub canopy or* >*50% relative cover in the shrub canopy; other shrubs if present,* < *half its cover...;* Eriogonum fasciculatum >*50% relative cover in the shrub canopy other shrubs if present,* <*50% relative cover except in some cases* Rhus ovata. *The first of*

> *the three rules is consistent with the buckwheat scrub on the site. Rarity Ranking for the buckwheat series is GS S5.*

Mixed Riparian Scrub Shrubland Alliance accounts for 1.51 acres and consists of species planted as part of the previous habitat restoration mitigation for the La Habra Hills Specific Plan. Species that have colonized the area do not specifically match any alliance within the MCVII but include riparian scrub and woodland dominated by CSS species including coyote brush, California buckwheat, California sagebrush, black sage, toyon, lemonade berry, laurel sumac, and sugar bush. The mixed riparian scrub immediately north of the golf course ponds includes riparian and/or woodland components such as mulefat, coast live oak (*Quercus agrifolia*), arroyo willow, Gooddingii's black willow (*Salix gooddingii*), and sandbar willow (*Salix exigua*). Because the predominance of the vegetation consists of upland species, the most accurate description of this area is "mixed scrub with woodland components." Because of the species planted as part of the restoration efforts, other areas include an even mix of a number of species. Finally, near the southwest area of the golf course is an area of mixed scrub that includes four-winged saltbush (*Atriplex canescens*), which comprises up to 30 percent cover. There are no rarity rankings for these areas, and they would not be considered "sensitive" based on Rarity Rankings because they do not meet Rarity Rankings of S1, S2 or S3. Where such areas support CAGN, they would be considered sensitive.

Black Sage Scrub Shrubland Alliance (*Salvia mellifera*) areas account for 1.40 acres, occur in the eastern portion of the golf course, and consist of species planted as part of the previous habitat mitigation restoration for the La Habra Hills Specific Plan as well as species that have colonized these areas. Black sage scrub accounts for greater than 60 percent cover with limited amounts of California buckwheat, California sagebrush, giant wild rye, lemonade berry, and laurel sumac. Non-natives include summer mustard, black mustard, and non-native annual grasses, including bromes and oats. Membership rules for black sage scrub are provided as follows in the MCVll (p. 706):

> Salvia mellifera *>60% relative cover in the shrub canopy;* Salvia mellifera *usually >60% or combined with a coastal shrub species >30% relative cover in the shrub canopy. The Rarity Ranking for the Black sage series is G4 S4.*

Coyote Brush Scrub (CBS) Shrubland Alliance (*Baccharis pilularis*) areas account for 2.32 acres, occur at the western end of the golf course, and consist of species planted as part of the previous habitat mitigation restoration for the La Habra Hills Specific Plan as well as species that have colonized the area. Based on Relevé cover data, coyote brush is the most common species in these areas, accounting for approximately 30 percent of the cover with other CSS species, including California brittlebush, California buckwheat, California sagebrush, giant wild rye, black sage, lemonade berry, and laurel sumac. Non-native species include summer mustard, Australian saltbush, hottentot fig, horehound, and Bermuda grass, all of which occur in very low percentages (e.g., 1 to 3 percent). Membership rules for the coyote brush series are provided as follows in the MCVII (p. 421):

> Baccharis pilularis >*50% absolute cover in the shrub layer;* Baccharis pilularis >*15% cover over grassy understory;* Baccharis pilularis *relative cover* >*50% than other shrub species. The last of the three rules is consistent with the scrub on the site. Rarity Ranking for the coyote brush series is G5 S5.*

Fremont Cottonwood Forest Alliance (*Populus fremontii*) covers 2.62 acres. Portions of this area were planted as part of the mitigation associated with golf course construction as part of the La Habra Hills Specific Plan. For purposes of this evaluation, areas of Forest Alliance are divided geographically and include "Central Forest Alliance," and "Eastern Forest Alliance." Areas mapped as "Forest Alliance" have declined due to the drought, with the surviving woodlands located in areas immediately adjacent to the golf course where they receive sufficient water from golf course irrigation.

The Central Forest Alliance occurs in two areas: the central drainage flanked by golf course holes 8 and 9 and limited patches around the golf course ponds. The Central Forest Alliance between golf holes 8 and 9 corresponds most closely with Fremont Cottonwood Forest Alliance. This area supports canopy trees that include Fremont cottonwood (20 percent), western sycamore, black willow, arroyo willow, and Brazilian pepper, with mulefat and mugwort in the understory. The areas of Eastern Forest Alliance correspond most closely with Fremont Cottonwood Forest Alliance. This area supports scattered canopy trees that include Fremont cottonwood, western sycamore, black willow, arroyo willow, Peruvian pepper, and Brazilian pepper. The membership rules for the Fremont cottonwood series are provided as follows in the MCVII (p. 215):

> Populus fremontii >*50% relative cover in the tree layer; Populus fremontii* >*5% absolute cover in the tree layer;* Populus fremontii >*50% relative cover in the tree layer, though sometimes* P. fremontii >*30% relative cover with* Salix *species being co-dominant. The Rarity Ranking for the Fremont cottonwood series is G4 S3.2.*

Arroyo Willow Forest Alliance (*Salix lasiolepis*), accounts for 0.21 acre, portions of which were also planted as part of the mitigation associated with the La Habra Hills Specific Plan. The Central Forest Alliance between the golf course ponds corresponds most closely with the Arroyo Willow Forest Alliance. This area supports canopy trees that include arroyo willow accounting for over 50 percent, Gooddingii's black willow, and western sycamore, with an understory of mulefat. The membership rules for arroyo willow thickets are provided as follows in the MCVII (p. 687):

> Salix lasiolepis >*50% relative cover in the shrub or tree canopy;* Salix lasiolepis >*25% absolute cover in the shrub or tree canopy. The arroyo willow thickets are consistent with both rules. The arroyo willow series has a Rarity Ranking of G4 S4.*

Mulefat Thicket Shrubland Alliance (*Baccharis salicifolia*) account for 0.19 acre as depicted in **Figure 3.5-2**, with locations in the central and eastern portions of the site. The membership rules for mulefat thickets are provided as follows in the MCVII (p. 425):

> Baccharis salicifolia >*50% relative cover in shrub canopy. Mulefat thickets have a Rarity Ranking of GS S4.*

California Bulrush Marsh Herbaceous Alliance (*Schoenoplectus californicus*) accounts for 0.33 acre. Areas on the site are equally dominated by California bulrush (*Schoenoplectus californicus*) and southern cattail (*Typha domingensis*), which occur in pure stands as well as mixed stands. The membership rules for the California bulrush series are provided as follows in the MCVII (p. 1055):

> Schoenoplectus californicus ≥*10% absolute cover in the herbaceous layer;* S. acutus*, if present,* < *50% relative cover. The California bulrush series has a Rarity Ranking of GS S4?*[5]

The California Bulrush Marsh Herbaceous Alliance associated with the golf course ponds in the northwest portion of the site is not regulated by the USACE pursuant to Section 404 of the Clean Water Act or by the CDFW pursuant to Section 1602 of the Fish and Game Code. Also as noted, the California bulrush marsh series and southern cattail marsh series have State Rarity Rankings of S4?, respectively, and are not considered "special-status" vegetation alliances. Impacts on this feature would not be considered significant.

Southern Cattail Marsh Alliance (***Typha domingensis***) covers 0.06 acre. Areas on the site are equally dominated by California bulrush (*Schoenoplectus californicus*) and southern cattail (*Typha domingensis*), which occur in pure stands as well as mixed stands. The Southern Cattail Marsh Alliance associated with the golf course ponds is not regulated by the USACE pursuant to Section 404 of the Clean Water Act or the CDFW pursuant to Section 1602 of the Fish and Game Code and impacts on this feature would not be considered significant. Also noted, the California bulrush marsh series and southern cattail marsh series have State Rarity Rankings of S5, respectively, and are not considered "special-status" vegetation alliances. The membership rules for the southern cattail marsh series are provided as follows in the MCVII (p. 1067):

> Typha domingensis >*50% relative cover in the herbaceous layer; one or more cattail species may be present. The Southern Cattail series has a Rarity Ranking of G5 S5.*

Open water is unvegetated; however, much of this habitat type is adjacent to cattails that form the wetland habitat type. The open water is completely dependent on potable water from the golf course and is not self-sustaining. The golf course ponds are lined and were created as part of the golf course development.

The open water does not correspond to any alliance within the MCVII and has no Rarity Ranking. For purposes of this analysis, the Golf Course Storage Pond in the northwest portion of the site is not considered a "special-status" vegetation alliance, nor is it regulated by the USACE pursuant to Section 404 of the Clean Water Act or the CDFW pursuant to Section 1602 of the Fish and Game Code.

[5] The "?" included in the Rarity Rankings is included in the MCVII and indicates that the current ranking is provisionally based on existing data.

Other includes those developed land cover types that are not covered by the Rarity Rankings, including Ornamental, Golf Course, and Developed. There are no alliances associated with Ornamental, Golf Course, and Developed; therefore, they were not mapped by GLA (2018c).

Tree Inventory

A preliminary tree inventory survey conducted by ValleyCrest Tree Care Services on January 5, 2015 identified a total of 1,278 trees on the Project site. These findings are shown in **Figure 3.5-3** and summarized in **Table 3.5-2**. The full list of trees that includes species, diameter, condition, and structure can be found in **Exhibit 3.5-B** at the end of this section.

Special-Status Vegetation Types

A CNDDB search for the La Habra USGS topographic quadrangle and the surrounding eight quadrangles found seven special-status vegetation communities designated by the CDFW within the Project site vicinity: (1) California Walnut Woodland, (2) Riversidian Alluvial Fan Sage Scrub, (3) Southern California Arroyo Chub/Santa Ana Sucker Stream, (4) Southern Coast Live Oak Riparian Forest, (5) Southern Cottonwood Willow Riparian Forest, (6) Southern Willow Scrub, and (7) Walnut Forest. The Project site does not contain any of these special-status vegetation types identified by the CNDDB (CDFW 2016g).

LSA

FIGURE 3.5-3

Rancho La Habra
Tree Inventory

SOURCE: Valleycrest (2015)

I:\LEN1802\G\Overview Map.cdr (9/27/2018)

Table 3.5-2
Summary of Project Site Tree Inventory

Scientific Name	Common Name	Number of Trees
Acacia sp.	acacia	7
Alnus rhombifolia	alder	34
Arbutus unedo	strawberry tree	1
Archontophoenix cunninghamiana	king palm	2
Callistemon citrinus	bottle brush	14
Cinnamomum camphora	camphor	4
Cupaniopsis anacardioides	carrotwood	21
Erythrina sp.	coral	16
Eucalyptus sideroxylon	eucalyptus red ironbark	25
Eucalyptus sp.	eucalyptus	18
Ficus carica	fig	1
Ficus sp.	ficus	10
Jacaranda mimosifolia	jacaranda	11
Ligustrum sp.	privet	1
Liquidambar styraciflua	liquidambar	1
Malosma laurina	laurel sumac	2
Melaleuca sp.	melaleuca	6
Morus alba	mulberry	1
Myoporum laetum	myoporum	15
Olea europaea	olive	17
Pinus canariensis	Canary Island pine	119
Pinus eldarica	Afghan pine	130
Pinus halepensis	Aleppo pine	199
Pinus sp.	pine	150
Platanus racemosa	California sycamore	23
Populus alba	poplar	34
Pyrus calleryana	Bradford pear	15
Quercus sp.	oak	2
Rhus lancea	African sumac	2
Salix lasiolepis	willow	108
Schinus molle	California pepper	212
Schinus terebinthifolius	Brazilian pepper	3
Syagrus romanzoffiana	queen palm	54
Tipuana sp.	tipuana	4
Ulmus parvifolia	Chinese elm	1
Washingtonia robusta	Mexican fan palm	15
	Total	**1,278**

Source: ValleyCrest Tree Care Services 2015.

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
Abronia villosa var. *aurita*	chaparral sand-verbena	CRPR: 1B.1	Occurs in sandy areas such as sand dunes as well as open areas with sandy soils in CSS and chaparral. Known from 75 to 1,600 meters (245 to 5,300 feet) above mean sea level (MSL).	The substrate on the site is generally not suitable for this species; however, there are some sandy openings within areas of CSS. Notably, there are no records of this species from the vicinity of the site, with the nearest records from Yorba Linda and Anaheim; however, all of these were recorded between 1903 and 1935 and have been extirpated. The nearest Los Angeles County occurrence is from the desert. Given the lack of detection, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site. **The species was not observed during surveys.**
Androsace elongate ssp. *acuta*	California androsace	CRPR: 4.2	Known from 150 to 1,200 meters (490 to 3,900 feet) MSL.	No potential for occurring on the site.
Asplenium vespertinum	Western spleenwort	CRPR: 4.2	Known from 180 to 1,000 meters (590 to 3,300 feet) MSL.	No potential for occurring on the site.
Atriplex parishii	Parish's brittlescale	CRPR: 1B.1	Annual herb known to occur in alkaline meadows, vernal pools, chenopod scrub, and drying alkaline flats with fine soils. Known from 25 to 1,900 meters (80 to 6,200 feet) MSL. Identifiable June through October.	No potential for occurring on the site.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	CRPR: 1B.2	Alkaline soils in coastal bluff scrub and coastal scrub. Known from 10 to 200 meters (30 to 700 feet) MSL. Identifiable April through October.	No potential for occurring on the site.
Berberis nevinii	Nevin's barberry	FE, SE CRPR: 1B.1	A large distinctive shrub that typically occurs on rocky slopes and in alluvial scrub associated with large washes in chaparral, cismontane woodland, coastal scrub, and riparian scrub with gravelly substrates from 275 to 825 meters (900 to 2,700 feet) MSL. Known to occur in Los Angeles, San Bernardino, Riverside, and San Diego counties. Blooms from March through June.	The substrate on the site is not suitable for this species. Also, there are no records of this species from the vicinity of the site and no records from Orange County. The nearest record is from Whittier Narrows, approximately 10 miles to the northwest. Given the lack of detection, lack of suitable habitat, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site. **The species was not observed during surveys.**

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
Californica macrophyllum	Round-leaved filaree	CRPR: 1B. 1	Clay soils supporting cismontane woodland and valley and foothill grassland. Known from 15 to 1,200 meters (50 to 3,900 feet) MSL. Active March through May.	No potential for occurring on the site.
Calochortus catalinae	Catalina mariposa lily	CRPR: 4.2	Known from 15 to 700 meters (50 to 2,300 feet) MSL.	No potential for occurring on the site.
Calochortus plummerae	Plummer's mariposa lily	CRPR: 4.2	A distinctive and easily recognized lily that occurs in CSS and chaparral, typically on ridgelines and dry slopes. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Known from 100 to 1,700 meters (330 to 5,600 feet) MSL. Blooms May through July.	There are no historic records from the vicinity of the site and the nearest extant populations in Orange County occur in the southern end of the Santa Ana Mountains, approximately 13 miles to the east, and in Los Angeles County in areas within the San Gabriel Mountain foothills around Glendora and San Dimas, approximately 16 miles to the north. In both instances, the site is separated from the extant occurrences by essentially unbroken urban development. Given the lack of detection, lack of suitable habitat, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site. **This distinctive species was not observed during surveys.**
Calochortus weedii var. *intermedius*	Intermediate mariposa lily	CRPR: 1B.2	Chaparral, coastal scrub, and valley and foothill grassland. Known from 180 to 855 meters (590 to 2,800 feet) MSL. Identifiable June through July.	No potential for occurring on the site.
Calystegia felix	Intermediate mariposa lily	CRPR: 3.1	A morning glory that is typically associated with seeps, wet meadows, and wet areas within riparian habitat. Known from 30 to 215 meters (100 to 700 feet) MSL.	The emergent wetlands exhibit conditions that could support this species; however, there are no records from Orange County, and the nearest records in Los Angeles County have been extirpated. The nearest extant locations occur in the Chino area, approximately 17 miles to the east. Given the lack of detection during surveys, history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site.
Camissoniopsis lewisii	Lewis' evening-primrose	CRPR: 3	Known from below 300 meters (< 990 feet) MSL.	No potential for occurring on the site.

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
Centromadia parryi ssp. *australis*	southern tarplant	CRPR: 1B.1	Known from below 480 meters (< 1,600 feet) MSL.	No potential for occurring on the site.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's beak	FE, SE CRPR: 1B.2	Known from below 30 meters (< 100 feet) MSL.	No potential for occurring on the site.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	FC, SE CRPR: 1B.1	Known from 150 to 1,220 meters (490 to 4,000 feet) MSL.	No potential for occurring on the site.
Convolvulus simulans	small-flowered morning-glory	CRPR: 4.2	This small annual grows on friable clay soils that are typically devoid of shrubs, in openings in chaparral, sage scrub, and grasslands. Known from 30 to 700 meters (100 to 2,300 feet) MSL. Blooming period from March to July.	No potential for occurring on the site.
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	CRPR: 2B.2	A parasitic plant that grows on wetland emergent plants such as cattails and bulrush that occur on the edges of the golf course ponds. Known from 15 to 280 meters (50 to 920 feet) MSL.	The determination to include this species as having "low potential" was based on an historic reference in the CNDDB; however, the two nearest occurrences are from El Monte, near the corner of Garvey Avenue and Rosemead Boulevard, 12 miles to the northwest of the site in an area that has been developed for decades and is clearly extirpated. The other occurrence is from 1899 in the Colton area, is also within a developed area, and is extirpated. Given the lack of detection, history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site.
Deinandra paniculata	Paniculata tarplant	CRPR: 4.2	Found in coastal scrub and valley and foothill grasslands often in clay or clay loam soils or vernally moist situations, and frequently in disturbed sites. It is usually found in vernally mesic sites. Sometimes found in vernal pools or on mima mounds near them. Habitat is variously described as vernal pool margins, grasslands, open habitats such as roadsides and disturbed areas, and inland from the coast within its range on mesas and dry foothills. Known from 25 to 940 meters (80 to 3,100 feet) MSL. Blooming period from April to November.	No potential for occurring on the site.

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
Dudleya multicaulus	many-stemmed dudleya	CRPR: 1B.2	Chaparral, coastal scrub, and valley and foothill grassland. Often found on clay soils or granitic outcrops. Known from 15 to 790 meters (50 to 2,600 feet) MSL. Blooms May through July.	No potential for occurring on the site.
Eriastrum denifolium ssp. *sanctorum*	Santa Ana River woolly-star	FE, SE CRPR: 1B.1	Occurs in coastal scrub and chaparral in sandy soils on river floodplains or terraced fluvial deposits.	No potential for occurring on the site.
Horkelia cuneata ssp. *puberula*	mesa horkelia	CRPR: 1B.1	Occurs in sandy or gravelly soils in chaparral and coastal scrub. Known from 70 to 810 meters (230 to 2,700 feet) MSL. Identifiable February through September.	The substrate on the site is suitable for this species in some areas. Nevertheless, there are no records of this species from the Santa Ana Mountains, 13 miles to the east, and Santa Fe Dam Recreation Area in Duarte, 14 miles to the north. Given the lack of detection, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site. **The species was not observed during surveys.**
Juglans californica	Southern California black walnut	CRPR: 4.2	Occurs in chaparral, cismontane woodland, and coastal scrub from 50 to 900 meters (165 to 3,000 feet) MSL. Known to occur in Santa Barbara, Ventura, Los Angeles, Riverside, San Bernardino, Orange, and San Diego counties. Blooms from March through August, identifiable year-round.	No potential for occurring on the site.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	CRPR: 1B.1	A small annual wildflower that occurs in inland areas in clay soils within alkali sink scrub and in coastal areas on the fringes of coastal salt marsh. This species blooms early, typically in February and March.	There is no suitable habitat for this species on the site and no potential for occurrence.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	CRPR: 4.3	An annual typically associated with dry soils on chaparral and CSS often around rock outcrops. Widespread throughout Southern California foothills in dry, exposed locales. Known from below 885 meters (< 2,900 feet) MSL. Blooming period from January to July.	The substrate and habitat structure on the site are not suitable for this species. Also, there are no records of this species from the vicinity of the site, with the nearest records from the Santa Ana Mountains, 13 miles to the east, and the Santa Fe Dam Recreation Area in Duarte, 14 miles to the north. Given the lack of detection, lack of suitable habitat, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
				occur on the site. **The species was not observed during surveys.**
Navarretia prostrata	prostrate vernal pool navarretia	CRPR: 1B.1	Occurs in coastal scrub, meadows and seeps, alkaline valley and foothill grasslands, and vernal pools from below 1,210 meters (<4,000 feet) MSL. Known to occur from several counties in Southern California, including San Luis Obispo, Los Angeles, Orange, Riverside, and San Bernardino. Blooms from April through July.	No potential for occurring on the site.
Nemacaulis denudate var. *denudate*	Coast wooly heads	CRPR 1B.2	Coastal dunes.	No potential for occurring on the site.
Orcuttia californica	California Orcutt grass	FE, SE CRPR: 1B.1	Well-established vernal pools. Known from 15 to 660 meters (50 to 2,200 feet) MSL.	None. No suitable habitat occurs on the site.
Phacelia hubbyi	Hubby's phacelia	CRPR: 4.2	Known from below 1,000 meters (<3,300 feet) MSL.	No potential for occurring on the site.
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	CRPR: 3.2	Known from below 300 meters (<980 feet) MSL.	No potential for occurring on the site.
Phacelia stellaris	Brand's star phacelia	FC CRPR: 1B.1	Annual herb found within CSS in sandy openings on benches, dunes, washes, and floodplains. Known from below 400 meters (<1,300 feet) MSL. Blooms March through June.	The only Orange County occurrence is from 1932 and occurs within a developed area in the Los Alamitos area. The nearest occurrence in Los Angeles County is from 1923 and occurs near Interstate 105 (I-105) in a developed area. Other occurrences in Los Angeles County are near El Segundo and Los Angeles International Airport (LAX), well removed from the site. Given the lack of detection, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site.
Pseudognaphalium leucocephalum	White rabbit-tobacco	CRPR: 2B.2	An annual that is typically associated with areas of alluvial scrub within high-energy streams in riparian woodland, cismontane woodland, coastal scrub, and chaparral on micro habitat of sandy, gravelly soils.	The substrate and habitat structure on the site are not suitable for this species. Also, there are no records of this species from the vicinity of the site, with the nearest records from Orange County in San Juan Creek, 35 miles southeast of the site. The nearest Los Angeles records are from 1900 and 1905 in Pasadena in developed areas and in 1881 from Azusa in areas now

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
				developed. Given the lack of suitable habitat including hydrologic conditions, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site. **The species was not observed during surveys.**
Quercus engelmannii	Engelmann oak	CRPR: 4.2	Occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands from 50 to 1,300 meters (165 to 4,300 feet) MSL. Known to occur from Los Angeles, Orange, Riverside, and San Diego counties as well as on Catalina Island and in Baja California. Blooms from March through June. Identifiable year-round.	No potential for occurring on the site.
Ribes divaricatum var. parishii	Parish's gooseberry	CRPR: 1A	Known from 65 to 300 meters (210 to 980 feet) MSL.	No potential for occurring on the site.
Romneya coulteri	Coulter's matilija poppy	CRPR :4.2	Native to Southern California and Baja California, it grows in dry canyons in chaparral and coastal sage scrub plant communities, sometimes in areas recently burned. It is a popular ornamental plant, kept for its large, showy flowers. Known from 20 to 1,200 meters (65 to 3,900 feet) MSL.	No potential for occurring on the site.
Scutellaria bolanderi ssp. *austromontan*	Southern mountains skullcap	CRPR: 1B.2	Known from 425 to 2,000 meters (1,400 to 6,600 feet) MSL.	No potential for occurring on the site.
Senecio aphanactis	chaparral ragwort	CRPR: 2B.2	Found in dry washes and canyons in association with CSS and chaparral. This species is known to occur in disturbed areas, especially after fires. Known from 15 to 800 meters (50 to 2,600 feet) MSL. Identifiable year-round.	No potential for occurring on the site.
Sidalcea neomexicana	salt spring checkerbloom	CRPR: 2B.2	Alkaline seeps, springs, and marshes. Known from below 15 to 1,530 meters (50 to 5,000 feet) MSL. Blooms March through June.	No potential for occurring on the site.
Suaeda esteroa	estuary seablite	CRPR: 1B.2	Known from below 5 meters (< 15 feet) MSL.	No potential for occurring on the site.
Symphyotrichum defoliatum	San Bernardino aster	CRPR: 1B.2	A perennial that according to the Jepson Manual is associated with grasslands and disturbed areas. It occurs	There are no extant records in the vicinity of the site, with the nearest location from 1896 in a now-

Table 3.5-3
Special-Status Plants: Potential Occurrence on the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence on Project Site
			in vernally moist areas, ditches, seeps, and springs within a variety of plant communities. Known from below 2,040 meters (<6,700 feet) MSL. Blooms July through November.	developed area of Buena Park. Other occurrences in the Los Alamitos and Seal Beach areas are from 1932 and are presumably extirpated. Currently known locations are from the Los Pinos Potrero in the Santa Ana Mountains, Santa Rosa Plateau, and San Bernardino County. Given the lack of suitable habitat, the history of the site, and the lack of potential source populations within the vicinity, there is no potential for this species to occur on the site.

Notes:

Federal Endangered Species Act Listing Codes
Federal listing is pursuant to the federal Endangered Species Act of 1973, as amended. The official federal listing of endangered and threatened animals is published in the Federal Register, 50 CFR 17.11.
FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.
FC = federal candidate for listing.
FPT = federally proposed threatened.

California Endangered Species Act Listing Codes
State listing is pursuant to Sections 2074.2 and 2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of endangered, threatened and rare species of plants and animals. The official California listing of endangered and threatened animals is contained in the California Code of Regulations, Title 14, and Section 670.5.
SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.
ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.
SCT = state candidate for listing as threatened.

California Rare Plant Ranks (formerly known as CRPR Lists)
The CRPR is a state-wide, non-profit organization that maintains, with CDFW, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CRPR and CDFG (now known as the CDFW) officially changed the name "CRPR List" or "CRPR Ranks" to "California Rare Plant Rank" (or CRPR). This was done to reduce confusion over the fact that CRPR and CDFG jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CRPR assignment.
CRPR: 1B – California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
CRPR: 2 – California Rare Plant Rank 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere. All of the plants constituting California Rare Plant Rank 2 meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.
CRPR: 4 – California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List. Very few of the plants constituting California Rare Plant Rank 4 meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CRPR and CDFG strongly recommend that California Rare Plant Rank 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

California Native Plant Society (CRPR) Threat Ranks
The CRPR Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1 because they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California) plants, and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.
0.1 = seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = fairly endangered in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
Sources: Allen and Roberts 2013, Baldwin et al. 2012, Calflora 2016, CDFW 2005, CDFW 2016g, CDFW 2016i, CNPS 2016, GLA 2018a.

Special-Status Plants

The CNDDB search found occurrences of Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*, observed 1935) and many-stemmed dudleya (*Dudleya multicaulis*, observed 1927) within or adjacent to the Project site. In addition, four listed plant species occur within the USGS 7.5-minute *La Habra, California* quadrangle: Nevin's barberry (*Berberis nevinii*), salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and California Orcutt grass (*Orcuttia californica*).

Plant species with the potential to occur on the Project site were analyzed based on current information pertaining to species distribution, habitat requirements, existing site conditions, and direct observations during botanical surveys of the Project site. As shown in **Table 3.5-3**, all of the special-status plant species associated with the on-site vegetation alliances have a low probability of occurrence or are not expected.

Focused Survey Results

GLA Senior Biologist Tony Bomkamp conducted focused surveys during the blooming periods on May 16 and July 27, 2018. Areas of suitable habitat were surveyed on foot to ensure visual coverage. GLA's focused special-status plant surveys (GLA 2018a) were conducted during the blooming periods, and no special-status plants were found. The results of the surveys are described in **Table 3.5-3**. In addition, the 1992 La Habra Hills Specific Plan documents that prior to the development of the Westridge Golf Course in 2003, Dr. Ted Hanes, professor of botany and plant ecology at California State University Fullerton, conducted surveys of the site and did not detect any plants designated as special-status species at the time.

Coulter's goldfields (observed 1935), many-stemmed dudleya (observed 1927), Nevin's barberry, salt marsh bird's beak, San Fernando Valley spineflower, and California Orcutt grass were identified through the CNDDB as being observed within or adjacent to the Project site. However, these species were not observed during on-site surveys conducted in 1992 by Dr. Hanes or in 2018 by Tony Bomkamp.

d. Critical Habitat

The Project site is within CAGN Critical Habitat, Unit 9, and contains a total of 11.37 acres of designated critical habitat within the central and the southwest portions of the site, as shown in **Figure 3.5-4**. The designated critical habitat located within the central portion of the Project site contains no physical or biological features for CAGN (e.g., CSS/CBS), but rather consists of riparian woodland and created habitat communities. Of the total 11.37 acres of designated critical habitat found on the Project site, 1.28 acres of habitat with physical and biological features for CAGN include California Brittlebush Scrub Shrubland Alliance, Coyote Brush Scrub Shrubland Alliance, and Mixed Scrub Shrubland Alliance (see **Table 3.5-4**).

Table 3.5-4
Native Vegetation Alliances Within Designated Critical Habitat on the Project Site

Vegetation Alliances	Area (Acres)
Coastal Sage Scrub	–
California Brittlebush Scrub Shrubland Alliance	0.12
Coyote Brush Scrub Shrubland Alliance	0.94
Mixed Scrub Shrubland Alliance	0.22
Total Coastal Sage Scrub	**1.28**
Riparian Woodland and Scrub	–
Fremont Cottonwood Forest Alliance	0.12
Mulefat Scrub	–
Mulefat Thicket Shrubland Alliance	0.05
Total Riparian	**0.17**
Total Native Vegetation Alliances Within Critical Habitat	**1.45**

Source: Habitat Assessment and Focused Surveys for Special-Status Plants (GLA 2018a).

The southern region of the Specific Plan area is located within the USFWS-designated Critical Habitat for the CAGN, Unit 9: East LA County – Matrix, NCCP Subregion of Orange County. As stated by the USFWS (USFWS 2007):

> Unit 9 encompasses approximately 17,552 acres (7,103 hectares) the majority of which is under private ownership within the Montebello Hills, Puente-Chino Hills, and West Coyote Hills areas. Core populations are known from the Montebello Hills, south slopes of the Puente-Chino Hills from Whittier east to Yorba Linda, and the East and West Coyote Hills. The unit also provides the primary connectivity between significant coastal California gnatcatcher populations and sage scrub habitat within the Orange County Central-Coastal NCCP (Unit 6).

e. Wildlife on or Near Project Site

Special-Status Wildlife

The CNDDB contains a single record of coastal cactus wren (*Campylorhynchus brunneicapillus*, observed 1998) and bank swallow (*Riparia riparia*, observed 1894) within or adjacent to the Project site; however, these species were not observed on the Project site during biological surveys conducted in 2018.

Sensitive wildlife species include the following classifications: federally or state-listed as threatened or endangered species, California Species of Special Concern, and fully protected

LSA

LEGEND

- Project Boundary
- Study Area
- Grading Footprint
- Critical Habitat (9/2017)
- Coastal California Gnatcatcher

FIGURE 3.5-4

0 300 600
FEET

Rancho La Habra

Critical Habitat

SOURCE: Bing (2014); VCS Environmental (2015); Glenn Lukos Associates (8/2019)

I:\LEN1802\GIS\MXD\CriticalHabitat.mxd (8/27/2019)

and protected species (as designated by the CDFW). A species' potential to occur on the Project site was evaluated based on distribution, CNDDB occurrences, habitat requirements, and existing site conditions and direct observations in the field during 2018 surveys. Special-status wildlife species evaluated for potential occurrence within the Project site are listed in **Table 3.5-5**.

Focused Species Surveys

Coastal California Gnatcatcher

The 2014 general biological survey determined the possibility for one federally listed threatened species, the CAGN, to occur on the Project site, given the presence of CSS habitat suitable for CAGN occupation. Subsequent focused surveys conducted in 2014 and 2016 confirmed the presence of CAGN on the site. Biologically, CAGN occupation of the southwestern corner of the Project site is logical due to its proximity to adjacent habitat (see **Figure 3.5-5**). The southwestern portion of the Project site abuts West Nicklaus Avenue, which is the entry drive to the residential neighborhood south of the golf course. Just south of West Nicklaus Avenue is the current open area known as the West Coyote Hills, which is in private ownership. This 509-acre property is currently undeveloped, partially vegetated with CSS habitat, and presumably occupied by CAGN. The Project site contains a total of 11.60 acres of CSS, 6.91 acres of which are located within the Project's grading footprint and included within CAGN presence/ absence protocol surveys.

USFWS protocol surveys were performed in 2014 by Cadre Environmental and again in 2016 by Kidd Biological, Inc. A family group of CAGN was observed in the southwest portion of the Project site during both surveys.

Two pairs of CAGN and as many as two unpaired males were documented within the Project site during the spring of 2013 by GLA. The two pairs of CAGN were documented within the western region of the Project site, while the two unpaired males were recorded using suitable habitats within the eastern region.

In 2014, Cadre Environmental documented one family group within the western region of the Project site. Specifically, one female and four juvenile CAGN were consistently documented using the majority of CSS and CBS habitats documented in the western region of the Project site. No adult male CAGN were documented during the monitoring surveys. Also, no CAGN were documented within suitable habitats located within the eastern region of the Project site.

In 2016, Kidd Biological, Inc. documented the CAGN pair, and two juveniles were observed in the CSS of CAGN Pair Territory 1 (see **Figure 3.5-5**) during the first survey conducted on April 6, 2016. This territory is located in the southwest portion of the Project site. The juveniles in this family group of CAGN were only observed on the first survey day. During the subsequent five surveys, they were not observed and had dispersed. The pair of CAGN were observed foraging

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
Accipiter cooperii	Cooper's hawk	WL	The Cooper's hawk breeds primarily in riparian areas and oak woodlands and is most common in montane canyons. It frequents landscapes where wooded areas occur in patches and groves and often uses patchy woodlands and edges with snags for perching. Dense stands with moderate crown-depths are usually used for nesting. They hunt in broken woodland and habitat edges. Within the range in California, they most frequently use dense stands of live oak, riparian deciduous, or other forest habitats near water. They are also found and can breed in suburban and urban settings.	**Present.** Suitable habitat including non-native grassland, Diegan sage scrub, and chaparral exists on the site. **Observed during 2018 least Bell's vireo survey.**
Agelaius tricolor	tricolored blackbird	SE, SSC, BCC	Colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland.	**Low.** Suitable habitat exists, on-site open waters nearby; however, no open-range foraging habitat. **Not observed during field surveys.**
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	WL	They are found on grass-covered hillsides, coastal sage scrub, and chaparral, and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush. Optimal habitat consists of sparse, low brush or grass, hilly slopes preferably interspersed with boulders and outcrops. The species may occur on steep grassy slopes without shrubs if rock outcrops are present. It is a very secretive species.	**Moderate.** Suitable habitat, including coastal sage scrub and coyote brush scrub, exists on the site; however, the slopes generally do not have boulders and outcrops. **Not observed during field surveys.**
Ambystoma californiense	California tiger salamander	ST, FT, SSC	The California tiger salamander is most commonly found in annual grassland habitat, but also occurs in the grassy understory of valley-foothill hardwood habitats (oak savannahs), edges of mixed woodland and lower elevation coniferous forests, and uncommonly along stream courses in valley-foothill riparian habitats. Seasonal ponds or vernal pools are crucial to breeding. They also breed in slower parts of streams and in some permanent waters, primarily in grassland and woodland areas. Some pools may be alkaline. They usually breed in fish-free ephemeral ponds. They sometimes use permanent human-made ponds if predatory fishes are absent. They require refuges provided by ground squirrels and other burrowing mammals in which to	**None.** Suitable habitat does not exist on the site. **Not observed during field surveys.**

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			enter a dormant state called estivation during the dry months.	
Antrozous pallidus	pallid bat	SSC, FSS, BLMS, WBWG: Medium	Pallid bats occupy a wide variety of habitats, including deserts, grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. They are most common in deserts, preferring areas of open, dry habitats, with rocky outcropped areas for roosting and water nearby. Night roosts may be in more open sites such as porches and open buildings. Pallid bats day roosts in deep rock crevices, tree hollows, mines, caves, and a variety of man-made structures.	**Low to none.** Not expected to roost on the site. **Not detected roosting or foraging during focused surveys.**
Ardea herodias	great blue heron	FSS	Year-round resident hunts while wading in quiet waters. This species can be found in marshes, rivers, lakes, salt water shores, and ponds.	**Low (breeding).** Open quiet waters found on the site. No evidence of breeding on the site. **Not observed during field surveys.**
Asio otus	long-eared owl	SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	**Low.** Somewhat suitable roosting or foraging habitat, including dense riparian habitat, occurs on the site. **Not observed during field surveys.**
Aspidoscelis hyperythra beldingi	orangethroat whiptail	SSC, FSS	The species is generally found in semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. Habitat types include low elevation chaparral, non-native grassland, (Riversidian) coastal sage scrub, juniper woodland, and oak woodland. Associations include alluvial fan scrub and riparian areas. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs.	**Low.** Somewhat suitable habitat, including coastal sage scrub, exists on the site; however, the site is generally not remarkably sandy. **Not observed during field surveys.**
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC	This species is found in a variety of habitats, primarily hot and dry open areas with sparse vegetation, including chaparral, woodland, and riparian areas.	**Low.** Suitable habitat (riparian) is limited on the site.
Athene cunicularia hypugaea	burrowing owl	SSC, BLMS, BCC	Burrowing owls are a year-round resident of California, including habitats of open, dry grassland, and desert. They are generally restricted to mostly flat, open country with suitable nest sites. They use rodent or other burrows for roosting and nesting cover and acquire their burrows from either abandonment or eviction. Burrowing owls typically hunt from a perch.	**None.** Suitable habitat does not exist on the site.

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
Buteo swainsoni	Swainson's hawk	ST, BLMS, BCC	Swainson's hawks require large, open areas with abundant prey in association with suitable nest trees. Suitable foraging areas include native grasslands or lightly grazed pastures and croplands, open deserts, and sparse shrub lands. Swainson's hawks often nest peripherally to riparian systems of the valley and use lone trees or groves of trees (e.g., oaks, cottonwoods, walnuts and willows) adjacent to their hunting areas. In the Great Basin, they typically nest in juniper trees of juniper-sage flats not near riparian zones.	**None.** Suitable habitat does not exist on the site.
Campylorhychus brunneicapillus sandiegensis	coastal cactus wren	SSC, FSS, BCC	Occurs almost exclusively in cactus (cholla and prickly pear)-dominated coastal sage scrub.	**Low.** Suitable habitat, including patches of cactus-dominated coastal sage scrub, does not exist on the site; however, in 1998, this species was reported in the CNDDB to have occurred on the site. **Not observed during 2018 site surveys.**
Catostomus santaanae	Santa Ana sucker	FT, SSC	Found in permanent streams with substrates that are generally coarse and consist of gravel rubble and boulders with growths of filamentous algae.	**None.** Suitable habitat does not exist on the site.
Charina trivirgata	rosy boa	FSS	The coastal rosy boa is typically found in dry, rocky brushlands and arid habitats, usually near intermittent streams but does not require permanent water. This subspecies is found from coastal southwestern California into northern Baja California.	**Low.** Somewhat suitable habitat, including patches of the brushy areas of coastal sage scrub, exists on the site; however, the site is not remarkably rocky.
Choeronycteris mexicana	Mexican long-tongued bat	SSC	The Mexican long-tongued bat preferred habitats include desert and montane riparian, desert succulent shrub, desert scrub, and pinyon-juniper habitats. Roosts in crevices, mines, and bridges.	**None.** Suitable habitat does not exist on the site.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT, SE, FSS, BCC	This species is an uncommon-to-rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Formerly much more common and widespread throughout lowland California. Roosts and nests in densely foliaged, deciduous trees and shrubs in extensive thickets, particularly willows.	**None.** Suitable habitat does not exist on the site.
Crotalus ruber	red-diamond rattlesnake	SSC, FSS	It can be found from the desert through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the	**None.** Suitable habitat does not exist on the site.

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus, or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats. They need rodent burrows, cracks in rocks, or surface cover objects.	
Elanus leucurus	white-tailed kite	FP, BLMS	Low-elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	**None.** Suitable habitat does not exist on the site.
Empidonax traillii extimus	southwestern willow flycatcher	FE, SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	**Low.** Somewhat suitable habitat, including limited riparian habitat, exists on the site. **Not observed during focused riparian bird surveys.**
Emys marmorata	western pond turtle	SSC, BLMS, FSS	Inhabits permanent or nearly permanent water below 1,830 meters (6,000 feet) throughout California, west of the Sierra Cascade.	**None.** Marginally suitable habitat exists on the site. **Not detected during focused surveys.**
Eumops perotis californicus	western mastiff bat	SSC, BLMS, WBWG: High	Western mastiff bats are found in a variety of habitats, such as semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas, but the species' distribution may be geomorphically determined, occurring primarily where there are significant rock features offering suitable roosting habitat. They are a cliff-dwelling species, where maternity colonies of 30 to several hundred roost generally under exfoliating rock slabs and rock crevices along cliffs. Western mastiff bats can also be found in similar crevices in large boulders and buildings. When roosting in rock crevices, they require a sizable drop from their roost in order to achieve flight. Western mastiff bats prefer deep crevices that are at least 15 or 20 feet above the ground. Foraging is concentrated around bodies of water but also includes coastal sage scrub,	**None.** Suitable habitat does not exist on the site. Not expected to roost on the site. **Not detected roosting or foraging.**

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			chaparral, and grassland habitats.	
Gila orcutti	arroyo chub	SSC, FSS	Native to streams from Malibu Creek to San Luis Rey River basin. Found in slow water stream sections with mud or sand bottoms and feeds heavily on aquatic vegetation and associated invertebrates.	**None.** Suitable habitat does not exist on the site.
Icteria virens	yellow-breasted chat	SSC	In Southern California, yellow-breasted chat are primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south to Central America.	**Low.** Low suitability habitat exists on the site. **Not observed during focused least Bell's vireo surveys.**
Lasiurus cinereus	hoary bat	WBWG: Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	**Low.** Not expected to roost on the site. **Not detected roosting or foraging.**
Lasiurus xanthinus	western yellow bat	SSC, WBWG: High	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roost in trees, hanging from the underside of a leaf. Commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non-native palm trees and have also been documented roosting in cottonwood trees.	**Low.** Has potential to occur but **not detected roosting or foraging on the site.**
Lepus californicus bennettii	San Diego black-tailed jackrabbit	SSC	The black-tailed jackrabbit is a habitat generalist occurring in open areas or semi-open country, typically in grasslands, agricultural fields, or sparse coastal scrub. It primarily is found in arid regions supporting short grass habitats. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to locomote, and the openness of open scrub habitat probably is preferred over dense chaparral. They have also been found in annual grassland, Riversidean sage scrub, alluvial fan sage scrub, Great Basin sagebrush, chaparral, disturbed habitat, southern willow scrub, and juniper woodland. They are not found in high mountain forests, typically preferring valley bottoms or intermontane	**None.** No suitable habitat exists on the site. **Not observed during field visit.**

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			valleys.	
Myotis yumanensis	Yuma myotis	BLMS, WBWG: Low	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water, which these bats use as foraging sites and sources of drinking water. This species usually feeds over water sources such as ponds, lakes, streams, and stock tanks. It is common in wooded canyon bottoms. The Yuma myotis roosts in buildings, mines, caves, or crevices. The species also has been seen roosting in abandoned swallow nests and under bridges. Separate, often more open, night roosts may be used. Maternity colonies of several thousand females and young may be found in buildings, caves, mines, and under bridges.	**Low.** Not expected to roost on the site. **Not detected roosting or foraging during focused surveys.**
Nyctinomops femorosaccus	pocketed free-tailed bat	SSC, WBWG: Medium	This bat species prefers rocky desert areas with high cliffs or rock outcrops in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian. Rock crevices in cliffs are preferred as roosting sites, since the bat must drop from the roost to gain flight speed. Typically reproduces in rock crevices, caverns, or buildings. Ranges from Southern California to New Mexico.	**Low.** Not expected to roost on the site. **Not detected roosting or foraging during focused surveys.**
Nyctinomops macrotis	big free-tailed bat	SSC, WBWG: Medium	The big free-tailed bat is rare in California. It occurs in low-lying arid areas in Southern California. Records of the species are from urban areas of San Diego County. Isolated populations are found throughout southwestern U.S. Roosts in crevices and cliffs. This species generally prefers rugged, rocky terrain, found to 8000 feet, preferring forest and deserts. New Mexico, southern Arizona, and Texas. Probably a year-long resident.	**Low.** Not expected to roost on the site. **Not detected roosting or foraging during focused surveys.**
Perognathus longimembris brevinasus	Los Angeles pocket mouse	SSC	Prefers sandy soil for burrowing. Also known to occur on gravel washes and in rocky soils. Associated with coastal sage scrub.	**Low to none.** Somewhat suitable habitat, including coastal sage scrub, is observed on the site; however, the site lacks sandy soils. **Not observed during the field survey.**
Phiynosoma blainvillei	coast homed lizard	SSC, BLMS	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland,	**Moderate.** Suitable habitat, including coastal sage scrub and riparian woodland, is observed on the site.

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			and riparian woodlands.	
Polioptila californica	coastal California gnatcatcher	FT, SSC	A non-migratory, permanent resident of coastal sage scrub habitat, which is a broad category of vegetation that includes the following plant communities: Ventura coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. They also use chaparral, grassland, and riparian habitats next to coastal sage scrub, but these habitats are used for dispersal and foraging. They avoid nesting on steep slopes.	**Present.** Known to occur within the site. Both breeding and foraging habitat are present on the site. The species was detected during the 2014 surveys, and previous focused surveys determined that coastal California gnatcatchers were using the site at the time of the survey.
Rana draytonii	California red-legged frog	FT, SSC	Quiet pools of streams, marshes, and occasionally ponds.	**None.** No suitable habitat exists on the site, as this location is outside the current range of the species.
Riparia riparia	bank swallow	ST, BLMS	Currently, bank swallows are locally common only in restricted riparian and coastal portions of California where sandy, fine-textured vertical bluffs, cliffs, or banks are available for the birds to dig their burrows and nest in colonies.	**None.** No suitable habitat exists on the site. **Not observed during 2018 site surveys.**
Salvadora hexalepis virgultea	coast patch-nosed snake	SSC	Associated with brushy or shrubby vegetation, such as chaparral in canyons and rocky hillsides. They seem to require at least a low shrub structure of minimum density since they are not found in habitats lacking this structural component. Coast patch-nosed snakes are presumed to take refuge and perhaps over-winter in burrows or woodrat nests, so the presence of one or more burrow- or refuge-creating mammals may be necessary for this snake to be present.	**Low.** Somewhat suitable habitat, including coastal sage scrub, exists on the site; however, the site is not remarkably rocky and does not have chaparral habitat.
Setophaga petechia	American yellow warbler	SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	**Present.** Observed on the site.
Spea hammondii	western spadefoot	SSC, BLMS	May be found in coastal sage scrub, open chaparral, pine-oak woodlands, and grassland habitats, but is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Within these habitats, they require rain pools/vernal pools where they can reproduce and that persist with more than 3 weeks of	**None.** No suitable habitat exists on the site.

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site
			standing water so they can metamorphose successfully. They can also breed in slow-moving streams (e.g., areas flooded by intermittent streams). Water breeding sites must lack fish, bullfrogs, and crayfish in order for this species to successfully reproduce and metamorphose. It estivates in sandy, gravelly soil in upland habitats adjacent to potential breeding sites in burrows approximating 1 meter in depth.	
Taxidea taxus	American badger	SSC	Badgers occur from alpine meadows to elevations as low as Death Valley, which is below sea level. Essentially the badger is an animal of open places. It shuns forests. In California, badgers occupy a diversity of habitats. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, openings in desert scrub, and grassy mountain meadows near timberline are preferred. They can also occur in treeless pastures and drained marshes. Badgers are generally associated with dry, open, treeless regions, prairies, parklands, and cold desert areas. They seem to occur primarily in areas of low to moderate slope.	**None.** No suitable habitat exists on the site.
Vireo bellii pusillus	least Bell's vireo	FE, SE	Least Bell's vireo primarily occupies riverine riparian habitats that typically feature dense cover within 1 to 2 meters of the ground and a dense, stratified canopy. Typically, it is associated with southern willow scrub, cottonwood-willow forest, mulefat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat that is limited to the immediate vicinity of water courses, 2,000-foot elevation in the interior. This species is generally restricted to major river systems in San Diego County.	**Low.** Somewhat suitable habitat, including dense riparian habitat, exists on the site. While suitable habitat is found on the site, the riparian habitat is extremely dense and not suitable for the species. Not observed during the field survey, except for a single migrant late in the season.

Notes:

Federal Endangered Species Act Listing Codes

Federal listing is pursuant to the federal Endangered Species Act of 1973, as amended. The official federal listing of endangered and threatened animals is published in the Federal Register, 50 CFR 17.11.

FE = Federally Listed as Endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range.

FT = Federally Listed as Threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the

Table 3.5-5
Special-Status Wildlife Species with Potential to Occur on Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence on Project Site

foreseeable future.
FC = Federal Candidate for Listing.
FPT = Federally Proposed Threatened.

California Endangered Species Act Listing Codes
State listing is pursuant to Sections 2074.2 and 2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of endangered, threatened and rare species of plants and animals. The official California listing of endangered and threatened animals is contained in the California Code of Regulations, Title 14, and Section 670.5.
SE = State Listed as Endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.
ST = State Listed as Threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.
SCT = State Candidate for Listing as Threatened.

California Department of Fish and Wildlife (CDFW)
FP = Fully Protected: Animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.
SSC = Species of Special Concern: Status applies to animals that (1) are declining at a rate that could result in listing, or (2) historically occurred in low numbers and known threats to their persistence currently exist. The CDFW has designated certain vertebrate species as "species of special concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.
WL = Watch List: These birds have been designated as "Taxa to Watch" in the California Bird Species of Special Concern report (Shuford and Gardali 2008). The report defines "Taxa to Watch" as those that are not on the current special concern list that (1) formerly were on the 1978 (Remsen 1978) or 1992 (CDFG 1992) special concern lists and are not currently state-listed as threatened and endangered, (2) have been removed (delisted) from either the state or federal threatened and endangered lists (and remain on neither), or (3) are currently designated as "fully protected" in California.

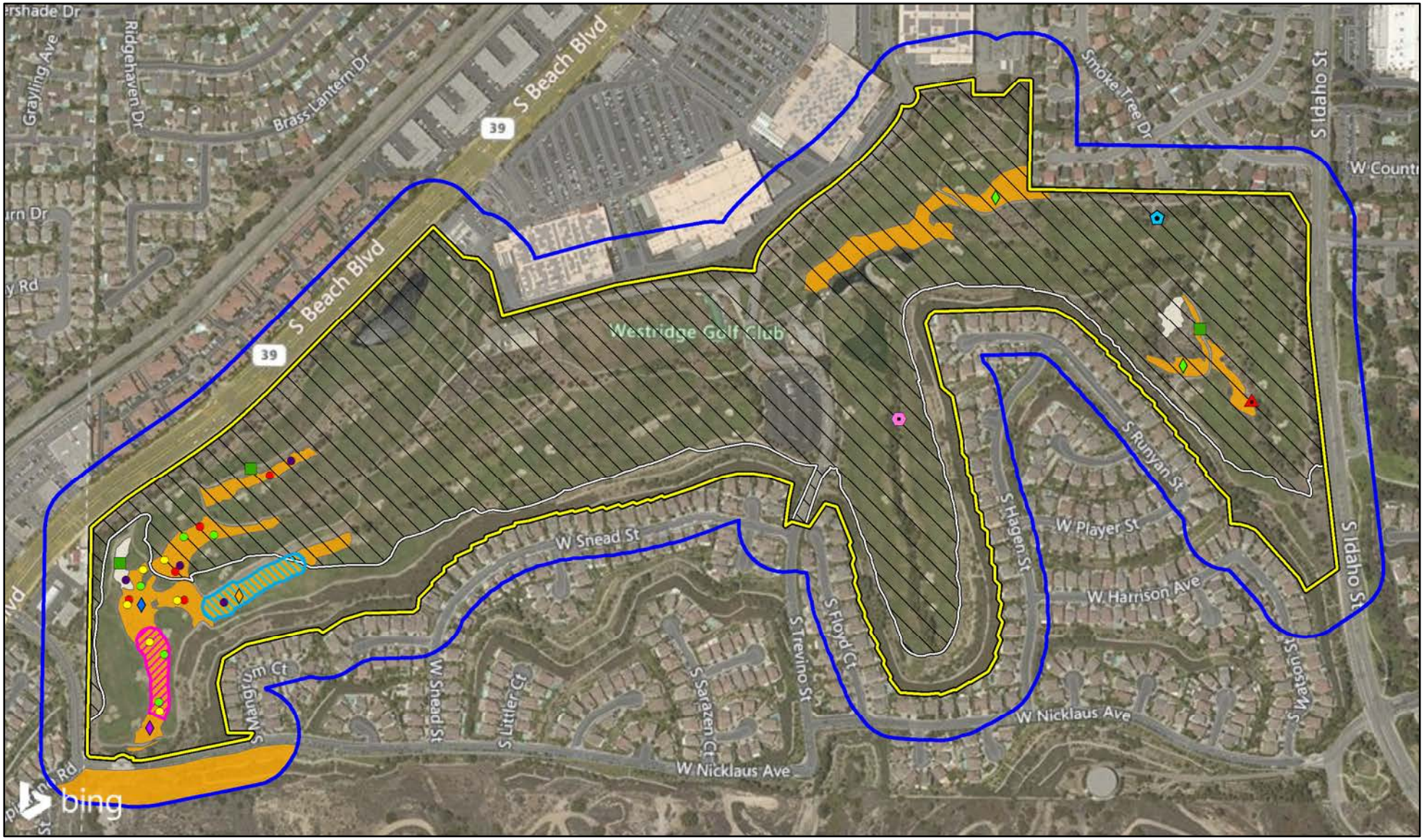
United States Fish and Wildlife Service (USFWS)
BCC = USFWS Bird of Conservation Concern: listed in the USFWS 2008 Birds of Conservation Concern report. The report identifies species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act. While all of the bird species included in the report are priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for Endangered Species Act listing.

United States Forest Service (USFS)
FSS = Forest Service Sensitive: those plant and animal species identified by a Regional Forester that are not listed or proposed for listing under the Endangered Species Act and for which population viability is a concern, as evidenced by (a) significant current or predicted downward trends in population numbers or density, or (b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution."

United States Bureau of Land Management (BLM)
BLMS = BLM Sensitive: those plant and animal species on BLM administered lands and that are (1) under status review by the USFWS/NMFS, or (2) whose numbers are declining so rapidly that federal listing my become necessary, or (3) have typically small and widely dispersed populations, or (4) inhabit ecological refugia or other specialized or unique habitats. BLM policy is to provide the same level of protection as USFWS candidate species.

California Department of Forestry and Fire Protection (CDF)
CDF: S = CDF Sensitive: species is a California Department of Forestry and Fire Protection sensitive species. The Board of Forestry classifies as sensitive species those species that warrant special protection during timber operations.

Western Bat Working Group (WBWG)
"Low" designation indicates that most of the existing data support stable populations of the species, and that the potential for major changes in status in the near future is considered unlikely. While there may be localized concerns, the overall status of the species is believed to be secure. Conservation actions would still apply for these bats, but limited resources are best used on red and yellow species.
"Medium" designation indicates a level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats. A lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.
"High" designation represents those species considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment.
Source: LSA, 2019



LSA

LEGEND

Project Boundary
Study Area
Grading Footprint

Vegetation Type (VCS Environmental 2015)
Coyote Brush Scrub
Coastal Sage Scrub

2013 Observations
CAGN Male 1
CAGN Male 2
CAGN Pair 1
CAGN Pair 2

2016 Observations
CaGn Pair Territory 1
CaGn PairTerritory 2

2014 Observations
Family Group 1 - 10/15/2014
Family Group 1 - 10/29/2014
Family Group 1 - 11/12/2014
Family Group 1 - 11/6/2014

2018 Observations
CAGN (Single)
CAGN (Pair)
Yellow Warbler
Least Bell's Vireo (Single)

0 300 600
FEET

SOURCE: Bing (2014); Kidd Biological (2016); Cadre Environmental (2014); Glenn Lukos Associates, Inc.(2013, 8/2019)

I:\LEN1802\GIS\MXD\CAGN_Observations_Supplemental.mxd (8/27/2019)

FIGURE 3.5-5

Rancho La Habra

California Gnatcatcher Survey

throughout Territory 1 during the remaining surveys. A second pair of CAGN were observed in CAGN Pair Territory 2. No juveniles were observed with this pair during any of the six surveys. The male CAGN was only observed during Surveys 5 and 6, and the female was not observed during these last two surveys.

Least Bell's Vireo

Least Bell's vireo was not detected during Surveys 1 through 7; however, during Survey 8 on July 26, 2018, a non-breeding individual was detected in an approximately 0.45-acre isolated patch of cottonwood woodland near the northeast corner of the golf course. Given the late July date, it was suspected that the individual was likely an early migrant consisting of an unpaired male or juvenile. As noted in an email by Loren Hays of the USFWS to Jeff Ahrens of GLA (addressing a similar but different situation), such a single late occurrence is most likely a dispersing unpaired male or juvenile. The email stated as follows: [6]

> *Although it is certainly possible that the bird you observed was unpaired (GLA again reiterates this email was not addressing this specific site), my experience has been that unpaired males often abandon sites (by mid-July) if they were unable to attract mates by that time. Who knows where they go, but we have not often turned up adult (1+ year-old) males in late July or August in locales where a territory was not occupied during the breeding season. When we have detected males in late July, August or September at "new" sites (not previously occupied nesting locale or territory), they are often juveniles (which were identified by their plumages and/or imperfect songs) …*

As noted, observations of CAGN were also recorded during the surveys for least Bell's vireo. Survey areas for least Bell's vireo are shown in **Figure 3.5-6**.

Bats

Specific to bats, the Project site contains approximately 2.75 acres of riparian habitat that include a limited number of sufficiently large individuals of Gooddingii's black willow (*Salix gooddingii*), Fremont cottonwood, western sycamore, and Mexican fan palm (*Washingtonia robusta*) with potential to provide roosting areas and exhibit the highest probability of supporting bat roosts (see **Table 3.5-6** and **Figure 3.5-7**).

No roost sites were detected within potential tree species including Gooddingii's black willow, Fremont cottonwood, western sycamore, and Mexican fan palm. A total of three bat species, none of which have special status, were detected foraging or flying over the site: the Mexican free-tailed bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), and California myotis (*Myotis californicus*). In general, bat use of the site was lower than expected given the open water on the site, the golf course ponds, and the limited emergent vegetation; however, it is possible

[6] Loren Hayes. Email transmitted to Jeff Ahrens on August 9, 2001.

Table 3.5-6
Special-Status Bats with Potential to Occur on Project Site

Species Name	Status	Habitat Requirements	Potential for Occurrence on Project Site
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: None CDFW: SSC WBWG: Medium	Occurs in low-lying arid areas in Southern California. Roosts in high cliffs or rocky outcrops.	Not expected to roost on the site. Not detected roosting or foraging.
Hoary bat *Lasiurus cinereus*	Federal: None State: None CDFW: None WBWG: Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Not expected to occur. Not detected roosting or foraging.
Pallid bat *Antrozous pallidus*	Federal: None State: None CDFW: SSC WBWG: Medium	Habitats with rocky, outcropped areas.	Not expected to roost on the site. Not detected roosting or foraging.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: None CDFW: SSC WBWG: Medium	Rocky areas with high cliffs in pine juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Not expected to roost on the site. Not detected roosting or foraging.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: None CDFW: SSC WBWG: High	Prefers habitat edges and mosaics with trees that are protected from above and open from below with open areas for foraging. Roosts primarily in trees, 2 to 40 feet above ground, from sea level up through mixed conifer forests.	Not expected to occur. Not detected roosting or foraging.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: None CDFW: SSC WBWG: High	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees. Currently increasing throughout its range.	Potential to occur but not detected roosting or foraging on site.
Yuma myotis *Myotis yumanensis*	Federal: None State: None CDFW: None WBWG: Low	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Not expected to occur. Not detected roosting or foraging.

Notes:
CDFW = California Department of Fish and Wildlife
SSC = California Species of Special Concern
WBWG = Western Bat Working Group
Source: GLA 2018d.

LSA

LEGEND

- Project Boundary
- Grading Footprint
- LBV Survey Area
- CAGN Single (7/5/2018)
- CAGN Single (7/27/2018)
- CAGN Pair (6/5/20185)
- Yellow Warbler
- Migrant LBV (7/26/2018)

0 300 600
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018, 8/2019)

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FIGURE 3.5-6

Rancho La Habra

Least Bell's Vireo Survey

LSA

LEGEND

- Project Boundary
- Grading Footprint
- Bat Survey Area (7/10/2018 - 4/30/2018)

0 300 600
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

I:\LEN1802\GIS\MXD\BatSurvey.mxd (8/27/2019)

FIGURE 3.5-7

Rancho La Habra

Bat Survey Area

that use of pesticides and herbicides on the golf course limited insects that provide forage for bats.

The surveys did not detect bat roosts on the Project site. The Project would not affect roosting bats, including special-status species. Construction of the Project would not result in significant impacts on any special-status bats.

Western Pond Turtle and Other Aquatic Wildlife

Juvenile and adult red-eared sliders (*Trachemys scripta elegans*), which are not sensitive species, were observed basking and swimming in both the northern and southern ponds on the eastern portion of the Project site (see **Figure 3.5-8**). No turtles of any species were observed in the pond on the western portion of the site. No western pond turtle were detected on the Project site during focused protocol surveys. Additional aquatic species observed during the protocol surveys included bullfrog (*Lithobates catesbeicmus*) and mosquitofish (*Gambusia affinis*).

General Wildlife

A compendium of wildlife species observed was compiled and is provided in **Exhibit 3.5-C** at the end of this section.

f. Aquatic Resources on Project Site

Waters of the United States

This section relies on the term "waters of the United States" as it applies to the jurisdictional limits under the authority of the USACE under the Clean Water Act and applies to the jurisdiction of the RWQCB under Section 401 of the Clean Water Act. The National Wetland Inventory (NWI) maps, National Hydrography Dataset (NHD), *La Habra* USGS 7.5-minute topographic quadrangle, and an aerial image were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their locations within any watersheds associated with the Project site, as well as other features that might contribute to federal authority located within watersheds associated with the Project site.

Likewise, past regulatory permitting documents for the construction of the golf course along with historical aerial imagery were used to determine the historic hydrologic course regime. The presence or absence of waters of the United States was then confirmed during the field survey. It was determined that the Project site includes waters of the United States within the ephemeral drainage located in the center of the Project site.

Section 404 and 401 jurisdiction is associated with two drainages on the golf course: the central drainage and eastern drainage. Two small additional features near the north edge of the Project site (see **Figures 3.5-9, 3.5-10, and 3.5-11**) were evaluated. Both lack an ordinary high-water mark and are therefore not characterized as waters of the United States. One of the historical

drainages, prior to the construction of the golf course, generally aligns with the central ephemeral drainage feature that currently exists within the Project site, indicating a natural historical flow.

The central ephemeral drainage exhibits an ordinary high-water mark in the lower reach and hydraulically connects to golf course ponds 1 and 2. From golf course ponds 1 and 2, a hydraulic connection exists to Coyote Creek and ultimately to the Pacific Ocean. While the central ephemeral drainage is jurisdictional, the entirety of golf course ponds 1 and 2 is not. The golf course ponds are all lined and receive water from potable water sources to create an aesthetic feature and/or provide a source for golf course irrigation. As specified within 33 CFR Section 328(b), ponds that are artificially constructed and provide detention are not jurisdictional. However, given the hydraulic connection between the central ephemeral drainage and a downstream receiving water body, a projection of the ephemeral drainage (10 feet wide) through golf course ponds 1 and 2 is presumed to determine jurisdiction.

On the remainder of the Project site, the eastern historical drainage does not appear to align with any existing drainage features on the site and is considered to have been permanently removed through the construction of the golf course. The third golf course pond does not align with a historical drainage, is lined, receives water from potable water sources, and was created as an aesthetic water feature within the golf course. Furthermore, the three basins currently found on the site do not appear to have any historical evidence for flow, as expected, due to the fact that they were constructed as part of the golf course and graded in the upland.

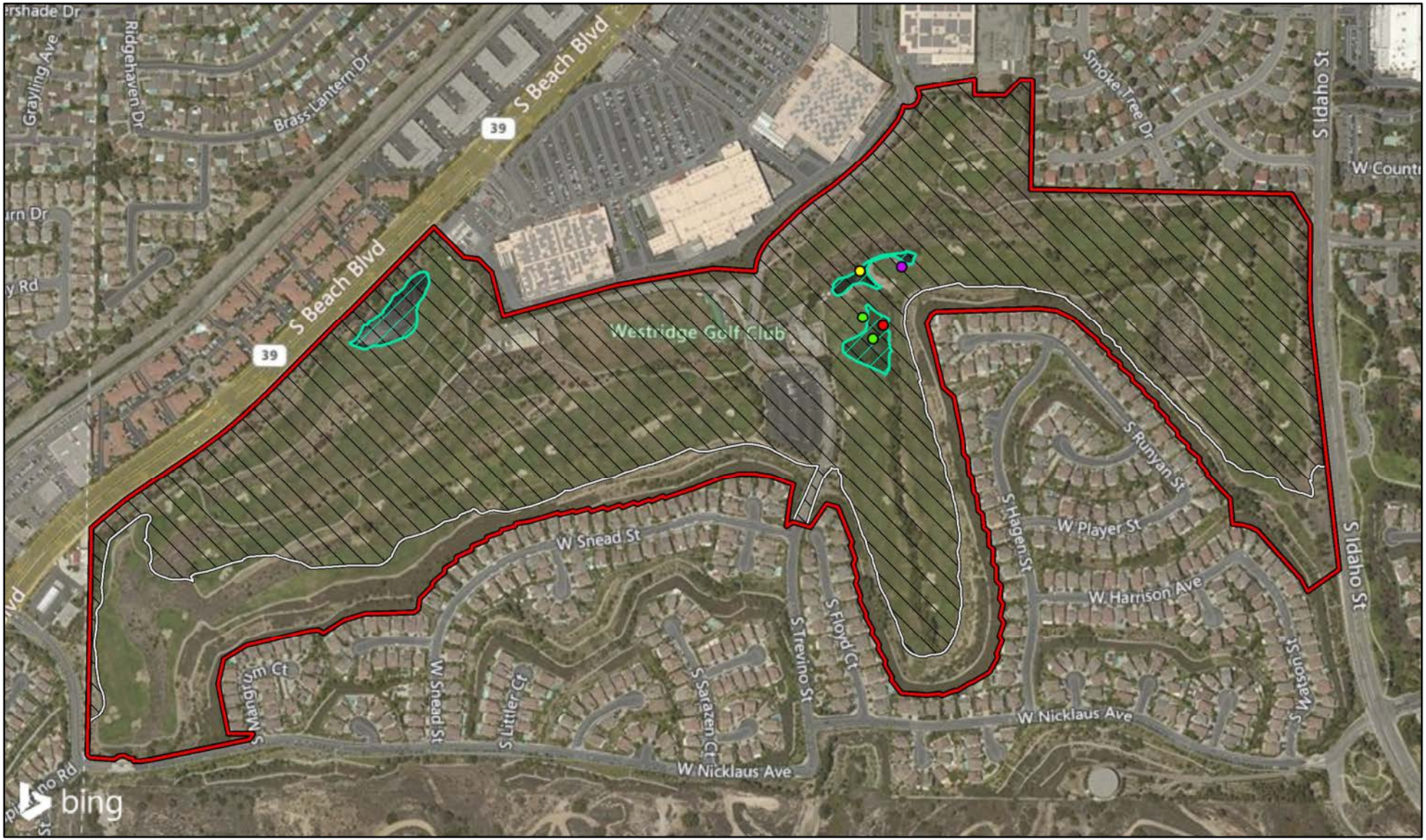
During the field survey for the jurisdictional delineation (GLA 2018b), it was determined that only a small portion of the central and eastern drainages exhibited an ordinary high-water mark and is considered jurisdictional non-wetland waters of the United States (see **Figures 3.5-10** and **3.5-11**). The central drainage includes 0.03 acre within 553 feet of the channel, and the eastern drainage includes 0.01 acre within 351 feet of the channel. A jurisdictional delineation is presented in **Table 3.5-7**.

Table 3.5-7
Jurisdictional Waters of the United States on Project Site

Drainage	Total (Acres)
Waters of the United States and Section 401	0.04
Porter-Cologne Water Quality Control Act	2.52

Source: GLA 2018b.

Those areas that are waters of the United States are subject to Water Quality Certifications by the RWQCB pursuant to Section 401 of the Clean Water Act. Thus, areas that exhibit an ordinary high-water mark within Deed-Restricted Area A-4 totaling 0.03 acre and Deed-Restricted Area A-10 totaling 0.01 acre would be subject to Section 401 Water Quality Certification by the RWQCB (see **Figure 3.5-11**).



LSA

LEGEND

- Project Boundary
- Grading Footprint
- Western Pond Turtle Survey Area
- Red-eared slider, 2 adults (July 5, 2018)
- Red-eared slider, 3 juveniles (July 5, 2018)
- Red-eared slider, 3 juveniles, 4 adults (June 15, 2018)
- Red-eared slider, 8 adults (June 25, 2018)

0 300 600
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

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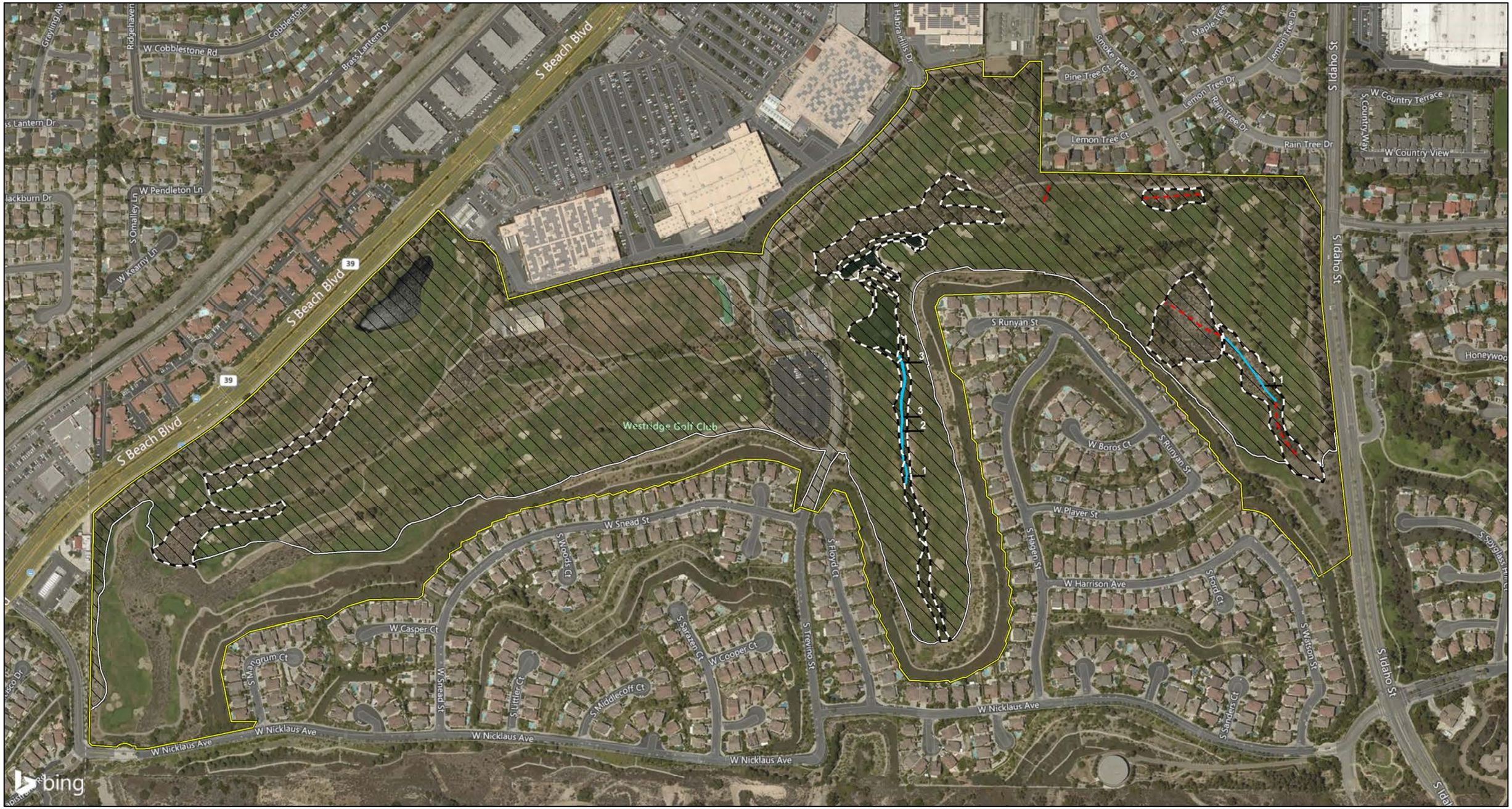
FIGURE 3.5-8

Rancho La Habra

Western Pond Turtle Survey Area



LSA

LEGEND

- Project Boundary
- Grading Footprint
- Deed Restricted Areas
- Corps\RWQCB Non-Wetland Waters
- No OHWM & No Bed/Bank
- Width of OHWM in feet

0 200 400
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

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FIGURE 3.5-9

Rancho La Habra

Waters of the U.S.

LSA

LEGEND

- Project Boundary
- Grading Footprint
- Deed Restricted Areas
- Corps/RWQCB Non-Wetland Waters
- No OHWM & No Bed/Bank
- Width of OHWM in feet

0 100 200
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

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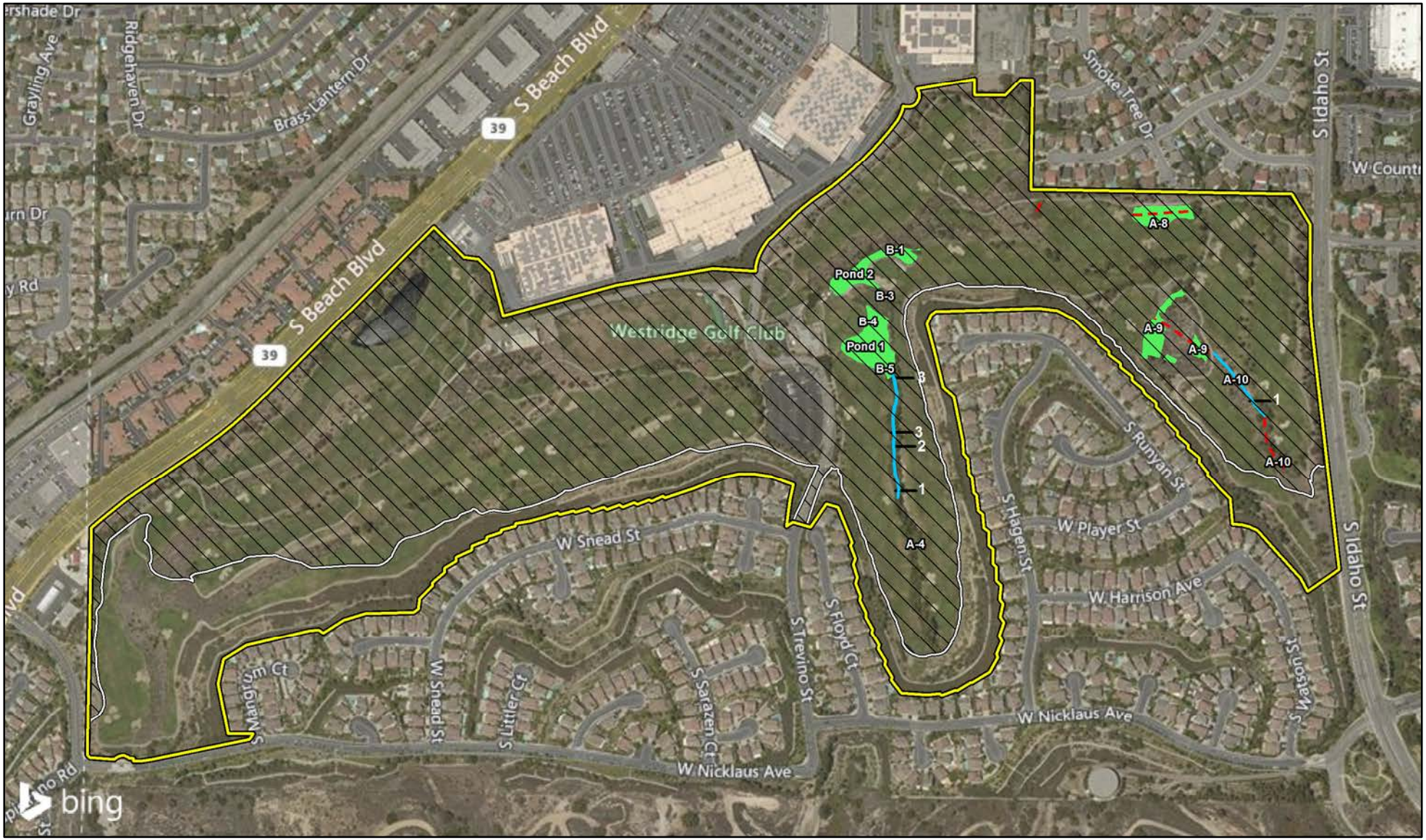
FIGURE 3.5-10

Rancho La Habra

Waters of the U.S. - Detail



LSA

LEGEND

- Project Boundary
- Grading Footprint
- Porter Cologne Act Waters
- Corps/RWQCB Non-Wetland Waters
- No OHWM & No Bed/Bank
- Width of OHWM in feet

0 300 600
FEET

FIGURE 3.5-11

Rancho La Habra

401 and Porter Cologne Act Waters

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

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Waters of the State/Porter-Cologne Water Quality Control Act

Non-federal waters can be regulated by the RWQCB when discharge of fill could affect Beneficial Uses as defined by the Santa Ana RWQCB's "Basin Plan." Beneficial Uses related to biological resources would include habitat for wildlife, which certain of the Deed-Restricted Areas provide, and thus, the loss of a Beneficial Use would require replacement.

As described above, Deed-Restricted Area A-9 does not exhibit an ordinary high-water mark and does not exhibit wetland conditions and, because it is not subject to USACE jurisdiction, would not be subject to Section 401 Water Quality Certification by the RWQCB. This is also the case for the area between Deed-Restricted Areas A-5 and B-8, which does not exhibit an ordinary high-water mark or support wetlands.

Deed-restricted golf course ponds 1 and 2 and associated Deed-Restricted Areas B-1 through B-5 that exhibit fringing emergent marsh or riparian vegetation would not be considered subject to USACE jurisdiction and therefore not subject to Section 401 Water Quality Certification by the RWQCB. This is also the case for the golf course pond adjacent to the 13th hole.

Under the Porter-Cologne Waste Discharge Requirements, the RWQCB requires notification for impacts on "waters of the State," which are not regulated by the USACE pursuant to Section 404 of the federal Clean Water Act. The lower segments of Deed-Restricted Areas A-4 and A-10 are subject to USACE jurisdiction as noted above. The upper segment of these features lacks an ordinary high-water mark, does not support wetlands, and is not waters of the United States. The RWQCB could potentially consider riparian areas within the deed-restricted areas subject to CDFW jurisdiction to be subject to the Waste Discharge Requirements.

Deed-Restricted Areas 8 and 9

Deed-Restricted Areas 8 and 9 lack an ordinary high-water mark and support no wetlands and no indicators for an ordinary high-water mark. Nevertheless, the RWQCB could potentially consider riparian areas within these deed-restricted areas subject to CDFW jurisdiction to be subject to the Waste Discharge Requirements.

Deed-Restricted Areas Pond 1 and Pond 2

Deed-restricted golf course ponds 1 and 2 are located immediately east of the golf course clubhouse and are within golf course fairway 18. The features are golf course ponds that are surrounded by fairways and a putting green. Limited areas of emergent cattails and bulrush and riparian woodland occur on the margins of the ponds and, as noted below, are associated with Deed-Restricted Areas B-1 through B-5. Open water associated with deed-restricted golf course ponds 1 and 2 totals 1.15 acres. The RWQCB is expected to determine that golf course ponds 1 and 2 and fringing vegetation exhibit Beneficial Uses and require notification regarding potential impacts pursuant to the Waste Discharge Requirements.

Deed-Restricted Areas B-1 through B-5

Deed-Restricted Areas B-1 through B-5 are limited areas adjacent to golf course ponds 1 and/or 2 and consist of open water, emergent wetlands, riparian forest, or in some areas, uplands. While these "fringing" emergent wetlands and/or riparian habitat are directly supported by the golf course irrigation, the RWQCB could determine that such areas exhibit Beneficial Uses under the Porter-Cologne Act. Deed-Restricted Areas B-1 through B-5 collectively support 0.27 acre of open water, 0.03 acre of bulrush alliance, 0.06 acre of cattail alliance, and 0.13 acre of arroyo willow alliance, for a total of 0.49 acre.

Golf Course Pond 3

On the western portion of the golf course, adjacent to the 13th fairway, is a golf course pond that is not within a deed-restricted area. This golf course pond is the primary water storage facility for the golf course irrigation and serves as a "water hazard" for golf course hole 13. The RWQCB is not expected to determine that the golf course pond and fringing vegetation exhibit Beneficial Uses and are subject to notification in accordance with the Waste Discharge Requirements.

Area Between Deed-Restricted Areas A-5 and B-8

The 200-foot-long drainage feature at the north end of the central drainage shows no evidence of a drainage channel that exhibited indicators of the presence of an ordinary high-water mark and no wetlands. Thus, this area would not be a waters of the State, subject to the Waste Discharge Requirements. As noted above, this area would not be subject to USACE or CDFW regulation and therefore would not be subject to Section 401 or the Waste Discharge Requirements.

Waters of the State/CDFW Jurisdiction

The delineation determined that the Project site includes waters of the State and associated riparian habitat that meet CDFW characteristics that define waters under the jurisdiction of California Fish and Game Code Section 1600 (Brady and Vyverberg 2013). The waters of the State receive storm water and irrigation runoff from the golf course, which provides the primary source of water to the two drainages and three golf course ponds identified within the Project site. The three on-site golf course ponds receive water from potable water sources. The central ephemeral drainage, the easternmost ephemeral drainage, and two of the three golf course ponds are considered waters of the State. The central ephemeral drainage and the easternmost ephemeral drainage are considered waters of the State due to the presence of biological and physical characteristics of a stream subject to the jurisdiction of the CDFW under California Fish and Game Code Section 1600 et seq. The eastern ephemeral drainage exhibits biological and physical indicators of waters of the State through the presence of riparian vegetation and a constructed channel bed and bank. The channel bed and bank appear to be a

remnant feature from when this area was actively irrigated. The effects of shutting off the irrigation can clearly be seen by the sharp reduction in riparian vegetation through historical aerials, indicating that this vegetation was dependent on irrigation and not associated with a natural flow regime. Golf course pond 1, connected to the easternmost ephemeral drainage, does exhibit the biological and physical characteristics of a stream subject to California Fish and Game Code Section 1600 et seq. in some segments, as shown in **Figure 3.5-12**. The riparian vegetation found within the other two golf course ponds is not associated with a CDFW-defined stream or any type of natural flow; therefore, it is not under the jurisdiction of the CDFW.

The man-made western golf course pond 3 was not included as a waters of the State because it did not exhibit characteristics of waters subject to California Fish and Game Code Section 1600 et seq. The golf course pond is a lined man-made golf course basin for storage of irrigation water that was graded in the upland; therefore, it is not associated with flow or subject to California Fish and Game Code Section 1600 et seq., which was confirmed during the field meeting with the CDFW. The two golf course ponds adjacent to the clubhouse (pond 1 and pond 2) are connected to the central ephemeral drainage and exhibit some biological and physical characteristics of a stream (e.g., evidence of flow and exhibit bed and bank) and therefore are subject to the jurisdiction of the CDFW under California Fish and Game Code Section 1600 et seq. Waters of the State are shown in **Figure 3.5-12**. The inventory of waters of the State and vegetation found within the jurisdiction of the State is presented in **Table 3.5-8**.

g. Soil Mapping

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) lists five soil types (series) for the Project site (see **Figure 3.5-13**). Soil types can be an indicator of the possibility for sensitive species (e.g., Delhi sands flower-loving fly). No unique soil types that would be classified as a wetland soil, such as histosols, exist on the Project site. A wetland delineation was conducted to identify areas with hydric soils, hydric vegetation, and hydrology.

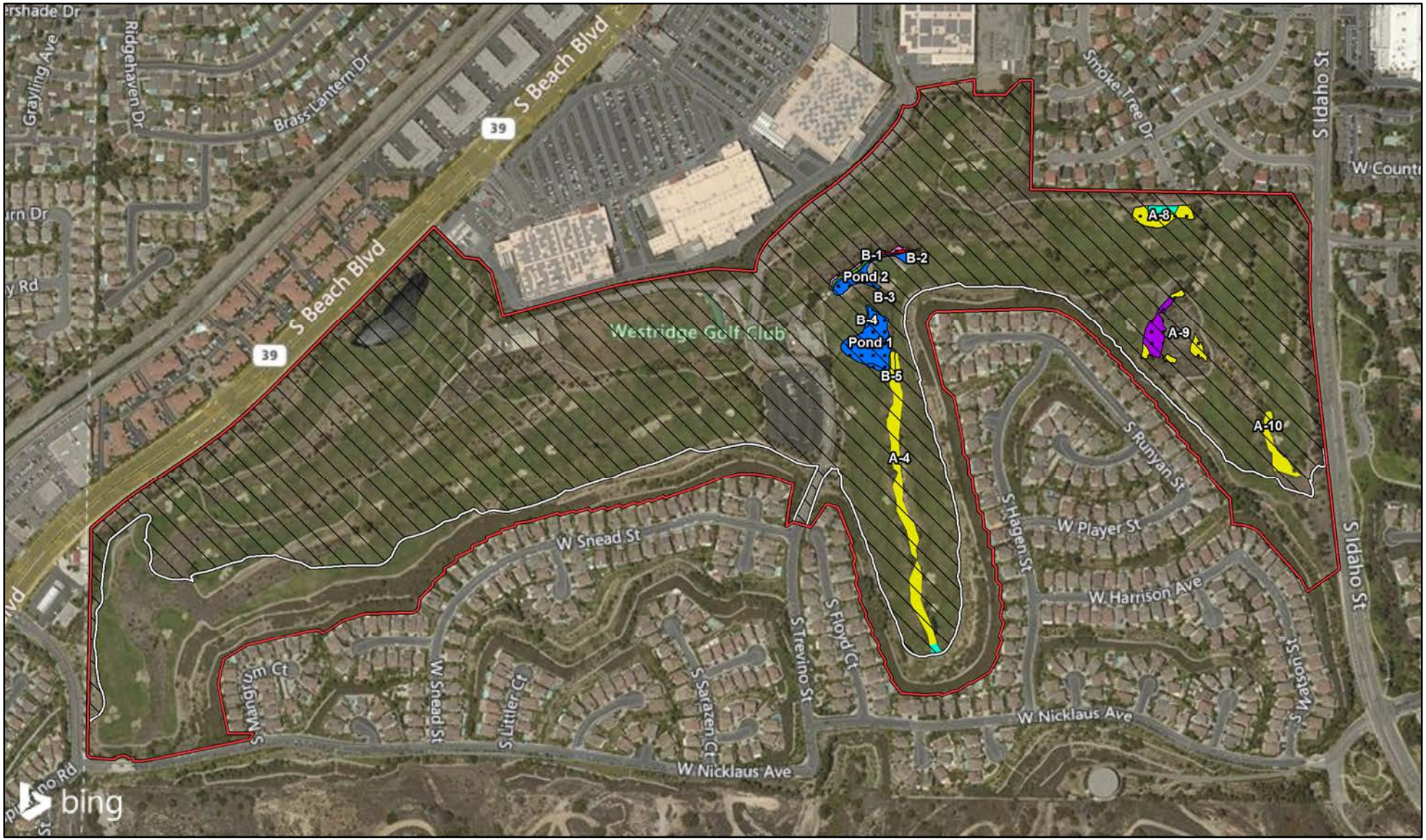
Descriptions of the five soil types are as follows:

Alo Clay: Soils of the Alo series consist of well-drained soils and have slopes of 30 to 50 percent. These soils are on moderately steep foothills, generally occurring on broad ridgetops. These soils are formed in material weathered from fine-grained sandstone or shale. Alo Clay soil is mapped within the central portion of the Project site.

Table 3.5-8
Waters of the State/California Department of Fish and Wildlife Jurisdiction on Project Site

Community Type		Totals (Acre)
Within Deed-Restricted Areas		
Arroyo Willow Forest Alliance		0.115
Fremont Cottonwood Forest Alliance		1.907
Mixed Riparian Scrub Alliance		0.558
Mulefat Scrub Alliance		0.169
California Bulrush Alliance		0.034
Southern Cattail Alliance		0.061
Open Water		1.148
	Subtotal	**3.992**
Outside Deed-Restricted Areas		
Fremont Cottonwood Forest Alliance		0.713
Arroyo Willow Forest Alliance		0.093
Mulefat Scrub		0.017
Mixed Riparian Scrub		0.95
	Subtotal	**1.773**
Total CDFW Jurisdiction		**5.765**

Source: LSA, 2019.



LSA

LEGEND

- Project Boundary
- Grading Footprint
- Porter Cologne Act Waters
- Arroyo Willow Forest Alliance
- California Bulrush Marsh Alliance
- Fremont Cottonwood Forest Alliance
- Mixed Riparian Scrub Shrubland Alliance
- Mulefat Thicket Shrubland Alliance
- Non-Riparian Strreambed
- Southern Cattail Marsh Alliance
- Open Water

0 300 600
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (2018; 8/2019)

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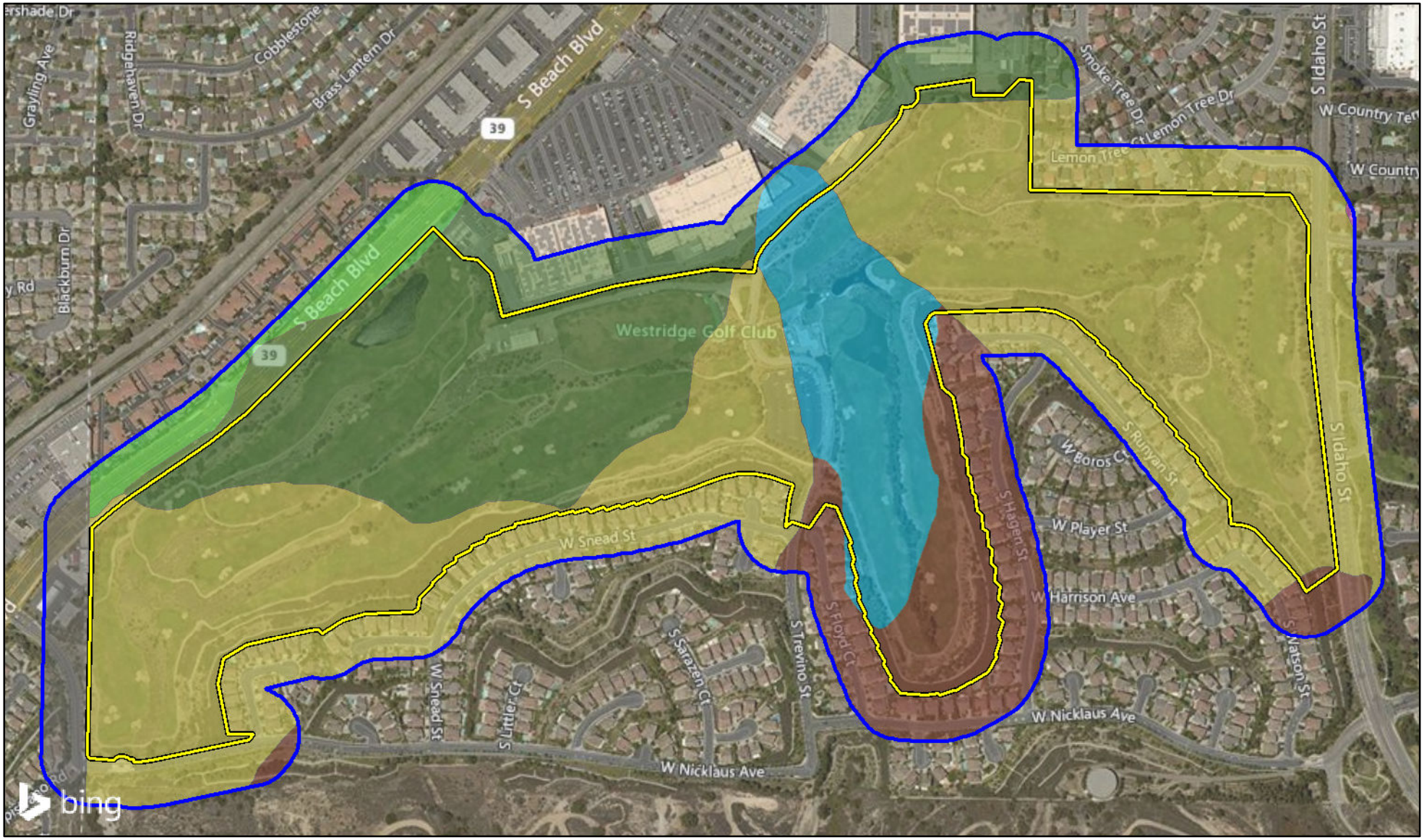
FIGURE 3.5-12

Rancho La Habra

Waters of the State / Porter Cologne Act Impacts



LSA

LEGEND

- Project Boundary
- Study Area

Soil Type

- ALO CLAY, 30 TO 50 PERCENT SLOPES
- ANAHEIM CLAY LOAM, 15 TO 30 PERCENT SLOPES
- ANAHEIM CLAY LOAM, 30 TO 50 PERCENT SLOPES
- SORRENTO CLAY LOAM, 0 TO 2 PERCENT SLOPES
- SORRENTO LOAM, 2 TO 9 PERCENT SLOPES
- XERORTHENTS LOAMY, CUT AND FILL AREAS, 15 TO 30 PERCENT SLOPES
- Soil Data Not Available

N

0 300 600
FEET

SOURCE: Bing (2014); VCS Environmental (2015)

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FIGURE 3.5-13

Rancho La Habra

Soils Map

- Anaheim Clay Loam: Soils of the Anaheim series consist of well-drained, moderately deep soils and have slopes of 30 to 50 percent. These soils are on moderately steep to very steep foothills and formed in material weathered from fine-grained sandstone or shale. Anaheim Clay Loam soil is mapped within the majority of the Project site.
- Sorrento Loam: This Sorrento series consists of well-drained soils on alluvial fans and floodplains with slopes of 2 to 9 percent. These soils formed in alluvium made up chiefly of sedimentary rocks. Sorrento Loam soil is present within the northwestern portion of the Project site adjacent to Beach Boulevard.
- Sorrento Clay Loam: This Sorrento series consists of well-drained soils on alluvial fans and floodplains with slopes of 0 to 2 percent. These soils formed in alluvium made up chiefly of sedimentary rocks. If the soil is bare, runoff is slow, and the erosion hazard is slight.
- Xerorthents Loamy Cut-and-Fill Area: The Xerorthents Loamy cut-and-fill area series consists of moderately well-drained soils and has slopes of 15 to 30 percent. The slopes of these soils were determined from the undisturbed landscape. Xerorthents Loamy soils are mapped within the central/southern portion of the Project site.

h. Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, would not likely persist over time in fragmented or isolated habitat areas because these areas prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967, Soule 1987, Harris and Gallagher 1989).

Corridors effectively act as links between different populations of a species. A group of smaller populations (termed "demes") linked together via a system of corridors is termed a "metapopulation." The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration versus emigration). The smaller the deme, the more important immigration becomes because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increase overall genetic diversity. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by:

- Allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity.

- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fires or disease) will result in population or local species extinction.
- Serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories:

- Dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions)
- Seasonal migration
- Movements related to home range activities (foraging for food or water; defending territories; searching for mates, breeding areas, or cover)

Wildlife Movement Terminology

Wildlife movement studies have used a number of terms, such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing," to refer to areas in which wildlife moves from one area to another. To clarify the meaning of these terms and facilitate the discussion of wildlife movement in this EIR section, these terms are defined as follows:

- **Travel Route:** A landscape feature (e.g., a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in movement from one area to another; it contains adequate food, water, and/or cover while wildlife moves between habitat areas; and it provides a relatively direct link between target habitat areas.
- **Wildlife Corridor:** A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.
- **Wildlife Crossing:** A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings are typically man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often "choke points" along a movement corridor.

Wildlife Movement Within Project Site

Large open spaces often support a diverse community representing all types of movement. Each category of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a local level to many-square-mile home ranges of large mammals moving at a regional level. Based on the presence of the CSS habitat, drainage features on the Project site, and the adjacent West Coyote Hills open space, the Project site may minimally serve as a migratory stop for various amphibians, reptiles, and some birds.

The Project site is generally isolated from the larger wildlife areas in the region by arterial roadways and highly dense residential areas, which provide a substantial barrier to local and regional wildlife movement. Furthermore, the Project site does not function as a regional corridor for larger species due to the lack of linkage to large open spaces, adjacent arterial roadways, and adjacent residential developments that surround the Project site that further restrict movement. Therefore, the Project site does not provide a connection between large areas of undeveloped land that may be used for wildlife movement.

A 1.38-acre area along the southwest portion of the Project site provides for the limited movement of wildlife between the Project site and the West Coyote Hills open space. This connection would not facilitate large-scale movement of wildlife from the West Coyote Hills open space to another large open space area because the Project site does not exhibit any other connections to wildlife corridors. A two-lane road with open split rail fencing separates the Project site from the West Coyote Hills open space, which allows some movement of wildlife (birds primarily) to occur across this connection. Furthermore, as observed during the 2014 and 2016 focused surveys, the recorded CAGN family used the CSS/CBS habitat found in the southwest portion of the Project site and not the habitat in the eastern portion of the site, suggesting that the Project site as a whole does not function as a wildlife corridor for bird species.

3.5.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of biological resources impacts. Based on Appendix G of the CEQA Guidelines, the Project would have a significant effect if it were to:

Threshold BIO-1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Wildlife or the U.S. Fish and Wildlife Service;

Threshold BIO-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans,

policies, or regulations or by the California Department of Fish and Wildlife, Regional Water Quality Control Board, or U.S. Fish and Wildlife Service;

Threshold BIO-3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

Threshold BIO-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

Threshold BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

Threshold BIO-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.5.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.

Impact BIO-1.1: Site grading and construction would remove habitat for special-status plant and animal species including coastal sage scrub, riparian woodland, and riparian scrub vegetation alliances, as well as nesting habitat for birds. Construction activities and the use of parks, trails, and the Community Center could increase human foot traffic and result in direct encroachment into habitats that support special-status species and nesting birds including coastal sage scrub, riparian woodland, and riparian scrub vegetation alliances, degrading the quality of the habitat compared to existing conditions. Compliance with applicable regulatory requirements of federal and state law, along with implementation of Mitigation Measures BIO-1.1a through BIO-1.1c, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Methodology

Geographic information system (GIS) mapping of existing biological conditions and proposed site grading and development was used to calculate acreages of alliances that are protected by the CDFW deed restrictions as well as those that are outside of deed-restricted areas.

A significant impact would occur if the Project would result in loss of existing on-site habitat for special status species.

The CDFW typically considers vegetation alliances with a Rarity Ranking of S1, S2, or S3 to be "threatened communities," and impacts on communities with rankings of S3 or lower are typically considered to be significant impacts under CEQA. Therefore, a significant impact would result due to loss of special-status species habitat if the Project would cause any of the following adverse effects on on-site CSS, riparian woodland, and riparian scrub vegetation alliances:

- Physical removal or substantial damage, or a potential increase in human disturbance, including physical encroachment that could cause a decline in the quality or total amount of habitat. Direct loss or incidental harm to a special-status species during construction would also be considered a significant impact, and could occur if young are abandoned because of human-wildlife interaction, construction equipment or vehicle destruction, or damage to an individual protected animal or plant, or if habitat is removed while a special-status species is present.
- Operation of the proposed community trails, parks, and the Community Center so as to increase intensity or duration of human encroachment that cause a decline in the quality or total amount of CSS, riparian woodland, or riparian scrub vegetation habitat.

Because areas of open water on-site are artificial and maintained as decorative golf course amenities, adverse effects would not be considered to be a significant impact.

Because the other categories include those developed land cover types that are not covered by the Rarity Rankings, adverse effects within those areas would not be considered to be a significant impact.

Impact Assessment

Direct Loss of Special-Status Species Habitat

Existing vegetation within the Project's grading footprint would be directly removed as a result of earth-moving and contouring. Site grading would remove existing soil substrate that was previously disturbed when the golf course was developed to accommodate placement of engineered fill for slope stabilization and to accommodate Specific Plan infrastructure such as roads, site drainage, utilities, and safety features. The Project would directly remove approximately 13.62 acres of existing vegetation included within the habitat alliances identified

in **Table 3.5-9**, of which approximately 9.66 acres are located within CDFW deed-restricted areas.

Of the affected vegetation, 7.55 acres consists of CSS that could support CAGN such as the Black Sage Scrub Shrubland Alliance, California Brittlebush Scrub Shrubland Alliance, California Buckwheat Scrub Shrubland Alliance, Coyote Brush Scrub Shrubland Alliance, and Mixed Scrub Shrubland Alliance. In addition, 3.02 acres of riparian vegetation that would be directly removed has the potential to provide habitat for least Bell's vireo, although no nesting least Bell's vireo were detected during on-site surveys.

Vegetation would be directly removed through standard construction clearing and grubbing methods. Direct loss or incidental harm to a special-status species during construction would also be considered a significant impact, and could occur if young are abandoned because of human-wildlife interaction, construction equipment or vehicle destruction, or damage to an individual protected animal or plant, or if habitat is removed while a special-status species is present.

Special-Status Plants

Table 3.5-3 identifies special-status plant species with the potential to occur in the development footprint, along with their regulatory status, general habitat requirements, the specific blooming period during which special-status plants could be observed in the development footprint, and links to current rare plant survey protocols. Special-status plant species have the potential to occur in CSS, mulefat scrub, riparian woodland, and emergent wetland habitats in the development footprint.

Of the special-status plant species that were found to have a possibility of occurring on the Project site, none were observed on the Project site during any of the plant surveys. Since special-status plants do not occur on the Project site, implementation of the Project is not anticipated to result in the permanent loss of special-status plants.

Critical Habitat

Critical habitat for the CAGN has been mapped by the USFWS as part of its mandate to identify habitat areas critical to the long-term survival of this listed species. The Project site is located along the eastern perimeter of the critical habitat boundary. The USFWS Critical Habitat (2007) for the CAGN indicates that within the overall boundary of the USFWS-mapped areas, any contiguous CSS plant communities in proximity to riparian habitats in coastal slopes and washes meet the definition of critical habitat for this species.

Of the total 11.37 acres of designated critical habitat located within the central and the southwest portions of the Project site, approximately 1.28 acres consist of contiguous CSS habitat in the southwest portion of the Project site meet the CAGN Critical Habitat definition. The Project would avoid impacts to constituent elements of critical habitat for the species (see **Figure 3.5-2** and **Figure 3.5-4**).

Table 3.5-9
Project Impacts on On-Site MCVII Vegetation Alliances (Acres)

MCVII Vegetation Alliances	Affected Deed-Restricted Area	Affected Non-Deed-Restricted Area	Total Affected Area	Total Preserved Area	Total Area on Project Site
Coastal Sage Scrub					
Black Sage Scrub Shrubland Alliance	1.34	0.06	1.40	-	1.40
California Brittlebush Scrub Shrubland Alliance	-	0.59	0.59	2.25	2.84
California Buckwheat Scrub Shrubland Alliance	-	0.40	0.40	-	0.40
California Sagebrush Shrubland Alliance	1.12	0.49	1.61	0.01	1.62
Coyote Brush Scrub Shrubland Alliance	1.02	0.05	1.07	1.25	2.32
Mixed Scrub Shrubland Alliance	2.18	0.30	2.48	0.54	3.02
Coastal Sage Scrub Subtotal	*5.66*	*1.89*	*7.55*	*4.05*	*11.60*
Riparian Woodland					
Arroyo Willow Forest Alliance	0.12	0.09	0.21	-	0.21
Fremont Cottonwood Forest Alliance	1.91	0.71	2.62	-	2.62
Riparian Woodland Subtotal	*2.03*	*0.80*	*2.83*	-	*2.83*
Riparian Scrub					
Mixed Riparian Scrub Shrubland Alliance	0.56	0.95	1.51	-	1.51
Mulefat Thicket Shrubland Alliance	0.17	0.02	0.19	-	0.19
Riparian Scrub Subtotal	*0.73*	*0.97*	*1.70*	-	*1.70*
Emergent Wetland					
California Bulrush Marsh Herbaceous Alliance	0.03	0.30	0.33	-	0.33
Southern Cattail Marsh Alliance	0.06	-	0.06	-	0.06
Open Water	1.15	-	1.15	-	1.15
Emergent Wetland Subtotal	*1.24*	*0.30*	*1.54*	-	*1.54*
Vegetation Alliance Total	***9.66***	***3.96***	***13.62***	***4.05***	***17.66***
Other (Developed, Parks and Trails, Ornamental Landscaping)					**133.17**
Total Project Site					**150.84**

Notes: MCVII = Manual of California Vegetation, Second Edition
Source: GLA 2018c.

Special-Status Wildlife Species

Bats. On-site surveys did not detect bat roosts. Because of the lack of roosting habitat, impacts associated with loss of roosting habitat for special-status bat species would not occur.

Least Bell's Vireo. Least Bell's vireo was determined to be absent from the site and would not be adversely affected by the Project.

Western Pond Turtle. Western pond turtle was determined to be absent from the site and would not be adversely affected by the Project.

Substantial Disturbance, Indirect Loss, and Degradation of Special-Status Species Habitats

Construction and subsequent use of the proposed Community Center, public park facilities, community trails, and upland conservation areas would result in the following physical changes that could adversely affect special-status habitats:

- Construction activities associated with draining and re-lining of golf course pond and grading and removal of golf course pond 3 (see **Figure 3.5-2**) would remove emergent wetland vegetation that has developed adjacent to the artificial golf course ponds and could harm nesting birds should they be present.
- Construction of the park and Community Center would result in vegetation clearing and removal of special-status plants and could cause harm to special-status nesting birds or raptor species that may use the large trees in the riparian woodland habitat for roosting.
- Fugitive dust created by demolition, site preparation, and earth-moving within the Specific Plan grading limits could settle on plant surfaces and inhibit metabolic processes such as photosynthesis and respiration. These changes could substantially degrade the health and vitality of sensitive habitats subject to fugitive dust and could cause a decline in the quality or total area of special-status species habitats adjacent to the development footprint, specifically the preserved CSS habitat at the west side of the Project site.
- Surface water runoff from construction areas could cause erosion and sedimentation and introduce contaminants or debris into special-status species habitats preserved in areas adjacent to the development footprint, specifically the CSS habitat on the west side of the Project site. Construction runoff and any litter or debris carried into special-status species habitats by construction runoff could damage, displace, or otherwise harm individual plants in special-status species habitats, and thereby reduce the quality or the total amount of habitat available to special-status species.

Significance Conclusion for Impact BIO-1.1

Project site grading would directly remove approximately 13.62 acres of habitat suitable for special-status species, of which approximately 9.66 acres is within CDFW deed-restricted areas. Such site grading would remove the majority of on-site CSS habitat (7.55 acres removed) and all of the riparian woodland (2.83 acres) and riparian scrub (1.70 acres) alliances on the site. Such removal of CSS, riparian woodland, and riparian scrub alliances would constitute a significant impact for which mitigation would be required.

Mitigation Measures

Mitigation Measure BIO-1.1a: **Compensatory Replacement of Special-Status Species Habitat.** The loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within the Project site shall be compensated through on-site or off-site establishment/ restoration/enhancement and/or off-site purchase of functionally equivalent or better habitat.

The determination of functional equivalency of on-site establishment/ restoration/enhancement and/or off-site purchase shall be made by the California Department of Fish and Wildlife for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas and by the City of La Habra for mitigation of loss of these habitats outside of existing deed-restricted areas and jurisdictional areas.

It is recognized, however, that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase/restoration/enhancement could be established to provide compensation for loss of (1) previous mitigation resulting from vacating existing deed restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be determined to be jurisdictional waters.

Compensation for lost on-site habitat with functionally equivalent or better habitat shall be detailed on an acreage-specific basis in a Habitat Mitigation and Monitoring Plan (HMMP), which shall be developed in coordination and compliance with State of California and federal regulatory agency requirements. Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet agencies' standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, the HMMP shall include:

- Baseline information, including the findings and conclusions of a Biological Assessment demonstrating that:

  - Off-site compensatory mitigation lands are functionally equivalent or better than the habitats lost on-site; and
  - On-site establishment of coastal sage scrub through restoration will result in functionally equivalent or better habitat than that lost on-site.
- Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration, or off-site habitat acquisition, creation, or enhancement); and
- Measurable performance standards and criteria, including but not limited to the overall amount or percent of cover and species diversity for restoration or enhancement in the Specific Plan development footprint that must meet state and federal regulatory resources agency approval and must be documented for City review at the end of the five-year monitoring period. Should the restoration or enhancement fail to meet success criteria as defined in the HMMP, implementation of remedial restoration shall be required.
- Contingency funds shall be established and deposited in escrow account(s) to ensure successful implementation of the HMMP, such funds to be refunded to the applicant at the time the HMMP performance criteria are met.
  - One account in an amount to be determined by the California Department of Fish and Wildlife (CDFW) to be held by CDFW for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas.

Should the HMMP being overseen by the California Department of Fish and Wildlife not be adequate to address mitigation of loss of coastal sage scrub habitat outside of existing deed-restricted areas, a second escrow account is to be established with the City of La Habra in an amount to be determined by the City.

Mitigation Measure BIO-1.1b: Construction Avoidance of Active Bird Nests.

Coastal Sage Scrub. If grading or soil disturbance of any kind is proposed within 50 feet of coastal sage scrub, or if upland conservation enhancement or restoration activities are

proposed between March 1 and August 15, a qualified biologist shall conduct pre-construction nesting California gnatcatcher surveys. Surveys shall be conducted using USFWS focused survey protocol methods and shall be conducted during the spring breeding season during the year construction occurs. Where an active bird nest is located, a 500-foot radius surrounding the active nest shall not be disturbed until after the nest becomes inactive and the family group can be confirmed, by a qualified biologist familiar with the species, to have left the nest territory. Prior to initiating vegetation clearing of coastal sage scrub, a qualified biologist shall walk ahead of the clearing activities to flush any birds from the habitat to be cleared.

Riparian Woodland. Proposed removal of riparian woodland within the development footprint shall be scheduled to occur during the non-breeding season for birds, which is between August 15 and January 31. If removal is scheduled to occur between February 1 and August 15, pre-construction breeding bird surveys shall be performed by a qualified biologist familiar with local bird species no later than 14 days prior to start of construction. If active nests are found during preconstruction surveys, a buffer of 250 feet shall be established and temporary fencing shall be placed to prevent encroachment into the buffer area by construction equipment or workers.

Mitigation Measure BIO-1.1c: **Setbacks and Erosion Protection for Coastal Sage Scrub.** All viewing areas, signage, benches, and other park features shall be located at least 50 feet from the edge of coastal sage scrub. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub habitats may be included in the setback, and shall be designed in coordination with a qualified biologist of the City's choosing to confirm that proposed fencing, signage, or efforts to reduce potential habitat encroachment would not create additional perches or vegetative features used by birds of prey compared to existing conditions. In addition, construction of proposed fencing or features intended to deflect potential human encroachment onto coastal sage scrub habitat shall be subject to erosion control strategies included in the required Storm Water Pollution Prevention Plan (SWPPP), which

would establish Best Management Practices (BMPs) to reduce sedimentation and erosion and prevent construction pollutants from leaving the site and the erosion and sediment control plan to be reviewed and approved by the City of La Habra prior to issuance of grading permit (see Impact HWQ-1.1 in Section 3.13, *Hydrology and Water Quality*, of the Draft EIR). Posted park rules shall identify coastal sage scrub habitats in the conservation areas and shall state that encroachment onto coastal sage scrub areas is prohibited. Educational signage and other signs proposed in the upland conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting.

Signage in public access areas shall advise that access is to approved trails, from 7:00 a.m. to 9:00 p.m. Lighting poles shall be located no closer than 50 feet from conservation areas wherever feasible. Where lighting poles cannot be located outside of setback areas, such as along permitted trails within the upland habitat conservation area, such lighting poles shall be low level and designed so as to discourage birds of prey from using them as perches for hunting activities. All lighting shall be directed downward so as not to intrude into habitat areas after sundown. The lighting plan shall be reviewed by a biologist prior to installation and submitted to the City for approval to confirm conformance with this measure.

Significance Conclusion for Impact BIO-1.1 with Implementation of Mitigation Measures

With implementation of Mitigation Measures BIO-1a through BIO-1c, the Project's impact on special-status species with the potential to occur in the development footprint would be reduced to a less-than-significant level for the following reasons:

- Mitigation Measure BIO-1a requires compensation for loss of any coastal sage scrub, riparian woodland, or riparian scrub habitat within the Project site through on-site establishment/ restoration/enhancement and or off-site purchase of functionally equivalent or better habitat.
- On-site establishment of 5.81 acres of CSS habitat would be provided through restoration (see **Figure 3.5-14**).
- Off-site acquisition of functionally equivalent or better habitat to compensate for Project impacts (vacation of deed-restricted areas and loss of on-site habitat) would be required

subject to the approval of CDFW in consultation with USFWS. Off-site options for functionally equivalent habitat or better include but are not limited to the following:

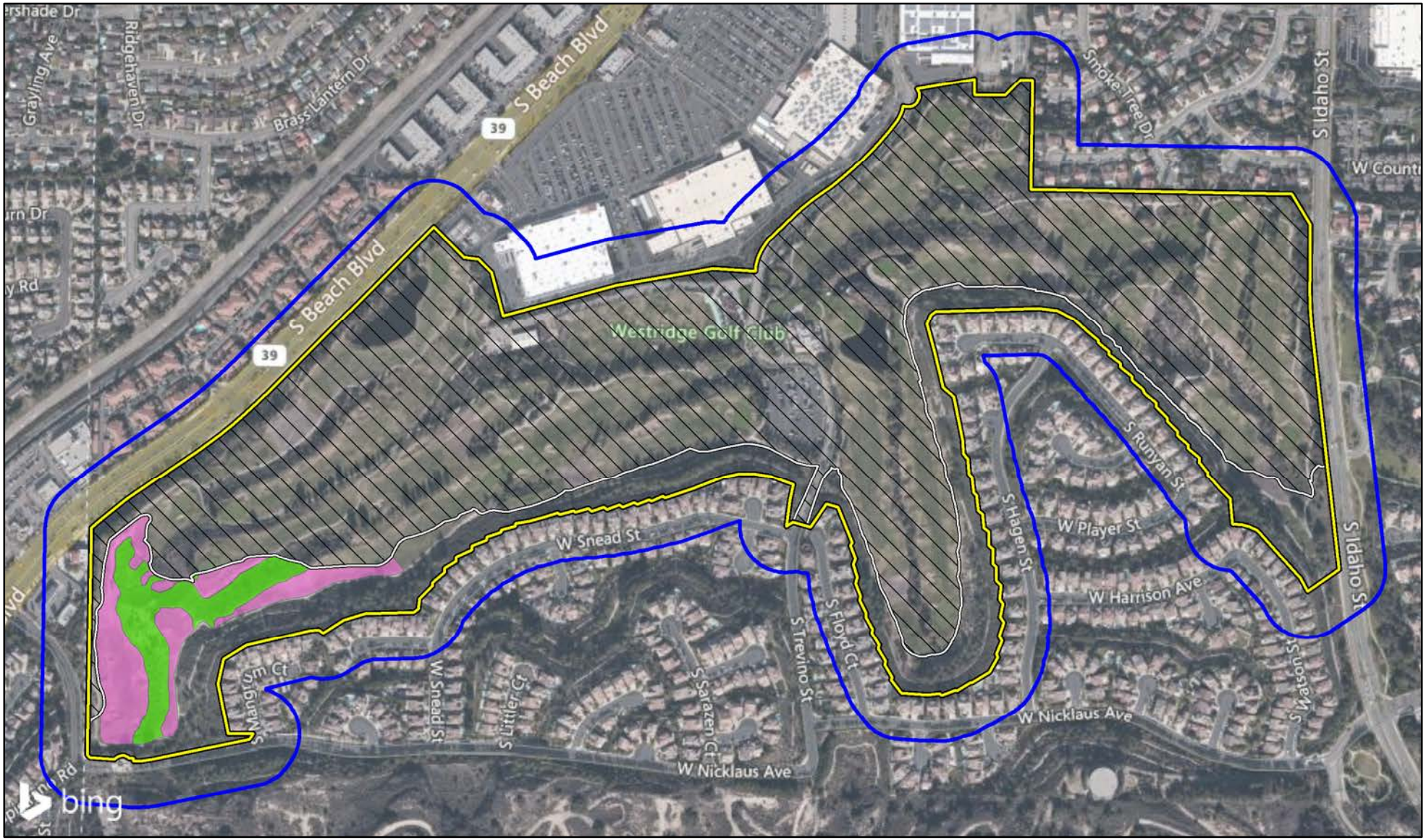
- **Mitigation Bank.** This option would include the purchase of Ephemeral Riparian Enhancement and/or of Oak Woodland Enhancement at the Soquel Canyon Mitigation Bank or an equivalent mitigation bank.
- **West Coyote Hills Property.** This option would include the purchase of functionally equivalent or better habitat on the West Coyote Hills property located south of the Project site in Fullerton. The City of Fullerton and the State of California have made preservation of a portion of the West Coyote Hills property a high priority, and purchase of mitigation on this site would help the state achieve its goals. As part of this option, the applicant would work with the State of California and the City of Fullerton to identify the specific property that would be appropriate to purchase independent of the specific habitat type of such property or a requirement for in-kind purchase.

  The biological resource importance of preserving the West Coyote Hills outweighs the need to purchase similar habitat types as those existing within the deed-restricted areas of the Project site because (1) the West Coyote Hills site has higher local and regional biological importance, including suitable habitat for CAGN and least Bell's vireo; and (2) the existing vegetation within the deed-restricted areas is underperforming and unsustainable, and lacks long-term maintenance or management. The purchase of off-site credits on the West Coyote Hills property includes long-term management of the property as established by the City of Fullerton prior to development.
- **Puente Hills Habitat Preservation Authority.** This option would include off-site establishment or acquisition and preservation of habitat that is desired by the Puente Hills Habitat Preservation Authority (Authority). The Authority currently manages over 3,870 acres of preserved public open space, with a goal of assembly of a reserve with over 4,000 acres. The overall goal of the Authority is to manage habitat and preserve biological diversity throughout this large area. An integral aspect of this goal is to preserve and enhance opportunities for wildlife movement through the Puente Hills with connections to the Chino Hills (i.e., movement at a much larger scale than currently occurs on the existing Westridge Golf Club site). The applicant has been working with the Authority and has executed a Memorandum of Understanding wherein the applicant would fund acquisition or establishment of CSS habitat. The Authority's priority is acquisition of lands that have been determined to have high value for establishing a wildlife corridor/linkage. Should acquisition not be immediately available due to the unwillingness of the sellers, the payment provided could then be used by the Authority for future acquisition or restoration (or combination thereof) at the Authority's discretion. Any restoration would be completed in accordance with the Authority's adopted Resource Management Plan. The terms and requirements of such an in-lieu-fee arrangement would need to be acceptable to the CDFW and USFWS in order to satisfy their mitigation requirements sufficiently to authorize the Project.

- The identification of multiple mitigation options as described above demonstrates that sufficient mitigation for impacts on on-site resources is feasible.

Given the Project's location within a highly developed/urbanized portion of the Southern California region, it is appropriate to consider potential off-site mitigation opportunities that may benefit higher-value habitats and associated species in the region. Also, it is appropriate for the CDFW and USFWS to be the arbiters for determining whether the specific selection of mitigation options constitutes "functionally equivalent or better" habitat to compensate for loss of CSS habitat within existing deed-restricted areas, as well as all riparian woodland and riparian scrub habitats, given the special attention focused on these resources by these agencies and the fact that (1) the CDFW has sole authority related to vacating existing deed restrictions and approving a Streambed Alteration Agreement to compensate for the habitat lost within the existing deed-restricted areas, (2) these agencies have approval authority for Project impacts on jurisdictional waters, and (3) both agencies have responsibilities under the federal and California Endangered Species Acts. The City would remain responsible for determining the adequacy of compensation for loss of CSS habitat outside of existing deed-restricted areas, recognizing that the combination of on-site and off-site mitigation approved by the CDFW and USFWS to compensate for impacts related to vacating existing deed restrictions and impacts on jurisdictional waters may also mitigate impacts on CSS habitat outside of existing deed-restricted areas.

Moreover, the ultimate mitigation could consist of some combination of various amounts of on-site and off-site options.



LSA

LEGEND

Project Boundary	Post-Construction Habitat
Study Area	Preservation (4.05 acres)
Grading Footprint	Restoration (5.81 acres)

FIGURE 3.5-14

0 300 600
FEET

SOURCE: Bing (2014); Glenn Lukos Associates (8/2019)

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Rancho La Habra

Post-Construction Habitat

Impact BIO-1.2: Development of the Rancho La Habra Specific Plan would require that existing deed restrictions intended to provide mitigation in perpetuity for loss of special-status species habitat associated with construction of the La Habra Hills Specific Plan, including the Westridge Golf Club (Project site), be vacated. Implementation of Mitigation Measure BIO-1.2, along with compliance with applicable regulatory requirements of state law, including replacement of existing deed-restricted areas through issuance of a new Streambed Alteration Agreement for Rancho La Habra, would compensate for the loss of previously provided mitigation within the Project site (deed-restricted areas) with functionally equivalent or better habitat. The impact would therefore be *significant but mitigable*.

Methodology

GIS mapping of existing deed-restricted areas and proposed site grading and development was used to calculate acreages protected by the CDFW deed restrictions and the areas of vegetative alliances within those deed-restricted areas.

A significant impact would occur if the Project would result in the grading or development of lands previously set aside as mitigation in perpetuity for impacts caused by development of the La Habra Hills Specific Plan (on-site deed-restricted lands).

Impact Analysis

The Project applicant has requested that the CDFW vacate existing on-site deed restrictions and issue a new Streambed Alteration Agreement. A review of the Rancho La Habra Specific Plan indicates that proposed grading and development would occur within existing on-site deed-restricted areas.

Significance Conclusion for Impact BIO-1.2

The Project would eliminate existing deed restrictions within the Project site and directly remove approximately 9.66 acres of habitat suitable for special-status species within current CDFW deed-restricted areas. Vacating existing deed restrictions along with such grading and development would constitute a significant impact for which mitigation would be required.

Mitigation Measures

Mitigation Measure BIO-1.2: Compensatory Replacement of Previously Provided Mitigation within On-Site Deed-Restricted Areas. The loss of previously provided mitigation within on-site deed-restricted areas within the Project site shall be compensated through on-

site establishment/restoration/enhancement and/or off-site purchase of functionally equivalent or better habitat.

The determination of functional equivalency of on-site establishment/restoration/enhancement and/or off-site purchase shall be made by the California Department of Fish and Wildlife.

It is recognized that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase could provide compensation for (1) loss of previous mitigation resulting from vacating existing deed-restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be classified as jurisdictional waters.

Compensation for loss of on-site deed-restricted areas with functionally equivalent or better habitat shall be detailed as set forth in Mitigation Measure BIO-1.1a.

Significance Conclusion for Impact BIO-1.2 with Implementation of Mitigation Measures

Because Mitigation Measure BIO-1.2 requires compensation with equivalent or better habitat for the loss of previously provided mitigation within on-site deed-restricted areas, impacts would be reduced to less than significant.

Threshold BIO-2: **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife, Regional Water Quality Control Board, or U.S. Fish and Wildlife Service.**

Impact BIO-2: **Site preparation and grading would directly remove 5.765 acres of riparian and wetland habitats, including Arroyo Willow Forest, California Bulrush Marsh, Fremont Cottonwood Forest, Mixed Riparian Scrub Shrubland, and Southern Cattail Marsh Alliances, within the Project's grading footprint. In addition, sensitive natural habitats proposed to be avoided by the Project, specifically the coastal sage scrub preserved on the west side of the Project site, could be damaged or reduced in quality during construction. Compliance with applicable regulatory requirements of federal and state law, along with implementation**

of Mitigation Measures BIO-1.1a and BIO-2a through BIO-2c, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Methodology

GIS mapping was used to calculate impacts on existing riparian habitat types and other sensitive natural communities identified by local or regional plans, policies, regulations, or by the CDFW, RWQCB, or USFWS.

Each of the existing habitat types shown in **Figure 3.5-2** may support special-status species. Therefore, the existing habitats that are depicted in **Figure 3.5-2** are considered to be sensitive natural habitats. Special-status species that have the potential to occur in existing habitats in the development footprint, and the regulatory status and habitat requirements of these species, are summarized in **Table 3.5-3** and **Table 3.5-5**.

Sensitive habitats also include resources protected pursuant to Section 404 of the Clean Water Act, Section 401 of the Clean Water Act, the Porter-Cologne Water Quality Control Act, and California Fish and Game Code Section 1602 criteria. GIS technology was also used to calculate impacts on these regulated water resources.

A significant impact would result if the Project would have any of the following adverse effects on riparian and wetland habitats, including Arroyo Willow Forest, California Bulrush Marsh, Fremont Cottonwood Forest, Mixed Riparian Scrub Shrubland, and Southern Cattail Marsh Alliances:

- Physical removal or substantial damage, or a potential increase in human disturbance, including physical encroachment that could cause a decline in the quality or total amount of habitat. Direct loss or incidental harm to a special-status species during construction would also be considered a significant impact, and could occur if young are abandoned because of human-wildlife interaction, construction equipment or vehicle destruction, or damage to an individual protected animal or plant, or if habitat is removed while a special-status species is present.
- Operation of the proposed community trails, parks, and the Community Center so as to increase intensity or duration of human encroachment that cause a decline in the quality or total amount of CSS riparian woodland, and riparian scrub vegetation habitat.

Impact Assessment

Direct Loss of Riparian Communities

Sensitive natural communities would be directly removed during grading, excavation, and earth-moving within the Specific Plan grading limits. Development of the Rancho La Habra Specific Plan would result in the direct loss of 5.765 acres of riparian and wetland habitats,

including Arroyo Willow Forest, California Bulrush Marsh, Fremont Cottonwood Forest, Mixed Riparian Scrub Shrubland, and Southern Cattail Marsh Alliances, as shown in **Table 3.5-9** and **Figure 3.5-2**.

Significance Conclusion for Impact BIO-2

Because development of the Rancho La Habra Specific Plan would result in the direct loss of 5.765 acres of riparian and wetland habitats, including Arroyo Willow Forest, California Bulrush Marsh, Fremont Cottonwood Forest, Mixed Riparian Scrub Shrubland, and Southern Cattail Marsh Alliances, a significant impact would result for which mitigation is required.

Destruction of or damage to sensitive natural communities or the proposed habitat enhancement in conservation areas from construction and use of proposed trails, viewing area kiosks, park facilities, the amphitheater, and the Community Center would also be considered a significant impact.

Mitigation Measures

Mitigation Measure BIO-2a: **Preventing Degradation of Natural Communities.** The applicant shall avoid or minimize adverse effects on sensitive natural communities within the Project site. The measures described below shall be employed to avoid degradation of sensitive natural communities by maintaining water quality and controlling erosion and sedimentation during construction as required by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities. (See also Draft EIR Section 3.13, *Hydrology and Water Quality*, for discussion of NPDES requirements and requirements for preparation and implementation of a Storm Water Pollution Prevention Plan [SWPPP] and implementation of Best Management Practices [BMPs].)

The Project applicant shall comply with requirements of the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit. This shall include construction site inspection and control programs at all construction sites, with follow-up and enforcement consistent with each Permittee's respective Enforcement Response Plan, to prevent construction site discharges of pollutants and impacts on Beneficial Uses of receiving waters. The goal of Provision C.3 of the MS4 Permit is for the Permittee, such as the City of La Habra, to use its planning authorities to include appropriate

source control, site design, and storm water treatment measures in new development projects to address both soluble and insoluble storm water runoff pollutant discharges and prevent increases in runoff flows from site development. This goal is to be accomplished primarily through the implementation of low impact development techniques. The Project applicant shall comply with local municipal requirements and the local storm water program as mandated under the Municipal Stormwater Permit, including, at minimum, the following measures:

- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- Avoid excavation and grading if there is 0.5 inch of rain or more within 48 hours.
- Limit on-site construction routes and stabilize construction entrance(s) and exit(s).
- For any increase in impervious surface area, include establishment of vegetated swales and permeable pavement materials, preserve vegetation, re-plant with native vegetation, and evaluate and implement appropriate measures.
- Provide native vegetation buffer areas where appropriate and practicable to prevent pollutants from entering off-site native habitats or water bodies.
- Construct diversion dikes and drainage swales to channel runoff around the site and away from bodies of water.
- Use berms and drainage ditches to divert runoff around exposed areas.
- Place diversion ditches across the top of cut slopes.
- Prohibit use of fertilizers or pesticides in areas with a potential runoff into adjacent native habitats.

The applicant shall prepare and implement a maintenance program as approved by the City that includes maintenance of water quality pollution-control features such as swales, sediment traps, or other passive applications of pollution prevention measures required as part of NPDES permitting.

The maintenance program shall address the management of lands adjacent to off-site coastal sage scrub habitat areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Install temporary silt fencing or vegetative plantings between development and adjacent sensitive natural communities, specifically off-site coastal sage scrub.
- Locate fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features, and otherwise isolate construction work areas from any identified jurisdictional features including California Fish and Game Code, U.S. Army Corps of Engineers, and Regional Water Quality Control Board jurisdictional areas.
- Ensure on-going maintenance and management in perpetuity at no expense to the City for the preserved upland areas adjacent to the development footprint, along with provisions permitting the City to enforce management and maintenance requirements and recoup costs for enforcement should such enforcement be necessary. On-going maintenance and management of upland conservation areas shall be implemented in a manner consistent with the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit, and evidence of compliance with such permit conditions shall be provided to the City Engineer on a quarterly basis.
- Provide trash receptacles at appropriate locations and provide for regular litter removal.
- Maintain all improvements within the parks, trails, and Community Center in a safe and working condition.

Mitigation Measure BIO-2b: **Conservation and Protection of Sensitive Habitats Avoided by Specific Plan Grading.** For on-going conservation and protection of sensitive habitats that the Specific Plan proposes to avoid, the following requirements shall apply:

- A habitat conservation and protection plan for proposed upland conservation areas adjacent to the development footprint shall be prepared by a qualified biologist with implementation approved by the City of La Habra Community Development Director prior to approval of

City grading permits. The habitat conservation and protection plan shall, at a minimum, include the following components to minimize the effect of night lighting on upland conservation area habitats adjacent to the development footprint.

The following shall apply to any proposed lighting within 150 feet of the upland or riparian conservation areas:

- Low-intensity streetlamps and low-elevation lighting poles shall be provided.
- Internal silvering of the globe or external opaque reflectors shall be provided to direct light away from sensitive natural habitats.
- Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into sensitive habitats.

Common area lighting plans shall be reviewed by the City for conformance with these measures prior to installation. Private lighting restrictions shall be enforced by the property owners' association as described below.

- CC&Rs, as well as residential and commercial leases within the Project site shall prohibit building occupants from creating outdoor feeding stations for feral cats to prevent feral cat colonies from establishing and to prevent the attraction of other predatory wildlife such as coyotes, red fox, raccoon, and opossums. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of this requirement.
- As part of Community Center and Project trail improvements, interpretive signage regarding the sensitive habitats and the dangers of unleashed domestic animals shall be provided to the satisfaction of the City. Such information shall be provided in the vicinity of the Community Center, along trails, and at wildlife viewing areas where public access is provided.

  In addition, information materials shall be prepared by the applicant for review and approval by the City regarding the sensitive habitats and the dangers of unleashed domestic animals within the Project site. Such materials shall be provided to each initial homeowner by the home

builder(s), to successive homeowners by the property owners' association, and to renters of for-rent multi-family dwellings by the building owner.

The property owners' association shall establish a pet policy prohibiting unleashed domestic animals outside of fully enclosed yard areas and have the right and obligation to impose fines for violation of the pet policy.

Mitigation Measure BIO-2c: **Compensatory Mitigation for Loss of Riparian and Wetland Habitat.** Loss of riparian and wetland habitat that cannot be avoided during site development shall be compensated with provision of functionally equivalent or better habitat, which may be provided as part of Mitigation Measure BIO-1.1a.

Significance Conclusion for Impact BIO-2 with Implementation of Mitigation Measures

With implementation of Mitigation Measures BIO-1.1a and BIO-2a through BIO-2c, the impact on riparian habitat or other sensitive natural communities with the potential to occur in the development footprint would be reduced to a less-than-significant level.

Threshold BIO-3: **Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.**

Impact BIO-3: **Earth-moving and site grading proposed within the Specific Plan area would directly remove, and could damage or degrade during construction, wetland areas subject to Clean Water Act Section 401 and Section 404 within the Project site, along with lands subject to California Fish and Game Code Section 1602. However, in the course of compliance with applicable regulatory requirements of federal and state law, and with implementation of mitigation measures, no net loss of wetlands would occur, and impacts would be reduced to less than significant levels. The impact is therefore *significant but mitigable.***

Methodology

As noted above, GLA Senior Regulatory Specialist Tony Bomkamp examined the Project site in 2018 to determine the limits of (1) USACE jurisdiction pursuant to Section 404 of the Clean Water Act; (2) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code; and (3) RWQCB jurisdiction pursuant to the Waste Discharge Requirements of the

Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The delineation was conducted consistent with the 2015 definition of "Waters of the United States" Rule.

A significant impact would result if the Project would have any of the following adverse effects on on-site jurisdictional waters:

- Physical removal or substantial damage, or a potential increase in human disturbance, including physical encroachment that could cause a decline in the quality or total amount of habitat. Direct loss of or incidental harm to a special-status species during construction would also be considered a significant impact and could occur if young are abandoned because of human-wildlife interaction, construction equipment or vehicle destruction, or damage to an individual protected animal or plant, or if habitat is removed while a special-status species is present.
- Operation of the proposed community trails, parks, and the Community Center so as to increase intensity or duration of human encroachment that cause a decline in the quality or total amount of coastal sage scrub, riparian woodland, and riparian scrub vegetation habitat.

Impact Assessment

Areas within the Project site were determined to be subject to the regulatory jurisdiction of (1) the USACE pursuant to Section 404 of the Clean Water Act; (2) the CDFW pursuant to Division 2, Chapter 6, Section 1600 of the California Fish and Game Code; and (3) the Santa Ana RWQCB pursuant to the Waste Discharge Requirements of the Porter-Cologne Act. The primary sources of water for the drainages, basins, and ponds within the Project site are potable water sources, storm water runoff, and golf course irrigation.

Table 3.5-10 and **Figure 3.5-9** through **Figure 3.5-12** show Project impacts on jurisdictional waters of the United States and waters of the State (GLA 2018b).

Table 3.5-10
Project Impacts on Jurisdictional Waters

Type of Jurisdictional Waters	Existing Area (Acres)	Area Affected by Project (Acres)
USACE Clean Water Act Section 404	0.04	0.04
USACE (Clean Water Act Section 401) and RWQCB (Porter-Cologne Water Quality Control Act)	2.52	2.39
CDFW (California Fish and Game Code Section 1602)	5.02	3.77

Notes:
CDFW = California Department of Fish and Wildlife
RWQCB = Regional Water Quality Control Board
USACE = United States Army Corps of Engineers
Source: GLA 2018b.

Significance Conclusion for Impact BIO-3

Direct removal of protected jurisdictional waters of the United States and waters of the State would be considered a significant impact for which mitigation is required.

Mitigation Measures

Mitigation Measure BIO-1.1a: Compensatory Replacement of Special-Status Species Habitat

Mitigation Measure BIO-2c: Compensatory Mitigation for Loss of Riparian and Wetland Habitat

Significance Conclusion for Impact BIO-3 with Implementation of Mitigation Measures

With implementation of Mitigation Measures BIO-1.1a and BIO-2c pertaining to avoidance and protection of jurisdictional resources, impacts on protected jurisdictional waters of the United States and waters of the State would be reduced to a less than significant level.

Threshold BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Impact BIO-4: No physical modifications to the existing 500-foot-wide vegetative interface between the Project site and West Coyote Hills habitat areas are proposed. However, wildlife viewing areas, kiosks, passive recreation structures, and lighting associated with proposed Specific Plan trail systems could impede localized movement of wildlife across that interface, resulting in a significant impact. Mitigation Measures BIO-4a and BIO-4b would protect the functionality of the existing 500-foot-wide vegetative interface, reducing impacts to less than significant. In addition, Mitigation Measure BIO-1a provides for enhancement of coastal sage scrub habitat in the southern portion of the Project site, which would benefit localized wildlife movement. The impact would therefore be *significant but mitigable*.

Methodology

Isolated populations of wildlife whose young have limited avenues for dispersal and no suitable habitat to reach through dispersal eventually deteriorate or cease to occupy a site. When wildlife populations become isolated, their long-term viability is reduced.

As previously noted, the Project site is largely surrounded by developed urban uses. However, an approximately 500-foot functional interface remains between on-site natural habitats and the undeveloped lands supporting similar habitat to the south in the West Coyote Hills. This interface area is bisected by a gate-guarded paved street (West Nicklaus Avenue), open split rail fencing, and ornamental landscaping that limit large animal movement between the West Coyote Hills and the existing golf course. Project-related physical changes that could impede wildlife movement and exchange across this existing linkage would be considered a significant impact.

Impact Assessment

The three nearest locations of large-scale similar habitat are the East Coyote Hills located 2 miles east of the Project site, the Puente Hills located 3 miles north of the Project site, and the West Coyote Hills located directly south of the Project site. The areas between the Project site and the East Coyote Hills and Puente Hills are developed with urban uses including buildings and roadways that do not support wildlife movement, and it is unlikely that wildlife species, including avian species, would be able to safely move between the Project site and those two large habitat areas.

Due to the presence of the CSS habitat, on-site drainage features, and the adjacent West Coyote Hills open space, the Project site may serve as a migratory stop for some birds and provide a local wildlife movement function. However, the Project site is separated from the larger wildlife areas in the region by roadways and urban residential areas, which provide a substantial barrier to local wildlife movement. Furthermore, the Project site would not function as a regional corridor for larger species due to the lack of linkage to large open spaces, as well as adjacent arterial roadways and adjacent residential developments that surround the Project site and further restrict movement. Therefore, the Project site does not provide a connection between large areas of undeveloped land that may be used for wildlife movement. Consequently, implementation of the Project is not anticipated to result in permanent loss of habitat that is critical to regional wildlife movement.

Large areas of similar habitat in the West Coyote Hills support avian species, including the threatened CAGN and additional special-status species such as the cactus wren, in similar habitat conditions compared to what is found in the proposed development footprint. The existing 500-foot-wide interface along the southern boundary of the Project site allows for movement between existing similar habitats that are directly south in the West Coyote Hills. The movement of wildlife between the undeveloped lands in the West Coyote Hills and similar

habitats within the Project site would primarily occur at this interface. No other linkages to wildlife habitat were found within a 5-mile radius that would facilitate wildlife movement to or from the Project site.

Nest territories for the CAGN have been documented in the Project site (see **Figure 3.5-5**). Dispersal of young and movement of CAGN and the other wildlife species on the Project site are largely unimpeded along a 500-foot-wide interface at the southern site boundary. Additional wildlife species present in the development footprint that may use the existing interface between the Project site and the West Coyote Hills are identified and addressed in **Table 3.5-5**.

There are no proposed buildings or structures, and no grading is proposed, in the existing interface between the Project site and the West Coyote Hills that would impede wildlife movement.

Minor physical changes to the interface would result from habitat enhancement that would include removal of pepper trees to increase functions and values of existing CSS habitat. Physical changes would include removal of existing non-native plants and weeds, and the planting of native shrub species that wildlife could use as cover when moving between the Project site and the West Coyote Hills.

Provision of wildlife viewing areas, kiosks, passive recreation structures, or lighting associated with proposed Specific Plan trail systems within the vegetated wildlife movement interface shown in **Figure 3.5-2** could obstruct local wildlife movement between the Project site and adjacent undeveloped land in the West Coyote Hills and potentially reduce the utility of the Project site as a "stepping stone" for movement by highly mobile species.

Significance Conclusion for Impact BIO-4

Because wildlife viewing areas, kiosks, passive recreation structures, or lighting associated with proposed Specific Plan trail systems could obstruct local wildlife movement between the Project site and adjacent undeveloped land in the West Coyote Hills, a significant impact could result.

Mitigation Measures

Mitigation Measure BIO-4a: **Locations of Structures and Trail Features.** Structures and trail features shall be situated to avoid obstructing the wildlife movement interface shown in **Figure 3.5-1**. Structures or facilities that would obstruct wildlife movement between the West Coyote Hills and the development footprint habitats shall not be placed within the interface between the Project site and adjacent undeveloped land in the West Coyote Hills.

Mitigation Measure BIO-4b: **Maintenance of Vegetative Cover along Wildlife Movement Interface.** Native vegetation along the existing 500-foot-wide vegetative interface in the southern portion of the Project site shall be preserved so as to maintain cover available for wildlife using the interface to move between the West Coyote Hills and Project site habitats.

Significance Conclusion for Impact BIO-4 with Implementation of Mitigation Measures

Mitigation Measures BIO-4a and BIO-4b would ensure avoidance of impacts and protect the functionality of the existing 500-foot-wide vegetative interface, reducing impacts to less than significant. In addition, Mitigation Measure BIO-1a provides for enhancement of CSS habitat in the southern portion of the Project site, which would benefit localized wildlife movement. Implementation of these measures would reduce impacts to less than significant.

Threshold BIO-5: **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact BIO-5: **Build-out of the Rancho La Habra Specific Plan would result in removal of trees and landscaping that provide avian nesting and roosting habitat throughout the grading footprint, conflicting with La Habra General Plan Policy BR 1.8, which encourages preservation of such resources in the City. Because Mitigation Measure BIO-5 provides for replacement of landscaping lost during site development that will provide equivalent or better habitat suitable for bird nesting and roosting, the Project would be consistent with General Plan policies and goals. In addition, removal of trees within the grading footprint during nesting bird season would adversely affect nesting birds. However, Mitigation Measure BIO-1.1b prohibits removal of trees with an active nest and establishes a protective buffer area around such trees until after the nest becomes inactive. Impacts would therefore be *significant but mitigable*.**

Methodology

The La Habra General Plan includes Policy BR 1.8, which states as follows: "Encourage the preservation of trees in existing and new development projects that are suitable nesting and roosting habitat for resident and migratory bird species."

Because the development footprint includes suitable nesting and roosting habitat for resident and migratory birds in the riparian woodland, in the CSS, and in the trees and shrubs in the landscaped slopes of the existing golf course, a review was undertaken to determine whether the Project would result in the loss of any trees that are suitable nesting and roosting habitat for resident and migratory bird species.

Notably, La Habra General Plan Policy BR 1.1 contemplates the conversion and protection of "sensitive plant species areas within the Westridge Golf Course." Impacts on sensitive plant species within the Westridge Golf Course are addressed in Impacts BIO-1.1 and BIO-1.2, above.

A significant impact would occur if a substantial number of existing trees providing suitable nesting and roosting habitat for resident and migratory bird species would be removed as the result of site development or if active nests within CSS or riparian woodlands would be removed.

Impact Assessment

None of the trees identified on the Project site are considered sensitive or heritage, nor are any existing trees subject to a tree preservation ordinance. However, the Project would remove all trees within the Specific Plan grading limits, including individual trees that provide nesting and roosting habitat for resident and migratory birds.

Significance Conclusion for Impact BIO-5

Proposed removal of trees providing nesting and roosting habitat throughout the Project site's grading footprint would conflict with General Plan Policy BR 1-8. Therefore, the proposed Specific Plan would be inconsistent with this policy, and a significant impact would result.

Removal of trees during nesting bird season would adversely affect nesting birds and result in a significant impact.

Mitigation Measures

Mitigation Measure BIO-5: **Replacement of Bird Nesting and Roosting Habitat.** All Project landscaping shall be in conformance with the approved Rancho La Habra Specific Plan, Landscape Plans, and plant palette and shall incorporate replacement for landscaping lost during development (combination of native and non-native plantings) that will provide equivalent or better habitat suitable for bird nesting and roosting for resident and migratory birds. Replacement for habitat lost during Project development may be in the form of landscaped slopes, street trees, preservation, and enhancement of

conservation habitat areas, and landscaping of the Community Center, park, and trail areas.

Significance Conclusion for Impact BIO-5 with Implementation of Mitigation Measures

Because Mitigation Measure BIO-5 provides for replacement of landscaping lost during site development that would provide equivalent or better habitat suitable for bird nesting and roosting for resident and migratory birds, development permitted by the Rancho La Habra Specific Plan would be consistent with General Plan policies and goals. Mitigation Measure BIO-1.1b prohibits removal of trees with an active nest and establishes a protective buffer area around such trees until after the nest becomes inactive and the family group can be confirmed, by a qualified biologist familiar with the species, to have left the nest territory. With implementation of Mitigation Measures BIO-1.1b and BIO-5, impacts would be less than significant.

Threshold BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact BIO-6: Because the Specific Plan area is not located within a "sub-regional focus area" that would be protected by the Orange County Central and Coastal Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP), the Project would be consistent with the NCCP/HCP, and *no impact* would result.

Methodology

A significant impact would result if development of the proposed Specific Plan would conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan to which the site is subject. This evaluation involves a two-step process of determining (1) whether the Project site is within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; and (2) if so, whether the Project is within an area proposed for conservation and is consistent with any applicable policies or provisions of the plan.

Impact Assessment

The Orange County Central and Coastal Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) and its associated implementation agreement cover 13 cities in Orange County, including the City of La Habra. The NCCP/HCP, which was adopted in 1996,

was intended to create a multi-species/multi-habitat reserve system and implement a long-term management program that will protect CSS and the species that use this habitat. The purpose of the NCCP/HCP is to take a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP/HCP program focuses on the long-term stability of wildlife and plant communities for which large tracts of land have already been set aside for permanent preservation. While the City of La Habra participates in the NCCP/HCP, the Project site is not located within a "sub-regional focus area" that would be protected by the plan.

The mitigation measures set forth in this section of the Partially Recirculated Draft EIR require that the Project compensate for the loss of sensitive habitats with functionally equivalent or better habitat, which is consistent with the intent of the NCCP/HCP. In addition, resident and migratory bird species would be removed as the result of site development. However, Mitigation Measure BIO-5 requires compensation for such loss.

Significance Conclusion for Impact BIO-6

Because the Specific Plan area is not located within a "sub-regional focus area" that would be protected by the Orange County Central and Coastal NCCP/HCP, no impact would result.

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c. Agency Consultation

The following resource agency coordination meetings were attended by biologists involved in preparation of technical analyses for this EIR and planners involved in preparation of the Rancho La Habra Specific Plan.

Meeting Date	Location	Attendees[a]
November 21, 2014	CDFW San Diego Office	**SGH**, **PC**, MB, and KH
January 30, 2015	Field Visit (Westridge Golf Course)	**SGH**, **PC**, MB, EW, and SR
March 31, 2015	Field Visit (Westridge Golf Course)	EW, VC, MB, and **WC**
August 31, 2015	CDFW Office	**WC**, MB, **PC**, EW, and VC
March 23, 2016	CDFW Office	**BB**, **PC**, EW, and VC
February 27, 2018	CDFW Office	**BB**, MB, **PC**, EW, and VC
July 12, 2018	CDFW Office	AH, CH, **TB**, EW, VT, and JT
September 7, 2018	CDFW Office	AH, CH, **TB**, EW, VT, and JT
October 17, 2018	CDFW Office	AH, CH, **TB**, EW, VT, and JT

Notes:

[a] AH = Andrew Han (Lennar)
BB = Brianna Bernard (Carlson Strategic Land Solutions)
CH = Craig Hoffman (Project Dimensions)
EW = Erinn Wilson (CDFW)
JT = Jennifer Turner (CDFW)
KH = Kevin Hupf (CDFW)
MB = Michael Battaglia (Lennar)
PC = Peter Carlson (Carlson Strategic Land Solutions)
SGH = Shawn Gatchel-Hernandez (VCS)
SR = Sarah Rains (CDFW)
TB = Tony Bomkamp (GLA)
VC = Victoria Chau (CDFW)
VT = Victoria Tank (CDFW)
WC = Wade Caffery (VCS)

CDFW = California Department of Fish and Wildlife
GLA = Glenn Lukos Associates
VCS = VCS Environmental
Bold type indicates biologists involved in preparation of technical analyses for this EIR and planners involved in preparation of the Rancho La Habra Specific Plan.

Exhibit 3.5-A
Plant Species Compendium

Scientific Name[1]	Common Name
Pinaceae	**Pine Family**
Pinus sp.	Pine[2]
*Pinus eldarica**	Afghan Pine[2]
*Pinus halepensis**	Aleppo pine[3]
*Pinus canariensis**	Canary Island pine[2,3]
Anacardiaceae	**Sumac or Cashew Family**
Malosma laurina	laurel sumac[2,3,4]
Rhus integrifolia	lemonade berry[3,4]
*Rhus lancea**	African sumac[2,3]
Rhus ovata	sugarbush[3]
*Schinus molle**	Peruvian pepper tree (California pepper tree)[2,3,4]
*Schinus terebinthifolius**	Brazilian peppertree[2,3,4]
Toxicodendron diversilobum	western poison oak[3]
Asteraceae (Compositae)	**Sunflower Family**
Ambrosia psilostachya	western ragweed[3,4]
Artemisia californica	California sagebrush[3,4]
Artemisia douglasiana	California mugwort[3,4]
Baccharis pilularis	coyote bush[3,4]
Baccharis salicifolia ssp. *salicifolia* *(=Baccharis salicifolia)*	mulefat[3,4]
*Centaurea melitensis**	tocalote (Malta star thistle)[3]
Encelia californica	California brittlebush /bush sunflower (California encelia)[3,4]
Isocoma menziesii	coastal goldenbush[4]
Brassicaceae (Cruciferae)	**Mustard Family**
*Brassica nigra**	black mustard[3]
*Hirschfeldia incana**	summer mustard[4]
Betulaceae	**Birch Family**
*Alnus rhombifolia**	white alder[2,3]
Bignoniaceae	**Bigonia Family**
Jacaranda mimosifolia	jacaranda[2]
Cactaceae	**Cactus Family**
Opuntia littoralis	coastal prickly pear[3]
Chenopodiaceae	**Goosefoot Family**
*Salsola tragus**	Russian thistle (tumbleweed)[3]
Ericaceae	**Heather Family**
*Arbutus unedo**	strawberry tree[2]
Euphorbiaceae	**Spurge Family**

Scientific Name[1]	Common Name
Croton setigerus (=Eremocarpus setigerus)	turkey mullein (doved)[3]
*Ricinus communis**	castor bean[3]
Fabaceae (Leguminosae)	**Legume Family**
Acacia sp. *	acacia[2]
Acmispon glaber (=Lotus scoparius)	deerweed (California broom)[3]
Erythrina sp.	coral[2]
Tipuana sp.*	tipuana[4]
Fagaceae	**Oak Family**
Quercus sp.	oak[2]
Quercus agrifolia	coast live oak[3]
Hamamelidaceae	**Witch Hazel Family**
*Liquidambar styraciflua**	liquidambar[2]
Lamiaceae (Labiatae)	**Mint Family**
Salvia apiana	white sage[3]
Salvia mellifera	black sage[3]
Lauraceae	**Laurel Family**
Cinnamomum camphora	camphor[2]
Moraceae	**Mulberry Family**
Ficus sp.	ficus[2]
Ficus carica	fig[2]
*Morus alba**	mulberry[2]
Myrtaceae	**Myrtle Family**
*Callistemon citrinus**	bottlebrush[2]
Eucalyptus sp.*	eucalyptus[2,3]
*Eucalyptus sideroxylon**	eucalyptus red iron bark[2]
Melaleuca sp.	melaleuca[2]
Oleaceae	**Olive Family**
*Olea europaea**	common olive[2,3]
Ligustrum sp.*	privet[2]
Platanaceae	**Sycamore Family**
Platanus racemosa	western sycamore[2,3]
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum	California buckwheat[3]
Rosaceae	**Rose Family**
Heteromeles arbutifolia	toyon (Christmas-berry, California holly)[3]
*Pyrus calleryana**	Bradford pear[2]
Salicaceae	**Willow Family**
*Populus alba**	poplar[2]
Populus fremontii	Fremont cottonwood[3,4]
Salix lasiolepis	arroyo willow[2,3,4]

Scientific Name[1]	Common Name
Salix nigra	black willow[3,4]
Sapindaceae	**Soapberry Family**
*Cupaniopsis anacardioides**	carrotwood[2]
Scrophulariaceae	**Figwort Family**
*Myoporum laetum**	myoporum[2]
Solanaceae	**Nightshade Family**
*Nicotiana glauca**	tree tobacco[3]
Ulmaceae	**Elm Family**
*Ulmus parvifolia**	Chinese elm[2]
MONOCOTS	
Arecaceae (Palmae)	**Palm Family**
Archontophoenix cunninghamiana	king palm[2]
*Syagrus romanzoffiana**	queen palm[2]
*Washingtonia robusta**	Mexican fan palm[2,3,4]
Elymus	**Wild Rye, Wheatgrass and Squirreltail**
Leymus condensatus	giant wild rye[3,4]
Poaceae	**Grass Family**
*Acacia redolens**	desert carpet[3]
*Arundo donax**	arundo (giant reed)[3]
Avena sp.*	wild oats[4]
*Avena barbata**	slender oat[3]
Bromus sp.*	bromes[4]
*Bromus diandrus**	ripgut grass[3]
*Cortaderia jubata**	pampas grass[3]
*Poa pratensis**	Kentucky bluegrass[3]
*Schismus barbatus**	common Mediterranean grass[3]
Typhaceae	**Cattail Family**
Typha sp.	broad-leaved cattail[3]

Notes:
[1] * indicates non-native species.
[2] Observed by ValleyCrest Tree Care Services in 2015.
[3] Observed by VCS Environmental in 2014.
[4] Observed by Glenn Lukos Associates in 2018.
Source: Compiled by LSA Associates, Inc. (2018).

Tree Survey

Standard Pacific Westridge

Tree Inventory

	Scientific Name	Common Name	Diameter	Condition	Structure
1	*Ligustrum sp.*	Privet	Small: 7-12 Inches	Very Good	Good
2	*Malosma laurina*	Laurel	Very Small: < 6 Inches	Good	Good
3	*Malosma laurina*	Laurel	Very Small: < 6 Inches	Good	Good
4	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
5	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
6	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
7	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Fair
8	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Fair
9	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
10	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
11	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
12	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
13	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
14	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
15	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
16	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
17	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
18	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Very Good	Good
19	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Very Good	Fair
20	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Very Good	Good
21	*Pinus canariensis*	Canary Island Pine	Very Small: < 6 Inches	Good	Good
22	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
23	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
24	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
25	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
26	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
27	*Pinus canariensis*	Canary Island Pine	Very Small: < 6 Inches	Very Good	Good
28	*Pinus canariensis*	Canary Island Pine	Very Small: < 6 Inches	Good	Good
29	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Very Good	Good
30	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Very Good	Good
31	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Very Good	Fair
32	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
33	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Good
34	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Good
35	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
36	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
37	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Fair
38	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
39	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
40	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Poor
41	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
42	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
43	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
44	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
45	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
46	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
47	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Good
48	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
49	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
50	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
51	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
52	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
53	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
54	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
55	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
56	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
57	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
58	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
59	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
60	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
61	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
62	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
63	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
64	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
65	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
66	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
67	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
68	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
69	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
70	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
71	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
72	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
73	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
74	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
75	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
76	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
77	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
78	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
79	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
80	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
81	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
82	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
83	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
84	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
85	*Pinus canariensis*	Canary Island Pine	Very Small: < 6 Inches	Good	Good
86	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
87	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
88	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
89	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
90	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
91	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Fair
92	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
93	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
94	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
95	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
96	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
97	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
98	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
99	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
100	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
101	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
102	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
103	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
104	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
105	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
106	*Pinus canariensis*	Canary Island Pine	Medium: 13-18 Inches	Good	Good
107	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
108	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
109	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
110	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Fair	Good
111	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
112	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
113	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
114	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Fair
115	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
116	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
117	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
118	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
119	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
120	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
121	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
122	*Pinus canariensis*	Canary Island Pine	Small: 7-12 Inches	Good	Good
123	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Good
124	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Good
125	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Good
126	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Good	Good
127	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
128	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Fair	Good
129	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Fair	Good
130	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Good
131	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Good	Good
132	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Good	Good
133	*Cupaniopsis anacardioides*	Carrotwood	Very Small: < 6 Inches	Good	Good
134	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
135	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
136	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Poor
137	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Fair	Good
138	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
139	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Good
140	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Very Good	Poor
141	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
142	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
143	*Cupaniopsis anacardioides*	Carrotwood	Small: 7-12 Inches	Good	Fair
144	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Good
145	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Good	Good
146	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Good	Good
147	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Fair	Fair
148	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Large: 19-24 Inches	Fair	Fair
149	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Good	Good
150	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Good
151	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Fair	Fair
152	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
153	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Fair	Fair
154	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Fair	Fair
155	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Large: 19-24 Inches	Fair	Fair
156	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Large: 19-24 Inches	Good	Good
157	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Fair	Fair
158	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Good	Fair
159	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Small: 7-12 Inches	Fair	Fair
160	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Large: 19-24 Inches	Good	Fair
161	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Large: 19-24 Inches	Good	Fair
162	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Fair
163	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Fair
164	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Very Good	Very poor
165	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Fair
166	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Fair	Fair
167	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Fair
168	*Eucalyptus sideroxylon*	Eucalyptus Red Iron B	Medium: 13-18 Inches	Good	Fair
169	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
170	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
171	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
172	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
173	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
174	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
175	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
176	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
177	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
178	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
179	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
180	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
181	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Very Good	Good
182	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
183	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
184	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
185	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
186	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
187	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
188	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
189	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
190	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
191	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
192	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
193	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
194	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
195	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Fair	Fair
196	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
197	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
198	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
199	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
200	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Fair	Fair
201	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Fair	Fair
202	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
203	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
204	*Pinus halepensis*	Aleppo Pine	Very Small: < 6 Inches	Poor	Fair
205	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
206	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
207	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
208	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
209	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
210	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
211	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
212	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Very good
213	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
214	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
215	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
216	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
217	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
218	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
219	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
220	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
221	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
222	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
223	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
224	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
225	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Very Good	Fair
226	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
227	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
228	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
229	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
230	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
231	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
232	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
233	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
234	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
235	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
236	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Poor
237	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
238	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
239	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
240	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
241	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
242	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
243	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
244	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
245	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
246	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
247	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
248	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
249	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
250	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
251	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
252	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
253	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
254	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Good
255	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
256	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
257	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
258	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
259	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
260	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
261	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
262	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
263	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
264	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Poor
265	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Poor
266	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
267	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
268	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
269	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
270	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
271	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
272	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
273	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
274	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
275	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
276	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
277	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
278	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
279	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
280	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Poor
281	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Poor
282	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Fair	Fair
283	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
284	*Pinus halepensis*	Aleppo Pine	Very Small: < 6 Inches	Good	Good
285	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
286	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
287	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
288	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
289	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Poor
290	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
291	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
292	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
293	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
294	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
295	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
296	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
297	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
298	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
299	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
300	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
301	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
302	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
303	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
304	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
305	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
306	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
307	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
308	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
309	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
310	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
311	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
312	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
313	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
314	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Poor
315	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
316	*Pinus halepensis*	Aleppo Pine	Large: 19-24 Inches	Good	Poor
317	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
318	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
319	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
320	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
321	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
322	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
323	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
324	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
325	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
326	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
327	*Pinus halepensis*	Aleppo Pine	Large: 19-24 Inches	Good	Poor
328	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
329	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
330	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
331	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
332	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
333	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
334	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
335	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
336	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
337	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
338	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
339	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
340	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
341	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
342	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
343	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Fair	Fair
344	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
345	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
346	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
347	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
348	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
349	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
350	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
351	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
352	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
353	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
354	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
355	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
356	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
357	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
358	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
359	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
360	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
361	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Good
362	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
363	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Good
364	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
365	*Pinus halepensis*	Aleppo Pine	Small: 7-12 Inches	Good	Fair
366	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
367	*Pinus halepensis*	Aleppo Pine	Medium: 13-18 Inches	Good	Fair
368	*Ficus sp.*	Ficus	Small: 7-12 Inches	Good	Good
369	*Ficus sp.*	Ficus	Medium: 13-18 Inches	Good	Good
370	*Ficus sp.*	Ficus	Small: 7-12 Inches	Very Good	Good
371	*Ficus sp.*	Ficus	Small: 7-12 Inches	Very Good	Good
372	*Ficus sp.*	Ficus	Small: 7-12 Inches	Very Good	Good
373	*Ficus sp.*	Ficus	Small: 7-12 Inches	Good	Fair
374	*Ficus sp.*	Ficus	Small: 7-12 Inches	Very Good	Fair
375	*Ficus sp.*	Ficus	Small: 7-12 Inches	Very Good	Good
376	*Ficus sp.*	Ficus	Small: 7-12 Inches	Good	Fair
377	*Ficus sp.*	Ficus	Small: 7-12 Inches	Good	Fair
378	*Melaleuca sp.*	Melaleuca	Medium: 13-18 Inches	Fair	Fair
379	*Melaleuca sp.*	Melaleuca	Small: 7-12 Inches	Fair	Fair
380	*Melaleuca sp.*	Melaleuca	Small: 7-12 Inches	Good	Good
381	*Melaleuca sp.*	Melaleuca	Small: 7-12 Inches	Fair	Fair
382	*Melaleuca sp.*	Melaleuca	Very Small: < 6 Inches	Fair	Fair
383	*Melaleuca sp.*	Melaleuca	Very Small: < 6 Inches	Good	Fair
384	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
385	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
386	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
387	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
388	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
389	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair
390	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
391	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
392	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
393	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
394	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
395	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
396	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
397	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
398	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
399	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
400	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
401	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
402	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
403	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
404	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
405	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
406	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
407	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
408	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
409	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
410	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
411	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
412	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
413	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
414	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
415	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
416	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
417	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
418	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
419	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
420	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair
421	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
422	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair
423	*Schinus molle*	California Pepper	Small: 7-12 Inches	Poor	Good
424	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Poor
425	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair
426	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Poor
427	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Fair
428	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Poor
429	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
430	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
431	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
432	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
433	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
434	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
435	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
436	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
437	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
438	*Schinus molle*	California Pepper	Small: 7-12 Inches	Very Good	Fair
439	*Schinus molle*	California Pepper	Small: 7-12 Inches	Very Good	Good
440	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
441	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
442	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
443	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
444	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
445	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
446	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
447	*Schinus molle*	California Pepper	Large: 19-24 Inches	Fair	Fair
448	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
449	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
450	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
451	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
452	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
453	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Good
454	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
455	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
456	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
457	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Fair
458	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
459	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
460	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
461	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
462	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
463	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
464	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
465	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
466	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
467	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
468	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
469	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
470	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
471	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good
472	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good
473	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Fair
474	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
475	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
476	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
477	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
478	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Poor
479	*Schinus molle*	California Pepper	Small: 7-12 Inches	Very Good	Very poor
480	*Schinus molle*	California Pepper	Small: 7-12 Inches	Very Good	Fair
481	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Fair
482	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Fair
483	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
484	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
485	*Schinus molle*	California Pepper	Large: 19-24 Inches	Very Good	Fair
486	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
487	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
488	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
489	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
490	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
491	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Fair
492	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
493	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
494	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
495	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Poor
496	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Poor
497	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
498	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
499	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
500	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
501	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
502	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
503	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
504	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
505	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
506	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
507	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
508	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Poor
509	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
510	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
511	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
512	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Poor
513	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
514	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
515	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
516	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good
517	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Good
518	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
519	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
520	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Faur
521	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
522	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
523	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
524	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
525	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
526	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
527	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
528	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
529	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
530	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
531	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good
532	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Fair
533	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
534	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Fair
535	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
536	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
537	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
538	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
539	*Schinus molle*	California Pepper	Small: 7-12 Inches	Very Good	Poor
540	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
541	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
542	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
543	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
544	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
545	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
546	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
547	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
548	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Fair
549	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Poor
550	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Poor
551	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
552	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
553	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
554	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Fair
555	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
556	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
557	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
558	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
559	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Good	Good
560	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
561	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
562	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
563	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
564	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
565	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
566	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
567	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
568	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Good
569	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Fair
570	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
571	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
572	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
573	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
574	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
575	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Very Good	Good
576	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Poor

	Scientific Name	Common Name	Diameter	Condition	Structure
577	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
578	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
579	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
580	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Poor
581	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
582	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Good	Good
583	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Fair
584	*Schinus molle*	California Pepper	Medium: 13-18 Inches	Fair	Good
585	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Good
586	*Schinus molle*	California Pepper	Small: 7-12 Inches	Fair	Fair
587	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Fair
588	*Schinus molle*	California Pepper	Very Small: < 6 Inches	Fair	Fair
589	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
590	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
591	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
592	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
593	*Schinus molle*	California Pepper	Small: 7-12 Inches	Good	Good
594	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Good
595	*Schinus molle*	California Pepper	Large: 19-24 Inches	Good	Good
596	*Olea europaea*	Olive	Very Small: < 6 Inches	Fair	Fair
597	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Very poor
598	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Very poor
599	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Very poor
600	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Very good
601	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Poor
602	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Fair
603	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
604	*Olea europaea*	Olive	Very Small: < 6 Inches	Very Good	Fair
605	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Fair
606	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
607	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
608	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
609	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
610	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Fair
611	*Olea europaea*	Olive	Very Small: < 6 Inches	Good	Good
612	*Olea europaea*	Olive	Small: 7-12 Inches	Fair	Fair
613	*Tipuana sp.*	Tipuana	Very Small: < 6 Inches	Good	Good
614	*Tipuana sp.*	Tipuana	Very Small: < 6 Inches	Very Poor	Poor
615	*Tipuana sp.*	Tipuana	Very Small: < 6 Inches	Very Poor	Poor
616	*Tipuana sp.*	Tipuana	Very Small: < 6 Inches	Very Poor	Poor
617	*Rhus lancea*	African Sumac	Small: 7-12 Inches	Good	Good
618	*Rhus lancea*	African Sumac	Very Small: < 6 Inches	Good	Good
619	*Acacia sp.*	Acacia	Small: 7-12 Inches	Good	Good
620	*Acacia sp.*	Acacia	Medium: 13-18 Inches	Poor	Poor
621	*Acacia sp.*	Acacia	Medium: 13-18 Inches	Very Poor	Poor
622	*Acacia sp.*	Acacia	Medium: 13-18 Inches	Very Poor	Poor
623	*Acacia sp.*	Acacia	Small: 7-12 Inches	Good	Good
624	*Acacia sp.*	Acacia	Small: 7-12 Inches	Good	Poor
625	*Acacia sp.*	Acacia	Very Small: < 6 Inches	Good	Fair
626	*Ulmus parvifolia*	Chinese Elm	Small: 7-12 Inches	Good	Good
627	*Arbutus unedo*	Strawberry Tree	Small: 7-12 Inches	Good	Good
628	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Fair	Fair
629	*Eucalyptus sp.*	Eucalyptus	Large: 19-24 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
630	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Fair	Fair
631	*Eucalyptus sp.*	Eucalyptus	Large: 19-24 Inches	Good	Good
632	*Eucalyptus sp.*	Eucalyptus	Very Small: < 6 Inches	Good	Fair
633	*Eucalyptus sp.*	Eucalyptus	Very Small: < 6 Inches	Fair	Fair
634	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Good	Fair
635	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Good	Fair
636	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Very Good	Poor
637	*Eucalyptus sp.*	Eucalyptus	Small: 7-12 Inches	Fair	Fair
638	*Eucalyptus sp.*	Eucalyptus	Large: 19-24 Inches	Very Good	Poor
639	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Very Good	Fair
640	*Eucalyptus sp.*	Eucalyptus	Medium: 13-18 Inches	Very Good	Good
641	*Eucalyptus sp.*	Eucalyptus	Small: 7-12 Inches	Good	Poor
642	*Eucalyptus sp.*	Eucalyptus	Very Small: < 6 Inches	Good	Poor
643	*Eucalyptus sp.*	Eucalyptus	Small: 7-12 Inches	Fair	Fair
644	*Eucalyptus sp.*	Eucalyptus	Small: 7-12 Inches	Good	Good
645	*Eucalyptus sp.*	Eucalyptus	Small: 7-12 Inches	Very Good	Poor
646	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Very Good	Good
647	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Very Good	Good
648	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Poor
649	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Fair	Fair
650	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Fair
651	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Good
652	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Good
653	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Fair	Good
654	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Good
655	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Fair	Good
656	*Jacaranda mimosifolia*	Jacaranda	Small: 7-12 Inches	Good	Good
657	*Washingtonia robusta*	Palm	Small: 7-12 Inches	Fair	Good
658	*Washingtonia robusta*	Palm	Medium: 13-18 Inches	Very Good	Good
659	*Washingtonia robusta*	Palm	Very Large: 25-30 Inches	Good	Good
660	*Washingtonia robusta*	Palm	Large: 19-24 Inches	Good	Good
661	*Washingtonia robusta*	Palm	Medium: 13-18 Inches	Good	Good
662	*Washingtonia robusta*	Palm	Medium: 13-18 Inches	Good	Good
663	*Washingtonia robusta*	Palm	Medium: 13-18 Inches	Good	Good
664	*Washingtonia robusta*	Palm	Small: 7-12 Inches	Good	Good
665	*Washingtonia robusta*	Palm	Medium: 13-18 Inches	Good	Good
666	*Washingtonia robusta*	Palm	Small: 7-12 Inches	Good	Good
667	*Washingtonia robusta*	Palm	Small: 7-12 Inches	Good	Good
668	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Good	Good
669	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
670	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Good	Fair
671	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Good
672	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Good
673	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Good
674	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
675	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Good
676	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
677	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Fair
678	*Alnus rhombifolia*	Alder	Very Small: < 6 Inches	Fair	Fair
679	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
680	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Poor	Fair
681	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
682	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
683	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Fair
684	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Poor	Poor
685	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Poor
686	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Fair
687	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Poor	Fair
688	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Poor	Fair
689	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
690	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Good
691	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Fair
692	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
693	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
694	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
695	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Very Poor	Fair
696	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Poor
697	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
698	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Poor	Good
699	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Poor	Fair
700	*Alnus rhombifolia*	Alder	Medium: 13-18 Inches	Fair	Fair
701	*Alnus rhombifolia*	Alder	Small: 7-12 Inches	Fair	Poor
702	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
703	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Fair
704	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Fair
705	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Fair
706	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
707	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Fair
708	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Poor
709	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
710	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
711	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
712	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
713	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
714	*Pinus sp.*	Pine	Small: 7-12 Inches	Poor	Poor
715	*Pinus sp.*	Pine	Small: 7-12 Inches	Poor	Poor
716	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Poor
717	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
718	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Poor
719	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
720	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
721	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
722	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
723	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
724	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
725	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
726	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
727	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
728	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
729	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
730	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
731	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
732	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
733	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
734	*Pinus sp.*	Pine	Small: 7-12 Inches	Poor	Fair
735	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
736	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
737	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
738	*Pinus sp.*	Pine	Very Small: < 6 Inches	Very Good	Very good
739	*Pinus sp.*	Pine	Very Small: < 6 Inches	Very Good	Very good
740	*Pinus sp.*	Pine	Very Small: < 6 Inches	Very Good	Good
741	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
742	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
743	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
744	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Good
745	*Pinus sp.*	Pine	Very Small: < 6 Inches	Poor	Fair
746	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
747	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
748	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Fair
749	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Fair
750	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
751	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Good
752	*Pinus sp.*	Pine	Very Small: < 6 Inches	Very Good	Fair
753	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Fair
754	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Good
755	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Very good
756	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
757	*Pinus sp.*	Pine	Very Small: < 6 Inches	Poor	Good
758	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Fair
759	*Pinus sp.*	Pine	Very Small: < 6 Inches	Poor	Good
760	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
761	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
762	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
763	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Good
764	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
765	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
766	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
767	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
768	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
769	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
770	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
771	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
772	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
773	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Good
774	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
775	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
776	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
777	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
778	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
779	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
780	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
781	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
782	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
783	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
784	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
785	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
786	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
787	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
788	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
789	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
790	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
791	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
792	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
793	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
794	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
795	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
796	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
797	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
798	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Good
799	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
800	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
801	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Poor
802	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Poor
803	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Fair
804	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Good
805	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
806	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
807	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
808	*Pinus sp.*	Pine	Small: 7-12 Inches	Very Good	Good
809	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
810	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
811	*Pinus sp.*	Pine	Very Small: < 6 Inches	Poor	Good
812	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
813	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
814	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
815	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
816	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
817	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
818	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
819	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
820	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
821	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
822	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Fair
823	*Pinus sp.*	Pine	Small: 7-12 Inches	Poor	Fair
824	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
825	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
826	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Poor
827	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
828	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Good
829	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
830	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
831	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
832	*Pinus sp.*	Pine	Small: 7-12 Inches	Poor	Fair
833	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Fair
834	*Pinus sp.*	Pine	Medium: 13-18 Inches	Fair	Poor
835	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Fair
836	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
837	*Pinus sp.*	Pine	Small: 7-12 Inches	Fair	Good
838	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
839	*Pinus sp.*	Pine	Very Small: < 6 Inches	Fair	Good
840	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
841	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
842	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
843	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
844	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Fair
845	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
846	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
847	*Pinus sp.*	Pine	Medium: 13-18 Inches	Good	Fair
848	*Pinus sp.*	Pine	Very Small: < 6 Inches	Good	Good
849	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
850	*Pinus sp.*	Pine	Small: 7-12 Inches	Very Good	Fair
851	*Pinus sp.*	Pine	Small: 7-12 Inches	Good	Good
852	*Schinus terebinthifolius*	Brazilian Pepper	Small: 7-12 Inches	Good	Good
853	*Schinus terebinthifolius*	Brazilian Pepper	Very Small: < 6 Inches	Good	Good
854	*Schinus terebinthifolius*	Brazilian Pepper	Very Small: < 6 Inches	Good	Good
855	*Platanus racemosa*	Sycamore	Very Small: < 6 Inches	Good	Fair
856	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Good
857	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
858	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
859	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Poor
860	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
861	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Fair
862	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
863	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Poor
864	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
865	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
866	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
867	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
868	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
869	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
870	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
871	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
872	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
873	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Fair
874	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Fair
875	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
876	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
877	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
878	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
879	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
880	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
881	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
882	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
883	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Very poor
884	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
885	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
886	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
887	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
888	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Fair
889	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Very poor
890	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
891	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
892	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
893	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
894	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor

	Scientific Name	Common Name	Diameter	Condition	Structure
895	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
896	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
897	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
898	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
899	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
900	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
901	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
902	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
903	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
904	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
905	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
906	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
907	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
908	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Very Poor	Poor
909	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
910	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
911	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
912	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
913	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
914	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
915	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
916	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
917	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Very poor
918	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
919	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
920	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
921	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Poor
922	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
923	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
924	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Poor
925	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
926	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
927	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
928	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
929	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Faur
930	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Fair
931	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
932	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
933	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
934	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
935	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Very Poor	Poor
936	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
937	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
938	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Fair	Poor
939	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Fair	Fair
940	*Salix lasiolepis*	Willow	Large: 19-24 Inches	Fair	Poor
941	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Good	Fair
942	*Salix lasiolepis*	Willow	Large: 19-24 Inches	Fair	Poor
943	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Very Poor	Poor
944	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
945	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Very poor
946	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Very poor
947	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Very poor

	Scientific Name	Common Name	Diameter	Condition	Structure
948	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
949	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Very Poor	Poor
950	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Poor
951	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Poor
952	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
953	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
954	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
955	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
956	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
957	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Poor
958	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
959	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
960	*Salix lasiolepis*	Willow	Small: 7-12 Inches	Poor	Poor
961	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
962	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Good	Poor
963	*Salix lasiolepis*	Willow	Medium: 13-18 Inches	Poor	Poor
964	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Poor
965	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Good	Fair
966	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Good	Poor
967	*Callistemon citrinus*	Bottle Brush	Very Small: < 6 Inches	Good	Fair
968	*Callistemon citrinus*	Bottle Brush	Very Small: < 6 Inches	Good	Poor
969	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Poor
970	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Fair
971	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Fair
972	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Fair
973	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Good	Poor
974	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Very Poor	Poor
975	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Good	Fair
976	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Fair
977	*Callistemon citrinus*	Bottle Brush	Small: 7-12 Inches	Fair	Fair
978	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
979	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
980	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
981	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
982	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
983	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
984	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
985	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
986	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
987	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
988	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
989	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
990	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
991	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
992	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
993	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
994	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
995	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Poor
996	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
997	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
998	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
999	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
1000	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
1001	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Good
1002	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
1003	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1004	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
1005	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1006	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1007	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Poor
1008	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1009	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Poor
1010	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1011	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1012	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1013	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1014	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1015	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Poor
1016	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1017	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1018	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1019	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1020	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1021	*Pinus eldarica*	Afghan Pine	Very Small: < 6 Inches	Good	Good
1022	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1023	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Poor
1024	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1025	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1026	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1027	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1028	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Very Good	Fair
1029	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1030	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1031	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Poor	Fair
1032	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Good
1033	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Very Poor	Good
1034	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1035	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1036	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Poor
1037	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1038	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1039	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1040	*Pinus eldarica*	Afghan Pine	Very Small: < 6 Inches	Fair	Good
1041	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1042	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1043	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1044	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1045	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1046	*Pinus eldarica*	Afghan Pine	Very Small: < 6 Inches	Fair	Good
1047	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1048	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1049	*Pinus eldarica*	Afghan Pine	Very Small: < 6 Inches	Fair	Fair
1050	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1051	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1052	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1053	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
1054	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1055	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1056	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1057	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Faur
1058	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1059	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1060	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1061	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1062	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1063	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1064	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Poor
1065	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Poor
1066	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1067	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1068	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1069	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1070	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1071	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1072	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1073	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1074	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1075	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1076	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1077	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1078	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1079	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Poor
1080	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1081	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1082	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1083	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1084	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Good
1085	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1086	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1087	*Pinus eldarica*	Afghan Pine	Large: 19-24 Inches	Fair	Fair
1088	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1089	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1090	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1091	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1092	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1093	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1094	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Fair	Fair
1095	*Pinus eldarica*	Afghan Pine	Large: 19-24 Inches	Good	Good
1096	*Pinus eldarica*	Afghan Pine	Very Small: < 6 Inches	Good	Good
1097	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1098	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1099	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1100	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Fair	Fair
1101	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1102	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Fair
1103	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1104	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good
1105	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Good
1106	*Pinus eldarica*	Afghan Pine	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
1107	*Pinus eldarica*	Afghan Pine	Medium: 13-18 Inches	Good	Fair
1108	*Pyrus calleryana*	Bradford Pear	Medium: 13-18 Inches	Good	Fair
1109	*Pyrus calleryana*	Bradford Pear	Very Small: < 6 Inches	Poor	Fair
1110	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Poor	Fair
1111	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Poor	Fair
1112	*Pyrus calleryana*	Bradford Pear	Very Small: < 6 Inches	Good	Good
1113	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Good	Good
1114	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Poor	Fair
1115	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Poor	Fair
1116	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Poor	Fair
1117	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Fair	Good
1118	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Good	Good
1119	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Good	Good
1120	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Good	Good
1121	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Fair	Good
1122	*Pyrus calleryana*	Bradford Pear	Small: 7-12 Inches	Fair	Fair
1123	*Erythrina sp.*	Coral	Small: 7-12 Inches	Fair	Fair
1124	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Good	Fair
1125	*Erythrina sp.*	Coral	Large: 19-24 Inches	Good	Fair
1126	*Erythrina sp.*	Coral	Large: 19-24 Inches	Good	Fair
1127	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Good	Fair
1128	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Good	Fair
1129	*Erythrina sp.*	Coral	Small: 7-12 Inches	Good	Fair
1130	*Erythrina sp.*	Coral	Large: 19-24 Inches	Good	Poor
1131	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Good	Fair
1132	*Erythrina sp.*	Coral	Small: 7-12 Inches	Fair	Poor
1133	*Erythrina sp.*	Coral	Large: 19-24 Inches	Good	Poor
1134	*Erythrina sp.*	Coral	Large: 19-24 Inches	Very Good	Poor
1135	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Good	Poor
1136	*Erythrina sp.*	Coral	Large: 19-24 Inches	Very Good	Poor
1137	*Erythrina sp.*	Coral	Medium: 13-18 Inches	Very Good	Poor
1138	*Erythrina sp.*	Coral	Large: 19-24 Inches	Very Good	Good
1139	*Cinnamomum camphora*	Campher	Medium: 13-18 Inches	Very Good	Fair
1140	*Cinnamomum camphora*	Campher	Small: 7-12 Inches	Fair	Faur
1141	*Cinnamomum camphora*	Campher	Small: 7-12 Inches	Poor	Fair
1142	*Cinnamomum camphora*	Campher	Small: 7-12 Inches	Poor	Fair
1143	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1144	*Populus alba*	Poplar	Small: 7-12 Inches	Good	Good
1145	*Populus alba*	Poplar	Small: 7-12 Inches	Good	Good
1146	*Populus alba*	Poplar	Very Small: < 6 Inches	Good	Good
1147	*Populus alba*	Poplar	Very Small: < 6 Inches	Good	Good
1148	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1149	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1150	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1151	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Poor
1152	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Poor
1153	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1154	*Populus alba*	Poplar	Small: 7-12 Inches	Poor	Poor
1155	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Poor
1156	*Populus alba*	Poplar	Small: 7-12 Inches	Poor	Fair
1157	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1158	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1159	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
1160	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1161	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1162	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1163	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1164	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1165	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1166	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1167	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1168	*Populus alba*	Poplar	Small: 7-12 Inches	Poor	Fair
1169	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1170	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Poor
1171	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Faur
1172	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Poor
1173	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Poor
1174	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1175	*Populus alba*	Poplar	Small: 7-12 Inches	Fair	Fair
1176	*Populus alba*	Poplar	Medium: 13-18 Inches	Fair	Fair
1177	*Quercus sp.*	Oak	Small: 7-12 Inches	Fair	Fair
1178	*Quercus sp.*	Oak	Very Small: < 6 Inches	Fair	Good
1179	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Fair	Fair
1180	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Fair	Good
1181	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Fair	Good
1182	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1183	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1184	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1185	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Fair	Good
1186	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Fair	Good
1187	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Fair	Good
1188	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1189	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1190	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1191	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1192	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1193	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1194	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1195	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1196	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1197	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1198	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1199	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1200	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1201	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1202	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1203	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1204	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1205	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1206	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1207	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1208	*Syagrus romanzoffiana*	Queen Palm	Very Small: < 6 Inches	Good	Good
1209	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1210	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1211	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1212	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good

	Scientific Name	Common Name	Diameter	Condition	Structure
1213	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1214	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1215	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1216	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1217	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1218	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1219	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1220	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1221	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1222	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1223	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1224	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1225	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1226	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1227	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1228	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1229	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1230	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1231	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1232	*Syagrus romanzoffiana*	Queen Palm	Small: 7-12 Inches	Good	Good
1233	*Ficus carica*	Fig	Small: 7-12 Inches	Good	Good
1234	*Platanus racemosa*	California Sycamore	Very Small: < 6 Inches	Fair	Good
1235	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1236	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Good
1237	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Good
1238	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1239	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1240	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1241	*Platanus racemosa*	California Sycamore	Very Small: < 6 Inches	Fair	Fair
1242	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1243	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1244	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1245	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1246	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1247	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1248	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1249	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Poor	Poor
1250	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Very Poor	Poor
1251	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1252	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Fair
1253	*Platanus racemosa*	California Sycamore	Medium: 13-18 Inches	Good	Good
1254	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Good	Good
1255	*Platanus racemosa*	California Sycamore	Small: 7-12 Inches	Fair	Fair
1256	*Archontophoenix cunninghamiana*	King Palm	Small: 7-12 Inches	Fair	Fair
1257	*Archontophoenix cunninghamiana*	King Palm	Very Small: < 6 Inches	Fair	Good
1258	*Myoporum laetum*	Myoporum	Very Small: < 6 Inches	Poor	Good
1259	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Poor
1260	*Washingtonia robusta*	Mexican Fan Palm	Small: 7-12 Inches	Fair	Poor
1261	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Good	Good
1262	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Poor
1263	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Poor
1264	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Good	Fair
1265	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Fair

	Scientific Name	Common Name	Diameter	Condition	Structure
1266	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Fair
1267	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Fair	Fair
1268	*Myoporum laetum*	Myoporum	Small: 7-12 Inches	Good	Fair
1269	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Fair	Fair
1270	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Fair	Fair
1271	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Fair	Fair
1272	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Fair	Fair
1273	*Myoporum laetum*	Myoporum	Medium: 13-18 Inches	Good	Faur
1274	*Liquidambar styraciflua*	Liquidambar	Small: 7-12 Inches	Good	Poor
1275	*Morus alba*	Mulberry	Small: 7-12 Inches	Fair	Fair
1276	*Washingtonia robusta*	Fan Palm	Medium: 13-18 Inches	Good	Poor
1277	*Washingtonia robusta*	Fan Palm	Medium: 13-18 Inches	Good	Good
1278	*Washingtonia robusta*	Fan Palm	Medium: 13-18 Inches	Good	Good

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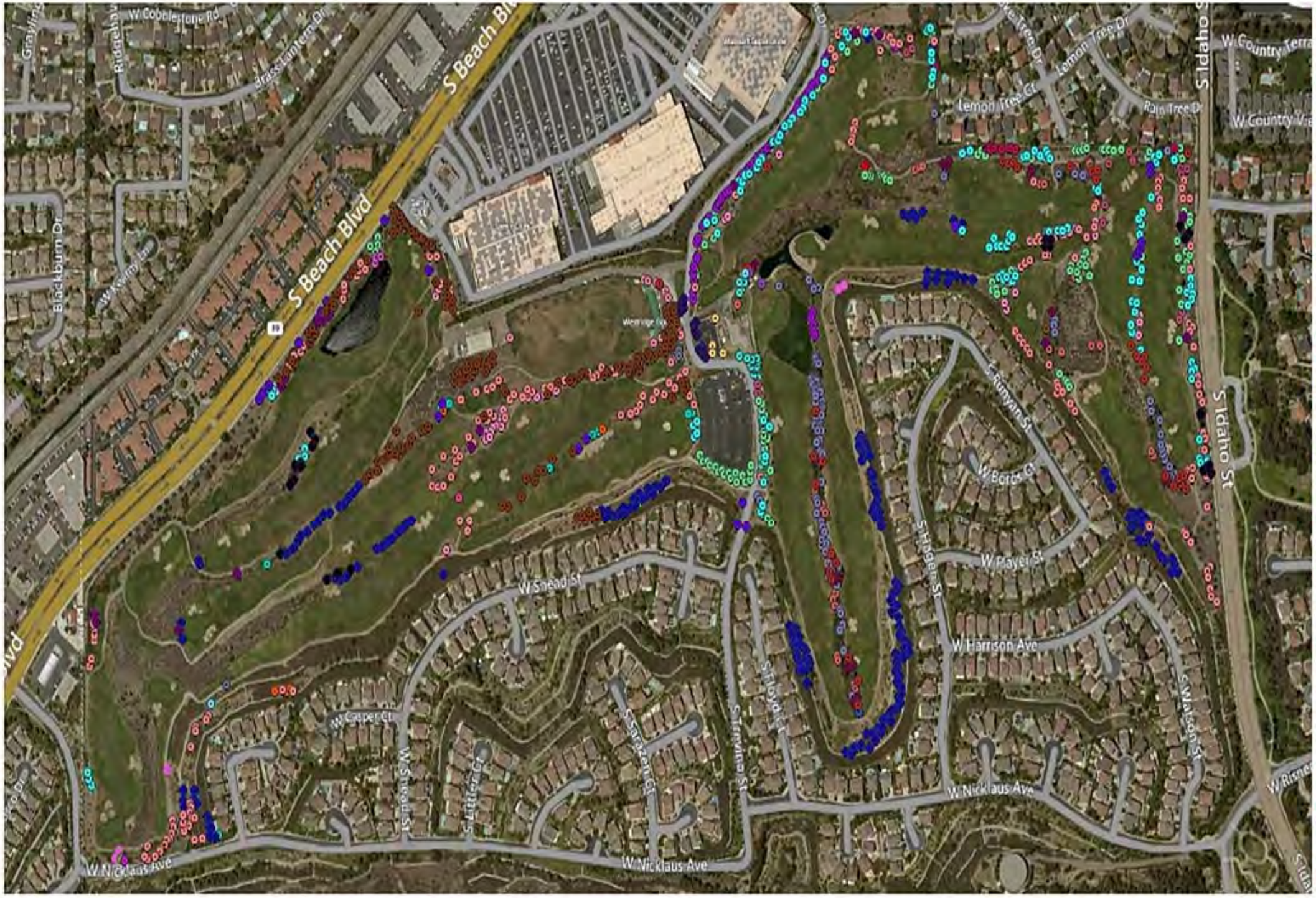

Map Legend

- Chinese Elm
- Strawberry Tree
- Acacia
- Tipuana
- African Sumac
- Alder
- Pine
- Palm
- Eucalyptus
- Jacaranda
- Carrotwood
- Eucalyptus Red Iron Bark
- Canary Island Pine
- Privet
- Laurel
- California Pepper
- Olive
- Melaleuca
- Aleppo Pine
- Ficus
- King Palm
- Myaporum
- California Sycamore
- Queen Palm
- Fig
- Mulberry
- Fan Palm
- Liquidambar
- Mexican Fan Palm
- Myoporum
- Bottle Brush
- Afghan Pine
- Willow
- Brazilian Pepper
- Sycamore
- Poplar
- Oak
- Campher
- Bradford Pear
- Coral

Exhibit 3.5-C
Wildlife Compendium

Scientific Name	Common Name
Avian Species	
Selasphorus sasin	Allen's hummingbird[1]
Fulica americana	American coot[1]
Corvus brachyrhynchos	American crow[1,2]
Turdus migratorius	American robin[1]
Calypte anna	Anna's hummingbird[1,2]
Hirundo rustica	barn swallow[1]
Thryomanes bewickii	Bewick's wren[1]
Nyclicorax nycticornx	black-crowned night-heron[1]
Sayornis nigricans	black phoebe[1,2]
Euphagus cyanocephalus	Brewer's blackbird[1]
Psaltriparus minimus	bushtit[1]
Aphelocoma californica	California scrub-jay[2]
Callipepla californica	California quail[2]
Melozone crissalis	California towhee[1,2]
Petrochelidon pyrrhonota	cliff swallow[1]
Poliptila californica californica	coastal California gnatcatcher[1,2]
Geothlypis trichas	common yellowthroat[1]
Accipiter cooperii	Cooper’s hawk[1]
Alopochen egyptacus	Egyptian goose[1]
Streptopelia decaocto	Eurasian collared-dove[1]
Quiscalus mexicanus	great-tailed grackle[1]
Geococcyx californianus	greater roadrunner[2]
Icterus cucullatus	hooded oriole[1]
Haemorhous mexicanus	house finch[1,2]
Troglodytes aedon	house wren[1]
Charadrius vociferus	killdeer[2]
Spinus psaltria	lesser goldfinch[1]
Vireo bellii pusillus	least Bell’s vireo[1]
Anas platyrhynchos	mallard[1]
Zenaida macroura	mourning dove[1,2]
Mimus polyglottos	northern mockingbird[1]
Stelgidopteryx serripennis	northern rough-winged swallow[1]
Picoides nuttallii	Nuttall’s woodpecker[1]
Empidonax difficillis	Pacific-slope flycatcher[1]
Phainopepla nitens	phainopepla[1]
Vidua macroura	pin-tailed whydah[1]

Scientific Name	Common Name
Buteo lineatus	red-shouldered hawk[1]
Buteo jamaicensis	red-tailed hawk[1,2]
Lonchura puntculata	scaly-breasted munia[1]
Egreta thula	snowy egret[1]
Melospiza melodia	song sparrow[1,2]
Porzana Carolina	sora[1]
Pipilo maculatus	spotted towhee[1]
Cathartes aura	turkey vulture[2]
Silalia mexicana	western bluebird[1]
Tyrannus verticalis	western kingbird[1,2]
Zonotrichia leucophrys	white-crowned sparrow[2]
Aeronautes saxatilis	white-throated swift[1]
Cardellina pusilla	Wilson's warbler[1]
Setophaga petechia	yellow warbler[1]
Brotogeris versicolurus	yellow-chevroned parakeet[1]
Aquatic Species	
Lithobates catesbeianus	bullfrog[1]
Cyprinus carpio haematopterus	koi[2]
Gambusia affinis	mosquitofish[1]
Trachemys scripta elegans	red-eared slider[1,2]
Mammals	
Eptesicus fuscus	big brown bat[1]
Myotis thysanodes	fringed myotis[1]
Tadarida brasiliensis	Mexican free-tailed bat[1]
Antrozous pallidus	pallid bat[1]
Lasionycteris noctivagans	silver-haired bat[1]
Lasiurus xanthinus	western yellow bat[1]
Spermophilus beecheyi	California ground squirrel[2]
Sylvilagus audubonii	desert cottontail[2]

Notes:
[1] Observed by Glen Lukos Associates in 2018.
[2] Observed by VCS Environmental in 2014.
Source: Compiled by LSA Associates, Inc. (2018).

3.7 TRAFFIC AND CIRCULATION

3.7.1 INTRODUCTION

a. Overview

This section analyzes Project and cumulative impacts on existing and future transportation and circulation systems. Transportation-related issues of concern that are addressed include traffic on local and regional roadways, transit, bicycles, pedestrians, and construction-related activities. Transportation impacts are assessed for weekday AM and PM commute periods for existing and cumulative (Year 2023 and Year 2035) conditions. This section is based on information contained in the August 9, 2019 "Traffic Impact Analysis Rancho La Habra" prepared by Linscott Law & Greenspan (LLG), which can be found in Partially Recirculated Draft EIR Appendix H.

b. Definitions

- **Average Daily Traffic (ADT)** represents the average traffic volume during a typical 24-hour day.
- **Bike Lane** refers to a corridor expressly reserved by markings for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles (Class 2 Bikeway).
- **Bike Path** refers to a paved route not on a street or roadway and expressly reserved for bicycles. Bike paths may parallel roads but typically are separated from them (Class 1 Bikeway).
- **Bike Route** refers to a facility shared with motorists and identified by signs or pavement marking symbols. A bike route does not have lane stripes (Class 3 Bikeway).
- **Bus Rapid Transit (BRT)** is a bus-based transit system that generally has specialized design, services, and infrastructure to improve system quality and remove the typical causes of delay. BRT aims to combine the capacity and speed of light rail with the flexibility, lower cost, and simplicity of a bus system by providing fully dedicated bus lanes along a significant part of the route. In addition, a BRT system typically has one or more of the following elements:
    - Alignment in the center of the road (to avoid typical curb-side delays);
    - Stations with off-board fare collection (to reduce boarding and alighting delay related to paying the driver);
    - Station platforms level with the bus floor (to reduce boarding and alighting delay caused by steps); and/or
    - Bus priority at intersections (to avoid intersection signal delay).

- **Collector** refers to a transitional street design that is between arterials and local streets. A collector is typically designed to carry 3,000 to 10,000 vehicles per day with one or more travel lane in each direction.
- **Congestion Management Programs (CMPs)** are state-mandated programs (Government Code Section 65089(a)) that require each county to prepare a plan to relieve congestion and reduce air pollution. Unless otherwise specified, references to the congestion management program are to the CMP as adopted for Orange County.
- **Intersection Capacity Utilization (ICU)** is a tool for measuring an intersection's capacity. ICU identifies how much reserve capacity is available or how much the intersection is over capacity. ICU does not predict delay but can be used to predict how often an intersection will experience congestion. See "Methodology" descriptions below for discussion of how ICU is used throughout this section.
- **Level of Service (LOS)** represents the quality of operations at an intersection or freeway mainline segment based on volume-to-capacity (v/c) ratio or delay. LOS values range from LOS A (best) to LOS F (worst). See **Table 3.7-1** for an explanation of LOS criteria at signalized intersections and **Table 3.7-2** for an explanation of LOS criteria at unsignalized intersections.
- **Major Arterial** is a roadway that is typically designed to carry over 30,000 vehicles per day with a minimum of two full-time through lanes in each direction in addition to a separate median lane (raised or painted) to accommodate left-turn movements.
- **Minor Arterial** is a roadway that is typically designed to carry 15,000 to 30,000 vehicles per day, with minimum of two travel lanes in each direction. A separate (generally painted) median lane to accommodate left-turn movement is desirable if there is sufficient roadway width.
- **Paratransit** consists of an alternative mode of passenger transportation that does not follow fixed routes or schedules and consists typically of vans or minibuses. Paratransit services are operated by public transit agencies, community groups, or not-for-profit corporations, and for-profit private companies or operators.
- **Passenger Car Equivalent (PCE)** is a factor used to adjust heavy vehicles for an accurate evaluation of trips, recognizing the larger size and slower travel of truck as compared to passenger cars. PCE volumes were computed for construction traffic analysis using a PCE factor of 3.0, which mean that one truck trip is considered to be the equivalent of three passenger car trips.
- **Peak Hour** represents the one-hour period between 7:00 and 9:00 a.m. and 4:00 and 6:00 p.m. that experiences the heaviest amount of traffic on a given intersection, freeway interchange, or freeway mainline segment.

Table 3.7-1
Level of Service Criteria for Signalized Intersections

	Intersection Utilization Capacity (ICU) Method		Highway Capacity Manual (HCM) Methodology	
	Description	Volume-to- Capacity (V/C) Ratio	Description	Delay
A	**Excellent**. No vehicle waits longer than one red light, and no approach phase is fully used.	0.0 – 0.60	This LOS occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 – 10 seconds
B	**Very Good**. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	>0.60 – 0.70	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	>10 – 20 seconds
C	**Good**. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	>0.70 – 0.80	These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	>20 – 35 seconds
D	**Fair**. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	>0.80 – 0.90	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	>35 – 55 seconds
E	**Poor**. Intersection approaches have the most vehicles they can accommodate; there may be long lines of waiting vehicles through several signal cycles.	>0.90 – 1.00	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	>55 – 80 seconds
F	**Failure**. Backups from nearby locations or on cross-streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.	>1.00	This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.	> 80 seconds

Source: Rancho La Habra Traffic Impact Analysis, 2019.

- **Roadway Capacity** refers to the maximum hourly of daily number of vehicles that can be reasonably expected to traverse along a roadway segment under prevailing roadway, traffic, and control conditions. Roadway capacity for Orange County roadways is presented in **Table 3.7-3**. Roadway capacity for Los Angeles County roadways is presented in **Table 3.7-4**.

Table 3.7-2
Level of Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Highway Capacity Manual Delay Value	Description
A	0 – 10 seconds	Little or no delay
B	>10 – 15 seconds	Short traffic delays
C	>15 – 25 seconds	Average traffic delays
D	>25 – 35 seconds	Long traffic delays
E	>35 – 50 seconds	Very long traffic delays
F	>50 seconds	Severe congestion

Source: Rancho La Habra Traffic Impact Analysis, 2019.

Table 3.7-3
Roadway Link Capacities – Orange County Intersections

Facility Type	Number of Lanes	Daily Capacity (VPD)						Peak Hour Capacity (VPH)
		A	B	C	D	E	F	
Principal	8 lanes divided	45,000	52,500	60,000	67,500	75,000	--	7,500
Smart Street	6 lanes divided	36,300	42,200	48,200	54,200	60,200	--	6,020
Major	6 lanes divided	33,900	39,400	45,000	50,600	56,300	--	5,630
Primary	4 lanes divided	22,500	26,300	30,000	33,800	37,500	--	3,750
Secondary	4 lanes undivided	15,000	17,500	20,000	22,500	25,000	--	2,500
Commuter	2 lanes undivided	7,500	8,800	10,000	11,300	12,500	--	1,250
	V/C Ratio	≤ 0.600	0.601-0.700	0.701-0.800	0.801-0.900	0.901-1.000	≥ 1.01	

Notes:
VPD = vehicles per day
VPH = vehicles per hour
Peak Hour Capacity = 10% of the daily LOS E daily capacity
The capacity of a Smart Street is 7% higher than the capacity of a major arterial, due to traffic flow operation enhancements that are associated with the Smart Street facility designation.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Given that the Orange County Master Plan of Arterial Highways does not provide a daily capacity for a residential street, the Project Traffic Impact Analysis based daily capacity for Sandlewood Avenue on information contained within the *Orange County Highway Design Manual (HDM),* dated June 2005 (i.e., pages 100-3 and 100-4). The *Orange County Highway Design Manual* contains the following definitions for a Residential Collector Street and a Residential Local Street:

- **Residential Collector Street** – A non-arterial street, normally through a residential area, designed to collect traffic from local streets and distribute it onto arterials and with a

planned capacity between 1,200 and 6,000 vehicle trips per day (VPD). Residential collectors shall not have residential frontage.

- **Residential Local Street –** A non-arterial street with direct residential frontage having a planned capacity of fewer than 1,200 vehicle trips per day (VPD).

  Regardless of its formal classification, Sandlewood Avenue between Idaho Street and Euclid Street functions as a Residential Collector Street, since several of the local residential streets within this neighborhood feed into this street, which then provides residents with direct access to either Idaho Street or Euclid Street. Therefore, a daily capacity of 6,000 vehicles per day is used in the daily analysis per the *Orange County HDM*. However, given that Sandlewood Avenue has residential frontage on the north side of the street and on the easterly portion of the south side of the street, the daily capacity of 6,000 vehicles per day was reduced by 10 percent and a capacity of 5,400 vehicles per day was used as the daily capacity of Sandlewood Avenue.

Table 3.7-4
Roadway Link Capacities – Los Angeles County Intersections

	Daily Roadway Capacity per Lane (VPD)						Peak Hour Capacity per Lane (VPH)
Facility Type	A	B	C	D	E	F	
Smart Street	5,780	6,740	7,700	8,670	9,630	--	1,070
Major	5,400	6,300	7,200	8,100	9,000	--	1,000
Secondary	4,800	5,600	6,400	7,200	8,000	--	850
Limited Secondary	4,200	4,900	5,600	6,300	7,000	--	750
Local	3,600	4,200	4,800	5,400	6,500	--	700
V/C Ratio	≤ 0.600	0.601-0.700	0.701-0.800	0.801-0.900	0.901-1.000	≥ 1.01	

Notes:
VPD = vehicles per day
VPH = vehicles per hour
Peak Hour Capacity = 10% of the daily LOS E daily capacity
The capacity of a Smart Street is 7% higher than the capacity of a major arterial, due to traffic flow operation enhancements that are associated with the Smart Street facility designation.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

- **Right-of-Way** refers to any place that is dedicated to use by the public for pedestrian and vehicular travel. A right-of-way may include, but is not limited to, a street, sidewalk, curb, and gutter. A right-of-way may be a crossing, intersection, parkway, median, highway, alley, lane, mall, court, way, avenue, boulevard, road, roadway, railway, viaduct, subway, tunnel, bridge, thoroughfare, park square, or other similar public way.
- **Trip** refers to a one-way journey that proceeds from an origin to a destination via a single mode of transportation. It is the smallest unit of movement considered in transportation studies. Each trip has one "production end" (origin) and one "attraction end" (destination).

3.7.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

Americans with Disabilities Act of 1990

Titles I, II, III, and V of the Americans with Disabilities Act (ADA) have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination on the basis of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warning for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travel way, and a vibration-free zone for pedestrians.

b. State Plans, Policies, and Regulations

Caltrans Standards, Policies, and Plans

Interstate freeways and State Routes are under the jurisdiction of the California Department of Transportation (Caltrans), which sets standards, policies, and strategic plans for the more than 45,000 miles of California's highway and freeway lanes, including Beach Boulevard (State Route [SR]-39), immediately west of the Project site, and Imperial Highway (SR-90), just north of the Project site. Caltrans administers its services through its six primary programs: Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration, and the Equipment Service Center. Under the Transportation Planning program, Caltrans runs the State of California's bicycle program. The Bicycle Facilities Unit, acting as Caltrans' bicycle division, provides policy, funding, planning, and technical expertise in bicycle transportation in consultation with federal, state, and local transportation agencies, Caltrans headquarters and district staff, legislative staff, and the public. The Caltrans Highway Design Manual establishes uniform policies and procedures to carry out the highway design functions of Caltrans.

Complete Streets Act

The California Complete Streets Act of 2008 (Assembly Bill 1358) requires cities and counties making substantive revisions to the circulation elements of their general plans to include modifications to plan for complete streets. The Act states: "In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners

must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit." California Government Code Section 65302(b)(2)(A) requires that, upon any substantial revision of a community's general plan circulation element, the circulation element must be amended to plan for "a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan." Subsection B defines "users of streets, roads, and highways" as "bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors."

Senate Bill 743 Revisions to CEQA Guidelines

On January 26, 2016, the Governor's Office of Planning and Research (OPR) released a revised draft CEQA Guidelines document to implement the provisions of Senate Bill (SB) 743 (Steinberg, 2013). SB 743 required changes to the CEQA Guidelines regarding the analysis of transportation impacts. The revised CEQA Guidelines will establish new criteria for determining the significance of transportation impacts and define alternative metrics to replace delay-based metrics such as LOS and ICU in CEQA documents. Vehicle miles traveled has been identified by OPR as the most appropriate metric to evaluate a project's transportation impacts. Once the Natural Resources Agency adopts these changes to the CEQA Guidelines, automobile delay, as measured by "level of service," "intersection capacity utilization," and other similar metrics, will no longer constitute a significant environmental effect under CEQA. Because the revised CEQA Guidelines were not adopted either at the time of the Notice of Preparation (NOP) for this EIR or at the start of the original Draft EIR's public review period, and their effective date falls after the close of the public review period for the Partially Recirculated Draft EIR, the provisions of SB 743 do not apply to the Rancho La Habra EIR.

c. Regional Plan, Policies, and Regulations

SCAG 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). Goals and policies relevant to the proposed Specific Plan are as follows:

Goals

1. Align the plan investments and policies with improving regional economic development and competitiveness.
2. Maximize mobility and accessibility for all people and goods in the region.
3. Ensure travel safety and reliability for all people and goods in the region.

4. Preserve and ensure a sustainable regional transportation system.
5. Maximize the productivity of our transportation system.
6. Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).
7. Actively encourage and create incentives for energy efficiency, where possible.
8. Encourage land use and growth patterns that facilitate transit and active transportation.

Policies

Identify regional strategic areas for infill and investment: Identify strategic opportunity areas for infill development of aging and underutilized areas and increased investment in order to accommodate future growth. This strategy makes efficient use of existing and planned infrastructure, revitalizes communities, and maintains or improves quality of life. Strategic areas are primarily identified as those with potential for transit-oriented development, existing and emerging centers, and small mixed-use areas.

Develop "complete communities": Create mixed-use districts or "complete communities" in strategic growth areas through a concentration of activities with housing, employment, and a mix of retail and services, located in close proximity to each other. Focusing a mix of land uses in strategic growth areas creates complete communities wherein most daily needs can be met within a short distance of home, providing residents with the opportunity to patronize their local area and run daily errands by walking or cycling rather than traveling by automobile.

Plan for additional housing and jobs near transit: Pedestrian-friendly environments and more compact development patterns in close proximity to transit serve to support and improve transit use and ridership. Focusing housing and employment growth in transit-accessible locations through this transit-oriented development approach will serve to reduce auto use and support more multi-modal travel behavior.

Plan for changing demand in types of housing: Shifts in the labor force, as the large cohort of aging "baby boomers" retires over the next 15 years and is replaced by new immigrants and "echo boomers," will likely induce a demand shift in the housing market for additional development types such as multi-family and infill housing in central locations, appealing to the needs and lifestyles of these large populations.

Continue to protect stable, existing single-family areas: Continue to protect stable existing single-family neighborhoods as future growth and a more diverse housing stock are accommodated in infill locations near transit stations, in nodes along corridors and in existing centers. Concurrently, focusing growth in central areas and maintaining less development in outlying areas preserves the housing option for large-lot single-family homes, while reducing the number of long trips and VMT to employment centers.

Orange County Congestion Management Program

In 1990, the California Legislature enacted the congestion management program (CMP) to implement Proposition 111, a state-wide transportation funding proposal that required local governments to implement mitigation measures to offset the impacts from new development on the regional transportation system. The CMP addresses the impact of local growth on the regional transportation system; the goal is to examine the interactions among land use, transportation, and air quality and to make decisions at the regional and local level in consideration of these interactions. The Orange County Transportation Authority (OCTA) is the designated agency responsible for implementing the CMP for Orange County.

When LOS requirements are not maintained on portions of the CMP highway and roadway system, a deficiency plan is required that analyzes the cause of the deficiency and the implementation costs of various alternatives such as roadway modifications, programs, or actions to measurably improve performance.

Highways must maintain at least LOS E, which is essentially one grade better than gridlock and is defined by a LOS where traffic flow fluctuates in terms of speed and flow rates, operating speeds average 35 miles per hour (mph), and delays are significant. For arterial streets, LOS E occurs where long queues of vehicles are waiting upstream of an intersection and it may take several signal cycles for a vehicle to clear the intersection. A jurisdiction failing to comply with the CMP may have its allocation of the state gas tax withheld.

As required by CMP legislation, the LOS standard for CMP intersections is LOS E or better (i.e., an ICU of 1.00 or better). Intersections that had LOS F in the 1992 CMP baseline are allowed to exceed the LOS E standard but may not increase by more than 0.1 above the baseline ICU value. Per the CMP, a significant impact is identified if a project causes the CMP facility to operate worse than LOS E and increases the ICU value by more than 0.10 if the CMP facility operates at LOS F without the project.

Imperial Highway and Beach Boulevard are part of the Orange County CMP Highway System and are therefore subject to CMP requirements.

Orange County Measure M

Orange County voters first approved Measure M in 1990 for a 20-year period, establishing a county-wide sales tax providing funding for more than $4 billion in transportation improvements, including adding 192 freeway lane miles, improving 170 intersections and 38 freeway interchanges, and implementing Metrolink service in Orange County. Voters renewed the sales tax for transportation improvements in 2006 for another 30 years.

d. Local Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to traffic and circulation include the following.

Chapter 2, Community Development

LU 1.5 Development Concurrency with Public Facilities. Phase development and public facilities working with other public entities to assure that adequate public facilities are available at the time of occupancy.

LU 4.3 Public Safety and Community Design. Require that neighborhoods, centers, streets, and public spaces be designed to enhance public safety and discourage crime by providing street-fronting uses ("eyes on the street"), adequate lighting and sight lines, and features that cultivate a sense of community ownership.

LU 7.5 Walkable Neighborhoods. Maintain sidewalks, parkways, street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.

LU 7.6 Neighborhood Connectivity. Maintain sidewalks or other means of pedestrian and bicycle connections to neighborhood commercial centers, parks, schools, work places, and other community activity centers.

CI 2.5 Attractive and Walkable Streets. Enhance the City's identity and image by tree planting and landscaping for the public rights-of-way and front setback areas of all major commercial and mixed-use districts and corridors.

Chapter 3, Mobility/Circulation

RN 1.1 Regional Transportation Plan. Support the regional transportation and growth management plan to conserve energy, improve air quality, and reduce greenhouse gas emissions (GHG) as appropriate and beneficial to the public welfare of the City and adjacent communities.

RN 1.7 Street System Improvements. Maintain and improve, where needed, the City's street system to maintain acceptable levels of service and provide a reliable and uncongested transportation system for the citizens of La Habra.

RN 1.8 Safe Street Design. Ensure that street system improvements incorporate design that considers safe movement for all street users (motorists, bicyclists, transit users, pedestrians, the disabled, and commercial users).

RN 1.10 Maintain Acceptable Levels of Service. Strive to achieve or maintain an acceptable level of service of LOS D or better at City jurisdiction intersections and LOS E or better at State Highway and CMP intersections.

RN 1.15 Traffic Mitigation Fee. Require a locally collected and administered traffic mitigation fee to guarantee that new development pays for its fair share toward improvements resulting in reductions in air quality, GHG emission, and traffic impacts generated by the development.

AT 2.3 Bikeway Network. Maintain and extend where and when feasible the City's bikeway network to make bicycling an attractive option.

AT 2.4 Bike Trail Linkages. Provide additional Class-I, Class-II, or innovative bicycle trail linkages between residential areas, employment areas, schools, parks, commercial areas, and transit stations.

AT 2.6 Pathway Easements. Require new development to dedicate easements for bicycle trail/pedestrian pathway connections.

AT 2.8 Bicycle Parking. Require that a percentage of parking spaces in new non-residential developments and additions to existing facilities be set aside for secure bicycle parking, to encourage use of bicycles for commuting, shopping, and recreational purposes.

AT 3.1 Pedestrian Network. Develop facilities to create a comfortable pedestrian walking environment throughout the City, such as pedestrian pathways, textured paving crosswalks, street furnishings, and landscaping to link residential areas, commercial centers, schools, and parks making walking an attractive option.

AT 3.2 Pedestrian Linkages. Require that new developments provide dedicated easements or pedestrian linkages to adjacent developments, establishing an interconnected network of pedestrian sidewalks and paths.

AT 3.3 Accessible Facilities. Provide for the adaptation and use of all pedestrian circulation systems by persons with disabilities through the design standards and implementation of projects that recognize their need and increase their access to facilities and services, consistent with Americans with Disabilities Act (ADA) and State requirements.

AT 3.5 Street Walkability. Provide for the complete street needs of pedestrians to ensure the "walkability" of all streets in residential, retail commercial, and mixed-use areas, including sidewalks, pedestrian crossing opportunities, median islands, pedestrian signals, street furniture, lighting, and signage.

AT 3.6 Pedestrian Connectivity. Enhance pedestrian connectivity between pedestrian attractors such as neighborhoods, mixed-use centers, commercial areas, schools, parks, and entertainment and cultural areas to make the pedestrian option safer and more convenient.

AT 3.8 Street Modifications/Improvements. Enhance pedestrian facilities (e.g., pedestrian pathways, textured paving crosswalks, street furnishings, and landscaping) where feasible when incorporating modifications/improvements into an existing street.

NTMP 1.2 Engineering. Promote engineering improvements such as physical measures constructed to lower speeds, improve safety, or otherwise reduce the impacts of motor vehicles.

La Habra Municipal Code

Traffic Improvement Fees

La Habra Municipal Code Section 10.48, Traffic Improvement Fee, is intended to implement the General Plan and to mitigate the traffic impacts caused by new development within the City through the construction of certain traffic improvements. As a mitigation measure, future developments are required to incorporate fair share participation to the cost of maintaining applicable level of service standards throughout the City and to develop future transportation systems.

Traffic Phasing Plan

La Habra Municipal Code Section 10.52, Traffic Phasing Plan, is intended to ensure that major development is adequately accommodated by the existing transportation system and permitted to proceed only if deficient areas are being addressed through new facilities, impacts on the system are being mitigated in conjunction with the development, other trip generation reduction measures are adopted that will alleviate traffic impacts, and/or the project will be phased to eliminate any significant impacts.

e. Roadway Performance Standards

Level of service criteria have been established for roadway and intersection operations by the City of La Habra, as well as nearby cities in which Project-related traffic could affect roadways and intersections, including the cities of Fullerton, Buena Park, and La Mirada. In addition, Caltrans has established performance standards for state-controlled facilities.

Roadway Segment Performance Standards

City of La Habra

The City of La Habra considers LOS D to be the acceptable condition that should be maintained for all roadway segments within the City, except those roadway segments that are part of the Orange County Congestion Management Plan Highway System (Beach Boulevard, Imperial Highway, and Whittier Boulevard west of Beach Boulevard), where LOS E is defined as the acceptable limit. **Table 3.7-5** identifies LOS standards for La Habra roadway segments.

Table 3.7-5
Level of Service Criteria for City of La Habra Roadway Segments

LOS D	
A.	Lambert Road between Beach Boulevard and Idaho Street
B.	Lambert Road between Idaho Street and Euclid Street
C.	Lambert Road between Euclid Street and Harbor Boulevard
E.	Idaho Street between Lambert Road and Imperial Highway
F.	Euclid Street between Lambert Road and Imperial Highway
G.	Harbor Boulevard between Lambert Road and Imperial Highway
N.	Idaho Street between Imperial Highway and Sandlewood Avenue
O.	Euclid Street between Imperial Highway and Sandlewood Avenue
W.	Sandlewood Avenue between Idaho Street and Euclid Street
HH.	Whittier Boulevard between Beach Boulevard and Hacienda Road
LOS E	
D.	Beach Boulevard between Lambert Road and Imperial Highway
I.	Imperial Highway between 1st Avenue and Beach Boulevard
J.	Imperial Highway between Beach Boulevard and La Habra Hills Drive
K.	Imperial Highway between La Habra Hills Drive and Idaho Street
L.	Imperial Highway between Idaho Street and Euclid Street
M.	Imperial Highway between Euclid Street and Harbor Boulevard
R.	Beach Boulevard between Imperial Highway and Hillsborough Apt
S.	Beach Boulevard between Hillsborough Apt and Hillsborough Drive
Z.	Beach Boulevard between Lambert Road and La Habra Boulevard
GG.	Beach Boulevard between La Habra Boulevard and Whittier Boulevard

Source: Rancho La Habra Traffic Impact Analysis, 2019.

City of La Mirada

The City of La Mirada considers LOS E to be the acceptable level of service that should be maintained for all non-residential roadway segments, and LOS D to be the acceptable level of

service for all neighborhood residential roadway segments. **Table 3.7-6** identifies LOS standards for La Mirada roadway segments.

Table 3.7-6
Level of Service Criteria for City of La Mirada Roadway Segments

LOS D	
H.	Imperial Highway between Santa Gertrudes Avenue and 1st Avenue
LOS E	
T.	Beach Boulevard between Hillsborough Drive and Rosecrans Avenue
Y.	Imperial Highway between La Mirada Boulevard and Santa Gertrudes Avenue
AA.	Imperial Highway between Valley View Avenue and La Mirada Boulevard

Source: Rancho La Habra Traffic Impact Analysis, 2019.

Cities of Fullerton and Buena Park

The cities of Fullerton and Buena Park consider LOS D to be the acceptable level of service.

Intersection Performance Standards

City of La Habra

The City of La Habra has established LOS D as the acceptable level of service for roadway intersections. LOS E is considered acceptable for State Highway intersections and CMP intersections, which include Beach Boulevard, Imperial Highway, and Whittier Boulevard west of Beach Boulevard. **Table 3.7-7** identifies LOS standards for La Habra intersections.

Table 3.7-7
Level of Service Criteria for City of La Habra Intersections

LOS D	
6. Idaho Street at Sandlewood Avenue	17. Euclid Street at Lambert Road
7. Euclid Street at Sandlewood Avenue	18. Harbor Boulevard at Lambert Road
16. Idaho Street at Lambert Road	
LOS E	
5. Beach Boulevard at Hillsborough Park Apts.	15. Beach Boulevard at Lambert Road
10. Beach Boulevard at Imperial Highway	21. Beach Boulevard at La Habra Boulevard
11. La Habra Hills Drive at Imperial Highway	28. Beach Boulevard at Whittier Boulevard
12. Idaho Street at Imperial Highway	29. Hacienda Road at Whittier Boulevard
13. Euclid Street at Imperial Highway	30. Walnut Street at Imperial Highway
14. Harbor Boulevard at Imperial Highway	

Source: Rancho La Habra Traffic Impact Analysis, 2019.

City of La Mirada

The City of La Mirada identifies LOS E as the acceptable condition during the peak commute hours for non-residential intersections, while LOS D is the acceptable condition for residential neighborhood intersections. **Table 3.7-8** identifies LOS standards for La Mirada intersections.

Table 3.7-8
Level of Service Criteria for City of La Mirada Intersections

LOS D	
9. 1st Avenue at Imperial Highway	
LOS E	
1. Beach Boulevard at Rosecrans Avenue	8. Santa Gertrudes Avenue at Imperial Highway
4. Beach Boulevard at Hillsborough Drive	19. La Mirada Boulevard at Imperial Highway
22. Valley View Avenue at Imperial Highway	

Source: Rancho La Habra Traffic Impact Analysis, 2019.

Cities of Fullerton and Buena Park

The cities of Fullerton and Buena Park consider LOS D to be the acceptable level of service during the peak commute hours.

Caltrans Performance Standards for State Highways

In conformance with the current *Caltrans Guide for the Preparation of Traffic Impact Studies*, existing and projected peak hour operating conditions at 19 state-controlled study intersections were evaluated using the Highway Capacity Manual operations method of analysis. Caltrans "endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities," but does not require that LOS D be maintained. However, Caltrans also acknowledges that this may not always be feasible and recommends that the local lead agency consult with Caltrans to determine the appropriate target LOS. For over 20 years, the City of La Habra's LOS standards have been used on Caltrans facilities within the City, based on longstanding consultation between City and Caltrans staff.

3.7.3 ENVIRONMENTAL SETTING

a. Existing Roadway and Highway Network

The principal local network of streets serving the Project site includes Imperial Highway, Beach Boulevard, La Habra Hills Drive, and Idaho Street. The existing circulation characteristics of these key area streets are described below.

Imperial Highway (State Route [SR] 90) is generally a six-lane, divided roadway oriented in the east-west direction. The posted speed limit along Imperial Highway is generally 45 mph

west of Beach Boulevard and generally 40 mph east of Beach Boulevard. Parking is not permitted along this roadway in the vicinity of the Project site. Traffic signals control the study intersections of Imperial Highway at Valley View Avenue, La Mirada Boulevard, Santa Gertrudes Avenue, 1st Avenue, Beach Boulevard, La Habra Hills Drive/Market Place, Idaho Street, Euclid Street, and Harbor Boulevard.

Beach Boulevard (SR-39) is generally a six-lane, divided roadway oriented in a north-south direction. Beach Boulevard borders a portion of the Project site to the west and will provide access to the Project site via a proposed signalized driveway that will be constructed by the Project directly opposite Hillsborough Park Apartments entry and via a left-turn in/right-turn in and right-turn out only unsignalized driveway. The posted speed limit on Beach Boulevard is generally 45 mph north of Hillsborough Drive and generally 50 mph south of Hillsborough Drive. Parking is not permitted along this roadway in the vicinity of the Project site. Traffic signals control the intersections of Beach Boulevard at Whittier Boulevard, La Habra Boulevard, Lambert Road, Imperial Highway, Hillsborough Park Apartments entry, Hillsborough Drive, Rosecrans Avenue, La Mirada Boulevard/Malvern Avenue, Artesia Boulevard, Commonwealth Avenue, Auto Center Drive, and the Interstate 5 (I-5) southbound ramps.

La Habra Hills Drive is generally a two-lane, divided roadway oriented in a north-south direction. Parking is not permitted along this roadway in the vicinity of the Project site. The *prima facie* speed limit on La Habra Hills Drive is 25 mph. A traffic signal controls the study intersection of La Habra Hills Drive at Imperial Highway.

Idaho Street is generally a four-lane, divided roadway oriented in a north-south direction. Idaho Street borders a portion of the Project site to the east. Idaho Street becomes Gilbert Street as it crosses into the City of Fullerton to the south. The posted speed limit on Idaho Street is generally 40 mph north of Imperial Highway and 45 mph south of Imperial Highway. Parking is generally not permitted along this roadway in the vicinity of the Project site. Traffic signals control the study intersections of Idaho Street at Lambert Road, Imperial Highway, Sandlewood Avenue, Rosecrans Avenue, and Malvern Avenue.

b. Existing Traffic Volumes/Roadway Levels of Service

Locations of the roadway segments analyzed for this EIR are shown in **Figure 3.7-1**. Existing traffic volumes along the key study roadway segments range from 1,296 vehicles per day on Sandlewood Avenue west of Euclid Street in La Habra to 71,766 vehicles per day on Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard in Buena Park. The highest traffic volumes occur along the major arterial roadways, including Beach Boulevard, Imperial Highway, and Whittier Boulevard. The average daily traffic (ADT) volumes and levels of service for each of the roadway segments are summarized in **Table 3.7-9**.

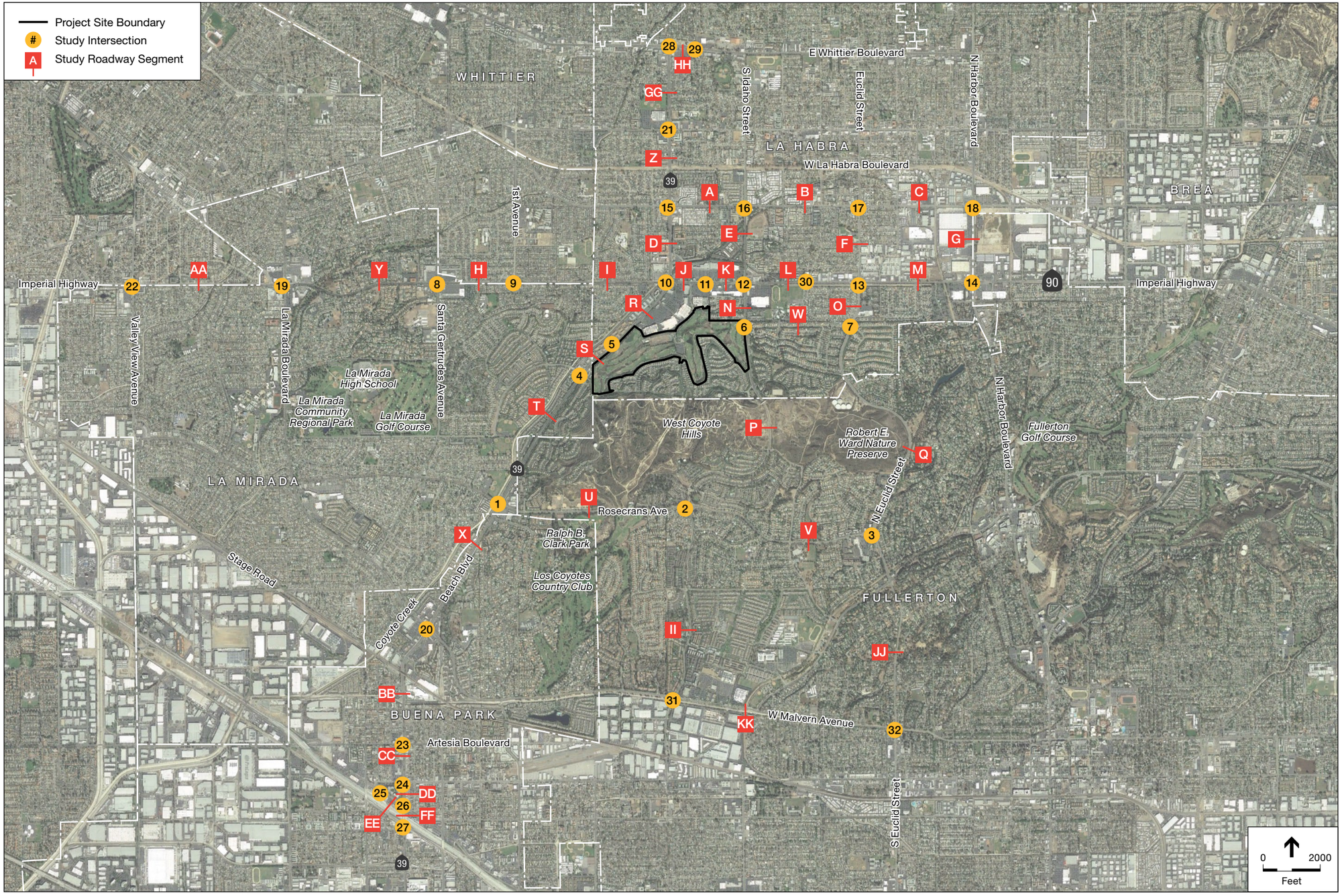

Figure 3.7-1: Key Intersections and Roadway Segments

Source: Google Earth; Carlson SLS

Table 3.7-9
Existing Key Roadway Segment Operating Conditions

	Roadway Segment	Location	Daily Volume	V/C Ratio	LOS	LOS Criteria
A	Lambert Rd. between Beach Blvd. and Idaho St.	La Habra	**35,387**	**0.944**	**F**	D
B	Lambert Rd. between Idaho St. and Euclid St.	La Habra	**37,387**	**0.997**	**E**	D
C	Lambert Rd. between Euclid St. and Harbor Blvd.	La Habra	**36,014**	**0.960**	**E**	D
D	Beach Blvd. between Lambert Rd. and Imperial Hwy.	La Habra	51,446	0.914	E	E
E	Idaho St. between Lambert Rd. and Imperial Hwy.	La Habra	23,702	0.632	B	D
F	Euclid St. between Lambert Rd. and Imperial Hwy.	La Habra	17,898	0.477	A	D
G	Harbor Blvd. between Lambert Rd. and Imperial Hwy.	La Habra	35,083	0.623	B	D
H	Imperial Hwy. between Santa Gertrudes Ave. and 1st Ave.	La Habra	36,239	0.671	B	D
I	Imperial Hwy. between 1st Ave. and Beach Blvd.	La Habra	36,310	0.645	B	E
J	Imperial Hwy. between Beach Blvd. and La Habra Hills Dr.	La Habra	49,867	0.828	D	E
K	Imperial Hwy. between La Habra Hills Dr. and Idaho St.	La Habra	50,687	0.842	D	E
L	Imperial Hwy. between Idaho St. and Euclid St.	La Habra	50,844	0.845	D	E
M	Imperial Hwy. between Euclid St. and Harbor Blvd.	La Habra	52,284	0.869	D	E
N	Idaho St. between Imperial Hwy. and Sandlewood Ave.	La Habra	20,217	0.539	A	D
O	Euclid St. between Sandlewood Ave. and Imperial Hwy.	La Habra	21,596	0.576	A	D
P	Gilbert St. between Sandlewood Ave. and Rosecrans Ave.	Fullerton	15,440	0.412	A	D
Q	Euclid St. between Sandlewood Ave. and Rosecrans Ave.	Fullerton	22,344	0.596	A	D
R	Beach Blvd. btwn Imperial Hwy. and Hillsborough Apts.	La Habra	55,337	0.919	E	E
S	Beach Blvd. btwn Hillsborough Apts. and Hillsborough Dr.	La Habra	58,110	0.965	E	E
T	Beach Blvd. btwn Hillsborough Drive and Rosecrans Ave.	La Mirada	53,636	0.928	E	E
U	Rosecrans Ave. between Beach Boulevard and Gilbert St.	Fullerton	20,815	0.555	A	D
V	Rosecrans Ave. between Gilbert St. and Euclid St.	Fullerton	15,137	0.605	B	D
W-1	Sandlewood Ave. east of Idaho St.	La Habra	3,600	0.667	B	D
W-2	Sandlewood Ave. between Idaho St. and Euclid St.	La Habra	1,931	0.358	A	D
W-3	Sandlewood Ave. west of Euclid Street	La Habra	1,296	0.240	A	D
X	Beach Blvd. between Rosecrans Ave. and La Mirada Blvd./Malvern Ave.	Buena Park	44,047	0.732	C	D
Y	Imperial Hwy. between La Mirada Blvd. and Santa Gertrudes Ave.	La Mirada	31,542	0.584	A	E
Z	Beach Blvd. btwn Lambert Rd. and La Habra Blvd.	La Habra	42,893	0.762	C	E
AA	Imperial Hwy. btwn Valley View Ave. and La Mirada Blvd.	La Mirada	30,552	0.566	A	E
BB	Beach Blvd. btwn La Mirada Blvd./Malvern Ave. and Artesia Blvd.	Buena Park	**71,766**	**1.192**	**F**	D
CC	Beach Blvd. btwn Artesia Blvd. and Commonwealth Ave.	Buena Park	**56,837**	**0.944**	**E**	D
DD	Beach Blvd. btwn Commonwealth Ave. and Auto Center Dr.	Buena Park	**58,783**	**0.976**	**E**	D

	Roadway Segment	Location	Daily Volume	V/C Ratio	LOS	LOS Criteria
EE	Auto Center Dr. btwn Beach Blvd. and I-5 NB Ramps	Buena Park	12,592	0.336	A	D
FF	Beach Blvd. btwn Auto Center Drive and I-5 SB Ramps	Buena Park	**61,904**	**1.028**	**F**	D
GG	Beach Blvd. btwn La Habra Blvd. and Whittier Blvd.	La Habra	35,120	0.624	B	E
HH	Whittier Blvd. btwn Beach Blvd. and Hacienda Rd.	La Habra	**47,059**	**1.255**	**F**	D
II	Gilbert St. btwn Rosecrans Ave. and Malvern Ave.	Fullerton	23,527	0.627	B	D
JJ	Euclid St. btwn Rosecrans Ave. and Malvern Ave.	Fullerton	31,442	0.838	D	D
KK	Malvern Ave. btwn Gilbert St. and Euclid St.	Fullerton	23,982	0.640	B	D

Notes:
Bold type indicates roadway segments currently exceed the applicable LOS standard.
NB = northbound
SB = southbound
Source: Rancho La Habra Traffic Impact Analysis, 2019.

As indicated in **Table 3.7-9**, eight of the 37 key roadway segments analyzed in the Project's traffic study (four in La Habra and four in Buena Park) currently operate at an unacceptable level of service. The roadway segments are as follows:

La Habra Roadway Segments

A Lambert Road between Beach Boulevard and Idaho Street (LOS E)

B Lambert Road between Idaho Street and Euclid Street (LOS E)

C Lambert Road between Euclid Street and Harbor Boulevard (LOS E)

HH Whittier Boulevard between Beach Boulevard and Hacienda Road (LOS F)

Buena Park Roadway Segments

BB Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard (LOS F)

CC Beach Boulevard between Artesia Boulevard and Commonwealth Avenue (LOS E)

DD Beach Boulevard between Commonwealth Avenue and Auto Center Drive (LOS E)

FF Beach Boulevard between Auto Center Drive and I-5 Southbound (SB) Ramps (LOS F)

c. Existing Intersection Levels of Service

Table 3.7-10 summarizes the existing peak hour service level calculations for the 32 key study intersections based on existing traffic volumes and current street geometry. Locations of the intersections analyzed for this EIR are shown in **Figure 3.7-1**.

Table 3.7-10
Existing Intersection Peak Hour Operating Conditions

	Key Intersections	LOS Criteria	Jurisdiction	Time Period	Control Type	ICU/ HCM[a,b]	LOS
1.	Beach Blvd. at Rosecrans Ave.	E	La Mirada/ Caltrans	AM	8∅[c] Traffic	0.979	E
				PM	Signal	0.935	E
2.	Gilbert St. at Rosecrans Ave.	D	Fullerton	AM	8∅ Traffic	39.1 s/v	D
				PM	Signal	37.1 s/v	D
3.	Euclid St. at Rosecrans Ave.	D	Fullerton	AM	3∅ Traffic	29.4 s/v	C
				PM	Signal	19.6 s/v	B
4.	Beach Blvd. at Hillsborough Dr.	E	La Mirada/ Caltrans	AM	5∅ Traffic	0.793	C
				PM	Signal	0.738	C
5.	Beach Blvd. at Hillsborough Park Apts.	E	La Habra/ Caltrans	AM	3∅ Traffic	0.533	A
				PM	Signal	0.503	A
6.	Idaho St. at Sandlewood Ave.	D	La Habra	AM	3∅ Traffic	0.485	A
				PM	Signal	0.528	A
7.	Euclid St. at Sandlewood Ave.	D	La Habra	AM	Two-Way	**69.4 s/v**	**F**
				PM	Stop	**41.4 s/v**	**E**
8.	Santa Gertrudes Ave. at Imperial Hwy.	E	La Mirada	AM	8∅ Traffic	0.852	D
				PM	Signal	0.871	D
9.	1st Ave. at Imperial Hwy.	D	La Mirada	AM	5∅ Traffic	0.706	C
				PM	Signal	0.594	A
10.	Beach Blvd. at Imperial Hwy.	E	La Habra/ Caltrans	AM	8∅ Traffic	0.786	C
				PM	Signal	0.834	D
11.	La Habra Hills Dr. at Imperial Hwy.	E	La Habra/ Caltrans	AM	6∅ Traffic	0.501	A
				PM	Signal	0.653	B
12.	Idaho St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	8∅ Traffic	0.692	B
				PM	Signal	0.728	C
13.	Euclid St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	8∅ Traffic	0.795	C
				PM	Signal	0.615	C
14.	Harbor Blvd. at Imperial Hwy.	E	La Habra/ Fullerton	AM	8∅ Traffic Signal	0.759	C
				PM		0.683	B
			Caltrans	AM		43.1 s/v	D
				PM		44.4 s/v	D
15.	Beach Blvd. at Lambert Rd.	E	La Habra/ Caltrans	AM	8∅ Traffic	0.949	E
				PM	Signal	0.900	D
16.	Idaho St. at Lambert Rd.	D	La Habra	AM	8∅ Traffic	0.814	D
				PM	Signal	0.775	C
17.	Euclid St. at Lambert Rd.	D	La Habra	AM	5∅ Traffic	0.702	C
				PM	Signal	0.799	C
18.	Harbor Blvd. at Lambert Rd.	D	La Habra	AM	8∅ Traffic	0.696	B
				PM	Signal	0.777	C
19.	La Mirada Blvd. at Imperial Hwy.	E	La Mirada	AM	8∅ Traffic	0.900	D
				PM	Signal	0.859	D
20.	Beach Blvd. at La Mirada Blvd./ Malvern Ave.	D	Buena Park/ Caltrans	AM	8∅ Traffic	0.757	C
				PM	Signal	0.805	D
21.	Beach Blvd. at La Habra Blvd.	E	La Habra/ Caltrans	AM	8∅ Traffic	0.729	C
				PM	Signal	0.801	D

Key Intersections	LOS Criteria	Jurisdiction	Time Period	Control Type	ICU/ HCM[a,b]	LOS
22. Valley View Ave. at Imperial Hwy.	E	La Mirada	AM PM	8∅ Traffic Signal	0.903 0.876	E D
23. Beach Blvd. at Artesia Blvd.	D	Buena Park/ Caltrans	AM PM	8∅ Traffic Signal	0.795 0.748	C C
24. Beach Blvd. at Commonwealth Ave.	D	Buena Park/Caltrans	AM PM	8∅ Traffic Signal	0.589 0.613	A B
25. I-5 NB Ramps at Auto Center Dr.	D	Buena Park/Caltrans	AM PM	6∅ Traffic Signal	0.350 0.477	A A
26. Beach Blvd. at Auto Center Dr.	D	Buena Park/Caltrans	AM PM	8∅ Traffic Signal	0.720 0.677	C B
27. Beach Blvd. at I-5 SB Ramps	D	Buena Park/ Caltrans	AM PM	3∅ Traffic Signal	0.691 0.675	B B
28. Beach Blvd. at Whittier Blvd.	E	La Habra/ Caltrans	AM PM	6∅ Traffic Signal	0.686 0.758	B C
29. Hacienda Rd. at Whittier Blvd.	E	La Habra/ Caltrans	AM PM	5∅ Traffic Signal	0.849 0.834	D D
30. Walnut St. at Imperial Hwy.	E	La Habra/ Caltrans	AM PM	One-Way Stop	**957.8 s/v** 44.6 s/v	**F** E
31. Gilbert St. at Malvern Ave.	D	Fullerton	AM PM	8∅ Traffic Signal	45.9 s/v 43.6 s/v	D D
32. Euclid St. at Malvern Ave.	D	Fullerton	AM PM	8∅ Traffic Signal	41.8 s/v 43.3 s/v	D D

Notes:
[a] s/v = seconds per vehicle (delay)
[b] **BOLD ICU/LOS** and **HCM/LOS** values indicate unacceptable service level
[c] ∅ = number of traffic signal cycles
Source: Rancho La Habra Traffic Impact Analysis, 2019.

As indicated in **Table 3.7-10**, the two intersections currently operating at unacceptable levels of service are in La Habra, as follows:

La Habra Intersections

7. Euclid Street/Sandlewood Avenue (LOS F during the AM Peak Hour, LOS E during the PM Peak Hour)

30. Walnut Street/Imperial Highway (LOS F during the AM Peak Hour)

d. Existing Public Transit

Public transit bus service in the Project site vicinity is provided by the Orange County Transportation Authority (OCTA), Foothill Transit, and Norwalk Transit. As shown in **Figure 3.7-2**, the following three bus routes operate within the vicinity of the Project site on Beach Boulevard and Imperial Highway, with connections to Fullerton, Huntington Beach, Anaheim, Yorba Linda, and Santa Ana:

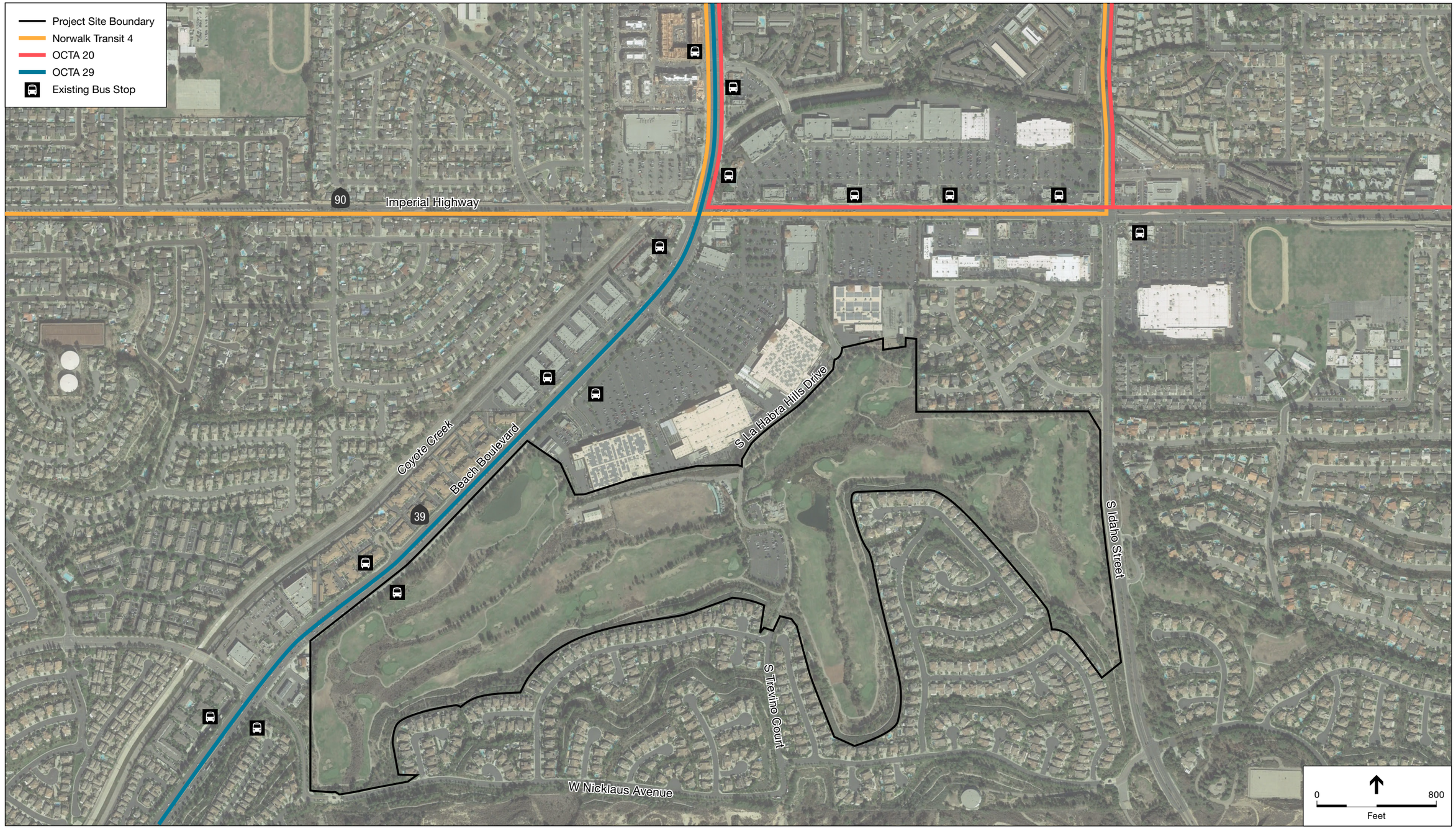

Figure 3.7-2: Transit Routes

Source: Google Earth Pro; Linscott, Law & Greenspan

- OCTA Route 20 provides service between La Habra and Yorba Linda via Imperial Highway from Beach Boulevard/Imperial Highway to Imperial Highway/Yorba Linda Boulevard. This route operates Monday to Friday with an average headway of 100 minutes.
- OCTA Route 29 provides service between Huntington Beach and La Habra via Beach Boulevard from 1st Street/Pacific Coast Highway to Beach Boulevard/Whittier Boulevard. This bus route also provides a connection to the Metrolink in Buena Park. This route operates seven days a week approximately every 20 minutes.
- Norwalk Transit Route 4 provides service along Imperial Highway, from Imperial Highway/Idaho Street to the Norwalk Metro Green Line Station. This route operates seven days a week with an average headway of 40 minutes.

The bus stops nearest to the Project site are located at the intersections of Beach Boulevard/ Hillsborough Park Apartments, Beach Boulevard/Westridge Plaza South, Beach Boulevard/Imperial Highway, Imperial Highway/La Habra Hills Drive, and Imperial Highway/Idaho Street.

3.7.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of traffic and circulation impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold TRA-1 Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Threshold TRA-2 Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

Threshold TRA-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

Threshold TRA-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Threshold TRA-5 Result in inadequate emergency access.

Threshold TRA-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.7.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

Impact TRA-1.1: Construction Traffic. Development permitted by the proposed Specific Plan would add traffic to area roadways during construction. Although such traffic would be temporary, congestion in the area would increase. With preparation of a Construction Management Plan (Mitigation Measure TRA-1.1), the effects of Project-related construction traffic would be reduced to less than significant. Impact TRA-1.1 is therefore *significant but mitigable*.

Methodology

To determine whether Project-related construction activities might result in a significant impact, an evaluation of construction-related traffic was undertaken to quantify traffic generation during construction and evaluate the extent to which Project-related traffic might cause traffic delays.

Construction activities associated with the Project would encompass four components: (1) demolition/crushing, (2) grading/excavation, (3) site preparation/installation of infrastructure, and (4) building construction. The following assumptions, as provided by the applicant, were used to evaluate construction traffic characteristics:

Demolition/Crushing

- Eight-hour workday (Per City of La Habra ordinance, construction would be permitted Monday through Saturday from 7:00 a.m. to 5:00 p.m.).
- Approximately 60 days of demolition/crushing activities.
- Maximum of 12 trucks entering and exiting the site daily (24 total one-way trips) for export of any unusable material.

- A total of 25 workers on-site.

Grading/Excavation

- Eight-hour workday (Per City of La Habra ordinance, construction would be permitted Monday through Saturday from 7:00 a.m. to 5:00 p.m.).
- Approximately 220 days of grading/excavation activities.
- Approximately 15,000 cubic yards of imported fill, requiring hauling as follows:
  - 15-cubic-yard truck carrying capacity.
  - Maximum of 100 daily trucks entering and exiting the site.
  - Approximately 10 days for soil import activities.
  - A total of 25 workers on-site.

Site Preparation/Installation of Infrastructure

- Eight-hour workday (Per City of La Habra ordinance, construction would be permitted Monday through Saturday from 7:00 a.m. to 5:00 p.m.).
- Approximately 120 days of preparation/installation activities.
- A total of 25 workers on-site.

Building Construction

- Eight-hour workday (Per City of La Habra ordinance, construction would be permitted Monday through Saturday from 7:00 a.m. to 5:00 p.m.).
- Approximately four years of building construction activities.
- A total of 200 workers on-site.

In addition, the following assumptions were used for truck trips and employee trips:

- Each truck load would require an inbound trip and an outbound trip.
- The daily number of truck trips was averaged over the eight-hour workday to obtain the number of peak hour truck trips (50 percent entering and 50 percent exiting).
- All truck trips were converted to passenger car equivalents (PCEs) using a factor of 3.0 (one truck operating on area roadway is assumed to be equivalent to three automobiles operated on the roads).
- Each worker would make two trips per day (one during the AM peak hour and one during the PM peak hour).

A significant impact was determined to exist if Project-related construction traffic would add sufficient traffic to area roadways to exceed applicable roadway performance standards, or cause traffic delays due to lane closures or potentially hazardous conditions.

Impact Assessment

Table 3.7-11 provides a summary of estimated construction peak hour and daily traffic volumes forecast for each of the four construction components. As indicated in the table, grading/ excavation activities are expected to generate the greatest amount of daily construction traffic—650 daily trips, with 103 trips during the AM peak hour and 103 trips during the PM peak hour. Grading/excavation activities are anticipated for approximately 220 days. Building construction, which would be ongoing for approximately four years, would generate the greatest amount of peak hour traffic—200 trips each in the AM and PM peak hours—with a total of 400 daily trips.

Table 3.7-11
Project Construction-Related Traffic Generation

	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Demolition/Crushing Activities							
Truck Traffic (12 Trucks)	24	2	1	3	1	2	3
PCE Factor	3	3	3	3	3	3	3
Truck Traffic (PCE)	72	6	3	9	3	6	9
Employees (25 Workers)	50	25	0	25	0	25	25
Total	**122**	**31**	**3**	**34**	**3**	**31**	**34**
Grading/Excavation Activities							
Truck Traffic (100 Trucks)	200	13	13	26	13	13	26
PCE Factor	3	3	3	3	3	3	3
Truck Traffic (PCE)	600	39	39	78	39	39	78
Employees (25 Workers)	50	25	0	25	0	25	25
Total	**650**	**64**	**39**	**103**	**39**	**64**	**103**
Site Preparation/Infrastructure Installation Activities							
Employees (25 Workers)	50	25	0	25	0	25	25
Total	**50**	**25**	**0**	**25**	**0**	**25**	**25**
Building Construction Activities							
Employees (200 Workers)	400	200	0	200	0	200	200
Total	**400**	**200**	**0**	**200**	**0**	**200**	**200**

Source: Rancho La Habra Traffic Impact Analysis, 2019.

As previously noted in Section 3.2, *Land Use and Planning*, La Habra Hills Drive provides access to the Westridge community from Imperial Highway. For approximately 15 months during Project site grading and infrastructure installation, La Habra Hills Drive would be closed across the Project site. The remaining two access points to the Westridge community—Hillsborough

Drive west to Beach Boulevard and Nicklaus Avenue east to Idaho Street—would remain available for daily traffic and emergency access. The result would be a temporary increase in traffic (964 total daily trips with 62 trips in/out in the AM peak hour and 78 trips in/out in the PM peak hour) distributed between Idaho Street and Beach Boulevard during the time that La Habra Hills Drive is closed across the Project site. The combination of added Project-related construction trips in the morning and afternoon peak hours and re-routing of traffic from the Westridge community may result in some minor increased traffic delays. In addition, some temporary lane closures may be needed during site construction as roadway improvements and site infrastructure are installed. While delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e., lumber, tiles, piping, windows, etc.) would not be a daily occurrence, such deliveries would typically occur just before or during the AM peak hour and could result in some additional traffic delays.

Significance Conclusion for Impact TRA-1.1

The combination of added Project-related construction trips in the morning and afternoon peak hours and re-routing of traffic from the Westridge community, along with the intermittent delivery of construction equipment and materials and the potential for lane closures, may increase peak hour traffic delays and would constitute a significant impact.

Mitigation Measures

Mitigation Measure TRA-1.1: Prior to issuance of a demolition, grading, or other permit, the applicant shall prepare and implement a Construction Management Plan, subject to approval of the City Engineer or their designee, to minimize construction-related traffic in the AM and PM peak hours, as well as to minimize disturbance to area residents. The Construction Management Plan shall, at a minimum:

- Include a proposed construction phasing plan.
- Identify proposed construction-related traffic controls and detours.
- Provide for traffic control for any street or lane closure, detour, or other disruption to traffic circulation to minimize the effects of such disruption.
- Limit the routes that construction vehicles may use for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e., lumber,

tiles, piping, windows, etc.) to Beach Boulevard and Imperial Highway (via La Habra Hills Drive).[1]

- Limit the routes that construction vehicles may use to dispose of any construction debris removed from the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive).
- Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts on adjacent streets.
- Specify requirements for the applicant to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material that may have been spilled, tracked, or blown onto adjacent streets or areas.
- Specify that hauling or transport of oversize loads will be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless otherwise approved in writing by the City Engineer.
- Specify that no hauling or transport shall be allowed during nighttime hours, weekends, or federal holidays.
- Prohibit use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway) for construction-related traffic.
- Require that haul trucks entering or exiting public streets shall at all times yield to public traffic.
- Specify that, if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer.
- Require that all construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur on-site.

[1] Both Beach Boulevard and Imperial Highway are identified in the La Habra General Plan as truck routes.

The Construction Management Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Devices* as well as City of La Habra requirements.

The applicant shall coordinate with Caltrans staff regarding Project-related work that will occur along Beach Boulevard. All construction activities within Caltrans right-of-way shall be subject to issuance of an encroachment permit by Caltrans.

Significance Conclusion for Impact TRA-1.1 with Implementation of Mitigation Measures

Implementation of the required Construction Management Plan meeting the standards of the current *California Manual on Uniform Traffic Control Devices* as well as City of La Habra requirements, including coordination with Caltrans as evidenced by a Caltrans-issued encroachment permit for construction activities within Caltrans rights-of-way, will reduce temporary traffic impacts of the Project to less than significant.

Impact TRA-1.2: **Intersections, Existing Plus Project Condition – Local Methodologies. The proposed Specific Plan would increase traffic at intersections on the surrounding roadway system. Project-related increases in intersection capacity utilization (ICU) and/or delay would exceed applicable thresholds for increased delay at one of the 32 intersections analyzed in the Project traffic study under Existing Plus Project conditions. Installation of traffic signals at the intersection of Walnut Street at Imperial Highway would reduce level of service (LOS) to acceptable levels. Because Caltrans has committed to fully fund this signalization, no mitigation measure is required. Therefore, this impact would be *less than significant*.**

Methodology

Traffic Forecasting Methodology

In order to estimate the traffic impact characteristics of the Project, a multi-step process was used for each of the scenarios analyzed herein. This process is detailed in the Traffic Impact Analysis prepared for Rancho La Habra (see Appendix H). In the first step, trip generation, the total arriving and departing traffic to and from the Project was estimated on a peak hour and daily basis. The traffic generation potential was forecast by applying the appropriate vehicle trip generation equations or rates to the Project development tabulation.

The second step of the forecasting process, trip distribution, identified the origins and destinations of inbound and outbound Project traffic. These origins and destinations were typically based on demographics and existing or anticipated travel patterns in the area.

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

With the forecasting process complete and Project traffic assignments developed, the impact of the Project was isolated by comparing operational (LOS) conditions at the selected key intersections and along area roadway segments[2] shown in **Figure 3.7-1** using expected future traffic volumes with and without forecasted Project-related traffic. The need for site-specific and/or cumulative local area traffic improvements was then evaluated and the significance of the Project's impacts identified.

Project Traffic Generation

Table 3.7-12 summarizes the trip generation rates used to forecast vehicular trips generated by the project for a typical weekday for each of the analysis scenarios in Section 3.7, *Traffic and Circulation*. As indicated in the table, the Project would generate a total of 6,713 daily two-way trips. Because the existing Westridge Golf Club generates 547 daily trips, the net increase in trips for the Project would be 6,166 trips per day, with a net increase of 433 AM peak hour trips and 581 PM peak hour trips.

The Project-related trip generation identified in **Table 3.7-12** does not reflect any adjustments for internal capture and pass-by. Therefore, the trip generation forecast presented in **Table 3.7-12** provides for a "worst-case" analysis.

[2] Thirty-two (32) intersections and thirty-seven (37) roadway segments analyzed in the Rancho La Habra Traffic Impact Analysis were identified for evaluation in consideration of the 50 peak hour Project-related trip criterion. Of the 32 study area intersections, 15 are within the City of La Habra, 6 are located in La Mirada, 4 are located in Fullerton, 6 are located in Buena Park and 1 is located jointly in the cities of La Habra and Fullerton. Of the 37 study area roadway segments, 20 are within La Habra, 4 are in La Mirada, 7 are in Fullerton, and 6 are within Buena Park.

Table 3.7-12
Project Trip Generation Forecasts

Institute of Transportation Engineers (ITE) Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Residential Components							
PA#1 – Townhomes/Condominiums (145[a] DU)	1,061	15	52	67	51	30	81
PA#2 – Single-Family Homes – 50 x 80 Lots (118 DU)	1,114	22	65	87	74	43	117
PA#3 – Single-Family Homes – 47 x 70 Lots (77 DU)	727	14	43	57	48	28	76
PA#4 – Single-Family Homes – 55 x 90 Lots (82 DU)	774	15	46	61	51	30	81
Subtotal	***3,676***	***66***	***206***	***272***	***224***	***131***	***355***
Retail Components							
PA#5 – Specialty Grocery Store (12,000 SF)	1,281	28	18	46	57	54	111
PA#5 – High-Turnover Restaurant (8,000 SF)	897	44	36	80	48	30	78
Subtotal	**2,178**	**72**	**54**	**126**	**105**	**84**	**189**
Recreation Components							
PA#6 – Recreation Community Center (22,500 SF)	648	26	14	40	24	28	52
PA#6 – Passive Park (42.1 ± Acres)	211	13	14	27	10	9	19
Subtotal	**859**	**39**	**28**	**67**	**34**	**37**	**71**
Total Project Trip Generation	**6,713**	**177**	**288**	**465**	**363**	**252**	**615**
Existing Golf Course Traffic Generation							
Westridge Golf Club Driveway Counts[b]	547	14	18	32	12	22	34
Net Traffic Increase	**6,166**	**163**	**270**	**433**	**351**	**230**	**581**

Notes:
DU = dwelling units
PA = Planning Area
SF = square feet
[a] Subsequent to preparation of the Traffic Impact Analysis, the Project was reduced from 145 multi-family units to 125 units. The Traffic Impact Analysis therefore presents a worst-case analysis.
[b] Traffic counts conducted at the site by TSI in September 2018. The values shown in Table 3.7-12 are an average of the weekday data collected on six days (twice each on a Tuesday, Wednesday and Thursday).
Source: Rancho La Habra Traffic Impact Analysis, 2019.

As noted in Chapter 2, *Project Description*, the proposed Specific Plan includes an option for Planning Area 5 to be developed with multi-family housing. Should Planning Area 5 be developed for multi-family housing rather than commercial use, the Project's net increase in traffic would be 4,347 daily trips, with a net increase of 330 AM peak hour trips and 419 PM peak hour trips. Thus, the Project's traffic generation would be greater with Planning Area 5 developed for commercial use, which is the land use assumed for that area in the traffic analysis to provide a worst-case assessment.

Project-Related Roadway Improvements

The following improvements would be constructed by the Project and were assumed in the Project traffic analysis:

- **Beach Boulevard at Hillsborough Park Apartments intersection**: Construct the east leg of the intersection and provide two inbound lanes and two outbound lanes (i.e., one westbound left-turn lane and one shared through/right-turn lane). Modify the median on Beach Boulevard to provide one 150-foot-long southbound left-turn lane with a 90-foot-long transition. Modify the existing traffic signal for five-phase operation with protected left-turn phasing in the north-south direction and permissive phasing in the east-west direction. The installation of these improvements is subject to the approval of the City of La Habra and Caltrans.
- **Idaho Street at Sandlewood Avenue intersection**: Construct the west leg of the intersection and provide one inbound lane and two outbound lanes (i.e., one eastbound left-turn lane and one shared through/right-turn lane). Provide one 100-foot-long northbound left-turn lane with a 90-foot-long transition on Idaho Street. Modify the existing traffic signal for five-phase operation with protected/permissive left-turn phasing in the north-south direction and permissive phasing in the east-west direction. The installation of these improvements is subject to the approval of the City of La Habra.
- **Beach Boulevard at proposed retail driveway**: Construct the Project driveway and provide one inbound lane and one outbound lane (i.e., one westbound right-turn lane). Modify the median on Beach Boulevard to provide one 100-foot-long southbound left-turn lane with a 90-foot-long transition. The installation of these improvements is subject to the approval of the City of La Habra and Caltrans.

Roadway Improvements Planned by the City of La Habra

The following improvements are planned by the City of La Habra and are assumed in the project traffic analysis:

- **Hacienda Road at Whittier Boulevard intersection**: Widen and/or restripe the northbound approach of Hacienda Road to provide an exclusive left-turn lane. Widen and/or restripe the southbound approach of Hacienda Road to provide an exclusive left-turn lane, a shared left/through lane, and dual right-turn lanes. Modify the existing traffic signal for split-phase operation in the north-south directions.

The installation of these improvements, which are planned by the City of La Habra/Caltrans as part of the Hacienda Road/Whittier Boulevard Intersection Improvement Project, are subject to the approval of Caltrans and the City of La Habra. These improvements are funded by OCTA and the City of La Habra.

Intersection Level of Level of Service Thresholds

The intersections studied in the Rancho La Habra Traffic Impact Analysis are located within four cities: La Habra, La Mirada, Fullerton, and Buena Park, each of which has established specific criteria for significant impacts. These criteria, which are used for each of the scenarios analyzed in this EIR section, are summarized below.

City of La Habra. For those study intersections within the jurisdiction of the City of La Habra, impacts are considered significant if:

- An undesirable peak hour LOS would occur at a signalized intersection as the result of the Project; or
- The Project would increase LOS at an intersection by 0.010 or greater, where the future LOS is unacceptable.
- An unsignalized intersection impact is considered to be significant if the project causes an intersection at LOS D or better to degrade to LOS E or LOS F, and the traffic signal warrant analysis determines that a traffic signal is justified.

In addition, the City of La Habra has undertaken traffic engineering studies for the intersection of Beach Boulevard at Imperial Highway and concluded that any additional traffic generated by new development at this intersection would have a significant impact.

City of La Mirada. For intersections within the jurisdiction of the City of La Mirada, impacts are considered significant if:

- An unacceptable peak hour LOS would occur as the result of the Project; or
- The Project would increase traffic demand at the intersection by 2 percent or more of capacity (ICU increase ≥ 0.020) at a location operating at an unacceptable LOS.

City of Fullerton. For intersections within the jurisdiction of the City of Fullerton, impacts are considered significant if:

- The Project would cause a signalized intersection operating at LOS D or better to degrade to LOS E or F; or
- The Project would cause an unsignalized intersection operating at LOS D or better to degrade to LOS E or F, and a traffic signal warrant analysis determines that a signal is justified.

City of Buena Park. For intersections within the jurisdiction of the City of Buena Park, impacts are considered significant if:

- *ICU Analysis*. An unacceptable peak hour LOS would occur and the Project would increase traffic demand at the study intersection by 2 percent of capacity (ICU increase ≥ 0.020).

- *Highway Capacity Manual (HCM) Analysis*. An unacceptable peak hour LOS would occur, and the Project would increase the delay by at least 2.0 seconds.

Impact Assessment

Table 3.7-13 summarizes peak hour LOS results at the 32 intersections analyzed for Existing Plus Project traffic conditions. The first column (1) of ICU/LOS and HCM/LOS values in **Table 3.7-13** presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in **Table 3.7-10**). The second column lists Existing Plus Project traffic conditions. The third column shows the increase in ICU value and/or delay value due to the Project-related peak hour trips and indicates whether Project-related traffic would exceed identified thresholds.

Table 3.7-13
Existing Plus Project Intersection Analysis – Local Methodologies

					(1) Existing Conditions		(2) Existing Plus Project Conditions		(3) Threshold Exceeded?	
		LOS Standard	Jurisdiction	Peak Hour	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	La Mirada/ Caltrans	AM	0.979	E	0.996	E	0.017	No
				PM	0.935	E	0.982	E	0.047	No
2.	Gilbert St. at Rosecrans Ave.	D	Fullerton	AM	39.3 s/v	D	39.7 s/v	D	--	No
				PM	37.1 s/v	D	38.3 s/v	D	--	No
3.	Euclid St. at Rosecrans Ave.	D	Fullerton	AM	29.4 s/v	C	29.4 s/v	C	--	No
				PM	19.5 s/v	B	19.6 s/v	B	--	No
4.	Beach Blvd. at Hillsborough Dr.	E	La Mirada/ Caltrans	AM	0.768	C	0.793	C	0.025	No
				PM	0.738	C	0.767	C	0.029	No
5.	Beach Blvd. at Hillsborough Park Apts	E	La Habra/ Caltrans	AM	0.533	A	0.565	A	0.032	No
				PM	0.503	A	0.568	A	0.065	No
6.	Idaho St. at Sandlewood Ave.	D	La Habra	AM	0.485	A	0.507	A	0.022	No
				PM	0.528	A	0.549	A	0.021	No
7.	Euclid St. at Sandlewood Ave.	D	La Habra	AM	**69.4 s/v**	**F**	**75.3 s/v**	**F**	--	No[a]
				PM	**41.4 s/v**	**E**	**47.2 s/v**	**E**	--	No[a]
8.	Santa Gertrudes Ave at Imperial Hwy.	E	La Mirada	AM	0.852	D	0.861	D	0.009	No
				PM	0.871	D	0.884	D	0.013	No
9.	1st Ave. at Imperial Hwy.	D	La Mirada	AM	0.706	C	0.716	C	0.010	No
				PM	0.594	A	0.604	A	0.010	No
10.	Beach Blvd. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.786	C	0.813	D	0.027	No
				PM	0.834	D	0.870	D	0.036	No
11.	La Habra Hills Dr. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.501	A	0.527	A	0.026	No
				PM	0.653	B	0.710	C	0.057	No
12.	Idaho St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.692	B	0.705	C	0.013	No
				PM	0.728	C	0.740	C	0.012	No
13.	Euclid St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.795	C	0.807	D	0.012	No
				PM	0.715	C	0.731	C	0.016	No
14.	Harbor Blvd. at Imperial Hwy.	E	La Habra/ Fullerton/ Caltrans	AM	0.759	C	0.762	C	0.003	No
				PM	0.683	B	0.686	B	0.003	No
				AM	43.1 s/v	D	47.2 s/v	D	--	No
				PM	44.4 s/v	D	45.5 s/v	D	--	No

		LOS Standard	Jurisdiction	Peak Hour	(1) Existing Conditions		(2) Existing Plus Project Conditions		(3) Threshold Exceeded?	
					ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
15.	Beach Blvd. at Lambert Rd.	E	La Habra/ Caltrans	AM	0.949	E	0.954	E	0.005	No
				PM	0.900	D	0.909	E	0.009	No
16.	Idaho St. at Lambert Rd.	D	La Habra	AM	0.814	D	0.815	D	0.001	No
				PM	0.775	C	0.776	C	0.001	No
17.	Euclid St. at Lambert Rd.	D	La Habra	AM	0.702	C	0.703	C	0.001	No
				PM	0.799	C	0.800	C	0.001	No
18.	Harbor Blvd. at Lambert Rd.	D	La Habra	AM	0.696	B	0.697	B	0.001	No
				PM	0.777	C	0.780	C	0.003	No
19.	La Mirada Blvd. at Imperial Hwy.	E	La Mirada	AM	0.900	D	0.908	E	0.008	No
				PM	0.859	D	0.866	D	0.007	No
20.	Beach Blvd. at La Mirada Blvd./Malvern Ave.	D	Buena Park/ Caltrans	AM	0.757	C	0.768	C	0.011	No
				PM	0.805	D	0.828	D	0.023	No
21.	Beach Blvd. at La Habra Blvd.	E	La Habra/ Caltrans	AM	0.729	C	0.734	C	0.005	No
				PM	0.801	D	0.806	D	0.005	No
22.	Valley View Ave. at Imperial Hwy.	E	La Mirada	AM	0.903	E	0.909	E	0.006	No
				PM	0.876	D	0.883	D	0.007	No
23.	Beach Blvd. at Artesia Blvd.	D	Buena Park/ Caltrans	AM	0.795	C	0.808	D	0.013	No
				PM	0.748	C	0.760	C	0.012	No
24.	Beach Blvd. at Commonwealth Ave.	D	Buena Park/ Caltrans	AM	0.589	A	0.598	A	0.009	No
				PM	0.613	B	0.624	B	0.011	No
25.	I-5 NB Ramps at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.350	A	0.350	A	0.000	No
				PM	0.477	A	0.477	A	0.000	No
26.	Beach Blvd. at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.720	C	0.730	C	0.010	No
				PM	0.677	B	0.691	B	0.014	No
27.	Beach Blvd. at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.691	B	0.698	B	0.007	No
				PM	0.675	B	0.684	B	0.009	No
28.	Beach Blvd. at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.686	B	0.692	B	0.006	No
				PM	0.758	C	0.761	C	0.003	No
29.	Hacienda Road at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.849	D	0.855	D	0.006	No
				PM	0.834	D	0.845	D	0.011	No
30.	Walnut St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	**957.8 s/v**	**F**	**1260.8 s/v**	**F**	--	**Yes**
				PM	44.6 s/v	E	48.7 s/v	E	--	No
31.	Gilbert St. at Malvern Ave.	D	Fullerton	AM	45.9 s/v	D	46.7 s/v	D	--	No
				PM	43.6 s/v	D	44.8 s/v	D	--	No
32.	Euclid St. at Malvern Ave.	D	Fullerton	AM	41.8 s/v	D	42.6 s/v	D	--	No
				PM	43.3 s/v	D	43.5 s/v	D	--	No

Notes: s/v = seconds per vehicle delay, NB = northbound, SB = southbound
Bold text indicates unacceptable LOS.
[a] Although this intersection is forecast to operate at an unacceptable LOS, the Project would not have a significant impact at this intersection based on applicable thresholds since the peak hour traffic signal warrant is not satisfied (see Traffic Impact Analysis Appendix H, Section 7.1.1).
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Significance Conclusion for Impact TRA-1.2

Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system. As indicated in **Table 3.7-13**, Project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at the intersection of Walnut Street at Imperial Highway under Existing Plus Project conditions. Although the intersection of Euclid Street at Sandlewood Avenue is also forecast to operate at unacceptable LOS F during the AM peak hour and unacceptable LOS E during the PM peak hour, traffic at this intersection would not exceed identified thresholds since the peak hour traffic signal warrant would not be not satisfied. The remaining 30 intersections that were analyzed currently operate at an acceptable service level during the AM and PM peak hours and would continue to do so with the addition of Project-generated traffic. The result is a significant impact at the intersection of Walnut Street at Imperial Highway within the City of La Habra. However, Caltrans has committed to fully fund improvements at this intersection.

As previously noted, the City of La Habra has undertaken traffic engineering studies that concluded any additional traffic generated by new development at the intersection of Beach Boulevard at Imperial Highway would have a significant impact for which fair share improvement fees would be required as mitigation.

Mitigation Measures

The Rancho La Habra Traffic Impact Analysis recommended the following improvements to the intersection at which the Project would have a significant impact:

- **Walnut Street at Imperial Highway**: Install a three-phase traffic signal with protected left-turn phasing on Imperial Highway (i.e., eastbound left-turn lane). It should be noted that this key study intersection satisfies the peak hour signal warrant under existing traffic conditions (i.e., Warrant #3 described in the current *California Manual on Uniform Traffic Control Devices* (MUTCD). Caltrans has committed to install a traffic signal at this location.

Mitigation Measure TRA-1.2: The applicant shall pay city-wide traffic improvement fees.

Significance Conclusion for Impact TRA-1.2 with Implementation of Mitigation Measures

City of La Habra fair share mitigation fees will mitigate impacts for intersections within La Habra. Although implementation of improvements at the intersection of Walnut Street at Imperial Highway would reduce LOS to acceptable levels, because this intersection is state-controlled, the City of La Habra cannot ensure implementation of Mitigation Measure TRA-1.2. Therefore, this impact would remain significant and unavoidable.

Impact TRA-1.3: **State-Controlled Intersections, Existing Plus Project Condition – Caltrans Methodology. Project-generated traffic increases would exceed applicable thresholds at 3 of the 19 state-controlled intersections analyzed in the Traffic Impact Analysis under Existing Plus Project conditions: Beach Boulevard/Artesia Boulevard, Hacienda Road/Whittier Boulevard, and Walnut Street/Imperial Highway. The remaining 16 state-controlled study intersections are forecast to continue to operate at an acceptable level of service (LOS) with the addition of Project-generated traffic to existing traffic. Implementation of improvements at the three affected intersections would fully mitigate the impacts of Project traffic, and the intersections would operate at an acceptable LOS during the AM and PM peak hours. Caltrans has committed to fund improvements at the intersection of Imperial Highway and Walnut Street. However, because the other two intersections are state-controlled, the City of La Habra cannot guarantee implementation of recommended mitigation measures. Therefore, this impact would remain *significant and unavoidable*.**

Methodology

In conformance with the current *Caltrans Guide for the Preparation of Traffic Impact Studies*, existing and projected peak hour operating conditions at state-controlled intersections were evaluated using the HCM operations method of analysis.

While Caltrans "endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities," it does not require that LOS D be maintained. Caltrans acknowledges that this LOS standard may not always be feasible and recommends that the local lead agency consult with Caltrans to determine the appropriate target LOS. Since the intersections within Caltrans right-of-way are within the cities of La Habra, La Mirada, and Buena Park, the cities are the lead agencies and each city's LOS standard was used to determine the significance of impacts. It should be noted that the intersection of Harbor Boulevard at Imperial Highway is within both the cities of La Habra and Fullerton. Based on long-standing consultations between City of La Habra and Caltrans staffs, City LOS standards have been used over the past 20+ years to determine the significance of impacts at intersections along a state highway within La Habra and have therefore been used to analyze impacts of the Project on state-controlled intersections.

The Caltrans intersection analyses used the intersection peak hour factors from existing traffic counts for existing and Existing Plus Project traffic conditions.

Impact Assessment

Table 3.7-14 summarizes the peak hour HCM LOS results at the 19 state-controlled study intersections within the study area for Existing Plus Project traffic conditions.

Significance Conclusion for Impact TRA-1.3

Project-generated increases at Caltrans intersections would exceed applicable thresholds at 3 of the 19 state-controlled intersections analyzed in the Traffic Impact Analysis under Existing Plus Project conditions. Caltrans has committed to fund improvements at the intersection of Imperial Highway and Walnut Street. A significant impact for which mitigation is required would occur at the following intersections:

- Beach Boulevard at Artesia Boulevard
- Hacienda Road at Whittier Boulevard

Mitigation Measures

The Rancho La Habra Traffic Impact Analysis recommended the following improvements to the three intersections at which the Project would have a significant impact:

- **Beach Boulevard at Artesia Boulevard**: Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide an exclusive right-turn lane. Modify the existing traffic signal as necessary and install a westbound right-turn overlap phase. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of Buena Park.
- **Hacienda Road at Whittier Boulevard**: Widen and/or restripe the northbound approach of Hacienda Road to provide an exclusive left-turn lane. Widen and/or restripe the southbound approach of Hacienda Road to provide an exclusive left-turn lane, a shared left/through lane, and dual right-turn lanes. Modify the existing traffic signal for split-phase operation in the north-south directions. The installation of these improvements, which are planned by the City of La Habra/Caltrans as part of the Hacienda Road/Whittier Boulevard Intersection Improvement Project, are subject to the approval of Caltrans and the City of La Habra.
- **Walnut Street at Imperial Highway**: Install a three-phase traffic signal with protected left-turn phasing on Imperial Highway (i.e., eastbound left-turn lane). This intersection satisfies the peak hour signal warrant under existing traffic conditions (i.e., Warrant #3 described in the current *California Manual on Uniform Traffic Control Devices* (MUTCD). Caltrans has committed to install a traffic signal at this location.

Table 3.7-14
Existing Plus Project Intersection Analysis – Caltrans Methodology

		LOS Standard	Peak Hour	(1) Existing Conditions HCM	(1) Existing Conditions LOS	(2) Existing Plus Project Conditions HCM	(2) Existing Plus Project Conditions LOS	(3) Threshold Exceeded? Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	AM	49.2 s/v	D	51.6 s/v	D	No
			PM	56.1 s/v	E	57.2 s/v	E	No
4.	Beach Blvd. at Hillsborough Dr.	E	AM	14.0 s/v	B	14.1 s/v	B	No
			PM	20.0 s/v	B	20.3 s/v	C	No
5.	Beach Blvd. at Hillsborough Park Apts.	E	AM	14.5 s/v	B	17.1 s/v	B	No
			PM	10.4 s/v	B	13.4 s/v	B	No
10.	Beach Blvd. at Imperial Hwy.	E	AM	64.4 s/v	E	69.0 s/v	E	No
			PM	61.5 s/v	E	68.7 s/v	E	No
11.	La Habra Hills Dr. at Imperial Hwy.	E	AM	38.5 s/v	D	38.8 s/v	D	No
			PM	49.1 s/v	D	53.9 s/v	D	No
12.	Idaho St. at Imperial Hwy.	E	AM	39.6 s/v	D	40.7 s/v	D	No
			PM	45.2 s/v	D	49.8 s/v	D	No
13.	Euclid St. at Imperial Hwy.	E	AM	49.3 s/v	D	51.0 s/v	D	No
			PM	48.7 s/v	E	50.9 s/v	D	No
14.	Harbor Blvd. at Imperial Hwy.	E	AM	43.1 s/v	D	47.2 s/v	D	No
			PM	44.4 s/v	D	45.5 s/v	D	No
15.	Beach Blvd. at Lambert Rd.	E	AM	55.2 s/v	E	55.2 s/v	E	No
			PM	51.9 s/v	D	51.9 s/v	D	No
20.	Beach Blvd. at La Mirada Blvd./Malvern Ave.	D	AM	48.4 s/v	D	51.4 s/v	D	No
			PM	48.3 s/v	D	51.0 s/v	D	No
21.	Beach Blvd. at La Habra Blvd.	E	AM	53.7 s/v	D	54.4 s/v	D	No
			PM	56.3 s/v	E	57.2 s/v	E	No
23.	Beach Blvd. at Artesia Blvd.	D	AM	52.6 s/v	D	**55.4 s/v**	**E**	**Yes**
			PM	**66.5 s/v**	**E**	**72.0 s/v**	**E**	**Yes**
24.	Beach Blvd. at Commonwealth Ave.	D	AM	38.2 s/v	D	39.2 s/v	D	No
			PM	36.6 s/v	D	37.3 s/v	D	No
25.	I-5 NB Ramps at Auto Center Dr.	D	AM	40.6 s/v	D	40.6 s/v	D	No
			PM	38.4 s/v	D	38.6 s/v	D	No
26.	Beach Blvd. at Auto Center Dr.	D	AM	41.5 s/v	D	42.7 s/v	D	No
			PM	39.7 s/v	D	40.0 s/v	D	No
27.	Beach Blvd. at I-5 SB Ramps	D	AM	28.7 s/v	C	29.0 s/v	C	No
			PM	26.2 s/v	C	26.5 s/v	C	No
28.	Beach Blvd. at Whittier Blvd.	E	AM	45.4 s/v	D	46.4 s/v	D	No
			PM	55.6 s/v	E	58.5 s/v	E	No
29.	Hacienda Rd. at Whittier Blvd.	E	AM	**254.2 s/v**	**F**	**254.7 s/v**	**F**	**Yes**
			PM	**135.7 s/v**	**F**	**167.9 s/v**	**F**	**Yes**
30.	Walnut St. at Imperial Highway	E	AM	**957.8 s/v**	**F**	**1260.8 s/v**	**F**	**Yes**
			PM	44.6 s/v	E	48.7 s/v	E	No

Notes:
s/v = seconds per vehicle delay, NB = northbound, SB = southbound
Bold text indicates unacceptable LOS.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Mitigation Measure TRA-1.3: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersections:

- Beach Boulevard at Artesia Boulevard (within Buena Park)
- Hacienda Road at Whittier Boulevard (within La Habra)

Significance Conclusion for Impact TRA-1.3 with Implementation of Mitigation Measures

Each of the intersections for which mitigation is required is state-controlled, and improvements require Caltrans approval. As a result, the City of La Habra cannot guarantee implementation of Mitigation Measure TRA-1.3, and the impact would therefore be *significant and unavoidable*.

Impact TRA-1.4: Roadway Segments, Existing Plus Project Condition. Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system. Along the nine roadway segments that would operate at unacceptable levels of service under Existing Plus Project conditions, Project-related traffic increases would not exceed applicable thresholds of significance for LOS and roadway volume to capacity ratio (v/c). Therefore, impacts along area roadway links would be *less than significant*.

Methodology

The roadway segments studied in the Rancho La Habra Traffic Impact Analysis are located within four cities: La Habra, La Mirada, Fullerton, and Buena Park, each of which has established specific criteria for significant impacts at both intersections and roadway segments. These criteria are summarized below.

City of La Habra

The City of La Habra considers LOS D to be the acceptable condition that should be maintained for all roadway segments within the City, except those roadway segments that are part of the Orange County Congestion Management Plan Highway System (Beach Boulevard, Imperial Highway, and Whittier Boulevard west of Beach Boulevard), where LOS E is defined as the acceptable limit (see **Table 3.7-5).**

The following steps are utilized to determine whether or not the proposed Project will have a significant impact at key roadway segments located within the City of La Habra:

- If the roadway segment is operating on a daily basis at an unacceptable level of service and the project traffic increase is 0.010 or greater, a peak hour evaluation will be conducted to determine if the roadway segment operates at a satisfactory service level in the critical peak hour. In order for a significant impact to occur, the key roadway segment must operate at an unacceptable LOS during the AM and/or PM peak hours and the project traffic increase must be 0.010 or greater.

City of La Mirada

The City of La Mirada considers LOS E to be the acceptable level of service that should be maintained for all non-residential roadway segments, and LOS D to be the acceptable level of service for all neighborhood residential roadway segments (see **Table 3.7-6**).

The following steps are utilized to determine whether or not the proposed Project will have a significant impact at key roadway segments located within the City of La Habra:

- If the roadway segment is operating on a daily basis at an unacceptable level of service and the project traffic increase is 0.020 or greater, a peak hour evaluation will be conducted to determine if the roadway segment operates at a satisfactory service level in the critical peak hour.
- In order for a significant impact to occur, the key roadway segment must operate at an unacceptable LOS during the AM and/or PM peak hours and the project traffic increase must be 0.020 or greater.

City of Fullerton

For roadway segments within the jurisdiction of the City of Fullerton, LOS D is considered to be the acceptable level of service for all roadway segments. A significant impact would occur if:

- The Project would cause a roadway segment operating at LOS D or better to degrade to LOS E or F.

For those roadway segments within the jurisdiction of the City of Fullerton, impacts are considered significant if the Project would cause a roadway segment operating at LOS D or better to degrade to LOS E or F.

City of Buena Park

For roadway segments within the jurisdiction of the City of Buena Park, LOS D is considered to be the acceptable level of service for all roadway segments. The following steps are utilized to determine whether or not the proposed Project will have a significant impact at key roadway segments located within the City of La Habra:

- If the roadway segment is operating on a daily basis at an unacceptable level of service and the project traffic increase is 0.020 or greater, a peak hour evaluation will be conducted to determine if the roadway segment operates at a satisfactory service level in the critical peak hour.
- In order for a significant impact to occur, the key roadway segment must operate at an unacceptable LOS during the AM and/or PM peak hours and the project traffic increase must be 0.020 or greater.

Impact Assessment

Table 3.7-15 summarizes the results of the Existing Plus Project daily analysis for the 39 roadway segments analyzed in the Rancho La Habra Traffic Impact Analysis. As indicated in this table, the following 9 of the 37 key roadway segments are forecast to operate at an unacceptable level of service on a daily basis with the Project:

City of La Habra

- Lambert Road between Beach Boulevard and Idaho Street
- Lambert Road between Idaho Street and Euclid Street
- Lambert Road between Euclid Street and Harbor Boulevard
- Beach Boulevard between Hillsborough Apartments and Hillsborough Drive
- Whittier Boulevard between Beach Boulevard and Hacienda Road

City of Buena Park

- Beach Boulevard between La Mirada Boulevard /Malvern Avenue and Artesia Boulevard
- Beach Boulevard between Artesia Boulevard and Commonwealth Avenue
- Beach Boulevard between Commonwealth Avenue and Auto Center Drive
- Beach Boulevard between Auto Center Drive and I-5 Southbound (SB) Ramps

Significance Conclusion for Impact TRA-1.4

The majority of key roadway segments are forecast to continue operating at an acceptable service level on a daily basis with the addition of Project-generated traffic to existing traffic. Of the nine roadway segments operating at an unacceptable level of service, only Beach Boulevard between Hillsborough Apartments and Hillsborough Drive requires a peak hour link assessment to determine whether or not it would be affected by the Project. The other eight roadway segments do not exceed the thresholds defined in the Rancho La Habra Traffic Impact Analysis requiring peak hour link assessment; therefore, Project-related impacts at those roadway segments would be less than significant under Existing Plus Project traffic conditions.

Table 3.7-15
Existing Plus Project Roadway Segment Levels of Service

				(1)	(2)	(3)	(4) Existing Traffic Conditions			(5) Existing Plus Project Traffic Conditions				
		LOS Std.	Jurisdiction	No. of Existing Lanes	Arterial Classification	Existing Capacity at LOS E	Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Increase	Significant (Yes/No)
A.	Lambert Rd. btwn Beach Blvd. and Idaho St.	D	La Habra	4	Primary	37,500	**35,387**	**0.944**	**E**	**35,387**	**0.944**	**E**	0.000	No
B.	Lambert Rd. btwn Idaho St. and Euclid St.	D	La Habra	4	Primary	37,500	**37,387**	**0.997**	**E**	**37,387**	**0.997**	**E**	0.000	No
C.	Lambert Rd. btwn Euclid St. and Harbor Blvd.	D	La Habra	4	Primary	37,500	**36,014**	**0.960**	**E**	**36,014**	**0.960**	**E**	0.000	No
D.	Beach Blvd. btwn Lambert Rd. and Imperial Hwy.	E	La Habra	6	Major	56,300	51,446	0.914	E	52,242	0.928	E	0.014	No
E.	Idaho St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	23,702	0.632	B	23,810	0.635	B	0.003	No
F.	Euclid St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	17,898	0.477	A	17,953	0.479	A	0.002	No
G.	Harbor Blvd. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	6	Major	56,300	35,083	0.623	B	35,459	0.630	B	0.007	No
H.	Imperial Highway btwn Santa Gertrudes Ave. and 1st Ave.	D	La Mirada	6	Major	54,000	36,239	0.671	B	37,186	0.689	B	0.018	No
I.	Imperial Highway btwn 1st Ave. and Beach Blvd.	E	La Habra	6	Major	56,300	36,310	0.645	B	37,321	0.663	B	0.018	No
J.	Imperial Highway btwn Beach Blvd. and La Habra Hills Dr.	E	La Habra	6	Smart St	60,200	49,867	0.828	D	51,774	0.860	D	0.032	No
K.	Imperial Highway btwn La Habra Hills Dr. and Idaho St.	E	La Habra	6	Smart St	60,200	50,687	0.842	D	52,210	0.867	D	0.025	No
L.	Imperial Highway btwn Idaho St. and Euclid St.	E	La Habra	6	Smart St	60,200	50,844	0.845	D	51,871	0.862	D	0.017	No
M.	Imperial Highway btwn Euclid St. and Harbor Blvd.	E	La Habra	6	Smart St	60,200	52,284	0.869	D	53,097	0.882	D	0.013	No
N.	Idaho St. btwn Imperial Hwy. and Sandlewood Ave.	D	La Habra	4	Primary	37,500	20,217	0.539	A	20,915	0.558	A	0.019	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Existing Traffic Conditions			(5) Existing Plus Project Traffic Conditions				Significant (Yes/No)
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Increase	
O.	Euclid St. btwn Sandlewood Ave. and Imperial Hwy.	D	La Habra	4	Primary	37,500	21,596	0.576	A	21,754	0.580	A	0.004	No
P.	Gilbert St. btwn Sandlewood Ave. and Rosecrans Ave.	D	Fullerton	4	Primary	37,500	15,440	0.412	A	16,004	0.427	A	0.015	No
Q.	Euclid St. btwn Sandlewood Ave. and Rosecrans Ave.	D	Fullerton	4	Primary	37,500	22,344	0.596	A	22,497	0.600	B	0.004	No
R.	Beach Blvd. btwn Imperial Hwy. and Hillsborough Apt.	E	La Habra	6	Smart St	60,200	55,337	0.919	E	58,540	0.972	E	0.053	No
S.	Beach Blvd. btwn Hillsborough Apt. and Hillsborough Dr.	E	La Habra	6	Smart St	60,200	58,110	0.965	E	**60,516**	**1.005**	**F**	**0.040**	
Peak Hour Assessment				*AM*	*NB*	*3,010*	*1,718*	*0.571*	*A*	*1,778*	*0.591*	*A*	*0.020*	*No*
					SB	*3,010*	*2,311*	*0.768*	*C*	*2,414*	*0.802*	*D*	*0.034*	*No*
				PM	*NB*	*3,010*	*2,288*	*0.760*	*C*	*2,419*	*0.804*	*D*	*0.044*	*No*
					SB	*3,010*	*2,006*	*0.666*	*B*	*2,094*	*0.696*	*B*	*0.030*	*No*
T.	Beach Blvd. btwn Hillsborough Dr. and Rosecrans Ave.	E	La Mirada	6	Smart St	57,780	53,636	0.928	E	55,873	0.967	E	0.039	No
U.	Rosecrans Ave. btwn Beach Blvd. and Gilbert St.	D	Fullerton	4	Primary	37,500	20,815	0.555	A	21,709	0.579	A	0.024	No
V.	Rosecrans Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Secondary	25,000	15,137	0.605	B	15,390	0.616	B	0.011	No
W-1.	Sandlewood Ave. East of Idaho St.	D	La Habra	2	Commuter	5,400	3,600	0.667	B	3,812	0.706	C	0.039	No
W-2.	Sandlewood Ave. btwn Idaho St. and Euclid St.	D	La Habra	2	Commuter	5,400	1,931	0.358	A	2,143	0.397	A	0.039	No
W-3.	Sandlewood Ave. West of Euclid St.	D	La Habra	2	Commuter	5,400	1,296	0.240	A	1,508	0.279	A	0.039	No
X	Beach Blvd. btwn Rosecrans Ave. and La Mirada Blvd.	D	Buena Park	6	Smart St	60,200	44,047	0.732	C	45,486	0.756	C	0.024	No
Y.	Imperial Highway btwn Santa Gertrudes and La Mirada Blvd.	E	La Mirada	6	Major	54,000	31,542	0.584	A	32,407	0.600	B	0.016	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Existing Traffic Conditions			(5) Existing Plus Project Traffic Conditions				
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Increase	Significant (Yes/No)
Z.	Beach Blvd. btwn Lambert Rd. and La Habra Blvd.	E	La Habra	6	Major	56,300	42,893	0.762	C	43,629	0.775	C	0.013	No
AA.	Imperial Highway btwn Valley View Ave. and La Mirada Blvd.	E	La Mirada	6	Major	54,000	30,552	0.566	A	31,183	0.577	A	0.011	No
BB.	Beach Blvd. btwn La Mirada Blvd./ Malvern Ave. and Artesia Blvd.	D	Buena Park	6	Smart St	60,200	**71,766**	**1.192**	**F**	**72,892**	**1.211**	**F**	0.019	No
CC.	Beach Blvd. btwn Artesia Blvd. and Commonwealth Ave.	D	Buena Park	6	Smart St	60,200	**56,837**	**0.944**	**E**	**57,668**	**0.958**	**E**	0.014	No
DD.	Beach Blvd. btwn Commonwealth and Auto Center Dr.	D	Buena Park	6	Smart St	60,200	**58,783**	**0.976**	**E**	**59,561**	**0.989**	**E**	0.013	No
EE.	Auto Center Dr. btwn Beach Blvd. and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	12,592	0.336	A	12,681	0.338	A	0.002	No
FF.	Beach Blvd. btwn Auto Center Dr. and I-5 SB Ramps	D	Buena Park	6	Smart St	60,200	**61,904**	**1.028**	**F**	**62,515**	**1.038**	**F**	0.010	No
GG	Beach Blvd. btwn La Habra Blvd. and Whittier Blvd.	E	La Habra	6	Major	56,300	35,120	0.624	B	35,790	0.636	B	0.012	No
HH.	Whittier Blvd. btwn Beach Blvd. and Hacienda Rd.	D	La Habra	4	Primary	37,500	**47,059**	**1.255**	**F**	**47,375**	**1.263**	**F**	0.008	No
II.	Gilbert St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	23,527	0.627	B	24,268	0.647	B	0.020	No
JJ.	Euclid St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	31,442	0.838	D	31,757	0.847	D	0.009	No
KK.	Malvern Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Primary	37,500	23,982	0.640	B	24,335	0.649	B	0.009	No

Notes:
NB = northbound, SB = southbound
BOLD text indicates unacceptable service level.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

As shown in **Table 3.7-15**, based on the peak hour link assessment, Beach Boulevard between Hillsborough Apartments and Hillsborough Drive currently operates at acceptable LOS C or better during the critical weekday AM and PM peak hours. Further, this roadway segment is forecast to continue to operate at LOS D or better under Existing Plus Project conditions during the weekday AM and PM peak hours. Therefore, Project-generated traffic would not have a significant impact along this roadway segment. Impacts would therefore be *less than significant*.

Mitigation Measures

Because impacts are less than significant, no mitigation measures are required.

Impact TRA-1.5: **Intersections, Year 2023 Cumulative Plus Project Condition – Local Methodologies. Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system. Project-related increases in intersection capacity utilization (ICU) and/or delay would exceed applicable thresholds for increased delay at 3 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis under Year 2023 Cumulative Plus Project conditions. Implementation of improvements at these three intersections (Beach Boulevard at Rosecrans Avenue, Walnut Street at Imperial Highway, and Beach Boulevard at La Mirada Boulevard/Malvern Avenue) would mitigate the effects of Project-related traffic on ICU and/or delay, and the intersections are forecast to operate at an acceptable level of service (LOS) during the AM and PM peak hours. Caltrans has committed to fund needed improvements at the intersection of Walnut Street and Imperial Highway. Because the remaining two affected intersections are outside of the City of La Habra, the City cannot require implementation of such improvements. Thus, the Project's impact would be *significant and unavoidable*.**

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of **Impact TRA-1.2** was also applied to projected Year 2023 cumulative conditions.

Year 2023 background traffic growth estimates were calculated using an ambient traffic growth factor of 1 percent per year to reflect unknown and future cumulative projects in the area, as well as account for regular growth in traffic volumes due to the development of projects outside the area. In addition, Year 2023 background traffic includes development of the 63 cumulative

projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

Impact Assessment

Table 3.7-16 summarizes the peak hour LOS results at the 32 key study intersections analyzed in the Rancho La Habra Traffic Impact Analysis for the Year 2023. The first column (1) of ICU/LOS and HCM/LOS values in **Table 3.7-16** presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in **Table 3.7-10**). The second column (2) lists forecast 2023 cumulative conditions (existing traffic plus ambient growth traffic plus cumulative project traffic) based on existing intersection geometry, but without any traffic generated by the Project. The third column (3) presents future forecast traffic conditions with the addition of traffic generated by the Project. The fourth column (4) shows the increase in ICU value and/or delay value due to the added peak hour Project trips and indicates whether the traffic associated with the Project would have a significant effect based on applicable LOS standards and significance criteria.

An analysis of future (Year 2023) cumulative traffic conditions indicates that 4 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis will operate at an unacceptable LOS without development of the Project. The remaining 28 intersections are forecast to continue to operate at acceptable levels of service during the AM and PM peak hours with the addition of ambient traffic growth and cumulative projects traffic. The intersections projected to operate at an unacceptable LOS in 2023 without development of the Project are:

- Beach Boulevard at Rosecrans Avenue (La Mirada)
- Euclid Street at Sandlewood Avenue (La Habra)
- Beach Boulevard at Lambert Road (La Habra)
- Walnut Street at Imperial Highway (La Habra)

Significance Conclusion for Impact TRA-1.5

Table 3.7-16 indicates that traffic associated with the Project would significantly affect 3 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis. Although the intersection of Beach Boulevard at Lambert Road is forecast to operate at unacceptable LOS F during the AM peak hour, the amount of traffic contributed by the Project would be less than the applicable significance threshold for the ICU increase. Also, although the intersection of Euclid Street at Sandlewood Avenue is forecast to operate at unacceptable LOS F during the AM and PM peak hours, intersection operations would not exceed applicable significance thresholds since the peak hour traffic signal warrant would not be satisfied. Caltrans has committed to fund needed improvements at the intersection of Walnut Street at Imperial

Table 3.7-16
Year 2023 Peak Hour Intersection Analysis – Local Methodologies

		LOS Std.	Jurisdiction	Time Period	(1) Existing Traffic Conditions		(2) Year 2023 Cumulative Traffic Conditions		(3) Year 2023 Cumulative Plus Project Traffic Conditions		(4) Significant Impact?	
					ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	La Mirada/ Caltrans	AM	0.979	E	**1.077**	**F**	**1.093**	**F**	0.016	No
				PM	0.935	E	**1.015**	**F**	**1.061**	**F**	**0.046**	**Yes**
2.	Gilbert St. at Rosecrans Ave.	D	Fullerton	AM	39.3 s/v	D	41.9 s/v	D	42.6 s/v	D	--	No
				PM	37.1 s/v	D	39.5 s/v	D	40.4 s/v	D	--	No
3.	Euclid St. at Rosecrans Ave.	D	Fullerton	AM	29.4 s/v	C	30.8 s/v	C	30.9 s/v	C	--	No
				PM	19.5 s/v	B	20.0 s/v	B	20.0 s/v	C	--	No
4.	Beach Blvd. at Hillsborough Dr.	E	La Mirada/ Caltrans	AM	0.768	C	0.823	D	0.848	D	0.025	No
				PM	0.738	C	0.806	D	0.828	D	0.022	No
5.	Beach Blvd. at Hillsborough Park Apt.	E	La Habra/ Caltrans	AM	0.533	A	0.578	A	0.610	B	0.032	No
				PM	0.503	A	0.546	A	0.612	B	0.066	No
6.	Idaho St. at Sandlewood Ave.	D	La Habra	AM	0.485	A	0.540	A	0.562	A	0.022	No
				PM	0.528	A	0.580	A	0.601	B	0.021	No
7.	Euclid St. at Sandlewood Ave.	D	La Habra	AM	**69.4 s/v**	**F**	**123.4 s/v**	**F**	**137.7 s/v**	**F**	--	No[a]
				PM	**41.4 s/v**	**E**	**59.6 s/v**	**F**	**70.9 s/v**	**F**	--	No[a]
8.	Santa Gertrudes Ave. at Imperial Hwy.	E	La Mirada	AM	0.852	D	0.918	E	0.927	E	0.009	No
				PM	0.871	D	0.948	E	0.961	E	0.013	No
9.	1st Ave. at Imperial Hwy.	D	La Mirada	AM	0.706	C	0.760	C	0.770	C	0.010	No
				PM	0.594	A	0.656	B	0.665	B	0.009	No
10.	Beach Blvd. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.786	C	0.880	D	0.907	E	0.027	No
				PM	0.834	D	0.942	E	0.978	E	0.036	No
11.	La Habra Hills Dr. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.501	A	0.558	A	0.594	A	0.036	No
				PM	0.653	B	0.736	C	0.780	C	0.044	No
12.	Idaho St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.692	B	0.763	C	0.776	C	0.013	No
				PM	0.728	C	0.813	D	0.825	D	0.012	No
13.	Euclid St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.795	C	0.904	E	0.916	E	0.012	No
				PM	0.715	C	0.831	D	0.846	D	0.015	No

		LOS Std.	Jurisdiction	Time Period	(1) Existing Traffic Conditions		(2) Year 2023 Cumulative Traffic Conditions		(3) Year 2023 Cumulative Plus Project Traffic Conditions		(4) Significant Impact?	
					ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
14.	Harbor Blvd. at Imperial Hwy.	E	La Habra/ Fullerton/	AM	0.759	C	0.841	D	0.845	D	0.004	No
				PM	0.683	B	0814	D	0.838	D	0.024	No
			Caltrans	AM	43.1 s/v	D	55.1 s/v	E	56.0s/v	E	--	No
				PM	44.4 s/v	D	54.0 s/v	E	54.6 s/v	D	--	No
15.	Beach Blvd. at Lambert Rd.	E	La Habra/ Caltrans	AM	0.949	E	**1.021**	**F**	**1.026**	**F**	0.005	No
				PM	0.900	D	0.974	E	0.984	E	0.010	No
16.	Idaho St. at Lambert Rd.	D	La Habra	AM	0.814	D	0.870	D	0.871	D	0.001	No
				PM	0.775	C	0.831	D	0.833	D	0.002	No
17.	Euclid St. at Lambert Rd.	D	La Habra	AM	0.702	C	0.771	C	0.772	C	0.001	No
				PM	0.799	C	0.876	D	0.877	D	0.001	No
18.	Harbor Blvd. at Lambert Rd.	D	La Habra	AM	0.696	B	0.763	C	0.765	C	0.002	No
				PM	0.777	C	0.850	D	0.853	D	0.003	No
19.	La Mirada Blvd. at Imperial Hwy.	E	La Mirada	AM	0.900	D	0.975	E	0.983	E	0.008	No
				PM	0.859	D	0.935	E	0.943	E	0.008	No
20.	Beach Blvd. at La Mirada Blvd./Malvern	D	Buena Park/ Caltrans	AM	0.757	C	0.843	D	0.854	D	0.011	No
				PM	0.805	D	0.880	D	**0.904**	**E**	**0.024**	**Yes**
21.	Beach Blvd. at La Habra Blvd.	E	La Habra/ Caltrans	AM	0.729	C	0.788	C	0.793	C	0.005	No
				PM	0.801	D	0.871	D	0.876	D	0.005	No
22.	Valley View Ave. at Imperial Hwy.	E	La Mirada	AM	0.903	E	0.989	E	0.995	E	0.006	No
				PM	0.876	D	0.985	E	0.992	E	0.007	No
23.	Beach Blvd. at Artesia Blvd.	D	Buena Park/ Caltrans	AM	0.795	C	0.876	D	0.889	D	0.013	No
				PM	0.748	C	0.834	D	0.847	D	0.013	No
24.	Beach Blvd. at Commonwealth Ave.	D	Buena Park/ Caltrans	AM	0.589	A	0.661	B	0.669	B	0.008	No
				PM	0.613	B	0.705	C	0.716	C	0.011	No
25.	I-5 NB Ramps at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.350	A	0.372	A	0.372	A	0.000	No
				PM	0.477	A	0.512	A	0.512	A	0.000	No
26.	Beach Blvd. at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.720	C	0.790	C	0.800	C	0.010	No
				PM	0.677	B	0.763	C	0.778	C	0.015	No

		LOS Std.	Jurisdiction	Time Period	(1) Existing Traffic Conditions		(2) Year 2023 Cumulative Traffic Conditions		(3) Year 2023 Cumulative Plus Project Traffic Conditions		(4) Significant Impact?	
					ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
27.	Beach Blvd. at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.691	B	0.785	C	0.793	C	0.008	No
				PM	0.675	B	0.767	C	0.775	C	0.008	No
28.	Beach Blvd. at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.686	B	0.753	C	0.758	C	0.005	No
				PM	0.758	C	0.814	D	0.818	D	0.004	No
29.	Hacienda Rd. at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.849	D	0.910	E	0.916	E	0.006	No
				PM	0.834	D	0.913	E	0.924	E	0.011	No
30.	Walnut St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	**957.8 s/v**	**F**	**5473.9 s/v**	**F**	**5473.9 s/v**	**F**	--	**Yes**
				PM	44.6 s/v	E	**94.2 s/v**	**F**	**107.4 s/v**	**F**	--	**Yes**
31.	Gilbert St. at Malvern Ave.	D	Fullerton	AM	45.9 s/v	D	44.5 s/v	D	44.6 s/v	D	--	No
				PM	43.6 s/v	D	49.8 s/v	D	50.7 s/v	D	--	No
32.	Euclid St. at Malvern Ave.	D	Fullerton	AM	41.8 s/v	D	47.9 s/v	D	49.0 s/v	D	--	No
				PM	43.3 s/v	D	48.2 s/v	D	48.3 s/v	D	--	No

Notes: s/v = seconds per vehicle (delay), NB = northbound, SB = southbound
BOLD text indicates unacceptable service level
[a] Although this intersection is forecast to operate at an unacceptable LOS, the Project's impact would be less than significant because the traffic signal warrant would not be met (see Traffic Impact Analysis Section 7.1.1).
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Highway. The remaining 27 intersections analyzed in the Rancho La Habra Traffic Impact Analysis are forecast to continue to operate at an acceptable LOS with the addition of Project-generated traffic in the Year 2023.

The two intersections where Project-related traffic would exceed applicable significance criteria in the Year 2023 and are not already committed to being improved are:

- Beach Boulevard at Rosecrans Avenue (La Mirada)
- Beach Boulevard at La Mirada Boulevard/Malvern Avenue (Buena Park)

This constitutes a significant impact for which mitigation is required.

Mitigation Measures

The Rancho La Habra Traffic Impact Analysis recommended the following improvements to the three intersections at which the Project would have a significant impact:

- **Beach Boulevard at Rosecrans Avenue**: Widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Widen and/or restripe the westbound approach of Rosecrans Avenue by up to 12 feet to provide an exclusive right-turn lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of La Mirada.
- **Beach Boulevard at La Mirada Boulevard/Malvern Avenue**: Widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of this improvement is subject to the approval of Caltrans and the City of Buena Park.
- **Walnut Street at Imperial Highway**: Install a three-phase traffic signal with protected left-turn phasing on Imperial Highway (i.e., eastbound left-turn lane). It should be noted that this key study intersection satisfies the peak hour signal warrant under existing traffic conditions (i.e., Warrant #3 described in the current *California Manual on Uniform Traffic Control Devices* [MUTCD]). Caltrans has committed to install a traffic signal at this location.

Mitigation Measure TRA-1.5a: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of La Mirada for Project-related impacts at the following intersection:

- Beach Boulevard at Rosecrans Avenue

Mitigation Measure TRA-1.5b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts at the following intersection:

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue

Significance Conclusion for Impact TRA-1.5 with Implementation of Mitigation Measures

Although implementation of recommended improvements at the intersections of Beach Boulevard at Rosecrans Avenue and Beach Boulevard at La Mirada Boulevard/Malvern Avenue would achieve acceptable levels of service, because these intersections are within La Mirada and Buena Park, respectively, the City of La Habra cannot ensure implementation of Mitigation Measures TRA-1.5a or TRA-1.5b. In addition, Caltrans has committed to install improvements at the intersection of Walnut Street at Imperial Highway that would reduce LOS to acceptable levels.

Therefore, this impact would remain significant and unavoidable.

Impact TRA-1.6: State-Controlled Intersections, Year 2023 Cumulative Plus Project Condition – Caltrans Methodology. Cumulative Project-generated traffic increases would exceed applicable thresholds at 5 of the 19 state-controlled intersections analyzed in the Rancho La Habra Traffic Impact Analysis. With the implementation of improvements, the state-controlled intersections of Beach Boulevard at Imperial Highway, Beach Boulevard at Artesia Boulevard, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway are forecast to operate at an acceptable level of service (LOS) during the AM and PM peak hours. Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway. The implementation of improvements at the intersection of Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project traffic; however, this intersection is still forecast to operate at unacceptable LOS F during the PM peak hour. Because these intersections are state-controlled, the City of La Habra cannot guarantee implementation of recommended mitigation measures. Therefore, this impact would be *significant and unavoidable*.

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of **Impact TRA-1.3** was also applied to projected Year 2023 cumulative conditions at Caltrans-controlled intersections.

Year 2023 background traffic growth estimates were calculated using an ambient traffic growth factor of 1 percent per year to reflect unknown and future cumulative projects in the area, as well as account for regular growth in traffic volumes due to the development of projects outside the area. In addition, Year 2023 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*. The Caltrans intersection analysis used a minimum peak hour factor of 0.95 for Year 2023 traffic conditions.

Impact Assessment

Table 3.7-17 summarizes the peak hour HCM level of service results at the 19 state-controlled study intersections analyzed in the Rancho La Habra Traffic Impact Analysis for 2023. The first column (1) of HCM/LOS values in **Table 3.7-17** presents Year 2023 cumulative traffic conditions based on existing intersection geometry, but without any Project-generated traffic.

An analysis of future (Year 2023) cumulative traffic conditions indicates that the following 4 of the 19 state-controlled intersections studied in the Traffic Impact Analysis are projected to operate at an adverse LOS:

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue (PM peak hour)
- Beach Boulevard at Artesia Boulevard (AM and PM peak hours)
- Hacienda Road at Whittier Boulevard (AM and PM peak hours)
- Walnut Street at Imperial Highway (AM and PM peak hours)

With the addition of Project-generated traffic, the following 5 of the 19 state-controlled intersections analyzed in the Traffic Impact Analysis would operate at an adverse LOS:

- Beach Boulevard at Imperial Highway (AM and PM peak hours)
- Beach Boulevard at La Mirada Boulevard/Malvern Avenue (PM peak hour)
- Beach Boulevard at Artesia Boulevard (AM and PM peak hours)
- Hacienda Road at Whittier Boulevard (AM and PM peak hours)
- Walnut Street at Imperial Highway (AM and PM peak hours)

Table 3.7-17
Year 2023 Peak Hour Intersection Analysis – Caltrans Methodology

		LOS Std.	Time Period	(1) Year 2023 Cumulative Traffic Conditions		(2) Year 2023 Cumulative Plus Project Traffic Conditions		(3) Threshold Exceeded?
				HCM	LOS	HCM	LOS	Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	AM	47.0 s/v	D	49.0 s/v	D	No
			PM	61.4 s/v	E	73.2 s/v	E	No
4.	Beach Blvd. at Hillsborough Dr.	E	AM	14.8 s/v	B	16.5 s/v	B	No
			PM	20.5 s/v	C	21.2 s/v	C	No
5.	Beach Blvd. at Hillsborough Park Apts.	E	AM	16.1 s/v	B	19.3 s/v	B	No
			PM	11.8 s/v	B	15.0 s/v	B	No
10.	Beach Blvd. at Imperial Hwy.	E	AM	76.3 s/v	E	**84.5 s/v**	**F**	**Yes**
			PM	76.1 s/v	E	**81.7 s/v**	**F**	**Yes**
11.	La Habra Hills Dr. at Imperial Hwy.	E	AM	42.6 s/v	D	45.4 s/v	D	No
			PM	55.9 s/v	E	63.5 s/v	E	No
12.	Idaho St. at Imperial Hwy.	E	AM	45.8 s/v	D	47.4 s/v	D	No
			PM	71.7 s/v	E	77.6 s/v	E	No
13.	Euclid St. at Imperial Hwy.	E	AM	55.4 s/v	E	58.7 s/v	E	No
			PM	70.0 s/v	E	75.5 s/v	E	No
14.	Harbor Blvd. at Imperial Hwy.	E	AM	55.1 s/v	D	56.0 s/v	E	No
			PM	54.0 s/v	E	54.6 s/v	D	No
15.	Beach Blvd. at Lambert Rd.	E	AM	68.1 s/v	E	68.3 s/v	E	No
			PM	69.6 s/v	E	69.6 s/v	E	No
20.	Beach Blvd. at La Mirada Blvd/ Malvern Ave.	D	AM	39.5 s/v	D	39.5 s/v	D	No
			PM	**65.5 s/v**	**E**	**68.7 s/v**	**E**	**Yes**
21.	Beach Blvd. at La Habra Blvd.	E	AM	55.6 s/v	E	56.1 s/v	E	No
			PM	68.2 s/v	E	69.8 s/v	E	No
23.	Beach Blvd. at Artesia Blvd.	D	AM	**68.2 s/v**	**E**	**72.2 s/v**	**E**	**Yes**
			PM	**67.8 s/v**	**E**	**72.5 s/v**	**E**	**Yes**
24.	Beach Blvd. at Commonwealth Ave.	D	AM	45.9 s/v	D	47.8 s/v	D	No
			PM	43.2 s/v	D	44.9 s/v	D	No
25.	I-5 NB Ramps at Auto Center Dr.	D	AM	41.2 s/v	D	41.3 s/v	D	No
			PM	45.0 s/v	D	45.2 s/v	D	No
26.	Beach Blvd. at Auto Center Dr.	D	AM	32.6s/v	C	33.0 s/v	C	No
			PM	44.8 s/v	D	46.1 s/v	D	No
27.	Beach Blvd. at I-5 SB Ramps	D	AM	30.8 s/v	C	32.7 s/v	C	No
			PM	30.6 s/v	C	31.0 s/v	C	No
28.	Beach Blvd. at Whittier Blvd.	E	AM	52.2 s/v	D	53.5 s/v	D	No
			PM	41.8 s/v	D	42.1 s/v	D	No
29.	Hacienda Rd. at Whittier Blvd.	E	AM	**272.2 s/v**	**F**	**273.1 s/v**	**F**	**Yes**
			PM	**154.9 s/v**	**F**	**156.3s/v**	**F**	**Yes**
30.	Walnut St. at Imperial Hwy.	E	AM	**5743.9 s/v**	**F**	**5743.9 s/v**	**F**	**Yes**
			PM	**94.2 s/v**	**F**	**107.4 s/v**	**F**	**Yes**

Notes:
NB = northbound, SB = southbound
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Significance Conclusion for Impact TRA-1.6

Table 3.7-17 indicates that traffic associated with the proposed Project would exceed applicable significance thresholds at five state-controlled intersections in the Year 2023. However, Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway.

This constitutes a significant impact at the remaining four intersections for which mitigation is required.

Mitigation Measures

The following improvements were identified in the Rancho La Habra Traffic Impact Analysis to mitigate cumulative Year 2023 plus Project traffic impacts (based on Caltrans methodology):

- **Beach Boulevard at Imperial Highway:** Consistent with the City of La Habra General Plan, widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Consistent with the City of La Habra General Plan, widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of La Habra.
- **Beach Boulevard at La Mirada Boulevard/Malvern Avenue:** Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of this improvement is subject to the approval of Caltrans and the City of Buena Park.
- **Beach Boulevard at Artesia Boulevard:** Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide an exclusive right-turn lane. Modify the existing traffic signal as necessary and install a westbound right-turn overlap phase. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of Buena Park.
- **Hacienda Road at Whittier Boulevard:** Widen and/or restripe the northbound approach of Hacienda Road to provide an exclusive left-turn lane. Widen and/or restripe the southbound approach of Hacienda Road to provide an exclusive left-turn lane, a shared left/through lane, and dual right-turn lanes. Modify the existing traffic signal for split-phase operation in the north-south directions.
- **Walnut Street at Imperial Highway:** Consistent with the City of La Habra General Plan, install a three-phase traffic signal with protected left-turn phasing on Imperial Highway

(i.e., eastbound left-turn lane). Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway.

Mitigation Measure TRA-1.6: The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersections:

- Beach Boulevard and La Mirada Boulevard-Malvern Avenue
- Hacienda Road at Whittier Boulevard
- Beach Boulevard at Artesia Boulevard

See **Mitigation Measure TRA-1.2** for mitigation at the intersection of:

- Beach Boulevard at Imperial Highway

Significance Conclusion for Impact TRA-1.6 with Implementation of Mitigation Measures

With implementation of the improvements recommended in the Rancho La Habra Traffic Impact Analysis, the intersections of Beach Boulevard at Imperial Highway, Beach Boulevard at Artesia Boulevard, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway are forecast to operate at an acceptable LOS during the AM and PM peak hours. Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway. The implementation of improvements at the intersection of Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project traffic; however, this intersection is still forecast to operate at unacceptable LOS F during the PM peak hour. Because these intersections are state-controlled, the City of La Habra cannot guarantee that the recommended improvements would be implemented other than at the intersection Walnut Street at Imperial Highway where Caltrans has committed to install needed improvements. As a result, impacts would remain significant and unavoidable.

Impact TRA-1.7: Roadway Segments, Year 2023 Cumulative Plus Project Condition. Fourteen of the 37 roadway segments analyzed in the Traffic Impact Analysis are forecast to operate at an unacceptable level of service (LOS) on a daily basis in the Year 2023 with the Project. However, Project-generated traffic would not increase delays exceeding applicable thresholds along any of the roadway segments analyzed in the Traffic Impact Analysis under Year 2023 Cumulative Plus Project conditions. Impacts would therefore be *less than significant*.

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of Impact TRA-1.4 was also applied to projected Year 2023 cumulative conditions along area roadway segments.

Year 2023 background traffic growth estimates were calculated using an ambient traffic growth factor of 1 percent per year to reflect unknown and future cumulative projects in the area, as well as account for regular growth in traffic volumes due to the development of projects outside the area. In addition, Year 2023 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

Impact Assessment

Table 3.7-18 summarizes the results of the Year 2023 Plus Project daily analysis for the 37 roadway segments analyzed in the Rancho La Habra Traffic Impact Analysis.

As indicated in this table, 14 of the 37 roadway segments are forecast to operate at an unacceptable level of service on a daily basis in 2023 without the Project. Addition of Project traffic to Year 2023 cumulative traffic would not cause any additional roadway segments to operate at an unacceptable level of service on a daily basis in 2023. The 14 roadway segments that are forecast to operate at unacceptable levels of service when traffic generated by the Project is added to Year 2023 cumulative traffic volumes are as follows:

City of La Habra

- Lambert Road between Beach Boulevard and Idaho Street
- Lambert Road between Idaho Street and Euclid Street
- Lambert Road between Euclid Street and Harbor Boulevard
- Beach Boulevard between Lambert Road and Imperial Highway
- Imperial Highway between Euclid Street and Harbor Boulevard
- Beach Boulevard between Imperial Highway and Hillsborough Apartments
- Beach Boulevard between Hillsborough Apartments and Hillsborough Drive
- Whittier Boulevard between Beach Boulevard and Hacienda Road

City of La Mirada

- Beach Boulevard between Hillsborough Drive and Rosecrans Avenue

Table 3.7-18
Year 2023 Roadway Segment Level of Service Summary

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity At LOS E	(4) Year 2023 Cumulative Traffic Conditions			(5) Year 2023 Cumulative Plus Project Traffic Conditions				Significant (Yes/No)
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
A.	Lambert Rd. btwn Beach Blvd. and Idaho St.	D	La Habra	4	Primary	37,500	**38,441**	**1.025**	**F**	**38,441**	**1.025**	**F**	0.000	No
B.	Lambert Rd. btwn Idaho St. and Euclid St.	D	La Habra	4	Primary	37,500	**40,541**	**1.081**	**F**	**40,541**	**1.081**	**F**	0.000	No
C.	Lambert Rd. btwn Euclid St. and Harbor Blvd	D	La Habra	4	Primary	37,500	**39,074**	**1.042**	**F**	**39,074**	**1.042**	**F**	0.000	No
D.	Beach Boulevard btwn Lambert Rd. and Imperial Hwy.	E	La Habra	6	Major	**56,300**	**56,521**	**1.004**	**F**	**57,317**	**1.018**	**F**	**0.014**	
	Peak Hour Assessment			*AM*	*NB*	2,815	1,501	0.533	A	1,533	0.545	A	0.012	No
					SB	2,815	2,393	0.850	D	2,415	0.858	D	0.008	No
				PM	*NB*	2,815	2,253	0.800	D	2,284	0.811	D	0.011	No
					SB	2,815	2,031	0.721	C	2,074	0.737	C	0.016	No
E.	Idaho St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	25,278	0.674	B	25,386	0.677	B	0.003	No
F.	Euclid St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	20,570	0.549	A	20,625	0.550	A	0.001	No
G.	Harbor Boulevard btwn Lambert Rd. and Imperial Hwy.	D	La Habra	6	Major	56,300	41,826	0.743	C	42,202	0.750	C	0.007	No
H.	Imperial Hwy. btwn Santa Gertrudes Ave. and 1st Ave.	D	La Mirada	6	Major	54,000	42,038	0.778	C	42,985	0.796	C	0.018	No
I.	Imperial Hwy. btwn 1st Ave. and Beach Blvd.	E	La Habra	6	Major	56,300	41,689	0.740	C	42,700	0.758	C	0.018	No
J.	Imperial Hwy. btwn Beach Blvd. and La Habra Hills Dr.	E	La Habra	6	Smart St	60,200	57,404	0.954	E	59,311	0.985	E	0.031	No
K.	Imperial Hwy. btwn La Habra Hills Dr. and Idaho St.	E	La Habra	6	Smart St	60,200	58,265	0.968	E	59,788	0.993	E	0.025	No
L.	Imperial Hwy. btwn Idaho St. and Euclid St.	E	La Habra	6	Smart St	60,200	59,063	0.981	E	60,090	0.998	E	0.017	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity At LOS E	(4) Year 2023 Cumulative Traffic Conditions			(5) Year 2023 Cumulative Plus Project Traffic Conditions				Significant (Yes/No)
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
M.	Imperial Hwy. btwn Euclid St. and Harbor Blvd.	E	La Habra	6	Smart St	60,200	**63,991**	**1.063**	**F**	**64,804**	**1.076**	**F**	**0.013**	
				AM	EB	3,010	2,130	0.708	C	2,172	0.722	C	0.014	No
					WB	3,010	2,117	0.703	C	2,136	0.710	C	0.007	No
				PM	EB	3,010	1,942	0.645	B	1,971	0.655	B	0.010	No
					WB	3,010	2,455	0.816	D	2,509	0.834	D	0.018	No
N.	Idaho St. btwn Imperial Hwy. and Sandlewood Ave.	D	La Habra	4	Primary	37,500	23,658	0.631	B	24,356	0.649	B	0.018	No
O.	Euclid St. btwn Sandlewood Ave. and Imperial Hwy.	D	La Habra	4	Primary	37,500	23,926	0.638	B	24,084	0.642	B	0.004	No
P	Gilbert St. btwn Sandlewood Ave. & Rosecrans Ave.	D	Fullerton	4	Primary	37,500	17,853	0.476	A	18,417	0.491	A	0.015	No
Q.	Euclid St. btwn Sandlewood Ave. and Rosecrans Ave.	D	Fullerton	4	Primary	37,500	24,320	0.649	B	24,473	0.653	B	0.004	No
R.	Beach Blvd. btwn Imperial Hwy. and Hillsborough Apt.	E	La Habra	6	Smart St	60,200	**61,483**	**1.021**	**F**	**64,686**	**1.075**	**F**	**0.054**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	2,002	0.665	B	2,073	0.689	B	0.024	No
					SB	*3,010*	2,519	0.837	D	2,570	0.854	D	0.017	No
				PM	*NB*	*3,010*	2,494	0.829	D	2,578	0.856	D	0.027	No
					SB	*3,010*	2,302	0.765	C	2,382	0.791	C	0.026	No
S.	Beach Blvd. btwn Hillsborough Apt. and Hillsborough Dr.	E	La Habra	6	Smart St	60,200	**64,395**	**1.070**	**F**	**66,801**	**1.110**	**F**	**0.040**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	1,956	0.650	B	2,016	0.670	B	0.020	No
					SB	*3,010*	2,537	0.843	D	2,640	0.877	D	0.034	No
				PM	*NB*	*3,010*	2,507	0.833	D	2,638	0.876	D	0.043	No
					SB	*3,010*	2,282	0.758	C	2,370	0.787	C	0.029	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity At LOS E	(4) Year 2023 Cumulative Traffic Conditions			(5) Year 2023 Cumulative Plus Project Traffic Conditions				Significant (Yes/No)
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
T.	Beach Blvd. btwn Hillsborough Dr. and Rosecrans Ave.	E	La Mirada	6	Smart St	57,780	**59,714**	**1.033**	**F**	**61,951**	**1.072**	**F**	**0.039**	
Peak Hour Assessment				*AM*	*NB*	*3,210*	1,694	0.528	A	1,749	0.545	A	0.017	No
					SB	*3,210*	2,606	0.812	D	2,705	0.843	D	0.031	No
				PM	*NB*	*3,210*	2,533	0.789	C	2,656	0.827	D	0.038	No
					SB	*3,210*	2,058	0.641	B	2,140	0.667	B	0.026	No
U.	Rosecrans Ave. btwn Beach Blvd. and Gilbert St.	D	Fullerton	4	Primary	37,500	25,092	0.669	B	25,986	0.693	B	0.024	No
V.	Rosecrans Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Secondary	25,000	16,128	0.645	B	16,381	0.655	B	0.010	No
W-1.	Sandlewood Ave. East of Idaho St.	D	La Habra	2	Commuter	5,400	3,780	0.700	C	3,992	0.739	C	0.039	No
W-2.	Sandlewood Ave. btwn Idaho St. and Euclid St.	D	La Habra	2	Commuter	5,400	2,028	0.376	A	2,240	0.415	A	0.039	No
W-3.	Sandlewood Ave. West of Euclid St.	D	La Habra	2	Commuter	5,400	1,361	0.252	A	1,573	0.291	A	0.039	No
X	Beach Blvd. btwn Rosecrans Ave. and La Mirada Blvd.	D	Buena Park	6	Smart St	60,200	50,358	0.837	D	51,797	0.860	D	0.023	No
Y.	Imperial Hwy. btwn Santa Gertrudes and La Mirada Blvd.	E	La Mirada	6	Major	54,000	37,410	0.693	B	38,275	0.709	C	0.016	No
Z.	Beach Blvd. btwn Lambert Rd. and La Habra Blvd.	E	La Habra	6	Major	56,300	47,030	0.835	D	47,766	0.848	D	0.013	No
AA.	Imperial Hwy. btwn Valley View Ave. and La Mirada Blvd.	E	La Mirada	6	Major	54,000	35,350	0.655	B	35,981	0.666	B	0.011	No
BB.	Beach Blvd. btwn La Mirada Blvd./Malvern Ave and Artesia Blvd.	D	Buena Park	6	Smart St	60,200	**78,881**	**1.310**	**F**	**80,007**	**1.329**	**F**	0.019	No
CC.	Beach Blvd. btwn Artesia Blvd. and Commonwealth Ave.	D	Buena Park	6	Smart St	60,200	**64,240**	**1.067**	**F**	**65,071**	**1.081**	**F**	0.014	No
DD.	Beach Blvd. bet. Commonwealth Ave. and Auto Center Dr.	D	Buena Park	6	Smart St	60,200	**66,214**	**1.100**	**F**	**66,992**	**1.113**	**F**	0.013	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity At LOS E	(4) Year 2023 Cumulative Traffic Conditions			(5) Year 2023 Cumulative Plus Project Traffic Conditions				Significant (Yes/No)
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
EE.	Auto Center Drive btwn Beach Blvd. and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	13,826	0.369	A	13,915	0.371	A	0.002	No
FF.	Beach Blvd. btwn Auto Center Dr. and I-5 SB Ramps	D	Buena Park	6	Smart St	60,200	**69,894**	**1.161**	**F**	**70,505**	**1.171**	**F**	0.010	No
GG	Beach Blvd. btwn La Habra Blvd. and Whittier Blvd.	E	La Habra	6	Major	56,300	38,113	0.677	B	38,783	0.689	B	0.012	No
HH.	Whittier Blvd. btwn Beach Blvd. and Hacienda Rd.	D	La Habra	4	Primary	37,500	**51,570**	**1.375**	**F**	**51,886**	**1.384**	**F**	0.009	No
II.	Gilbert St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	27,672	0.738	C	28,413	0.758	C	0.020	No
JJ.	Euclid St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	**33,942**	**0.905**	**E**	**34,257**	**0.914**	**E**	0.009	No
KK.	Malvern Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Primary	37,500	26,182	0.698	B	26,535	0.708	C	0.010	No

Notes:
NB = northbound, SB = southbound, EB = eastbound, WB = westbound
BOLD text = unacceptable LOS.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

City of Buena Park

- Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard
- Beach Boulevard between Artesia Boulevard and Commonwealth Avenue
- Beach Boulevard between Commonwealth Avenue and Auto Center Drive
- Beach Boulevard between Auto Center Drive and I-5 Southbound (SB) ramps

City of Fullerton

- Euclid Street between Rosecrans Avenue and Malvern Avenue

Significance Conclusion for Impact TRA-1.7

Of the 14 roadway segments that would operate at an unacceptable level of service under Year 2023 Cumulative Plus Project conditions, only Beach Boulevard between Lambert Road and Imperial Highway, Imperial Highway between Euclid Street and Harbor Boulevard, Beach Boulevard between Imperial Highway and Hillsborough Apartments, Beach Boulevard between Hillsborough Apartments and Hillsborough Drive, and Beach Boulevard between Hillsborough Drive and Rosecrans Avenue required a peak hour link assessment to determine whether or not they would be affected by the Project under Year 2023 cumulative conditions. The peak hour link assessment conducted at these roadway segments demonstrated that Project-generated traffic would not exceed applicable thresholds during the AM or PM peak hours. The other nine roadway segments do not exceed applicable thresholds defined for a peak hour link assessment, and the Project would therefore have a less than significant impact under Year 2023 Cumulative Plus Project traffic conditions.

As shown in **Table 3.7-18**, the addition of Project traffic would not exceed applicable thresholds along any of the roadway segments analyzed in the Traffic Impact Analysis under Year 2023 Cumulative Plus Project traffic conditions. Impacts would therefore be less than significant.

Mitigation Measures

Because impacts are less than significant, no mitigation measures are required.

Impact TRA-1.8: Intersections, Year 2035 Cumulative Plus Project Condition – Local Methodologies. Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system, resulting in increased intersection capacity utilization (ICU) and/or delay at area intersections. Project-related increases in ICU and/or delay would exceed applicable thresholds at 6 of the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis. Although an additional 12 of the

32 intersections analyzed in the Traffic Impact Analysis are forecast to operate at unacceptable level of service (LOS) E and/or LOS F during the AM and/or PM peak hour with the addition of Project traffic to cumulative traffic in 2035, Project-generated increases in ICU and/or delay would not exceed the applicable significance threshold. Implementation of improvements at the affected intersections of Beach Boulevard at Imperial Highway and Walnut Street at Imperial Highway, both of which are within the City of La Habra, would achieve acceptable levels of service in both the AM and PM peak hours. Although Caltrans has committed to fund improvements at the intersection of Walnut Street and Imperial Highway, improvements at the intersection of Beach Boulevard at Imperial Highway would require Caltrans approval, which the City of La Habra cannot guarantee. In addition, implementation of improvements at the affected intersections of Beach Boulevard at Rosecrans Avenue, Euclid Street at Imperial Highway, Beach Boulevard at Lambert Road, and Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project-generated traffic; however, these locations are still forecast to operate at unacceptable LOS E and/or LOS F during the AM and/or PM peak hours. Therefore, impacts of the Project would be *significant and unavoidable*.

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of Impact TRA-1.2 was also applied to projected Year 2035 cumulative conditions.

Long-term (Year 2035) daily and peak hour traffic forecasts were projected based on modeled traffic projections prepared by OCTA utilizing the OCTAM3.4 Year 2035 Model. In addition, Year 2035 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

Impact Assessment

Table 3.7-19 summarizes the peak hour LOS results at the 32 intersections analyzed in the Rancho La Habra Traffic Impact Analysis for the Year 2035. Review of column 2 of **Table 3.7-19** shows that projected Year 2035 Cumulative Without Project traffic will adversely affect 18 of the

Table 3.7-19
Year 2035 Peak Hour Intersection Analysis – Local Methodologies

		LOS Standard	Jurisdiction	Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Traffic Conditions		(3) Year 2035 Plus Project Traffic Conditions		(4) Significant Project Impact?	
					ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	La Mirada/ Caltrans	AM	0.979	E	**1.135**	**F**	**1.152**	**F**	0.017	No
				PM	0.935	E	**1.085**	**F**	**1.132**	**F**	**0.047**	**Yes**
2.	Gilbert St. at Rosecrans Ave.	D	Fullerton	AM	39.3 s/v	D	43.4 s/v	D	44.9 s/v	D	--	No
				PM	37.1 s/v	D	40.0 s/v	D	41.1 s/v	D	--	No
3.	Euclid St. at Rosecrans Ave.	D	Fullerton	AM	29.4 s/v	C	41.5 s/v	D	41.7 s/v	D	--	No
				PM	19.5 s/v	B	20.1 s/v	C	20.1 s/v	C	--	No
4.	Beach Blvd. at Hillsborough Dr.	E	La Mirada/ Caltrans	AM	0.768	C	0.867	D	0.892	D	0.025	No
				PM	0.738	C	0.849	D	0.870	D	0.021	No
5.	Beach Blvd. at Hillsborough Park Apts.	E	La Habra/ Caltrans	AM	0.533	A	0.610	B	0.641	B	0.031	No
				PM	0.503	A	0.576	A	0.641	B	0.065	No
6.	Idaho St. at Sandlewood Ave.	D	La Habra	AM	0.485	A	0.572	A	0.594	A	0.022	No
				PM	0.528	A	0.631	B	0.652	B	0.021	No
7.	Euclid St. at Sandlewood Ave.	D	La Habra	AM	**69.4 s/v**	**F**	**198.0 s/v**	**F**	**221.1 s/v**	**F**	--	No[a]
				PM	**41.4 s/v**	**E**	**93.1 s/v**	**F**	**114.5 s/v**	**F**	--	No[a]
8.	Santa Gertrudes Ave. at Imperial Hwy.	E	La Mirada	AM	0.852	D	0.972	E	0.980	E	0.008	No
				PM	0.871	D	**1.125**	**F**	**1.138**	**F**	0.013	No
9.	1st Ave. at Imperial Hwy.	D	La Mirada	AM	0.706	C	0.837	D	0.848	D	0.011	No
				PM	0.594	A	0.714	C	0.722	C	0.008	No
10.	Beach Blvd. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.786	C	0.998	E	**1.026**	**F**	**0.028**	**Yes**
				PM	0.834	D	**1.049**	**F**	**1.085**	**F**	**0.036**	**Yes**
11.	La Habra Hills Dr. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.501	A	0.676	B	0.712	C	0.036	No
				PM	0.653	B	0.777	C	0.813	D	0.036	No
12.	Idaho St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.692	B	0.830	D	0.846	D	0.016	No
				PM	0.728	C	0.891	D	0.904	E	0.013	No
13.	Euclid St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	0.795	C	**1.022**	**F**	**1.033**	**F**	**0.011**	**Yes**
				PM	0.715	C	0.881	D	0.897	D	0.016	No

		LOS Standard	Jurisdiction	Time Period	(1) Existing Traffic Conditions		(2) Year 2035 Traffic Conditions		(3) Year 2035 Plus Project Traffic Conditions		(4) Significant Project Impact?	
					ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
14.	Harbor Blvd. at Imperial Hwy.	E	La Habra/ Fullerton	AM	0.759	C	**1.142**	**F**	**1.146**	**F**	0.004	No
				PM	0.683	B	0.985	E	0.999	E	0.014	No
			Caltrans	AM	43.1 s/v	D	**110.1 s/v**	**F**	**111.8 s/v**	**F**	--	No
				PM	44.4 s/v	D	**89.7 s/v**	**F**	**90.4 s/v**	**F**	--	No
15.	Beach Blvd. at Lambert Rd.	E	La Habra/ Caltrans	AM	0.949	E	**1.079**	**F**	**1.084**	**F**	0.005	No
				PM	0.900	D	**1.184**	**F**	**1.200**	**F**	**0.016**	**Yes**
16.	Idaho St. at Lambert Rd.	D	La Habra	AM	0.814	D	**0.919**	**E**	**0.920**	**E**	0.001	No
				PM	0.775	C	**1.080**	**F**	**1.081**	**F**	0.001	No
17.	Euclid St. at Lambert Rd.	D	La Habra	AM	0.702	C	**1.119**	**F**	**1.120**	**F**	0.001	No
				PM	0.799	C	**1.190**	**F**	**1.191**	**F**	0.001	No
18.	Harbor Blvd. at Lambert Rd.	D	La Habra	AM	0.696	B	0.814	D	0.816	D	0.002	No
				PM	0.777	C	**1.134**	**F**	**1.137**	**F**	0.003	No
19.	La Mirada Blvd. at Imperial Hwy.	E	La Mirada	AM	0.900	D	**1.205**	**F**	**1.213**	**F**	0.008	No
				PM	0.859	D	0.991	E	0.998	E	0.007	No
20.	Beach Blvd. at La Mirada/Malvern Ave	D	Buena Park/ Caltrans	AM	0.757	C	**0.987**	**E**	**0.998**	**E**	0.011	No
				PM	0.805	D	**0.925**	**E**	**0.948**	**E**	**0.023**	**Yes**
21.	Beach Blvd. at La Habra Blvd.	E	La Habra/ Caltrans	AM	0.729	C	0.832	D	0.837	D	0.005	No
				PM	0.801	D	0.925	E	0.931	E	0.006	No
22.	Valley View Ave. at Imperial Hwy.	E	La Mirada	AM	0.903	E	**1.043**	**F**	**1.049**	**F**	0.006	No
				PM	0.876	D	**1.033**	**F**	**1.039**	**F**	0.006	No
23.	Beach Blvd. at Artesia Blvd.	D	Buena Park/ Caltrans	AM	0.795	C	**0.943**	**E**	**0.955**	**E**	0.012	No
				PM	0.748	C	**0.906**	**E**	**0.918**	**E**	0.012	No
24.	Beach Blvd. at Commonwealth Ave.	D	Buena Park/ Caltrans	AM	0.589	A	0.698	B	0.706	C	0.008	No
				PM	0.613	B	0.747	C	0.758	C	0.011	No
25.	I-5 NB Ramps at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.350	A	0.389	A	0.389	A	0.000	No
				PM	0.477	A	0.529	A	0.529	A	0.000	No
26.	Beach Blvd. at Auto Center Dr.	D	Buena Park/ Caltrans	AM	0.720	C	0.855	D	0.864	D	0.009	No
				PM	0.677	B	0.834	D	0.849	D	0.015	No
27.	Beach Blvd. at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.691	B	0.849	D	0.857	D	0.008	No
				PM	0.675	B	0.837	D	0.845	D	0.008	No

				(1) Existing Traffic Conditions		(2) Year 2035 Traffic Conditions		(3) Year 2035 Plus Project Traffic Conditions		(4) Significant Project Impact?	
	LOS Standard	Jurisdiction	Time Period	ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
28. Beach Blvd. at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.686	B	0.868	D	0.880	D	0.012	No
			PM	0.758	C	0.858	D	0.861	D	0.003	No
29. Hacienda Rd. at Whittier Blvd.	E	La Habra/ Caltrans	AM	0.849	D	0.985	E	0.989	E	0.004	No
			PM	0.834	D	**1.187**	**F**	**1.191**	**F**	0.004	No
30. Walnut St. at Imperial Hwy.	E	La Habra/ Caltrans	AM	**957.8 s/v**	**F**	**27,301.7 s/v**	**F**	**27,301.7 s/v**	**F**	--	**Yes**
			PM	44.6 s/v	E	**113.0 s/v**	**F**	**127.6 s/v**	**F**	--	**Yes**
31. Gilbert St. at Malvern Ave.	D	Fullerton	AM	45.9 s/v	D	49.4 s/v	D	52.5 s/v	D	--	No
			PM	43.6 s/v	D	**56.0 s/v**	**E**	**59.6 s/v**	**E**	--	No
32. Euclid St. at Malvern Ave.	D	Fullerton	AM	41.8 s/v	D	**59.6 s/v**	**E**	**61.0 s/v**	**E**	--	No
			PM	43.3 s/v	D	**56.9 s/v**	**E**	**59.0 s/v**	**E**	--	No

Notes: s/v = seconds per vehicle (delay), NB = northbound, SB = southbound
BOLD text indicates unacceptable service level
[a] Although this intersection is forecast to operate at an unacceptable LOS, project-related traffic at this intersection does not exceed applicable significance criteria, since the peak hour traffic signal warrant is not satisfied.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

32 intersections that were analyzed. The remaining 14 intersections are forecast to operate at an acceptable LOS under Year 2035 Cumulative Without Project traffic conditions.

The 18 intersections projected to operate at an adverse LOS in 2035 without Project-generated traffic are:

- Beach Boulevard at Rosecrans Avenue (La Mirada)
- Euclid Street at Sandlewood Avenue (La Habra)
- Santa Gertrudes Avenue at Imperial Highway (La Mirada)
- Beach Boulevard at Imperial Highway (La Habra)
- Euclid Street at Imperial Highway (La Habra)
- Harbor Boulevard at Imperial Highway (La Habra/Fullerton)
- Beach Boulevard at Lambert Road (La Habra)
- Idaho Street at Lambert Road (La Habra)
- Euclid Street at Lambert Road (La Habra)
- Harbor Boulevard at Lambert Road (La Habra)
- La Mirada Boulevard at Imperial Highway (La Mirada)
- Beach Boulevard at La Mirada Boulevard/Malvern Avenue (Buena Park)
- Valley View Avenue at Imperial Highway (La Mirada)
- Beach Boulevard at Artesia Boulevard (Buena Park)
- Hacienda Road at Whittier Boulevard (La Habra)
- Walnut Street at Imperial Highway (La Habra)
- Gilbert Street at Malvern Avenue (Fullerton)
- Euclid Street at Malvern Avenue (Fullerton)

Significance Conclusion for Impact TRA-1.8

Table 3.7-19 indicates that Project-generated traffic would exceed applicable thresholds at six intersections.

Although the intersections of Santa Gertrudes Avenue/Imperial Highway, Harbor Boulevard/Imperial Highway, Idaho St/Lambert Road, Euclid St/Lambert Road, Harbor Boulevard/Lambert Road, La Mirada Boulevard/Imperial Highway, Valley View Avenue/Imperial Highway, Beach Boulevard/Artesia Boulevard, Hacienda Road/Whittier Boulevard, Gilbert St/Malvern Avenue, and Euclid St/Malvern Avenue are forecast to operate at unacceptable LOS E and/or LOS F during the AM and/or PM peak hour with the addition of

Project traffic, the traffic added to these intersections by Project would not exceed applicable significance thresholds. Also, although the intersection of Euclid Street at Sandlewood Avenue is forecast to operate at an unacceptable LOS F during the AM and PM peak hours, a significant impact would not occur at this intersection since the peak hour traffic signal warrant is not satisfied. The remaining 14 intersections analyzed in the Rancho La Habra Traffic Impact Analysis are forecast to continue operating at an acceptable LOS with the addition of Project generated traffic in the Year 2035.

The six intersections where Project-generated traffic would exceed applicable thresholds in the Year 2035 are:

- Beach Boulevard at Rosecrans Avenue (City of La Mirada)
- Beach Boulevard at Imperial Highway (City of La Habra)
- Euclid Street at Imperial Highway (City of La Habra)
- Beach Boulevard at Lambert Road (City of La Habra)
- Beach Boulevard at La Mirada Boulevard /Malvern Avenue (City of Buena Park)
- Walnut Street at Imperial Highway (City of La Habra)

Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway. The Project would thus result in significant impacts at the remaining five intersections for which mitigation is required.

Mitigation Measures

The following are improvements recommended in the Rancho La Habra Traffic Impact Analysis to mitigate Year 2035 plus Project traffic impacts:

- **Beach Boulevard at Rosecrans Avenue:** Widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Widen and/or restripe the westbound approach of Rosecrans Avenue by up to 12 feet to provide an exclusive right-turn lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of La Mirada.
- **Beach Boulevard at Imperial Highway:** Widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these

improvements appear to be feasible. The installation of these improvements is subject to the approval of Caltrans and the City of La Habra.

- **Euclid Street at Imperial Highway**: Widen and/or restripe the southbound approach of Imperial Highway by up to 12 feet to provide an exclusive southbound right-turn lane. Modify the existing traffic signal. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.
- **Beach Boulevard at Lambert Road**: Widen and/or restripe the eastbound approach of Lambert Road by up to 12 feet to provide an exclusive right-turn lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.
- **Beach Boulevard at La Mirada Boulevard /Malvern Avenue**: Widen and/or restripe the northbound approach of Beach Boulevard by up to 12 feet to provide a fourth northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12 feet to provide a fourth southbound through lane. Modify the existing traffic signal as necessary. Right-of-way acquisition will be required. Based on review of aerial photographs, these improvements appear to be feasible. The installation of this improvement is subject to the approval of Caltrans and the City of Buena Park.
- **Walnut Street at Imperial Highway:** Install a three-phase traffic signal with protected left-turn phasing on Imperial Highway (i.e., eastbound left-turn lane). This intersection satisfies the peak hour signal warrant under existing traffic conditions (i.e., Warrant #3 described in the current *California Manual on Uniform Traffic Control Devices* [MUTCD]). Caltrans has committed to install needed improvements at this intersection.

See **Mitigation Measure TRA-1.2** for mitigation of impacts at the intersections of:

- Beach Boulevard at Imperial Highway

See **Mitigation Measure TRA-1.5a** for mitigation of impacts at the intersections of:

- Beach Boulevard at Rosecrans Avenue

See **Mitigation Measure TRA-1.5b** for mitigation of impacts at the intersection of:

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue

Mitigation Measure TRA-1.8a: The applicant shall pay city-wide traffic improvement fees as well as fair share impact fees at the following intersection:

- Euclid Street at Imperial Highway

Mitigation Measure TRA-1.8b: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the following intersection:

- Beach Boulevard at Lambert Road

Significance Conclusion for Impact TRA-1.8 with Implementation of Mitigation Measures

Implementation of improvements at the affected intersections of Beach Boulevard at Imperial Highway and Walnut Street at Imperial Highway, both of which are within the City of La Habra, would achieve acceptable levels of service in both the AM and PM peak hours. Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway. However, because improvements at the intersection of Beach Boulevard at Imperial Highway would require Caltrans approval, the City of La Habra cannot guarantee its implementation.

Implementation of improvements at the affected intersections of Beach Boulevard at Rosecrans Avenue, Euclid Street at Imperial Highway, Beach Boulevard at Lambert Road, and Beach Boulevard at La Mirada Boulevard/Malvern Avenue would offset the impact of Project-generated traffic; however, these intersections are still forecast to operate at unacceptable LOS E and/or LOS F during the AM and/or PM peak hours.

Thus, impacts would be significant and unavoidable.

Impact TRA-1.9: State-Controlled Intersections, Year 2035 Cumulative Plus Project Condition – Caltrans Methodology. Of the 19 state-controlled intersections analyzed, 8 intersections would operate at an unacceptable level of service (LOS) to which the Project would generate additional traffic in the Year 2035. Project-generated traffic increases would also cause a ninth state-controlled intersection to operate at an unacceptable LOS. With the implementation of improvements, the intersections of Beach Boulevard at Imperial Highway, Euclid Street at Imperial Highway, Harbor Boulevard at Imperial Highway, Beach Boulevard at Lambert Road, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, and Beach Boulevard at Artesia Boulevard would offset the impact of Project-generated traffic. However, these intersections would still operate at unacceptable LOS E or F during the AM and/or PM peak hours. With implementation of improvements, the affected intersections of Beach Boulevard at Rosecrans Avenue, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway

would operate at an acceptable LOS during the AM and PM peak hours. While Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway, the City of La Habra cannot ensure implementation of Mitigation Measure TRA-1.9 at other intersections. Therefore, this impact would be *significant and unavoidable*.

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of Impact TRA-1.3 was also applied to projected Year 2035 cumulative conditions at Caltrans-controlled intersections.

Long-term (Year 2035) daily and peak hour traffic forecasts were projected based on modeled traffic projections prepared by OCTA utilizing the OCTAM3.4 Year 2035 Model. In addition, Year 2035 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

The Caltrans intersection analysis used a peak hour factor of 1.00 for Year 2035 buildout traffic conditions.

Impact Assessment

Table 3.7-20 summarizes the peak hour LOS results at the 19 state-controlled intersections that were analyzed in the Rancho La Habra Traffic Impact Analysis for the Year 2035. The first column (1) of HCM/LOS values presents Year 2035 cumulative traffic conditions based on existing intersection geometry, but without Project-generated traffic. The second column (2) presents Year 2035 cumulative traffic conditions with the addition of Project traffic. The third column (3) indicates whether Project-generated peak hour trips would exceed identified significance thresholds.

Table 3.7-20 shows that projected long-term (Year 2035) cumulative background (without Project) traffic will adversely affect 8 of the 19 state-controlled study intersections. The remaining 11 state-controlled intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours. The 8 intersections projected to operate at an adverse LOS without addition of Project-generated traffic are:

- Beach Boulevard at Imperial Highway
- Euclid Street at Imperial Highway
- Harbor Boulevard at Imperial Highway
- Beach Boulevard at Lambert Road

- Beach Boulevard at La Mirada Boulevard/Malvern Avenue
- Beach Boulevard at Artesia Boulevard
- Hacienda Road at Whittier Boulevard
- Walnut Street at Imperial Highway

Significance Conclusion for Impact TRA-1.9

Table 3.7-20 indicates that traffic would exceed applicable significance thresholds at 9 of the 19 state-controlled intersections analyzed in the Rancho La Habra Traffic Impact Analysis. The Project would add traffic exceeding applicable significance thresholds to 8 intersections that would operate an unacceptable level of service even without traffic from Rancho La Habra. In addition, Project-generated traffic at the intersection of Beach Boulevard at Rosecrans Avenue would cause PM peak hour traffic to degrade to an unacceptable LOS F.

The remaining ten state-controlled intersections are forecast to continue operating at an acceptable LOS with the addition of Project-generated traffic in the Year 2035. The nine intersections projected to operate at an unacceptable LOS are:

- Beach Boulevard at Rosecrans Avenue
- Beach Boulevard at Imperial Highway
- Euclid Street at Imperial Highway
- Harbor Boulevard at Imperial Highway
- Beach Boulevard at Lambert Road
- Beach Boulevard at La Mirada/Malvern Avenue
- Beach Boulevard at Artesia Boulevard
- Hacienda Road at Whittier Boulevard
- Walnut Street at Imperial Highway

Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway.

Table 3.7-20
Year 2035 Peak Intersection Analysis – Caltrans Methodology

		LOS Std.	Time Period	(1) Year 2035 Traffic Conditions		(2) Year 2035 Plus Project Traffic Conditions		(3) Impact
				HCM	LOS	HCM	LOS	Yes/No
1.	Beach Blvd. at Rosecrans Ave.	E	AM	73.3 s/v	E	75.4 s/v	E	No
			PM	79.7 s/v	E	**85.5 s/v**	**F**	**Yes**
4.	Beach Blvd. at Hillsborough Dr.	E	AM	15.0 s/v	B	17.3 s/v	B	No
			PM	21.3 s/v	C	22.2 s/v	C	No
5.	Beach Blvd. at Hillsborough Park Apts.	E	AM	16.6 s/v	B	19.9 s/v	B	No
			PM	12.1 s/v	B	15.4 s/v	B	No
10.	Beach Blvd. at Imperial Hwy.	E	AM	**88.3 s/v**	**F**	**96.9 s/v**	**F**	**Yes**
			PM	**103.2 s/v**	**F**	**116.5 s/v**	**F**	**Yes**
11.	La Habra Hills Dr. at Imperial Hwy.	E	AM	65.4 s/v	E	70.4 s/v	E	No
			PM	59.8 s/v	E	68.6 s/v	E	No
12.	Idaho St. at Imperial Hwy.	E	AM	53.7 s/v	D	58.4 s/v	E	No
			PM	79.6 s/v	E	79.9 s/v	E	No
13.	Euclid St. at Imperial Hwy.	E	AM	**117.4 s/v**	**F**	**118.6 s/v**	**F**	**Yes**
			PM	**84.3 s/v**	**F**	**90.4 s/v**	**F**	**Yes**
14.	Harbor Blvd. at Imperial Hwy.	E	AM	**110.1 s/v**	**F**	**111.8 s/v**	**F**	**Yes**
			PM	**89.7 s/v**	**F**	**90.4 s/v**	**F**	**Yes**
15.	Beach Blvd. at Lambert Rd.	E	AM	**90.7 s/v**	**F**	**90.9 s/v**	**F**	**Yes**
			PM	**139.5 s/v**	**F**	**140.9 s/v**	**F**	**Yes**
20.	Beach Blvd. at La Mirada Blvd./ Malvern Ave.	D	AM	44.8 s/v	D	45.0 s/v	D	No
			PM	**72.1 s/v**	**E**	**74.1 s/v**	**E**	**Yes**
21.	Beach Blvd. at La Habra Blvd.	E	AM	57.1 s/v	E	57.7 s/v	E	No
			PM	71.0 s/v	E	71.2 s/v	E	No
23.	Beach Blvd. at Artesia Blvd.	D	AM	**76.3 s/v**	**E**	**80.6 s/v**	**F**	**Yes**
			PM	**93.6 s/v**	**F**	**98.9 s/v**	**F**	**Yes**
24.	Beach Blvd. at Commonwealth Ave.	D	AM	46.8 s/v	D	48.8 s/v	D	No
			PM	43.9 s/v	D	45.6 s/v	D	No
25.	I-5 NB Ramps at Auto Center Dr.	D	AM	41.3 s/v	D	41.3 s/v	D	No
			PM	45.2 s/v	D	45.4 s/v	D	No
26.	Beach Blvd. at Auto Center Dr.	D	AM	34.1 s/v	C	34.4 s/v	C	No
			PM	46.6 s/v	D	47.5 s/v	D	No
27.	Beach Blvd. at I-5 SB Ramps	D	AM	36.6 s/v	D	37.2 s/v	D	No
			PM	34.8 s/v	C	35.3 s/v	D	No
28.	Beach Blvd. at Whittier Blvd.	E	AM	53.4 s/v	D	54.8 s/v	D	No
			PM	45.5 s/v	D	46.0 s/v	D	No
29.	Hacienda Rd. at Whittier Blvd.	E	AM	**447.3 s/v**	**F**	**448.6 s/v**	**F**	**Yes**
			PM	**408.1 s/v**	**F**	**408.7 s/v**	**F**	**Yes**
30.	Walnut St. at Imperial Hwy.	E	AM	**27,301.7 s/v**	**F**	**27,301.7 s/v**	**F**	**Yes**
			PM	**113.0 s/v**	**F**	**127.6 s/v**	**F**	**Yes**

Notes: s/v = seconds per vehicle (delay), NB = northbound, SB = southbound
BOLD text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Mitigation Measures

See **Mitigation Measure TRA-1.2** for mitigation of impacts at the intersection of:

- Beach Boulevard and Imperial Highway

See **Mitigation Measure TRA-1.3** for mitigation of impacts at the intersections of:

- Hacienda Road and Whittier Boulevard
- Beach Boulevard and Artesia Boulevard

See **Mitigation Measure TRA-1.5a** for mitigation of impacts at the intersection of:

- Beach Boulevard at Rosecrans Avenue

See **Mitigation Measure TRA-1.6b** for mitigation of impacts at the intersections of:

- Beach Boulevard and La Mirada Boulevard/Malvern Avenue
- Harbor Boulevard and Imperial Highway

Mitigation Measure TRA-1.9: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following intersections:

- Euclid Street and Imperial Highway
- Beach Boulevard and Lambert Road

Significance Conclusion for Impact TRA-1.9 with Implementation of Mitigation Measures

Implementation of the improvements recommended in the Rancho La Habra Traffic Impact Analysis and described above would offset the impact of Project-generated traffic at the intersections of Beach Boulevard at Imperial Highway, Euclid Street at Imperial Highway, Harbor Boulevard at Imperial Highway, Beach Boulevard at Lambert Road, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, and Beach Boulevard at Artesia Boulevard. However, these intersections would still operate at unacceptable LOS E or F during the AM and/or PM peak hours. With implementation of improvements, the affected intersections of Beach Boulevard at Rosecrans Avenue, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway would operate at an acceptable LOS during the AM and PM peak hours. Caltrans has committed to install needed improvements at the intersection of Walnut Street at Imperial Highway.

However, the intersections of Euclid Street at Imperial Highway and Beach Boulevard at Lambert Road are state-controlled. As a result, the City of La Habra cannot ensure

implementation of Mitigation Measure TRA-1.9. Therefore, this impact would be significant and unavoidable.

Impact TRA-1.10: Roadway Segments, Year 2035 Cumulative Plus Project Condition. Eighteen of the 39 roadway segments analyzed in the Traffic Impact Analysis are forecast to operate at an unacceptable level of service (LOS) on a daily basis in the Year 2035 with the Project. Project-generated traffic would have a significant impact along Imperial Highway between Euclid Street and Harbor Boulevard and along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard. With implementation of recommended improvements, both Imperial Highway between Euclid Street and Harbor Boulevard and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard would operate at acceptable LOS D or better under Year 2035 Cumulative Plus Project traffic conditions. However, because both of these roadway segments are on a state highway and require Caltrans approval, the City of La Habra cannot guarantee implementation of these improvements. Therefore, this impact would be *significant and unavoidable*.

Methodology

The methodology for determining the significance of Project-related impacts that was applied to existing conditions for analysis of Impact TRA-1.4 was also applied to projected Year 2035 cumulative conditions along area roadway segments.

Long-term (Year 2035) daily and peak hour traffic forecasts were projected based on modeled traffic projections prepared by OCTA utilizing the OCTAM3.4 Year 2035 Model. In addition, Year 2035 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

Impact Assessment

Table 3.7-21 summarizes the results of the Year 2035 Cumulative Plus Project daily analysis for the 37 key roadway segments. An analysis of future Year 2035 cumulative traffic conditions indicates that 17 of the 37 roadway segments analyzed in the Rancho La Habra Traffic Impact Analysis would operate at an unacceptable level of service without Project-generated traffic, including:

Table 3.7-21
Year 2035 Roadway Segment Level of Service Summary

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Year 2035 Cumulative Traffic Conditions			(5) Year 2035 Cumulative Plus Project Traffic Conditions				
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	Significant Impact?
A.	Lambert Rd. btwn Beach Blvd. and Idaho St.	D	La Habra	4	Primary	37,500	**40,747**	**1.087**	**F**	**40,747**	**1.087**	**F**	0.000	No
B.	Lambert Rd. btwn Idaho St. and Euclid St.	D	La Habra	4	Primary	37,500	**42,973**	**1.146**	**F**	**42,973**	**1.146**	**F**	0.000	No
C.	Lambert Rd. btwn Euclid St. and Harbor Blvd.	D	La Habra	4	Primary	37,500	**41,418**	**1.104**	**F**	**41,418**	**1.104**	**F**	0.000	No
D.	Beach Blvd btwn Lambert Rd. and Imperial Hwy.	E	La Habra	6	Major	56,300	**57,988**	**1.030**	**F**	**58,784**	**1.044**	**F**	**0.014**	
	Peak Hour Assessment			AM	NB	2,815	1,485	1,575	0.560	A	1,607	0.571	A	*0.011*
					SB	2,815	2,393	2,606	0.926	E	2,628	0.934	E	*0.008*
				PM	NB	2,815	2,446	2,389	0.849	D	2,420	0.860	D	*0.011*
					SB	2,815	2,559	2,519	0.895	D	2,562	0.910	E	*0.015*
E.	Idaho St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	26,412	0.704	C	26,520	0.707	C	0.003	No
F.	Euclid St. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	4	Primary	37,500	21,804	0.581	A	21,859	0.583	A	0.002	No
G.	Harbor Blvd. btwn Lambert Rd. and Imperial Hwy.	D	La Habra	6	Major	56,300	44,336	0.787	C	44,712	0.794	C	0.007	No
H.	Imperial Highway btwn Santa Gertrudes Ave. and 1St. Ave.	D	La Mirada	6	Major	54,000	44,560	0.825	D	45,507	0.843	D	0.018	No
I.	Imperial Highway btwn 1St. Ave. and Beach Blvd.	E	La Habra	6	Major	56,300	44,190	0.785	C	45,201	0.803	D	0.018	No
J.	Imperial Highway btwn Beach Blvd. and La Habra Hills Dr.	E	La Habra	6	Smart St	**60,200**	**61,645**	**1.024**	**F**	**63,552**	**1.056**	**F**	0.032	**60,200**

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Year 2035 Cumulative Traffic Conditions			(5) Year 2035 Cumulative Plus Project Traffic Conditions				Significant Impact?
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
	Peak Hour Assessment			AM	EB	3,010	2,720	0.904	E	2,776	0.922	E	0.018	No
					WB	3,010	2,312	0.768	C	2,392	0.795	C	0.027	No
				PM	EB	3,010	2,168	0.720	C	2,265	0.752	C	0.032	No
					WB	3,010	2,143	0.712	C	2,225	0.739	C	0.027	No
K.	Imperial Hwy. btwn La Habra Hills Dr. and Idaho St.	E	La Habra	6	Smart St	60,200	**62,434**	**1.037**	**F**	**63,957**	**1.062**	**F**	**0.025**	
	Peak Hour Assessment			AM	EB	3,010	2,718	0.903	E	2,779	0.923	E	0.020	No
					WB	3,010	2,359	0.784	C	2,412	0.801	D	0.017	No
				PM	EB	3,010	2,209	0.734	C	2,273	0.755	C	0.021	No
					WB	3,010	2,208	0.734	C	2,298	0.763	C	0.029	No
L.	Imperial Hwy. btwn Idaho St. and Euclid St.	E	La Habra	6	Smart St	60,200	**62,478**	**1.038**	**F**	**63,505**	**1.055**	**F**	**0.017**	
	Peak Hour Assessment			AM	EB	3,010	2,686	0.892	D	2,736	0.909	E	0.017	No
					WB	3,010	2,239	0.744	C	2,266	0.753	C	0.009	No
				PM	EB	3,010	2,331	0.774	C	2,368	0.787	C	0.013	No
					WB	3,010	2,416	0.803	D	2,485	0.826	D	0.023	No
M.	Imperial Hwy. btwn Euclid St. and Harbor Blvd.	E	La Habra	6	Smart St	60,200	**67,830**	**1.127**	**F**	**68,643**	**1.140**	**F**	**0.013**	
	Peak Hour Assessment			AM	EB	3,010	**3,029**	**1.006**	**F**	**3,071**	**1.020**	**F**	**0.014**	**Yes**
					WB	3,010	2,462	0.818	D	2,481	0.824	D	0.006	No
				PM	EB	3,010	2,196	0.730	C	2,225	0.739	C	0.009	No
					WB	3,010	**2,995**	**0.995**	**E**	**3,049**	**1.013**	**F**	**0.018**	**Yes**
N.	Idaho St. btwn Imperial Hwy. and Sandlewood Ave.	D	La Habra	4	Primary	37,500	24,051	0.641	B	24,749	0.660	B	0.019	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Year 2035 Cumulative Traffic Conditions			(5) Year 2035 Cumulative Plus Project Traffic Conditions				Significant Impact?
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	
O.	Euclid St. btwn Sandlewood Ave. and Imperial Hwy.	D	La Habra	4	Primary	37,500	25,362	0.676	B	25,520	0.681	B	0.005	No
P.	Gilbert St. btwn Sandlewood Ave. and Rosecrans Ave.	D	Fullerton	4	Primary	37,500	20,018	0.534	A	20,582	0.549	A	0.015	No
Q.	Euclid St. btwn Sandlewood Ave. and Rosecrans Ave.	D	Fullerton	4	Primary	37,500	25,779	0.687	B	25,932	0.692	B	0.005	No
R.	Beach Blvd. btwn Imperial Hwy. and Hillsborough Apts.	E	La Habra	6	Smart St	60,200	**65,172**	**1.083**	**F**	**68,375**	**1.136**	**F**	**0.053**	
	Peak Hour Assessment			AM	NB	3,010	2,122	0.705	C	2,193	0.729	C	0.024	No
					SB	3,010	2,670	0.887	D	2,721	0.904	E	0.017	No
				PM	NB	3,010	2,644	0.878	D	2,728	0.906	E	0.028	No
					SB	3,010	2,440	0.811	D	2,520	0.837	D	0.026	No
S.	Beach Blvd. btwn Hillsborough Apt. and Hillsborough Dr.	E	La Habra	6	Smart St	60,200	**68,259**	**1.134**	**F**	**70,665**	**1.174**	**F**	**0.040**	
	Peak Hour Assessment			AM	NB	3,010	2,074	0.689	B	2,134	0.709	C	0.020	No
					SB	3,010	2,689	0.893	D	2,792	0.928	E	0.035	No
				PM	NB	3,010	2,658	0.883	D	2,789	0.927	E	0.044	No
					SB	3,010	2,419	0.804	D	2,507	0.833	D	0.029	No
T.	Beach Blvd. btwn Hillsborough Dr. and Rosecrans Ave.	E	La Mirada	6	Smart St	57,780	**63,297**	**1.095**	**F**	**65,534**	**1.134**	**F**	**0.039**	
	Peak Hour Assessment			AM	NB	3,210	1,795	0.559	A	1,850	0.576	A	0.017	No
					SB	3,210	2,763	0.861	D	2,862	0.892	D	0.031	No
				PM	NB	3,210	2,685	0.836	D	2,808	0.875	D	0.039	No
					SB	3,210	2,181	0.679	B	2,263	0.705	C	0.026	No
U.	Rosecrans Ave. btwn Beach Blvd. and Gilbert St.	D	Fullerton	4	Primary	37,500	26,598	0.709	C	27,492	0.733	C	0.024	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Year 2035 Cumulative Traffic Conditions			(5) Year 2035 Cumulative Plus Project Traffic Conditions				
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	Significant Impact?
V.	Rosecrans Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Secondary	25,000	16,868	0.675	B	17,121	0.685	B	0.010	No
W-1.	Sandlewood Ave. East of Idaho St.	D	La Habra	2	Commuter	5,400	4,007	0.742	C	4,219	0.781	C	0.039	No
W-2.	Sandlewood Ave. btwn Idaho St. and Euclid St.	D	La Habra	2	Commuter	5,400	2,065	0.382	A	2,277	0.422	A	0.040	No
W-3.	Sandlewood Ave. West of Euclid St.	D	La Habra	2	Commuter	5,400	1,430	0.265	A	1,642	0.304	A	0.039	No
X.	Beach Blvd. btwn Rosecrans Ave. and La Mirada Blvd.	D	Buena Park	6	Smart St	60,200	53,379	0.887	D	**54,818**	**0.911**	**E**	**0.024**	
Peak Hour Assessment				AM	NB	3,010	2,062	0.685	B	2,097	0.697	B	0.012	No
					SB	3,010	**2,914**	**0.968**	**E**	**2,984**	**0.991**	**E**	**0.023**	**Yes**
				PM	NB	3,010	**2,735**	**0.909**	**E**	**2,818**	**0.936**	**E**	**0.027**	**Yes**
					SB	3,010	2,264	0.752	C	2,317	0.770	C	0.018	No
Y.	Imperial Hwy. btwn Santa Gertrudes and La Mirada Blvd.	E	La Mirada	6	Major	54,000	39,655	0.734	C	40,520	0.750	C	0.016	No
Z.	Beach Blvd. btwn Lambert Rd. and La Habra Blvd.	E	La Habra	6	Major	56,300	49,852	0.885	D	50,588	0.899	D	0.014	No
AA.	Imperial Hwy. btwn Valley View Ave. and La Mirada Blvd.	E	La Mirada	6	Major	54,000	37,471	0.694	B	38,102	0.706	C	0.012	No
BB.	Beach Blvd. btwn La Mirada Blvd./Malvern Ave. and Artesia Blvd.	D	Buena Park	6	Smart St	60,200	**83,614**	**1.389**	**F**	**84,740**	**1.408**	**F**	0.019	No
CC.	Beach Blvd. btwn Artesia Blvd. and Commonwealth Ave.	D	Buena Park	6	Smart St	60,200	**68,094**	**1.131**	**F**	**68,925**	**1.145**	**F**	0.014	No
DD.	Beach Blvd. btwn Commonwealth Ave. and Auto Center Dr.	D	Buena Park	6	Smart St	60,200	**70,187**	**1.166**	**F**	**70,965**	**1.179**	**F**	0.013	No
EE.	Auto Center Dr. btwn Beach Blvd. and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	14,656	0.391	A	14,745	0.393	A	0.002	No

		LOS Std.	Jurisdiction	(1) No. of Existing Lanes	(2) Arterial Classification	(3) Existing Capacity at LOS E	(4) Year 2035 Cumulative Traffic Conditions			(5) Year 2035 Cumulative Plus Project Traffic Conditions				
							Daily Volume	V/C Ratio	LOS	Daily Volume	V/C Ratio	LOS	Inc.	Significant Impact?
FF.	Beach Blvd. btwn Auto Center Dr. and I-5 SB Ramps	D	Buena Park	6	Smart St	60,200	**74,088**	**1.231**	**F**	**74,699**	**1.241**	**F**	0.010	No
GG	Beach Blvd. btwn La Habra Blvd. and Whittier Blvd.	E	La Habra	6	Major	56,300	40,400	0.718	C	41,070	0.729	C	0.011	No
HH.	Whittier Blvd. btwn Beach Blvd. and Hacienda Rd.	D	La Habra	4	Primary	37,500	**54,664**	**1.458**	**F**	**54,980**	**1.466**	**F**	0.008	No
II.	Gilbert St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	29,332	0.782	C	30,073	0.802	D	0.020	No
JJ.	Euclid St. btwn Rosecrans Ave. and Malvern Ave.	D	Fullerton	4	Primary	37,500	**34,944**	**0.932**	**E**	**35,259**	**0.940**	**E**	0.008	No
KK.	Malvern Ave. btwn Gilbert St. and Euclid St.	D	Fullerton	4	Primary	37,500	27,753	0.740	C	28,106	0.749	C	0.009	No

Notes:
NB = northbound, SB = southbound, EB = eastbound, WB = westbound
BOLD text indicates unacceptable service level.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

- Lambert Road between Beach Boulevard and Idaho Street
- Lambert Road between Idaho Street and Euclid Street
- Lambert Road between Euclid Street and Harbor Boulevard
- Beach Boulevard between Lambert Road and Imperial Highway
- Imperial Highway between Beach Boulevard and La Habra Hills Drive
- Imperial Highway between La Habra Hills Drive and Idaho Street
- Imperial Highway between Idaho Street and Euclid Street
- Imperial Highway between Euclid Street and Harbor Boulevard
- Beach Boulevard between Imperial Highway and Hillsborough Apartments
- Beach Boulevard between Hillsborough Apartments and Hillsborough Drive
- Beach Boulevard between Hillsborough Drive and Rosecrans Avenue
- Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard
- Beach Boulevard between Artesia Boulevard and Commonwealth Avenue
- Beach Boulevard between Commonwealth Avenue and Auto Center Drive
- Beach Boulevard between Auto Center Drive and I-5 Southbound (SB) Ramps
- Whittier Boulevard between Beach Boulevard and Hacienda Road
- Euclid Street between Rosecrans Avenue and Malvern Avenue

The addition of Project-generated traffic to cumulative 2035 conditions would cause one additional roadway segment—Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard—operate at an unacceptable level of service.

Significance Conclusion for Impact TRA-1.10

Table 3.7-21 indicates that the following 18 of the 39 roadway segments analyzed in the Rancho La Habra Traffic Impact Analysis would operate at an unacceptable level of service on a daily basis in the Year 2035 with traffic from the Project:

- Lambert Road between Beach Boulevard and Idaho Street
- Lambert Road between Idaho Street and Euclid Street
- Lambert Road between Euclid Street and Harbor Boulevard
- Beach Boulevard between Lambert Road and Imperial Highway
- Imperial Highway between Beach Boulevard and La Habra Hills Drive
- Imperial Highway between La Habra Hills Drive and Idaho Street
- Imperial Highway between Idaho Street and Euclid Street

- Imperial Highway between Euclid Street and Harbor Boulevard
- Beach Boulevard between Imperial Highway and Hillsborough Apartments
- Beach Boulevard between Hillsborough Apartments and Hillsborough Drive
- Beach Boulevard between Hillsborough Drive and Rosecrans Avenue
- Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard
- Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard
- Beach Boulevard between Artesia Boulevard and Commonwealth Avenue
- Beach Boulevard between Commonwealth Avenue and Auto Center Drive
- Beach Boulevard between Auto Center Drive and I-5 Southbound (SB) Ramps
- Whittier Boulevard between Beach Boulevard and Hacienda Road
- Euclid Street between Rosecrans Avenue and Malvern Avenue

Of the 18 roadway segments operating at an unacceptable level of service, 9 roadway segments—Beach Boulevard between Lambert Road and Imperial Highway, Imperial Highway between Beach Boulevard and La Habra Hills Drive, Imperial Highway between La Habra Hills Drive and Idaho Street, Imperial Highway between Idaho Street and Euclid Street, Imperial Highway between Euclid Street and Harbor Boulevard, Beach Boulevard between Imperial Highway and Hillsborough Apartments, Beach Boulevard between Hillsborough Apartments and Hillsborough Drive, Beach Boulevard between Hillsborough Drive and Rosecrans Avenue, and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard—require a peak hour link assessment to determine whether they would be affected by the Project in the Year 2035. Traffic at the other nine roadway segments would not exceed applicable thresholds for requiring a peak hour link assessment, and the Project would have a less than significant impact at those locations.

As shown in **Table 3.7-21**, the Project would have a significant impact along two roadway segments under Year 2035 conditions. Project-generated traffic would have a significant impact along Imperial Highway between Euclid Street and Harbor Boulevard since this roadway segment would operate at unacceptable LOS F in the eastbound direction during the critical weekday AM peak hour and at an unacceptable LOS F in the westbound direction during the critical weekday PM peak hour with the Project. Project-generated traffic would have a significant impact along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard since this roadway segment would operate at an unacceptable LOS E in the southbound direction during the critical weekday AM peak hour and at unacceptable LOS E in the northbound direction during the critical weekday PM peak hour with the Project.

Mitigation Measures

The following improvements were recommended in the Rancho La Habra Traffic Impact Analysis to mitigate Year 2035 Cumulative Plus Project traffic impacts:

- **Imperial Highway between Euclid Street and Harbor Boulevard:** Widen and restripe Imperial Highway to provide a fourth eastbound through lane and a fourth westbound through lane. The installation of these improvements would require additional right-of-way and may be further constrained due to the existing channel located south of Imperial Highway that runs parallel to Imperial Highway, from west of Euclid Avenue, east to Village Drive. In addition, this improvement is subject to the approval of Caltrans and the City of La Habra.
- **Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard:** Widen and restripe Beach Boulevard to provide a fourth northbound through lane and a fourth southbound through lane. The installation of these improvements would require additional right-of-way and is subject to the approval of Caltrans and the City of Buena Park.

Mitigation Measure TRA-1.10a: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following roadway segment:

- Imperial Highway between Euclid Street and Harbor Boulevard

Mitigation Measure TRA-1.10b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts along the following roadway segment:

- Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard

Significance Conclusion for Impact TRA-1.10 with Implementation of Mitigation Measures

With implementation of recommended improvements, both Imperial Highway between Euclid Street and Harbor Boulevard and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard would operate at acceptable LOS D or better under Year 2035 Cumulative Plus Project traffic conditions. However, because both of these roadway segments are on a state highway and one of the roadway segments is within the City of Buena Park, the improvements would require those agencies' approval. The City of La Habra cannot guarantee implementation of the improvements. Therefore, the impact would be significant and unavoidable.

Impact TRA-1.11: Freeway Mainline Segments. Although the addition of Project-generated trips would not result in any new deficient service levels under Existing Plus Project, Year 2023 Cumulative Plus Project, or Year 2035 Cumulative Plus Project conditions, Project-generated traffic would increase traffic density along State Route 57 (SR-57) southbound south of Imperial Highway under Year 2023 Cumulative Plus Project conditions. Because the SR-57 freeway is controlled exclusively by the State of California and there is no mechanism by which the City of La Habra can construct or guarantee construction of any freeway improvements, the Project's impact would be *significant and unavoidable.*

Methodology

Caltrans methodology has been used to analyze Project-related impacts on freeway mainline segments. Caltrans requires the use of analysis methods provided in the HCM for the analysis of basic freeway segments. Caltrans "endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities;" however, it does not require that LOS D be maintained at all times and at all locations. Caltrans acknowledges that maintaining LOS D may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, LOS D is the target level of service standard and was used to assess Project impacts along area freeway segments. Based on Caltrans criteria, a project's impact is considered significant if the project causes the LOS to change from an acceptable LOS (i.e., LOS D or better) to a deficient LOS (i.e., LOS E or F), or increases the traffic density on a facility that is operating at an unacceptable level.

The *Caltrans Guide for the Preparation of Traffic Impact Studies* (December 2002) states the following:

> The following criterion is a starting point in determining when a TIS (Traffic Impact Study) is needed. When a project:
>
> 1. Generates over 100 peak hour trips assigned to a State highway facility….
> 2. Generates 50 to 100 peak hour trips assigned to a State highway facility and noticeable delay approaching LOS C or D….
> 3. Generates 1 to 49 peak hour trips assigned to a State highway facility and noticeable delay approaching LOS E or F….

Based on the Caltrans criteria above and the results of the basic freeway segment analysis for existing traffic conditions, it was determined that no additional analysis was needed for the freeway segments along the I-5 freeway, since the Project would not generate 50 to 100 peak hour trips and the four I-5 freeway segments are forecast to operate at an acceptable LOS C or

better during the AM and PM peak hours under existing traffic conditions. However, additional traffic analysis is required for two freeway segments along SR-57 under Existing Plus Project conditions.

The analysis of Existing Plus Project conditions adds Project generated traffic to the two freeway segments being analyzed. For Year 2023 traffic analyses, background traffic growth estimates were calculated using an ambient traffic growth factor of 1 percent per year to reflect unknown and future cumulative projects in the area, as well as account for regular growth in traffic volumes due to the development of projects outside the area. Long-term (Year 2035) daily and peak hour traffic forecasts were projected based on modeled traffic projections prepared by OCTA utilizing the OCTAM3.4 Year 2035 Model. In addition, Year 2035 background traffic includes development of the 63 cumulative projects within the cities of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park, and La Mirada that are identified in **Table 6-1** and **Figure 6-1** in Chapter 6, *Cumulative Impacts*.

The Caltrans freeway mainline analysis used a peak hour factor of 0.95 for existing, Existing Plus Project, and Year 2023 traffic conditions; a peak hour factor of 1.00 for Year 2035 buildout traffic conditions; and a truck percentage of 9.35 percent for the I-5 freeway and 6.14 percent for the SR-57 freeway.

Impact Assessment

Existing Plus Project Freeway Mainline Conditions

Table 3.7-22 indicates that with the addition of Project traffic, the two freeway segments located along the SR-57 freeway are forecast to continue to operate at an unacceptable level of service during the PM peak hour when compared to the LOS standards defined in this report, however the density values remain unchanged without and with the project.

Table 3.7-22
Existing Plus Project Freeway Mainline Analysis

		Existing Conditions			Existing Plus Project Conditions			
	Time Period	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Significant? Yes/No
SR-57 southbound north of Imperial Hwy.	AM	1,704	26.8	D	1,704	26.8	D	No
	PM	**2,123**	**36.9**	**E**	**2,123**	**36.9**	**E**	No
SR-57 southbound south of Imperial Hwy.	AM	1,615	25.1	C	1,620	25.2	C	No
	PM	**2,155**	**37.9**	**E**	**2,157**	**37.9**	**E**	No

Notes:
pc/hr/lane = passenger cars per hour per lane
pc/mi/lane = passenger cars per mile per lane
Bold text indicates unacceptable service levels based on the Caltrans LOS criteria
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Year 2023 Cumulative Plus Project Freeway Mainline Conditions

Table 3.7-23 indicates that two freeway segments located along the SR-57 freeway would operate at an unacceptable level of service during the PM peak hour with or without the addition of Project-generated traffic. Addition of Project-generated trips would result in a 0.1 increase in peak hour traffic density (passenger cars per mile per lane) along the SR-57 freeway southbound, south of Imperial Highway.

Table 3.7-23
Year 2023 Cumulative Plus Project Freeway Mainline Analysis

		Year 2023 Conditions			Year 2023 Plus Project Conditions			
	Time Period	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Significant? Yes/No
SR-57 southbound north of Imperial Hwy.	AM	1,838	29.5	D	1,838	29.5	D	No
	PM	**2,305**	**43.2**	**E**	**2,305**	**43.2**	**E**	No
SR-57 southbound south of Imperial Hwy.	AM	1,756	27.8	D	1,761	27.9	D	No
	PM	**2,350**	**45.0**	**E**	**2,352**	**45.1 [a]**	**F**	**Yes**

Notes:
pc/hr/lane = passenger cars per hour per lane
pc/mi/lane = passenger cars per mile per lane
Bold text indicates unacceptable service levels based on the Caltrans LOS criteria
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Year 2035 Cumulative Plus Project Freeway Mainline Conditions

Table 3.7-24 indicates that two freeway segments located along the SR-57 freeway would operate at an unacceptable level of service during the PM peak hour with or without the addition of Project-generated traffic. Addition of Project-generated trips would not result in any change in peak hour traffic density (passenger cars per hour per lane).

Table 3.7-24
Year 2035 Cumulative Plus Project Freeway Mainline Analysis

		Year 2035 Conditions			Year 2035 Plus Project Conditions			
	Time Period	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Significant? Yes/No
SR-57 southbound north of Imperial Hwy.	AM	1,851	29.8	D	1,851	29.8	D	No
	PM	**2,258**	**41.4**	**E**	**2,258**	**41.4**	**E**	No
SR-57 southbound south of Imperial Hwy.	AM	1,735	27.4	D	1,739	27.4	D	No
	PM	**2,276**	**42.1**	**E**	**2,279**	**42.1**	**E**	**Yes**

Notes:
pc/hr/lane = passenger cars per hour per lane
pc/mi/lane = passenger cars per mile per lane
Bold text indicates unacceptable service levels based on the Caltrans LOS criteria
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Significance Conclusion for Impact TRA-1.11

Although the addition of Project-generated trips would not result in any new deficient service levels under Existing Plus Project, Year 2023 Cumulative Plus Project, or Year 2035 Cumulative Plus Project conditions, Project traffic would increase traffic density along SR-57 southbound south of Imperial Highway under Year 2023 Cumulative Plus Project conditions. Because this freeway mainline segment operates at an unacceptable level, the Project-related increase in traffic density constitutes a significant impact.

Mitigation Measures

The improvements needed to mitigate Project-related impacts on the SR-57 freeway would include addition of a southbound lane to the segment north of Imperial Highway.

Mitigation Measure TRA-1.11: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following freeway mainline segment:

- SR-57 southbound lanes south of Imperial Highway

Significance Conclusion for Impact TRA-1.11 with Implementation of Mitigation Measures

The SR-57 freeway is controlled exclusively by the State of California, and there is no mechanism by which the City of La Habra can construct or guarantee the construction of any freeway improvements. Therefore, the Project's impact on the SR-57 freeway southbound south of Imperial Highway would be significant and unavoidable.

Impact TRA-1.12: Caltrans Freeway Ramp Junction Merge and Diverge Analysis. Although the Project would not cause a change in level of service (LOS) at any of the freeway ramps analyzed in the Rancho La Habra Traffic Impact Analysis, Project-generated traffic would increase the density of traffic merging onto the southbound State Route 57 (SR-57) freeway from Imperial Highway under Year 2023 Cumulative Plus Project conditions. Because the SR-57 freeway is controlled exclusively by the State of California and there is no mechanism by which the City of La Habra can construct or guarantee construction of any improvements to this ramp junction, the Project's impact would be *significant and unavoidable*.

Methodology

The methodology for determining the significance of Project impacts is the same as for Impact TRA-11. The analysis that was undertaken is consistent with Caltrans requirements and was prepared using the methods provided in the HCM.

The Caltrans freeway merge/diverge analysis used a peak hour factor of 0.95 for existing, Existing Plus Project, and Year 2023 traffic conditions; a peak hour factor of 1.00 for Year 2035 buildout traffic conditions; and a truck percentage of 9.35 percent for the I-5 freeway and 6.14 percent for the SR-57 freeway.

Impact Assessment

Existing Plus Project Conditions

Table 3.7-25 summarizes the peak hour LOS results at three freeway ramp junctions for Existing Plus Project traffic conditions. This table indicates that each of the three freeway ramps analyzed in the Rancho La Habra Traffic Impact Analysis currently operate at an acceptable level of service during the AM and PM peak hours and would continue to do so with the addition of Project-generated traffic.

Year 2023 Cumulative Plus Project Conditions

Table 3.7-26 summarizes the peak hour LOS results at the three freeway ramp junctions analyzed in the Rancho La Habra Traffic Impact Analysis for Year 2023 cumulative traffic conditions. This table indicates that one of the three freeway ramps (SR-57 southbound on-ramp [eastbound] from Imperial Highway) would operate at an unacceptable level of service in the Year 2023 during the PM peak hour with or without Project-generated traffic. The remaining two freeway ramps (SR-57 southbound off-ramp to Imperial Highway and SR-57 southbound on-ramp [westbound] from Imperial Highway) are forecast to operate at an acceptable LOS D or better in the Year 2023 with Project traffic during the AM and PM peak hours. Although the Project-generated traffic would not cause a change in level of service, it would increase the density at the freeway ramp (SR-57 southbound on-ramp [eastbound] from Imperial Highway).

Year 2035 Cumulative Plus Project Conditions

Table 3.7-27 summarizes the peak hour level of service results for the three freeway ramp junctions analyzed in the Rancho La Habra Traffic Impact Analysis for Year 2035 cumulative traffic conditions. This table indicates that all three freeway ramps would operate at an acceptable level of service under Year 2035 conditions during the AM and PM peak hours with or without traffic from the Project.

Table 3.7-25
Existing Plus Project Merge/Diverge Analysis

				Existing Traffic Conditions				Existing Plus Project Traffic Conditions				
			Time Period	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Significant? Yes/No
1.	SR-57 southbound off-ramp to Imperial Hwy.	Diverge Analysis	AM	6,100	1,104	19.7	B	6,100	1,104	19.7	B	No
			PM	7,600	1,244	24.2	C	7,600	1,244	24.2	C	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy.	Merge Analysis	AM	4,996	208	19.2	B	4,996	208	19.2	B	No
			PM	6,356	469	26.0	C	6,356	469	26.0	C	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy.	Merge Analysis	AM	5,204	577	23.8	C	5,204	593	24.0	C	No
			PM	6,825	888	32.0	D	6,825	897	32.1	D	No

Notes:
pc/mi/lane = passenger cars per mile per lane, EB = eastbound, WB = westbound
Bold text indicates unacceptable service level.
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Table 3.7-26
Year 2023 Cumulative Plus Project Merge/Diverge Analysis

				Year 2023 Without Project Traffic Conditions				Year 2023 With Project Traffic Conditions				
			Time Period	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Significant? Yes/No
1.	SR-57 southbound off-ramp to Imperial Hwy.	Diverge Analysis	AM	6,580	1,262	20.9	C	6,580	1,262	20.9	C	No
			PM	8,251	1,454	27.5	C	8,251	1,454	27.5	C	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy.	Merge Analysis	AM	5,318	230	20.5	C	5,318	230	20.5	C	No
			PM	6,797	499	27.8	C	6,797	499	27.8	C	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy.	Merge Analysis	AM	5,548	740	26.4	C	5,548	756	26.5	C	No
			PM	**7,296**	**1,114**	**35.5**	**E**	**7,296**	**1,123**	**35.6**	**E**	**Yes**

Notes:
pc/mi/lane = passenger cars per mile per lane, EB = eastbound, WB = westbound
Bold text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Table 3.7-27
Year 2035 Cumulative Plus Project Merge/Diverge Analysis

				Year 2035 Without Project Traffic Conditions				Year 2035 With Project Traffic Conditions				
			Time Period	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Freeway Peak Hr. Volume	Ramp Peak Hr. Volume	Density (pc/mi/lane)	LOS	Significant? Yes/No
1.	SR-57 southbound off-ramp to Imperial Hwy	Diverge Analysis	AM	6,975	1,466	21.8	C	6,975	1,466	21.8	C	No
			PM	8,508	1,641	27.6	C	8,508	1,641	27.6	C	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy	Merge Analysis	AM	5,509	244	20.2	C	5,509	244	20.2	C	No
			PM	6,867	529	26.9	C	6,867	529	26.9	C	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy	Merge Analysis	AM	5,753	784	26.1	C	5,753	800	26.3	C	No
			PM	7,396	1,181	34.7	D	7,396	1,190	34.7	D	No

Notes:
pc/mi/lane = passenger cars per mile per lane, EB = eastbound, WB = westbound
Bold text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Significance Conclusion for Impact TRA-1.12

Although the Project would not cause a change in level of service, it would increase the density of traffic merging onto the southbound SR-57 freeway from Imperial Highway under Year 2023 Cumulative Plus Project conditions. This constitutes a significant impact for which mitigation is required.

Mitigation Measures

The improvements needed to mitigate Project-related impacts on the SR-57 merge to the southbound SR-57 freeway would include addition of a southbound lane to the freeway mainline segment north of Imperial Highway.

See **Mitigation Measure TRA-1.11**.

Significance Conclusion for Impact TRA-1.12 with Implementation of Mitigation Measures

The SR-57 freeway is controlled exclusively by the State of California, and there is no mechanism by which the City of La Habra can construct or guarantee the construction of any freeway improvements. Therefore, the Project's impact on the SR-57 southbound on-ramp (eastbound) from Imperial Highway would be significant and unavoidable.

Impact TRA-1.13: **Left-Turn Queueing Analysis. An analysis of queueing and available storage at the Project's primary access points and the intersection of Beach Boulevard at Imperial Highway indicated that adequate storage is provided under existing, Year 2023, and Year 2035 traffic conditions, except for the dual westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway. At that intersection, westbound left-turning vehicles would queue into the Imperial Highway through lane, causing vehicles to queue back to the La Habra Hills Drive/Imperial Highway intersection during the AM and PM peak hours. Such queueing occurs under existing, Year 2023, and Year 2035 conditions with and without Project-generated traffic during the AM peak hour under all traffic scenarios and during the PM peak hour under Year 2023 and Year 2035 traffic scenarios. The Project is forecast to contribute approximately 50 feet (i.e., three vehicles) to the already-deficient storage for the dual westbound left-turn lanes. The storage deficiency along the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway could be addressed by reallocating more green time to the westbound left-turn lanes. However, because this**

intersection is state-controlled, and the City of La Habra cannot guarantee Caltrans approval of this improvement, the impact would be *significant and unavoidable*.

Methodology

To determine whether traffic generated by the Project would cause vehicles queueing to make left turns back up into through traffic lanes, a queuing analysis was conducted for the Project's primary access points and the intersection of Beach Boulevard at Imperial Highway. The queue lengths were calculated for 95th percentile queue lengths and compared to available vehicle storage capacity at the following intersections:

- Beach Boulevard at Hillsborough Park Apartments (southbound left-turn)
- Idaho Street at Sandlewood Avenue (northbound left-turn)
- Beach Boulevard at Imperial Highway (dual westbound left-turns)
- La Habra Hills Drive at Imperial Highway (westbound left-turn)
- Beach Boulevard at Proposed Retail Driveway (southbound left-turn)

A significant impact would occur if Project-generated traffic would cause queuing of vehicles waiting to make left turns to back up into through traffic lanes.

Impact Assessment

This section addresses peak hour left-turn stacking/storage lengths for the three primary project access points, the proposed retail driveway and the intersection of Beach Boulevard/Imperial Highway, including the following specific intersections:

- Beach Boulevard at Hillsborough Park Apartments (southbound left-turn)
- Idaho Street at Sandlewood Avenue (northbound left-turn)
- Beach Boulevard at Imperial Highway (dual westbound left-turns)
- La Habra Hills Drive at Imperial Highway (westbound left-turn)
- Beach Boulevard at Proposed Retail Driveway (southbound left-turn)

A queuing evaluation was prepared for the identified left-turn pockets at these five intersections based on projected Existing Plus Project, Year 2023 Cumulative Plus Project, and Year 2035 Cumulative Plus Project peak hour traffic volumes and the HCM methodology.

Table 3.7-28 presents the 95th percentile queuing analysis results for Existing Plus Project traffic conditions, Year 2023 Cumulative Plus Project traffic conditions, and Year 2035 Cumulative Plus Project traffic conditions. As shown, the queue for the dual westbound left-turn lanes at the

Table 3.7-28
Peak Hour Intersection Left-Turn Queuing Analysis

		Existing Plus Project Traffic Conditions				Year 2023 Plus Project Traffic Conditions				Year 2035 Plus Project Traffic Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Estimated/ Proposed Storage Provided (feet)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)	Max. Queue/ Min. Storage Required (feet)	Adequate Storage? (Yes/No)
Beach Blvd. at Hillsborough Park Apts.													
Southbound Left-Turn	150	11	Yes	36	Yes	10	Yes	33	Yes	10	Yes	30	Yes
Idaho St. at Sandlewood Ave.													
Northbound Left-Turn	100	6	Yes	13	Yes	6	Yes	13	Yes	6	Yes	13	Yes
Beach Blvd. at Imperial Hwy.													
Westbound Left-Turn	390	366 (407)	Yes (No)	352 (390)	Yes (Yes)	432 (473)	No (No)	443 (492)	No (No)	517 (555)	No (No)	491 (541)	No (No)
La Habra Hills Dr. at Imperial Hwy.													
Westbound Left-Turn	415	175	Yes	353	Yes	220	Yes	398	Yes	244	Yes	404	Yes
Beach Blvd. at Proposed Retail Driveway													
Southbound Left-Turn	100	22	Yes	44	Yes	22	Yes	44	Yes	22	Yes	44	Yes

Notes:
Queue is based on the *95th Percentile Queue* and is reported in total queue length (feet) for signalized intersections.
xxx(xxx) = without Project (with Project)
Source: Rancho La Habra Traffic Impact Analysis, 2019.

intersection of Beach Boulevard at Imperial Highway exceeds the turn pocket storage under existing plus project traffic conditions during the AM peak hour.

Significance Conclusion for Impact TRA-1.13

Adequate storage is provided at all five locations under existing, Year 2023, and Year 2035 traffic conditions except for the dual westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway, where westbound left-turning vehicles are forecast to queue into the Imperial Highway through lane, causing vehicles to queue back to the La Habra Hills Drive/Imperial Highway intersection during the AM and/or PM peak hours. The Project is forecast to contribute approximately 50 feet (i.e., three vehicles) to the already-deficient storage for the dual westbound left-turn lanes. A significant impact would therefore result.

Mitigation Measures

The Rancho La Habra Traffic Impact Analysis stated that improvements to address existing and future deficient storage, including the Project's queueing impacts on the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway, could be addressed by reallocating additional green time to the westbound left-turn lanes. This improvement would be subject to the approval of the City of La Habra and Caltrans.

Mitigation Measure TRA-1.13: The applicant shall pay to the City of La Habra the cost of reallocating additional green time to the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway to be distributed to Caltrans for Project-related queueing impacts at that intersection.

Significance Conclusion for Impact TRA-1.13 with Implementation of Mitigation Measures

Reallocating more green time to the westbound left-turn lanes would mitigate existing and future deficient storage, including the Project's queueing impacts for the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway. However, the intersection of Beach Boulevard at Imperial Highway is state-controlled, and the City of La Habra cannot guarantee implementation of this improvement. This impact would therefore be significant and unavoidable.

Threshold TRA-2: Conflict with an applicable congestion management program, including, but not limited to, level of service (LOS) standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

Impact TRA-2: **The proposed Specific Plan would increase traffic on the surrounding roadway system, resulting in increased intersection capacity utilization (ICU) and/or delay at area intersections. These increases would not exceed applicable thresholds at any congestion management program location. However, the City of La Habra has undertaken traffic engineering studies that concluded any additional traffic generated by new development at the intersection of Beach Boulevard at Imperial Highway would have a significant impact for which fair share improvement fees would be required as mitigation. Since payment of such fees are required of the Project, this impact would be *significant but mitigable*.**

Methodology

This analysis is consistent with the requirements and procedures outlined in the current Orange County Congestion Management Program (CMP). The CMP requires that a traffic impact analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects with direct access to the CMP Highway System. The Project has access driveways to Imperial Highway and Beach Boulevard, which are part of the CMP Highway System. The Project is forecast to generate approximately 6,166 daily trip-ends, and thus meets the criteria requiring a CMP analysis.

CMP analysis requirements relate to evaluating a project's impacts on the CMP highway system, which consists of specific roadways, including State Highways and "Smart Streets." As described in the "Radius of Development Influence" section of the Orange County Congestion Management Program, CMP intersections are to be analyzed when a proposed project would generate 3 percent or more of a CMP system link's daily LOS E capacity.

Four roadway segments on the CMP Highway System meet this 3 percent threshold:

- Imperial Highway between Beach Boulevard and La Habra Hills Drive
- Beach Boulevard between Imperial Highway and Hillsborough Apartments
- Beach Boulevard between Hillsborough Apartments and Hillsborough Drive
- Beach Boulevard between Hillsborough Drive and Rosecrans Avenue

A significant impact would occur if the Project would cause a CMP facility to operate worse than LOS E, or would increase the ICU value by more than 0.10 if the CMP facility operates at LOS F without the Project.

Impact Assessment

Tables 3.7-29, **3.7-30**, and **3.7-31** reflect the analysis of Existing Plus Project, Year 2023 Cumulative Plus Project, and Year 2035 Cumulative Plus Project LOS results, respectively, based on the CMP methodology and thresholds. Based on the results of the analysis presented in these tables, the CMP intersections of Beach Boulevard at Imperial Highway and Harbor Boulevard at Imperial Highway would operate at an unacceptable LOS F in the PM and AM peak hours, respectively, under Year 2035 Without Project conditions. The addition of Project-generated traffic to Year 2035 AM peak hour traffic at the intersection of Beach Boulevard at Imperial Highway would cause the AM peak hour LOS to deteriorate from LOS E to LOS F.

Table 3.7-29
Existing Plus Project Peak Hour Intersection Analysis – Congestion Management Program (CMP)

				Existing Traffic Conditions		Existing Plus Project Traffic Conditions		CMP Impact	
		LOS Standard	Time Period	ICU	LOS	ICU	LOS	ICU Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	0.786	C	0.813	D	0.027	No
			PM	0.834	D	0.870	D	0.036	No
14.	Harbor Boulevard at Imperial Highway	E	AM	0.759	C	0.762	C	0.003	No
			PM	0.683	B	0.686	B	0.003	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.691	B	0.698	B	0.007	No
			PM	0.675	B	0.684	B	0.009	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.686	B	0.692	B	0.006	No
			PM	0.758	C	0.761	C	0.003	No

Notes: SB = southbound
Bold text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Table 3.7-30
Year 2023 Peak Hour Intersection Analysis – Congestion Management Program (CMP)

				Year 2023 Cumulative Traffic Conditions		Year 2023 Cumulative Plus Project Traffic Conditions		CMP Impact	
		LOS Standard	Time Period	ICU	LOS	ICU	LOS	Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	0.880	D	0.907	E	0.027	No
			PM	0.942	E	0.978	E	0.036	No
14.	Harbor Boulevard at Imperial Highway	E	AM	0.841	D	0.845	D	0.004	No
			PM	0.814	D	0.838	D	0.024	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.785	C	0.793	C	0.008	No
			PM	0.767	C	0.775	C	0.008	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.753	C	0.758	C	0.005	No
			PM	0.814	D	0.818	D	0.004	No

Notes: SB = southbound
Bold text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Table 3.7-31
Year 2035 Peak Hour Intersection Analysis – Congestion Management Program (CMP)

				Year 2035 Cumulative Traffic Conditions		Year 2035 Cumulative Plus Project Traffic Conditions		CMP Impact	
		LOS Standard	Time Period	ICU	LOS	ICU	LOS	ICU Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	0.998	E	**1.026**	**F**	**0.028**	**Yes**
			PM	**1.049**	**F**	**1.085**	**F**	0.036	No
14.	Harbor Boulevard at Imperial Highway	E	AM	**1.142**	**F**	**1.146**	**F**	0.004	No
			PM	0.985	E	0.999	E	0.014	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.849	D	0.857	D	0.008	No
			PM	0.837	D	0.845	D	0.008	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.868	D	0.880	D	0.012	No
			PM	0.858	D	0.861	D	0.003	No

Notes:
SB = southbound
Bold text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2019.

Significance Conclusion for Impact TRA-2

Although the intersection of Harbor Boulevard at Imperial Highway would operate at an unacceptable LOS F in the AM peak hour, the addition of Project-generated traffic would not be sufficient to cause a significant impact per applicable thresholds of significance. However, because the addition of Project-generated traffic would cause AM peak hour traffic at the intersection of Beach Boulevard at Imperial Highway to operate at an unacceptable level of service in Year 2035 Cumulative Plus Project traffic conditions, the impact would be significant.

Mitigation Measures

See **Mitigation Measure TRA-1.2** for mitigation at the intersection of:

- Beach Boulevard at Imperial Highway

Significance Conclusion for Impact TRA-2 with Implementation of Mitigation Measures

City of La Habra fair share mitigation fees will mitigate impacts for intersections within La Habra, including the intersection of Beach Boulevard at Imperial Highway. Therefore, this impact would be significant but mitigable.

Threshold TRA-3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

Impact TRA-3: The Rancho La Habra Specific Plan would not result in any changes to air traffic patterns. Therefore, the Project would have *no impact*.

Methodology

To determine the significance, a screening analysis was first undertaken to determine whether the Project site was within an airport land use plan and if so, whether the proposed Specific Plan would conflict in any way with the airport land use plan. Once it was determined that the Project site was outside of any airport land use plan, the location of the nearest public airport or private airstrip was determined. Because the Project site is located more than 2 miles away from any other public airport or private airstrip, other sections of this EIR were reviewed to determine whether any of the identified impacts of the Specific Plan would possibly affect air traffic patterns. No such impact, including the potential for light and glare, was identified.

Impact Assessment

As noted in Draft EIR Section 3.12, *Hazards and Hazardous Materials*, the Specific Plan area is not located within an airport land use plan or within 2 miles of an airport for which an airport land use plan has been adopted. Fullerton Municipal Airport is the closest airport to the Project site and is located approximately 2.5 miles to the south. According to the Airport Environs Land Use Plan adopted for Fullerton Municipal Airport (Orange County Airport Land Use Commission 2004), the plan affects the cities of Anaheim, Buena Park, and Fullerton, as well as unincorporated areas of Orange County. The Project site and the rest of the City of La Habra are not affected by the plan since they are not within either the Federal Aviation Administration (FAA) Part 77 Fullerton Municipal Airport Notification Area (10,000-foot radius at 50:1 slope) or the FAA Part 77 Fullerton Municipal Airport Obstruction Imaginary Surfaces. The Project would therefore not conflict with an airport land use plan, nor would it cause other adverse effects on a public airport use or private airstrip such that air traffic patterns could be adversely affected.

Significance Conclusion for Impact TRA-3

Implementation of the proposed Specific Plan would not result in a change in air traffic patterns in either the existing or cumulative project scenarios. Therefore, there would be no impact, and no mitigation is required.

Mitigation Measures

Because no impact would result, no mitigation measures are required.

Threshold TRA-4: Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact TRA-4: Development proposed within the Specific Plan area would be subject to City of La Habra review of proposed roadway improvements, which would ensure that roadway design hazards are not created. *No impact* would result.

Methodology

The design of proposed roadway improvements would be subject to City standards and approval of the City's Public Works Department. In addition, the residential, commercial, and recreational uses proposed for the Project site would not generate vehicles that are incompatible on the surrounding roadway system (e.g., farm equipment). Thus, no impact would result, and further detailed analysis of this environmental issue was determined to be unnecessary.

Impact Assessment

Design of all proposed transportation and circulation features would be required to be consistent with the applicable City roadway design standards and Public Works Department requirements.

Significance Conclusion for Impact TRA-4

Detailed designs for roadway, pedestrian, or bicycle features for subsequent development within the Specific Plan area would be reviewed as part of the City's development review process and would be required to meet all applicable design standards. In addition, the Project would not generate vehicles whose use would be incompatible on the surrounding roadway system. Therefore, no impact would result, and mitigation measures are not required.

Mitigation Measures

No impact would result, and mitigation measures are not required.

Threshold TRA-5: Result in inadequate emergency access.

Impact TRA-5: The Rancho La Habra Specific Plan provides for adequate emergency access to and within the Project site, both during construction and ongoing operations. However, lane closures could occur on adjacent roadways during infrastructure construction and La Habra Hills Drive would be closed during site grading, diverting traffic from Imperial Highway to the Westridge community via La Habra Hills Drive onto Beach Boulevard and Idaho St. Thus, emergency access from Imperial Highway could be slightly slowed on a temporary basis. Mitigation Measure TRA-1.1, requiring implementation of a Construction Management Plan to ensure adequate emergency access during construction. The impact would therefore be *significant but mitigable*.

Methodology

Development that would impede emergency access by police, fire protection, or emergency medical vehicles to uses within the proposed Specific Plan area would constitute a significant impact. Because such emergency access could be impeded by permanent or temporary street closures, any such closures were evaluated to determine whether adequate alternative access would be provided to maintain access in an emergency by police, fire protection, or emergency medical personnel. Because emergency access could also be impeded by poor roadway or site design (e.g., inadequate lane widths or turning radii), the potential for roadway improvements or site-specific developments to impede emergency vehicle access was reviewed.

Impact Assessment

For approximately 15 months during Project site grading and infrastructure installation, La Habra Hills Drive would be closed across the Project site, temporarily eliminating one of the three entries into the Westridge community. The remaining two access points to the Westridge community—Hillsborough Drive west to Beach Boulevard and Nicklaus Avenue east to Idaho St—would remain available for emergency access. As a result, access from the Westridge community to Imperial Highway would not be available through the Project site, and emergency access from the north would be required to use Beach Boulevard or Idaho Street, creating a longer route to the residential community. As discussed in Draft EIR Section 3.12, *Hazards and Hazardous Materials*, the temporary closure of La Habra Hills Drive would not affect response time to the Westridge community from the two closest Los Angeles County fire stations, both of which are within 0.5 miles of the Westridge community. Response time for police would be slightly longer on a temporary basis, depending on the location of the closest police officer at the time a call was received.

Following grading and infrastructure improvements, La Habra Hills Drive would be re-opened to the Westridge residential community. The public road would be re-routed around the parking lot to the future Community Center, minimizing potential pedestrian/automobile conflicts for park users. The roadway would provide continued access to the Westridge community for emergency use.

As discussed in Impact TRA-1.1, temporary closure of travel adjacent to the Project site could intermittently occur during construction of Project-related infrastructure. Such closures could temporarily increase congestion on the adjacent street system.

Development within the Specific Plan area would also be reviewed by the City, including review by police and fire agency authorities, to ensure adequate emergency access to, from, and within the Project site (e.g., adequate number of access points, minimum lane widths, minimum turning radii).

Significance Conclusion for Impact TRA-5

As discussed in Impact TRA-1.1, re-routing of traffic from the Westridge community and the potential for lane closures during site construction may increase peak hour traffic delays. Such increased delays, even if temporary, could impede emergency response, and would constitute a significant impact for which mitigation would be required.

As noted above, the Specific Plan would be reviewed by the City, including police and fire agency authorities, to ensure adequate emergency access to, from, and within the Project site during and after site grading and construction. In addition, in accordance with Mitigation Measure TRA-1.1, a Construction Management Plan would be implemented to ensure adequate emergency access during site construction. Thus, with mitigation, impacts during construction would be less than significant. Once La Habra Hills Drive is re-opened and construction has progressed sufficiently that lane closures on the adjacent roadway system would no longer be necessary, impacts in relation to emergency access would be less than significant.

Mitigation Measures

See **Mitigation Measure TRA-1.1**.

Significance Conclusion for Impact TRA-5 with Implementation of Mitigation Measures

Implementation of the required Construction Management Plan meeting the standards of the current *California Manual on Uniform Traffic Control Device* (Mitigation Measure TRA-1.1), as well as City of La Habra requirements, would ensure adequate access during site construction and thereby reduce emergency access impacts of the Project to less than significant.

Threshold TRA-6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact TRA-6: The Rancho La Habra Specific Plan provides enhanced bicycle and pedestrian facilities within the Project site and implement applicable requirements for transit, bicycle, and pedestrian facilities. The impact would therefore be *less than significant*.

Methodology

To determine whether the proposed Specific Plan would result in a significant impact, the extent to which the plan would provide facilities to enhance the use of public transit, as well as pedestrian and bicycle mobility, was compared to adopted plans for public transit, pedestrian mobility, and bicycle facilities. A significant impact would result if adopted plans would require a greater level of public transit, pedestrian mobility, and bicycle facilities than is being proposed in the Specific Plan.

Impact Assessment

As previously discussed, public transit bus service in the area is provided by the Orange County Transportation Authority (OCTA), Foothill Transit, and Norwalk Transit. Several OCTA bus routes operate within the vicinity of the Project site on Beach Boulevard, Imperial Highway, Euclid Street, and Harbor Boulevard with connections to Fullerton, Huntington Beach, Anaheim, Yorba Linda, and Santa Ana. The bus stops nearest to the Project site are located at the intersections of Beach Boulevard at Hillsborough Park Apartments, Beach Boulevard at Westridge Plaza South, Beach Boulevard at Imperial Highway, Imperial Highway at La Habra Hills Drive, and Imperial Highway at Idaho St. Residents of the Project would be within walking distance of existing bus stops, which currently serve and would continue to serve the Project site. The Project's design provides a bus turn-out on Beach Boulevard to allow buses the ability to pull out of the travel lane to pick up and drop off passengers. The bus turn-out would be located just north of the Project entry at the Beach Boulevard/Hillsborough Park Apartments intersection.

In addition, the Project has been designed with approximately 2.6 miles of trails and that are consistent with adopted policies in the City of La Habra General Plan Mobility/Circulation Element. The trails would loop through the community and connect to Idaho Street, Beach Boulevard, and the Westridge Plaza shopping center. A signalized crossing of Beach Boulevard allows users to reach the Coyote Creek regional trail. Sidewalks and trails would also connect to Idaho Street, providing connections to Las Positas Elementary School, Imperial Middle School, and Vista del Valle Park. The Project would also provide road and pedestrian connections to the

Westridge Plaza shopping center along La Habra Hills Drive and on the west end adjacent to the multi-family neighborhood and retail store pad.

Significance Conclusion for Impact TRA-6

Implementation of the Project would provide enhanced bicycle and pedestrian facilities within the Project site and implement applicable requirements for transit, bicycle, and pedestrian facilities. The impact would therefore be less than significant.

Mitigation Measures

Because impacts are less than significant, no mitigation measures are required.

3.7.6 REFERENCES – TRAFFIC AND CIRCULATION

Linscott Law & Greenspan Engineers, *Traffic Impact Analysis, Rancho La Habra*, August 9, 2019.

Orange County Transportation Authority, *Congestion Management Program Preparation Manual*, April 19, 2011.

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3.8 AIR QUALITY

3.8.1 INTRODUCTION

a. Overview

This section evaluates the potential impacts on air quality resulting from implementation of the proposed Rancho La Habra Specific Plan, including technical analyses prepared by Urban Crossroads, for which modeling results are provided in Appendix I. This section evaluates the potential for the Specific Plan to conflict with or obstruct implementation of the applicable air quality plan for the South Coast Air Basin, violate an air quality standard or contribute substantially to an existing or projected air quality violation, result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment, expose sensitive receptors to substantial pollutant concentrations or create objectionable odors that would affect a substantial number of people. The analyses in this section evaluate both the types and quantities of air pollutant emissions that would be generated on a temporary basis due to construction and those that would be generated from long-term use of the site for the proposed community.

Emissions of greenhouse gases (GHGs) resulting from development pursuant to the proposed Specific Plan and impacts in relation to climate change and the goals of Assembly Bill 32 (AB 32) are presented and discussed in Section 3.9, *Greenhouse Gas Emissions*, of this EIR.

b. Definitions

- **Air Basin** refers to an area defined by geographic features that create a distinctive regional climate. California has 15 distinct air basins. An air basin generally has similar meteorological and geographic conditions. Implementation of the proposed Specific Plan would occur within the South Coast Air Basin.
- **Air District** refers to the body responsible for managing air quality on a regional level. California is currently divided into 35 air districts. Implementation of the proposed Specific Plan would occur within the boundaries of the South Coast Air Quality Management District (SCAQMD).
- **Air Pollutants** are the foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation, and/or materials.
- **Ambient Air Quality** represents existing air conditions in a given area.
- **Ambient Air Quality Standards** are the health- and welfare-based standards prescribed by the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) for outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period.

- **Attainment** refers to the status of regions that are meeting the primary standards established by USEPA within the National Ambient Air Quality Standards (NAAQS) for six major pollutants termed criteria pollutants, based on data collected at permanent monitoring stations.
- **Air Quality Management Plan (AQMP)** refers to the plan prepared by the SCAQMD for the purpose of bringing the area into compliance with the requirements of the NAAQS and California Ambient Air Quality Standards. AQMPs are incorporated into the State Implementation Plan (SIP).
- **Area Sources** of pollution include sources of emissions that are spread over a wide area, such as consumer products, fireplaces, road dust, and farming operations.
- **Best Available Control Measures (BACMs)** are the set of measures designed to reduce fugitive dust emissions from construction sites. These measures are set forth in Table 1 of South Coast Air Quality Management District Rule 403, Fugitive Dust Emissions, and are described in Section 3.8.2 c of this EIR.
- **Criteria Air Pollutants** are those for which acceptable levels of exposure have been determined and for which an ambient air quality standard has been set by CARB. Such standards have been set for six criteria pollutants: ozone (O_3), carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (PM), which consists of PM that is 10 microns in diameter or less (PM_{10}) and PM that is 2.5 microns in diameter or less ($PM_{2.5}$).
    - **Ozone.** Ozone is the main component of photochemical smog and is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROGs) or volatile organic compounds (VOCs), and nitrogen oxides (NO_X). While both ROGs and VOCs refer to compounds of carbon, ROG is a term used by CARB and is identified based on a list of carbon compounds that exempts carbon compounds determined by CARB to be non-reactive. VOC is a term used by USEPA and is identified based on USEPA's separate list of exempted compounds it identifies as having negligible photochemical reactivity. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution problems. Ozone concentrations are the cumulative result of regional development patterns rather than the result of a few significant emission sources.

      Once ozone is formed, it remains in the atmosphere for one or two days. Ozone is then eliminated through reaction with chemicals on the leaves of plants, attachment to water droplets as they fall to earth (rainout), or absorption by water molecules in clouds that later fall to earth with rain (washout).
    - **Carbon Monoxide.** CO, a colorless and odorless gas, is a relatively non-reactive pollutant that is a product of incomplete combustion mostly associated with motor

vehicles. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, lower emissions from new vehicles, and improvements in fuels.

- **Lead.** Lead is a metal found naturally in the environment and present in some manufactured products. There are a variety of activities that can contribute to lead emissions, which are grouped into two general categories: stationary and mobile sources. On-road mobile sources include light-duty automobiles; light-, medium-, and heavy-duty trucks; and motorcycles.

  Emissions of lead have dropped substantially over the past 40 years. The reduction before 1990 is largely due to the phase-out of lead as an anti-knock agent in gasoline for on-road automobiles. Substantial emission reductions have also been achieved due to enhanced controls in the metals processing industry.

- **Nitrogen Dioxide.** NO_2 is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NO_X, which are reported as equivalent NO_2. Aside from its contribution to ozone formation, NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

- **Sulfur Dioxide.** SO_2 is a colorless, extremely irritating gas or liquid that enters the atmosphere as a pollutant mainly from burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfur trioxide (SO_3). Collectively, these pollutants are referred to as sulfur oxides (SO_X). Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters.

- **Particulate Matter.** PM_{10} and $PM_{2.5}$ consist of particulate matter that is 10 microns or less in diameter and 2.5 microns[1] or less in diameter, respectively. PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. One common source of $PM_{2.5}$ is diesel exhaust emissions. Particulate matter is emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust), and is also formed in the atmosphere by condensation and/or transformation of SO_2 and ROG. Traffic generates particulate matter emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. PM_{10}

[1] A micron is one-millionth of a meter. The width of a single human hair ranges from approximately 10 to 200 microns.

and $PM_{2.5}$ are also emitted by burning wood in residential wood stoves and fireplaces and open agricultural burning. $PM_{2.5}$ can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including ROGs, ammonia (NH_3), NO_X, and SO_X.

- **Mobile Sources** refer to sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes that emit air pollutants while moving and when stopped.
- **Non-Attainment** refers to regions that are not meeting the primary standards established by USEPA within the NAAQS for major pollutants termed criteria pollutants, based on data collected at permanent monitoring stations.
- **Sensitive Receptors** include land uses, such as residences, schools, hospitals, children's day care facilities, elderly care facilities, and similar uses, that are particularly sensitive to adverse air quality. A sensitive receptor also includes sensitive populations such as asthmatics, children, and the elderly who are particularly sensitive to air pollution.
- **Stationary Sources** include non-mobile sources such as power plants, refineries, and manufacturing facilities that emit air pollutants from a fixed location.
- **Toxic Air Contaminant**s are defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health.

3.8.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

The 1970 Clean Air Act (last amended in 1990) requires that regional planning and air pollution control agencies prepare a regional air quality plan to outline the measures by which both stationary and mobile sources of pollutants will be controlled to achieve all standards by the deadlines specified in the Clean Air Act. These ambient air quality standards are intended to protect the public health and welfare, and they specify the concentration of pollutants (with an adequate margin of safety) to which the public can be exposed without adverse health effects. They are designed to protect those segments of the public most susceptible to respiratory distress, including asthmatics, the very young, the elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels that are somewhat above ambient air quality standards before adverse health effects are observed.

The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare,

including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. **Table 3.8-1** identifies National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (USEPA) pursuant to the Clean Air Act.

Table 3.8-1
Federal and State Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	---	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when ROG and NO_X react in sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial equipment.
	8 hours	0.070 ppm	0.075 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, CO interferes with transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm	0.100 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	annual arithmetic mean	0.030 ppm	0.053 ppm		
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm	75 ppb	Irritates upper respiratory tract; injurious to lung tissue. Destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.5 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	annual arithmetic mean	---	0.030 ppm		
Respirable Particulate Matter (PM_{10})	24 hours	50 µg/m³	150 µg/m³	May irritate eyes and respiratory tract, and cause decreases in lung capacity, cancer, and increased mortality. Produces haze and limits visibility.	Dust-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, natural sources (e.g., wind-raised dust).
	annual arithmetic mean	20 µg/m³	---		
Fine Particulate Matter ($PM_{2.5}$)	24 hours	---	35 µg/m³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; formed from photochemical reactions of other pollutants (NO_X, sulfur oxides, and organics).
	annual arithmetic mean	12 µg/m³	12.0 µg/m³		
Lead (Pb)	30-day average	1.5 µg/m³	---	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases).	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	calendar quarter	---	1.5 µg/m³		
	rolling 3-month average	---	0.15 µg/m³		

Table 3.8-1
Federal and State Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	no national standard	Can cause nuisance odor (rotten egg smell), headache, and breathing difficulties (higher concentrations).	Geothermal power plants, petroleum production and refining.
Sulfates (SO_4)	24 hour	25 µg/m^3	no national standard	Decreases ventilatory functions; aggravates asthma symptoms and cardio-pulmonary disease; causes vegetation damage; degrades visibility; causes property damage.	Industrial processes.
Visibility-Reducing Particles	8 hour	Reduces visibility to 10 miles or less	no national standard	Reduces visibility, reduces airport safety, lowers real estate value, and discourages tourism.	See $PM_{2.5}$.
Vinyl Chloride	24 hour	0.01 ppm	no national standard	Short-term exposure to high levels can cause dizziness, drowsiness, and headaches. Long-term oral exposure or inhalation can cause liver damage, including angiosarcoma, a rare form of liver cancer.	Polyvinyl chloride (PVC) plastic and vinyl products.

Notes: ppm = parts per million; µg/m^3 = micrograms per cubic meter
Source: Rancho La Habra Air Quality Impact Analysis, 2019.

The Clean Air Act also requires each state to prepare a State Implementation Plan (SIP). The Clean Air Act Amendments of 1990 added requirements for states with non-attainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect current emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. USEPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the Clean Air Act, and to determine whether implementing the SIPs would achieve air quality goals. In addition, USEPA sets federal vehicle and stationary source emissions standards and provides research and guidance in air pollution programs.

Current attainment status is indicated in **Table 3.8-2**.

Table 3.8-2
Attainment Status of Criteria Pollutants in South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Non-Attainment	No Standard
O_3 8-hour	Non-Attainment	Non-Attainment (Extreme)
PM_{10}	Non-Attainment	Attainment (Maintenance)
$PM_{2.5}$	Non-Attainment	Non-Attainment (Serious)
CO	Attainment	Attainment (Maintenance)
NO_2	Attainment	Attainment (Maintenance)
SO_2	Attainment	Attainment
Lead	Attainment*	Non-Attainment (partial)*
All others	Attainment/Unclassified	Attainment/Unclassified

* The South Coast Air Basin is in attainment except for Los Angeles County.
Source: State/federal designations were taken from www.arb.ca.gov/desig/adm/adm.htm.

b. State Plans, Policies, and Regulations

California Clean Air Act

In 1988, the state legislature passed the California Clean Air Act, which established California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress for the first time. The California Clean Air Act provides the state with a comprehensive framework for air quality planning regulation and sets state air quality standards. The California Ambient Air Quality Standards, also shown in **Table 3.8-1**, incorporate additional standards for most of the criteria pollutants and set standards for other pollutants recognized by the state such as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. In general, the state standards are more health-protective than the federal standards.

The California Clean Air Act requires each air district in which state air quality standards are exceeded to prepare a plan that documents reasonable progress toward attainment. Current attainment status is shown in **Table 3.8-2**.

State Implementation Plan

The 1977 Clean Air Act Amendments require that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled to achieve all standards specified in the Clean Air Act. For areas that are designated "non-attainment" with respect to a standard, the Clean Air Act specifies future dates for achieving compliance with the NAAQS and mandates

that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. Similarly, the 1988 California Clean Air Act also requires development of air quality plans and strategies to meet state air quality standards in areas designated as non-attainment (except for areas designated as non-attainment for the state PM standards). Maintenance plans are required for attainment areas that had previously been designated non-attainment to ensure continued attainment of the standards.

Toxic Air Contaminant Regulation

Toxic air contaminants (TACs) have been regulated under federal air quality law since the 1977 federal Clean Air Act Amendments. The most recent federal Clean Air Act Amendments (1990) reflect a technology-based approach for reducing TACs. The first phase involves requiring facilities to install Maximum Achievable Control Technology (MACT). The MACT standards vary depending on the type of emitting source. USEPA has established MACT standards for over 20 facilities or activities, such as perchloroethylene dry cleaning and petroleum refineries. The second phase of control involves determining the residual health risk represented by air toxics emissions sources after implementation of MACT standards.

Two principal laws provide the foundation for state regulation of TACs from stationary sources. In 1983, the state legislature adopted Assembly Bill 1807, which established a process for identifying TACs and provided the authority for developing retrofit air toxics control measures on a statewide basis. Air toxics from stationary sources in California are also regulated under Assembly Bill 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Regulation of TACs from mobile sources has traditionally been implemented through emissions standards for on-road motor vehicles (imposed on vehicle manufacturers) and through specifications for gasoline and diesel fuel sold in California (imposed on fuel refineries and retailers), rather than through land use decisions, air quality permits, or regulations addressing how motor vehicles are used by the general public.

In August 1998, CARB identified particulate emissions from diesel-fueled engines (diesel particulate matter, or DPM) as TACs. CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). This document provides a plan to reduce diesel particulate emissions, with the goal of reducing emissions and the associated health risks by 75 percent in 2010 and by 85 percent in 2020. The program aims to require the use of state-of-the-art catalyzed diesel particulate filters and ultra-low sulfur diesel fuel on diesel-fueled engines.

California Air Resources Board Air Quality Land Use Handbook

As part of its Community Health Program, CARB has developed an Air Quality and Land Use Handbook, which is intended to serve as a general reference guide for evaluating and reducing air pollution impacts associated with new development projects. CARB is also developing

related information and technical evaluation tools for addressing cumulative air pollution impacts in a community. These tools, when completed, will be available through CARB's Internet site or in the form of future supplements. The recommendations and considerations contained in the Handbook are voluntary, and do not constitute a requirement or mandate for either land use agencies or local air districts.

c. Regional Plans, Policies, and Regulations

The Southern California Air Quality Management District (SCAQMD) is the regional agency responsible for air quality regulation within the South Coast Air Basin, which encompasses all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties (an area of 10,743 square miles). The SCAQMD is responsible for managing ambient air quality and setting regulations in the South Coast Air Basin, establishing an air quality monitoring network for measuring levels of criteria pollutants, administering funds to reduce regional mobile source emissions, and permitting stationary air pollutant sources. The SCAQMD has permit authority over most types of stationary emission sources; can require stationary sources to obtain permits; and can impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The SCAQMD regulates new or expanding stationary sources of TACs. Under the 1977 Lewis-Presley Air Quality Management Act, the SCAQMD is also responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards.

2016 South Coast Air Quality Management Plan

The SCAQMD is responsible for developing and adopting an Air Quality Management Plan (AQMP), which serves as guidance to bring the region into compliance with federal and state air quality standards. The AQMP includes rules to reduce emissions from various sources, including specific types of equipment, industrial processes, paints, solvents, and other consumer products.

On March 3, 2017, SCAQMD adopted the 2016 AQMP, which is an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following NAAQS:

- 2008 8-hour ozone standard by 2031
- 2012 annual $PM_{2.5}$ standard by 2025[2]
- 2006 24-hour $PM_{2.5}$ standard by 2019
- 1997 8-hour ozone standard by 2023
- 1979 1-hour ozone standard by year 2022

[2] The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National $PM_{2.5}$ standard.

The AQMP projects that total NO_X emissions in the South Coast Air Basin would need to be reduced to 150 tons per day by year 2023 and to 100 tons per day in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by 2022, which requires reducing NO_X emissions in the South Coast Air Basin to 250 tons per day. This is approximately 45 percent additional reduction beyond existing regulations for the 2023 ozone standard and 55 percent additional reduction beyond existing regulations to meet the 2031 ozone standard.

Reducing NO_X emissions would also reduce $PM_{2.5}$ concentrations in the South Coast Air Basin. However, because the goal is to meet the 2012 federal annual $PM_{2.5}$ standard no later than 2025, SCAQMD is seeking to reclassify the South Coast Air Basin from "moderate" to "serious" nonattainment under this federal standard. A "moderate" nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA.

Lead Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the South Coast Air Basin, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

SCAQMD Rules and Regulations

All development projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the proposed Rancho La Habra Specific Plan are as follows:

- **Rule 401 – Visible Emissions.** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in

shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

- **Rule 402 – Nuisance.** This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 – Fugitive Dust.** SCAQMD Rule 403 governs emissions of fugitive dust during and after construction. Compliance with this rule is achieved through application of standard best management practices, such as applying water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, ceasing construction activity when winds exceed 25 miles per hour, and establishing a permanent ground cover on finished sites.
- **Rule 403 – Dust Control Information**. requires project applicants to control fugitive dust using BACMs such that dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating an off-site nuisance. Applicable Rule 403 dust suppression (and PM_{10} generation) techniques to reduce impacts on nearby sensitive receptors may include, but are not limited to, the following:
    - Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
    - Water active sites at least three times daily. Locations where grading is to occur shall be thoroughly watered prior to earth-moving.
    - Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
    - Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.
    - Suspend all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 miles per hour.
    - Provide bumper strips or similar best management practices where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
    - Replant disturbed areas as soon as practical.
    - Sweep on-site streets (and off-site streets if silt is carried to adjacent public thoroughfares) to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

- **Rule 431.2 – Sulfur Content of Liquid Fuels**. This rule limits the sulfur content of diesel and other liquid fuels for the purpose of both reducing the formation of sulfur oxides and particulates during combustion and to enable the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low sulfur diesel, and other liquid fuels for stationary source applications in the SCAQMD. The rule also affects diesel fuel supplied for mobile source applications.
- **Rule 445 – Wood Burning.** This rule prohibits permanently installed wood-burning devices in any new development. A wood-burning device means any fireplace, wood-burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, that has a heat input of less than one million British thermal units per hour.
- **Rule 481 – Spray Coating.** This rule applies to all spray painting and spray coating operations and equipment and states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:
    - The spray coating equipment is operated inside a control enclosure that is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
    - Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
    - An alternative method of coating application or control is used that has effectiveness equal to or greater than the equipment specified in the rule.
- **Rule 1108 - Volatile Organic Compounds.** This rule governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the Air Basin. This rule also regulates the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.
- **Rule 1113 – Architectural Coatings.** This rule states that no person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the rule.
- **Rule 1143 – Paint Thinners and Solvents.** This rule governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

- **Rule 1186 – Fugitive Dust.** This rule limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency, or special district such as water, air, sanitation, transit, or school district.
- **Rule 1186.1 – Less Polluting Sweepers**. To reduce air toxics and criteria pollutant emissions, this rule requires certain public and private sweeper fleet operators to acquire and operate alternative-fuel or otherwise less-polluting sweepers when purchasing or leasing these vehicles for sweeping operations undertaken by or for governments or governmental agencies within the jurisdiction of the SCAQMD.
- **Rule 1303 – Major Emission Sources.** This rule governs the permitting of re-located or new major emission sources, requiring BACMs and setting significance limits for PM_{10} among other pollutants.
- **Rule 1401 – New Source Review of Toxic Air Contaminants.** This rule specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units that emit toxic air contaminants.
- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities.** This rule provides work practice requirements to limit asbestos emissions from demolition and renovation activities and associated disturbance of asbestos-containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos-containing materials removal procedures and time schedules, asbestos-containing materials handling and clean-up procedures, and storage, disposal, and land filling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

d. Local Plans, Policies, and Regulations

City of La Habra General Plan policies relevant to air quality include the following:

> **RN 1.1 Regional Transportation Plan**. Support the regional transportation and growth management plan to conserve energy, improve air quality, and reduce greenhouse gas emissions (GHG) as appropriate and beneficial to the public welfare of the City and adjacent communities.
>
> **RN 1.13 SCAQMD Goals**. Support the South Coast Air Quality Management Plan of acceptable transportation alternatives such as alternative modes, alternative energy, and non-motorized options.

AQ 1.1 Ambient Air Quality Standards. Work with the California Air Resources Board (ARB) and South Coast Air Quality Management District (SCAQMD) to meet state and federal ambient air quality standards.

AQ 1.4 Air Quality Assessment and Monitoring. Cooperate with the California ARB and SCAQMD to measure air quality at emission sources and enforce the standards of the Clean Air Act for air quality and GHG emissions.

AQ 2.1 Land Use and Urban Form. Reduce air pollution and GHG emissions by discouraging dependence on the private automobile; promoting development that is compact, mixed-use, pedestrian- and bicycle-friendly, and transit-oriented; improving the jobs-housing balance; promoting energy-efficient building design and site planning; using water-efficient systems; and comparable methods defined in the Land Use Section of the Community Development Chapter.

AQ 2.3 Development-Infrastructure Concurrency. Manage growth by ensuring the timely provision of infrastructure to serve new development.

AQ 2.4 Land Use-Air Quality Relationship. Implement zoning and land use practices that have a beneficial impact on air quality and reduce the impacts of climate change.

AQ 2.6 Evaluate Air Quality Impacts. Evaluate the significance of air quality impacts from projects or plans as part of the environmental review process and establish necessary and appropriate mitigation requirements for project or plan approval.

AQ 2.7 New Development. Review proposed development applications to ensure that projects incorporate feasible measures to reduce construction and operational emissions for reactive organic gases (ROG), nitrogen oxides (NO_X), and particulate matter (PM_{10} and $PM_{2.5}$) through project design.

AQ 2.8 Emissions Reduction. Require development projects that exceed SCAQMD ROG and NO_X operational thresholds to incorporate feasible measures through design and/or operational features that reduce emissions, where possible, to a less than significant level.

AQ 2.9 Equity. Ensure that all land use decisions are made in an equitable fashion in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.

AQ 3.3 Private Development Infrastructure. Facilitate the use of renewable energy and water-efficient systems in residential, commercial, industrial, and other private development projects, provided that they are located and designed consistent with the character and quality of La Habra's neighborhoods and districts.

AQ 4.5 Zero-Emission and Low-Emission Vehicle Use. Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles, and other non-motorized vehicles and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in multifamily, mixed-use, and high density centers and corridors to accommodate these vehicles.

AQ 5.1 Development Dust and Particulate Emission Control. Regulate development to reduce PM_{10} emissions from construction, demolition, and debris hauling to achieve compliance with federal standards.

3.8.3 ENVIRONMENTAL SETTING

The Project site is within the South Coast Air Basin, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County. The larger SCAQMD boundary includes 10,743 square miles. The South Coast Air Basin is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east.

a. Regional Climate

The regional climate has a substantial influence on air quality in the South Coast Air Basin. In addition, temperature, wind, humidity, precipitation, and amount of sunshine influence air quality. Annual average temperatures throughout the South Coast Air Basin are in the low to middle 60s (degrees Fahrenheit [°F]). Due to a decreased marine influence, the eastern portion of the South Coast Air Basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the South Coast Air Basin, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the South Coast Air Basin have recorded maximum temperatures above 100°F.

Although the climate of the South Coast Air Basin can be characterized as semi-arid, the air near the land surface is moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of South Coast Air Basin climate. Humidity restricts visibility in the South Coast Air Basin, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the South Coast Air Basin is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the South Coast Air Basin's rainfall occurs from November through April. Due to its generally clear weather, about three-quarters of available sunshine is received in the South Coast Air Basin. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the South Coast Air Basin is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also generally brings five to ten periods of strong, dry offshore winds from desert areas to the northeast, locally termed "Santa Anas," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, wind flow is typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

In the South Coast Air Basin, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing and effectively acts as a "lid" to pollutants over the entire Air Basin.

A second inversion type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_X and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

b. Local Air Quality

The nearest long-term air quality monitoring site for ozone (O_3), carbon monoxide (CO), and nitrogen dioxide (NO_2) to the Project site is the North Orange County monitoring station, located approximately 1.31 miles north of the Project site in La Habra. The nearest long-term air quality monitoring station for PM_{10} and $PM_{2.5}$ is the Central Orange County monitoring station, located approximately 5.5 miles southeast of the Project site in Anaheim. The most recent three years of data available are shown in **Table 3.8-3**, which identifies the number of days ambient air quality standards were exceeded for the study area. This information is considered to be representative of the local air quality at the Project site. Data for SO_2 has been omitted as the Air Basin has been in attainment for SO_2 since 2010 and few monitoring stations measure SO_2 concentrations.

c. Criteria and Other Air Pollutants of Concern

The federal government and State of California have established NAAQS and California Ambient Air Quality Standards, respectively, for six criteria pollutants: ozone (O_3), CO, Pb, NO_2, SO_2, and PM_{10} and $PM_{2.5}$.

Ozone and NO_2 are considered regional pollutants because they (or their precursors) affect air quality on a regional scale; NO_2 reacts photochemically with reactive organic gases to form ozone, and this reaction occurs at some distance downwind of the source of pollutants. Pollutants such as CO, SO_2, and Pb are considered to be local pollutants that tend to accumulate in the air near the source. Particulate matter is considered to be a local as well as a regional pollutant.

The primary pollutants of concern in the study area are ozone (including nitrogen oxides, NO_X), CO, and PM. Principal characteristics surrounding these pollutants are discussed below. TACs are also discussed, although no air quality standards exist for these pollutants.

Ozone (O_3)

Ozone (smog) is a highly reactive and unstable gas that is formed by photochemical reactions between oxides of nitrogen and ROGs rather than being directly emitted. Ozone is a pungent, colorless gas typical of Southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during summer and early fall. The entire South Coast Air Basin is designated as a non-attainment area for the state 1-hour and 8-hour ozone standards. USEPA has officially designated the status for most of the South Coast Air Basin regarding the 8-hour ozone standard as "Extreme," which means the Air Basin has until 2024 to attain the federal 8-hour ozone standard.

ROG, NO_X, and CO are considered ozone precursors. If ozone precursors are present under the right conditions, they react to form ozone. Because the reaction takes place in the atmosphere, winds can carry ozone far from where the precursors were originally emitted. Scientists have studied the effects of ozone on health for decades.

Hundreds of research studies have confirmed that exposure to ozone and the pollutants that produce it is linked to premature death, asthma, bronchitis, heart attack, and other cardiopulmonary problems. Ground level ozone can harm lung function and irritate the respiratory system. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital

Table 3.8-3
Project Area Air Quality Monitoring Summary, 2016-2018

Pollutant	Standard	Year		
		2016	2017	2018
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.103	0.113	0.111
Maximum 8-Hour Concentration (ppm)		0.08	0.09	0.08
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	3	5	3
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	7	12	4
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	7	12	4
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)	> 35 ppm	3.1	3.8	3.0
Maximum 8-Hour Concentration (ppm)	> 20 ppm	1.5	1.7	1.4
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)	> 0.100 ppm	0.06	0.08	0.07
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m³)	> 150 µg/m³	74	128	129
Annual Arithmetic Mean (µg/m³)		24.4	26.3	27.1
Number of Samples Exceeding Federal 24-Hour Standard	> 150 µg/m³	0	0	0
Number of Samples Exceeding State 24-Hour Standard	> 50 µg/m³	3	17	13
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m³)	> 35 µg/m³	44.5	53.9	54.1
Annual Arithmetic Mean (µg/m³)	> 12 µg/m³	9.47	11.39	11.02
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m³	1	6	3

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter
Source: Rancho La Habra Air Quality Impact Analysis, 2019.

admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in communities with high ozone levels.

Anyone who spends time outdoors where ozone pollution levels are high may be at risk; however, five groups of people are especially vulnerable to the effects of breathing ozone:

- Children and teens;
- Anyone 65 and older;
- People who work or exercise outdoors;

- People with existing lung diseases, such as asthma and chronic obstructive pulmonary disease (also known as COPD, which includes emphysema and chronic bronchitis); and
- People with cardiovascular disease.

In addition, newer evidence suggests that other groups—including women and people who suffer from obesity—may also face a higher risk from ozone inhalation.

Carbon Monoxide (CO)

CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Air Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. The entire South Coast Air Basin is in attainment for the state standards for CO. The South Coast Air Basin is designated as an "Attainment/Maintenance" area under the federal CO standards.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Therefore, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes.

Reduction in birth weight and impaired neuro-behavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities.

Nitrogen Oxides (NO_X)

NO_2, a reddish-brown gas, and NO, a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are collectively referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and

may reduce resistance to infection. The entire South Coast Air Basin is designated as non-attainment for the state NO_2 standard and as an "Attainment/Maintenance" area under the federal NO_2 standard.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

Sulfur Dioxide (SO_2)

SO_2 is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire South Coast Air Basin is in attainment with both federal and state SO_2 standards.

A few minutes of exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.

Lead (Pb)

Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders,

distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures, and death; however, it appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

The South Coast Air Basin is designated as being in attainment for the state and federal standards for lead.

Particulate Matter (PM)

Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM_{10}) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particulate matter ($PM_{2.5}$) levels. Fine particles can also be formed in the atmosphere through chemical reactions.

PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. USEPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily by the elderly and individuals with cardiopulmonary disease), increased respiratory symptoms and disease (in children and individuals with cardiopulmonary disease such as asthma), decreased lung functions (particularly in children and individuals with asthma), and alterations in lung tissue and structure and in respiratory tract defense mechanisms.

Most of the South Coast Air Basin is designated non-attainment for the federal and state PM_{10} and $PM_{2.5}$ standards.

Volatile Organic Compounds (VOCs)

VOCs are hydrocarbon compounds that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include

gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to ozone (O_3), which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROGs)

ROGs, also known as VOCs, are formed from the combustion of fuels and the evaporation of organic solvents. ROGs are not defined as criteria pollutants but are a prime component of the photochemical smog reaction. Consequently, ROG accumulates in the atmosphere more quickly during the winter, when sunlight is limited, and photochemical reactions are slower. Health effects include eye, nose, and throat irritation; headaches, loss of coordination, and nausea; and damage to the liver, kidney, and central nervous system. Some organics can cause cancer in animals; some are suspected or known to cause cancer in humans. Key signs or symptoms associated with exposure to VOCs include conjunctival irritation, nose and throat discomfort, headache, allergic skin reaction, dyspnea, declines in serum cholinesterase levels, nausea, vomiting, nose bleeding, fatigue, and dizziness. The SCAQMD uses the terms ROG and VOC (see above) interchangeably.

Sulfates

Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. The entire South Coast Air Basin is in attainment for the state standard for sulfates. Effects of sulfate exposure at levels above air quality standards include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property. Sulfates increase the acidity of the atmosphere and form acid rain.

Hydrogen Sulfide (H_2S)

Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. In 1984, a CARB committee concluded that the ambient standard for hydrogen sulfide is adequate

to protect public health and to significantly reduce odor annoyance. The entire South Coast Air Basin is unclassified for the state standard for hydrogen sulfide.

Visibility-Reducing Particles

Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition and can be made up of many different materials such as metals, soot, soil, dust, and salt. The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. The entire South Coast Air Basin is unclassified for the state standard for visibility-reducing particles.

Odors

Offensive odors can potentially affect human health in several ways. First, odor-generating compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. The unpleasantness of odors can lead to considerable distress among the public and generate citizen complaints to local governments and air districts.

According to CARB's (2005) Air Quality and Land Use Handbook, land uses associated with odor complaints typically include sewage treatment plants, landfills, recycling facilities, and manufacturing plants. Odor impacts on residential areas and sensitive receptors, such as hospitals, day care centers, and schools, warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas. Potential sources of odors within the Westridge Golf Club include the intermittent use of fertilizers.

d. Regional Air Quality Improvement

In 1976, California adopted the Lewis Air Quality Management Act which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. The geographic area over which the SCAQMD has jurisdiction is known as the South Coast Air Basin. SCAQMD develops comprehensive plans and regulatory programs for the region to attain federal standards by dates specified in federal law. SCAQMD is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures.

SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in basin air quality. Nearly all control programs developed through the early 1990s relied on (1) the development and application of cleaner technology; (2) add-on emission controls, and (3) uniform CEQA review throughout the Air Basin. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB.

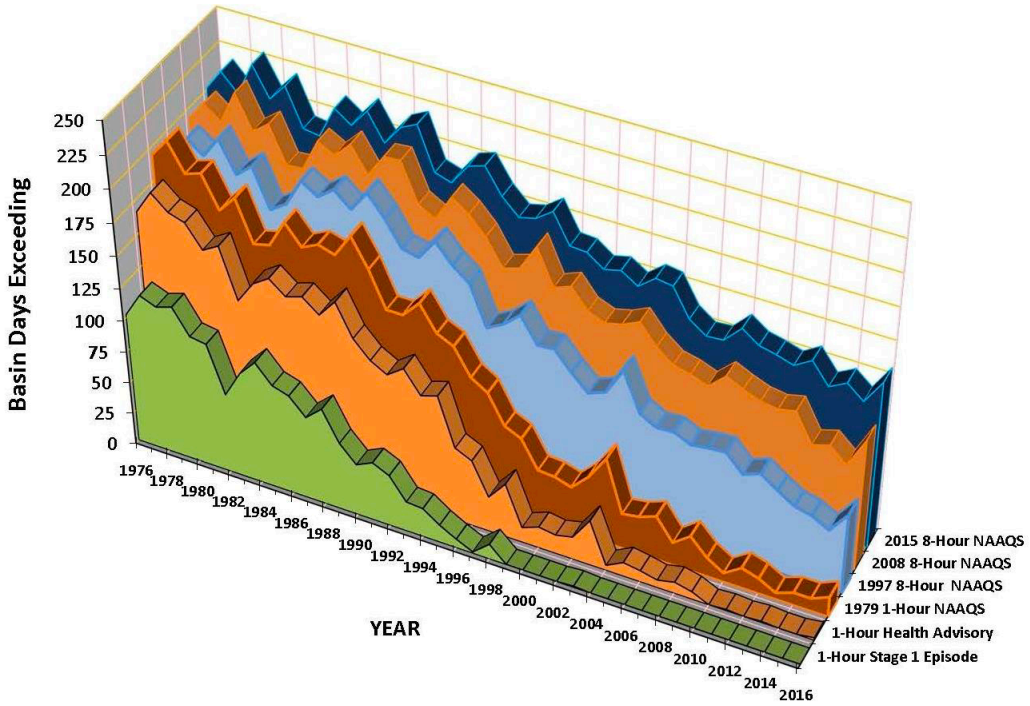
SCAQMD created regional air quality management plans which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the South Coast Air Basin. The AQMP states, "the remarkable historical improvement in air quality since the 1970's is the direct result of Southern California's comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs."

Ozone, NO_X, VOC, and CO have been decreasing in the Air Basin since 1975 and are projected to continue to decrease through 2020. These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the Air Basin continues to increase, NO_X and VOC levels are decreasing because of mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_X emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. Ozone contour maps show that the number of days exceeding the national 8-hour standard has decreased between 1997 and 2007. In 2007, there was an overall decrease in exceedance days compared with 1997. Ozone levels in the South Coast Air Basin have decreased substantially over the last 30 years as shown in **Figure 3.8-1**. Today, the maximum measured concentrations are approximately one-third of the concentrations experienced in the Basin in the late 1970s.

The overall trends of PM_{10} and $PM_{2.5}$ levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM_{10} have remained somewhat constant in the Air Basin, and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area-wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions.

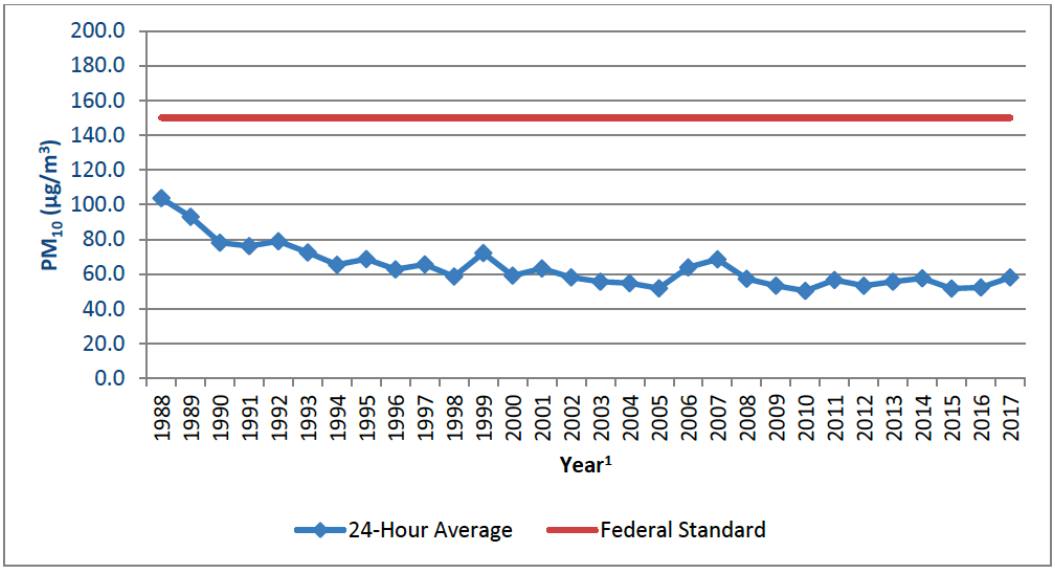
As with other pollutants, the most recent PM_{10} statistics also show overall improvement as illustrated in **Figure 3.8-2** and **Figure 3.8-3.** During the period for which data are available, the 24-hour national annual average concentration for PM_{10} decreased by approximately 44 percent, from 103.7 micrograms per cubic meter ($\mu g/m^3$) in 1988 to 58.2 $\mu g/m^3$ in 2017. Although the values are below the federal standard, it should be noted that there are days within the year

Figure 3.8-1
South Coast Air Basin Ozone Trends



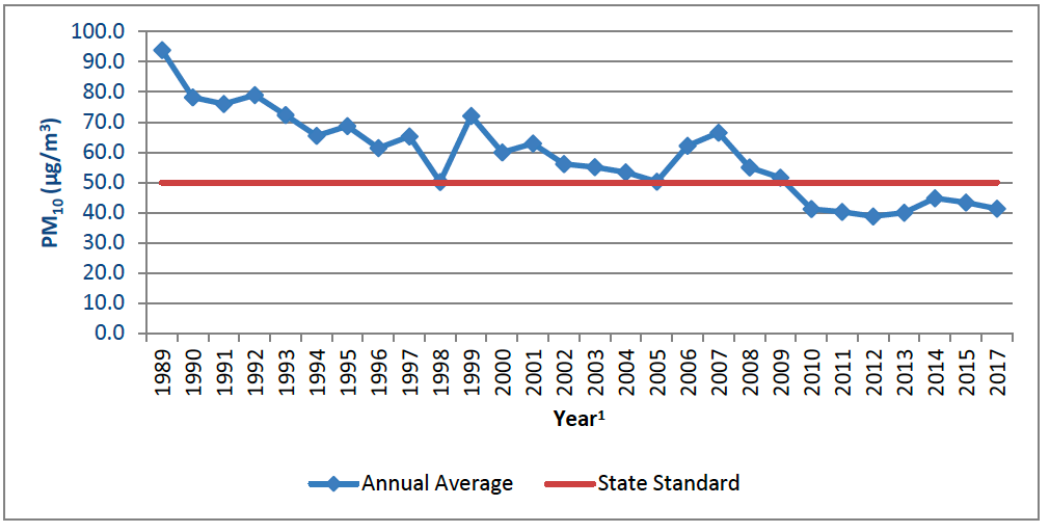
Source: South Coast Air Quality Management District

Figure 3.8-2
South Coast Air Basin Average 24-Hour Concentration PM_{10} Trend[1]



Source: California Air Resource Board
[1]Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

Figure 3.8-3
South Coast Air Basin Annual Average Concentration PM_{10} Trend[1]



Source: California Air Resource Board
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

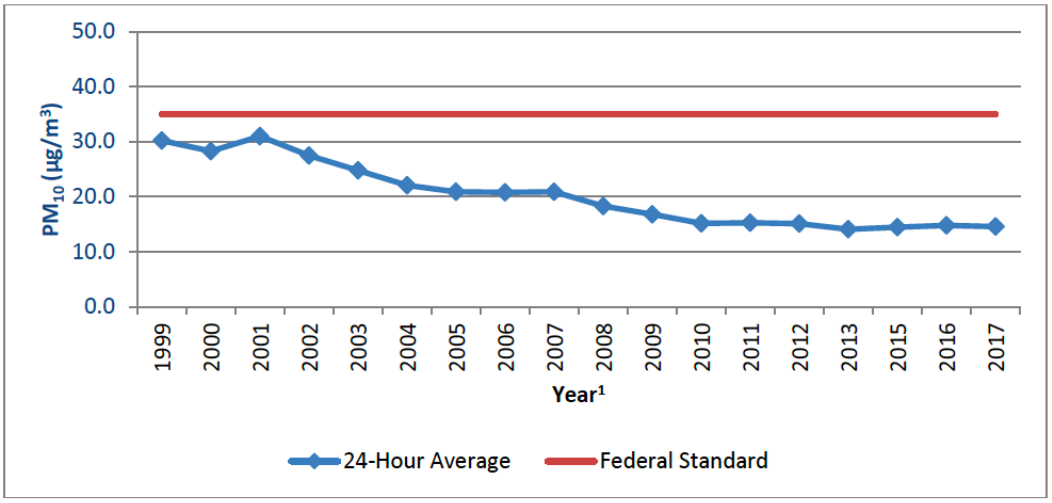
where the concentrations will exceed the threshold. The 24-hour state annual average for emissions for PM_{10} have decreased by approximately 56 percent since 1988. Although data in the late 1990s show some variability, this is probably due to meteorology rather than a change in emissions. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM_{10} standards has also shown an overall drop.

Figure 3.8-4 shows the most recent 24-hour average $PM_{2.5}$ concentrations in the South Coast Air Basin from 1999 through 2017. Overall, the national and state annual average concentrations have decreased by almost 52 percent and 30 percent, respectively. The South Coast Air Basin is currently designated as nonattainment for the state and federal $PM_{2.5}$ standards.

While the 2012 AQMP PM_{10} attainment demonstration and the 2015 associated supplemental State Implementation Plan (SIP) submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, they could not anticipate the effect of the ongoing drought on the measured $PM_{2.5}$.

The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of $PM_{2.5}$- equivalent emission reductions continued through 2015, the severe drought conditions contributed to the $PM_{2.5}$ increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour $PM_{2.5}$ standard, SCAQMD submitted a request and in January 2016, the USEPA approved a "bump up" to the non-attainment classification from "moderate" to "serious," with a new attainment deadline as soon as practicable, but not beyond December 31, 2019.

Figure 3.8-4
South Coast Air Basin 24-Hour Average Concentration $PM_{2.5}$ Trend[1]

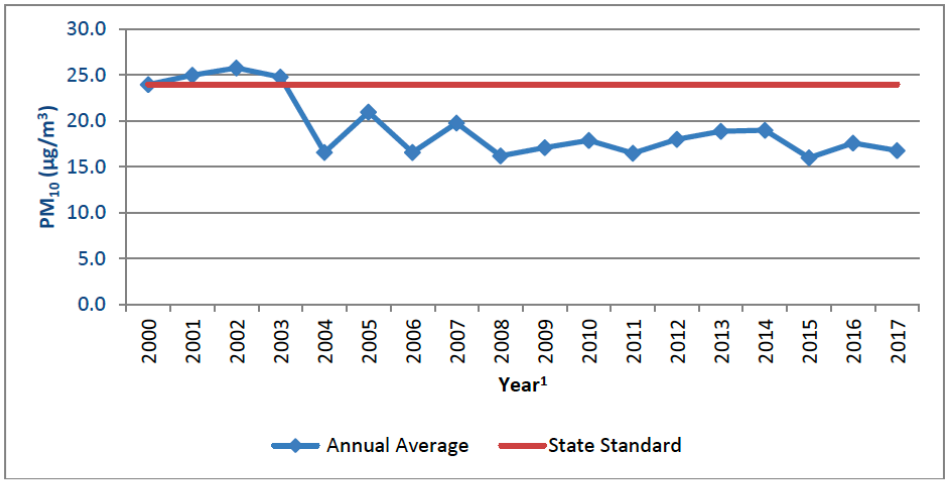


Source: California Air Resource Board
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

In March 2017, the SCAQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) and updated emission inventory methodologies for various source categories.

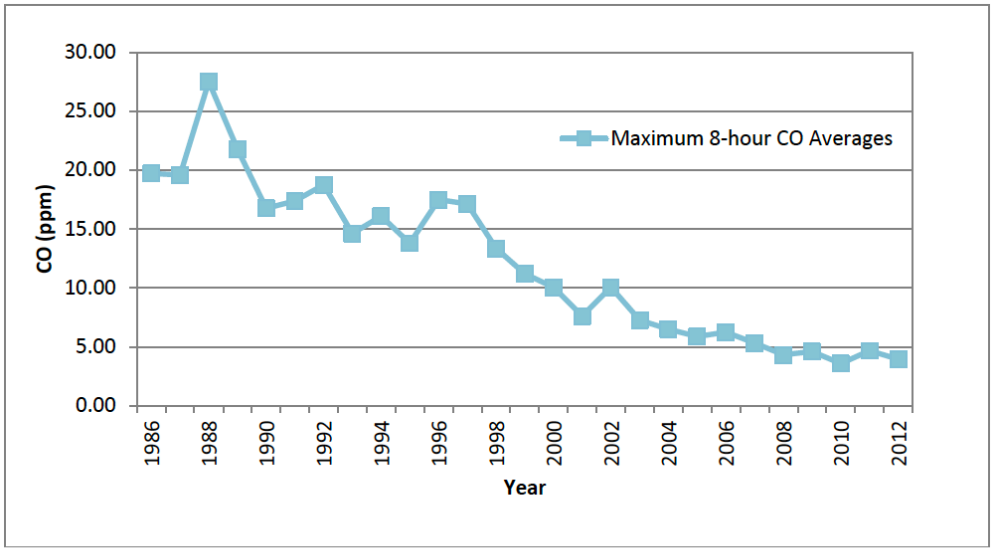
The most recent CO concentrations in the South Coast Air Basin are shown in **Figure 3.8-6**. CO concentrations in the South Coast Air Basin exhibit a total decrease of more about 80 percent in the peak 8-hour concentration since 1986. It should be noted 2012 is the most recent year for which 8-hour CO averages and related statistics are available for the South Coast Air Basin. The number of exceedance days has also declined.

Figure 3.8-5
South Coast Air Basin Annual Average Concentration PM $_{2.5}$ Trend[1]



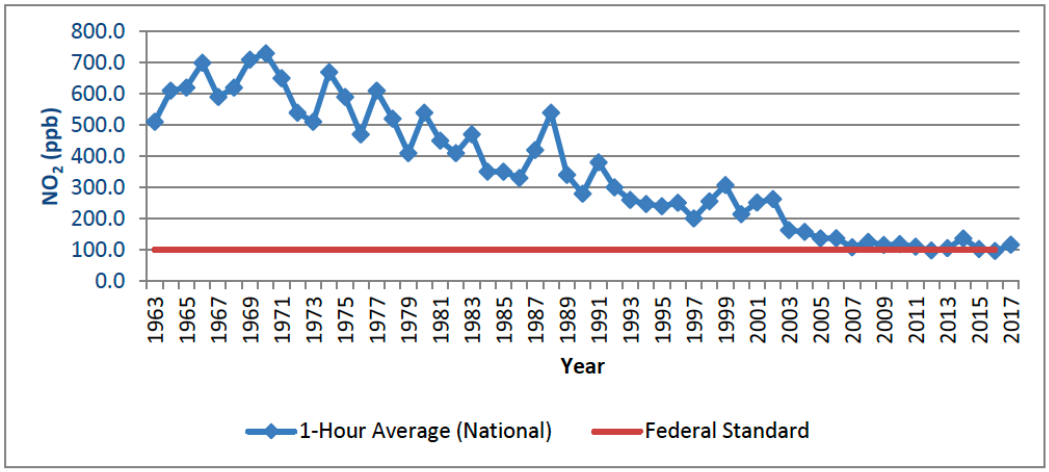
Source: California Air Resource Board
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

Figure 3.8-6
South Coast Air Basin 8-Hour Average Carbon Monoxide Trend[1]



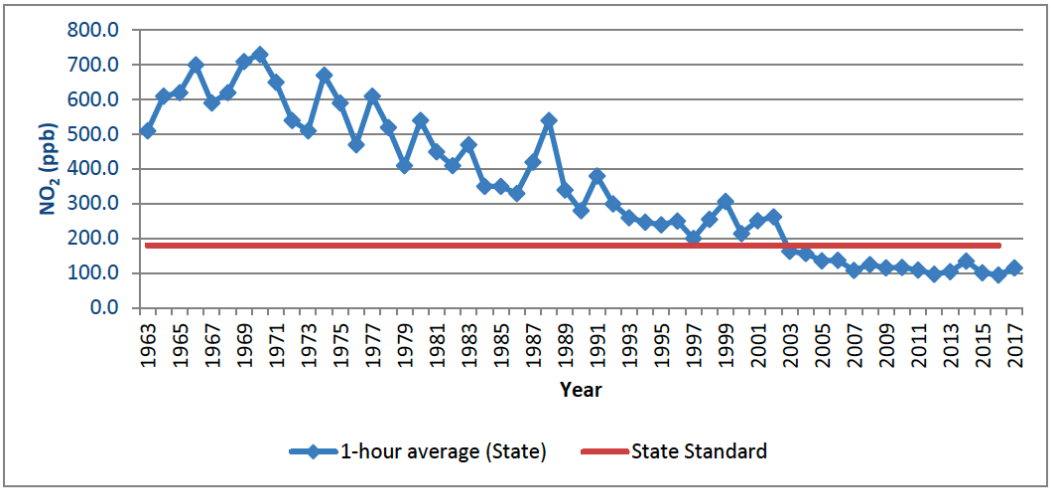
Source: California Air Resource Board
[1] The most recent year where 8-hour concentration data is available is 2012.

Figure 3.8-7
South Coast Air Basin 24-Hour Average Nitrogen Dioxide Trend (Based on Federal Standard)



Source: California Air Resource Board

Figure 3.8-8
South Coast Air Basin 24-Hour Average Nitrogen Dioxide Trend (Based on State Standard)



Source: California Air Resource Board

e. Existing Project Site Emissions

The Project site is currently occupied by the 18-hole Westridge Golf Club. Existing operational emissions for the golf course are shown in **Table 3.8-4**.

Table 3.8-4
Existing Golf Course Daily Emissions
(Pounds Per Day)

Criteria Pollutant	Summer	Winter
VOC	1.44	1.43
NO_X	3.39	3.49
CO	10.54	10.23
SO_X	0.03	0.03
PM_{10}	2.86	2.86
$PM_{2.5}$	0.79	0.79

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

3.8.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of air quality impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold AQ-1 Conflict with or obstruct implementation of the applicable air quality plan;

Threshold AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

Threshold AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

Threshold AQ-4 Expose sensitive receptors to substantial pollutant concentrations; or

Threshold AQ-5 Create objectionable odors affecting a substantial number of people.

3.8.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold AQ-1: Conflict with or obstruct attainment of the applicable air quality plan.

Impact AQ-1: Although the Project would not increase the frequency or severity of existing air quality violations or cause or contribute to new violations, proposed housing and population growth would be inconsistent with the Air Quality Management Plan for the South Coast Air Basin. No feasible mitigation measures are available to reduce Impact AQ-1 to a less than significant level. However, as discussed in Draft EIR Chapter 7, *Alternatives*, the Project Alternatives 1-5 would eliminate or reduce the identified significant impact. The resulting impact of the proposed Project would therefore be *significant and unavoidable*.

Methodology

The Specific Plan area is within the South Coast Air Basin and the jurisdictional boundaries of the SCAQMD. The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the regional Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality in the Air Basin.

According to the SCAQMD's CEQA Handbook, a project involving a legislative land use action (such as the proposed Specific Plan) must meet both of the following criteria in order to be found consistent with the AQMP:

1. The project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
2. The project would not generate population and employment growth in excess of the assumptions in the AQMP.

Consistency Criterion 1 refers to violations of NAAQS and California Ambient Air Quality Standards. Violations of these standards would occur if the localized significance thresholds analyzed in **Impact AQ-2.2** were exceeded.

Consistency Criterion 2 refers to the growth forecasts and associated assumptions used as the basis for regional air quality management planning. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general

plans of cities located within the SCAG region. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the SCAG forecast assumptions form the basis of the land use and transportation control portions of the AQMP. Therefore, if the uses and level of housing and employment growth of the proposed Specific Plan are consistent with the applicable assumptions used in the development of the AQMP, the proposed Specific Plan would be consistent with the AQMP, even if Project emissions would exceed the SCAQMD's recommended daily emissions thresholds.

Impact Assessment

Criterion 1: Violate National or California Ambient Air Quality Standards

As evaluated as part of **Impact AQ-2.2**, the Project's emissions would not exceed applicable localized significance thresholds during either construction or operations.

Criterion 2: Generate Population and Employment Growth in Excess of AQMP Assumptions

The Project includes a General Plan Amendment to permit development of 402 dwelling units and either 20,000 square feet of commercial space or an additional 46 dwelling units. The project would exceed the growth intensities allowed within the current "Open Space (Parks, Flood Channels)" General Plan land use designation, and would thereby exceed the overall buildout of the General Plan. Since the AQMP is based on SCAG growth projections, which are in turn based on local General Plans, increasing the buildout of the La Habra General Plan would increase population growth for La Habra beyond that which was assumed in the AQMP.

Significance Conclusion for Impact AQ-1

While the Project would not result in or cause violations of NAAQS or California Ambient Air Quality Standards, it would exceed the level of housing and employment growth assumed in development of the AQMP. Therefore, the proposed Specific Plan would be inconsistent with the AQMP, and a significant impact would result. Because there are no feasible mitigation measures available to achieve consistency with AQMP growth assumptions, this impact would be *significant and unavoidable*. Although no feasible mitigation measures are available to reduce Impact AQ-1 to a less than significant level, as discussed in Draft EIR Chapter 7, *Alternatives*, the following Project Alternatives would eliminate or reduce the identified significant impact:

1. No Project – No Development
2. No Project – General Plan Build-Out
3. Golf Course and Hotel
4. Reduced Density Residential / 9-Hole Golf Course
5. Reduced Density Single Family Development

Threshold AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact AQ-2.1: Development permitted by the proposed Rancho La Habra Specific Plan would result in the emission of criteria pollutants during construction and ongoing operations. Total daily construction emissions would exceed applicable daily emissions thresholds for nitrogen oxides (NO_X), resulting in a cumulatively considerable net increase of a criteria pollutant for which the region is in non-attainment. However, compliance with applicable South Coast Air Quality Management District (SCAQMD) rules and implementation of mitigation measures would reduce impacts to a less than significant level, and the impact would therefore be *significant but mitigable*. Operational emissions would be below applicable thresholds, and their impact would therefore be *less than significant*.

Methodology

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized in **Table 3.8-5**. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the South Coast Air Basin with daily emissions that exceed any of the indicated amounts would be significant.

Table 3.8-5
Daily Emissions Significance Criteria (Pounds Per Day)

Pollutant	Construction	Operations
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Emissions Modeling

The latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2 was used to model emissions of criteria air pollutants that would result from the proposed Rancho

La Habra Specific Plan during construction and long-term operations. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NO_X, VOC, PM_{10}, $PM_{2.5}$, SO_X, and CO) and GHG emissions from direct and indirect sources, and to quantify applicable air quality and GHG reductions achieved from mitigation measures. Model defaults were adjusted to reflect Rancho La Habra Specific Plan data, where available, including anticipated site construction activities, the proposed land use plan, and Project-specific trip generation.

Construction Impacts

Construction is expected to last approximately six years from demolition and site clearing through completion of the final structure within the Project site. The construction schedule used in the analysis represents a "worst-case" analysis scenario should construction occur any time commencing August 2020, since emission factors for construction decrease as time passes due to increasingly stringent emissions regulations. The duration of construction activity and associated construction equipment were based on information provided by the applicant and reviewed by the City of La Habra (City) to confirm that the duration of construction activity and associated equipment represents a reasonable approximation of the expected construction timing and equipment. The specific equipment on-site at any time would vary due to specific Project needs and equipment availability at the time of construction.

The CalEEMod™ model was used to calculate fugitive dust emissions resulting from site grading, including importation of 15,000 cubic yards of soil for retaining wall construction. Equipment anticipated to be used in Project construction activities is indicated in **Table 3.8-6**. Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site), were estimated based on information CalEEMod™ model defaults.

The estimated maximum daily construction emissions without mitigation are summarized on **Table 3.8-7**. CalEEMod™ calculates maximum daily emissions for summer and winter periods. As a conservative measure, construction emissions presented in **Table 3.8-7** are from the winter period because these emissions are higher than those from the summer period. As shown in **Table 3.8-7**, Project construction emissions would exceed criteria pollutant thresholds established by the SCAQMD for emissions of NO_X.

Table 3.8-6
Construction Equipment Assumptions (8 Hours Per Day)

Activity	Equipment	Number
Demolition	Excavators	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
Crushing	Crushing/Processing Equip.	1
Site Preparation	Tractors/Loaders/Backhoes	2
Mass Grading	Rubber Tired Dozers	1
	Scrapers	6
	Tractors/Loaders/Backhoes	1
Finishing Grading	Tractors/Loaders/Backhoes	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coating	Air Compressors	1

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Table 3.8-7
Daily Project Construction Emissions (Without Mitigation)

	Emissions (Pounds Per Day)					
Year	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2020	9.26	109.86	59.19	0.17	10.13	5.61
2021	11.61	105.72	61.69	0.17	9.37	5.39
2022	11.10	43.50	51.21	0.14	8.05	3.23
2023	10.69	37.87	49.88	0.13	7.85	3.04
2024	10.43	35.87	48.92	0.13	7.70	2.90
2025	10.15	33.58	47.99	0.13	7.54	2.76
2026	10.08	33.39	47.31	0.13	7.54	2.76
Maximum Daily Emissions	**11.61**	**109.86**	**61.69**	**0.17**	**10.13**	**5.61**
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	**Yes**	No	No	No	No

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Operations Impacts

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors associated with the proposed Specific Plan, including mobile and area source emissions, were also quantified using the CalEEMod™ computer model. Area source emissions, which are widely distributed and made of many small emissions sources (e.g., building heating and cooling units, landscaping equipment, consumer products, painting operations, etc.) were modeled according to the size and type of land use proposed. Mass mobile source emissions were modeled based on the daily vehicle trips that would result from the proposed Specific Plan.

Operational activities associated with the Project would result in emissions of VOCs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources:

- Area sources
- Energy sources
- Mobile sources
- Stationary sources

Operational emissions from each of these sources are discussed below.

Area Source Emissions

Architectural Coatings. Over a period of time, buildings within the Project site would generate emissions from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using the CalEEMod™ model.

Consumer Products. Consumer products include but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds that, when released in the atmosphere, can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on assumptions provided in the CalEEMod™ model. In the case of the proposed commercial/retail uses, no substantive on-site use of consumer products is anticipated.

Landscape Maintenance Equipment. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain Project landscaping. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod™ model.

Energy Source Emissions

Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project site are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the South Coast Air Basin, criteria pollutant emissions from offsite generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod™ model and assume compliance with 2019 Title 24 standards which will be in effect starting January 1, 2020.

Mobile Source Emissions

Vehicles. Project-related operational air quality impacts derive primarily from vehicle trips generated by the uses within the Project site. Trip characteristics presented in the Rancho La Habra Traffic Impact Analysis were used in this analysis to determine Project traffic. The emissions associated with vehicular travel were calculated using the CalEEMod™ model.

Fugitive Dust Related to Vehicular Travel. Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod™ model.

Stationary Source Emissions

Future development of 20,000 square feet of commercial use could result in the use of an emergency generator. For analysis purposes, it is anticipated that a 500-horsepower, diesel-powered emergency generator could be in use for up to 50 hours per year. Emissions associated with stationary source emissions of such a generator were calculated using the CalEEMod™ model. According to the CalEEMod™ model outputs shown in Appendix I, the project would not result in measurable stationary source emissions.

Impact Assessment

Construction Emissions

SCAQMD Rules that are currently applicable during construction activity include but are not limited to Rule 1403 (Asbestos), Rule 1113 (Architectural Coatings), Rule 431.2 (Low Sulfur Fuel), Rule 403 (Fugitive Dust), and Rule 1186/1186.1 (Street Sweepers). The estimated maximum daily construction emissions are summarized in **Table 3.8-7**. Under the assumed scenarios, emissions resulting from Project construction would exceed the applicable SCAQMD threshold for emissions of NO_X.

Operations Emissions

Estimated peak summer and winter operational emissions are summarized in **Table 3.8-8** based on commercial development within Planning Area 5. This presents a worst-case analysis since emissions would be lower with development of 46 multi-family residents within that Planning Area. As shown in that table, emissions resulting from Project operations would not exceed applicable SCAQMD thresholds for any criteria pollutant.

Significance Conclusion for Impact AQ-2.1

Air pollutant emissions would not exceed applicable thresholds for criteria pollutants; however, because the Project would exceed the applicable threshold for NO_X during construction, a significant impact would result. Mitigation is required.

Table 3.8-8
Daily Project Operations Emissions

	Emissions (Pounds Per Day)					
Operational Activities – Summer	**VOC**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Proposed Specific Plan						
Area Source	26.00	6.70	37.47	0.04	0.70	0.70
Energy Source	0.24	2.13	1.18	0.01	0.17	0.17
Mobile Source	13.12	26.35	108.03	0.33	36.33	9.86
Total Daily Emissions	39.36	35.18	146.68	0.38	37.20	10.73
Existing Golf Course Use	1.44	3.39	10.54	0.03	2.86	0.79
Net Emissions Increase	**37.92**	**31.79**	**136.14**	**0.35**	**34.34**	**9.94**
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

	Emissions (Pounds per Day)					
Operational Activities – Winter	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Proposed Specific Plan						
Area Source	26.00	6.70	37.47	0.04	0.70	0.70
Energy Source	0.24	2.13	1.18	0.01	0.17	0.17
Mobile Source	13.75	27.12	106.35	0.31	36.32	9.86
Total Daily Emissions	40.00	35.95	145.01	0.37	37.19	10.73
Existing Golf Course Use	1.43	3.49	10.23	0.03	2.86	0.79
Net Emissions Increase	**38.57**	**32.46**	**134.78**	**0.34**	**34.33**	**9.94**
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Mitigation Measures

Mitigation Measure AQ-2.1a: All off-road construction equipment, except scrapers, shall be equipped with engines that meet the U.S. Environmental Protection Agency (USEPA) Tier 4 Final Emission Standards. A minimum of three of the six scrapers involved in grading operations shall be equipped with engines that meet the USEPA Tier 4 Final Emission Standards. Tier 4 Final Emission Standards result in NO_X emission reductions greater than 90 percent from unmitigated levels.

Mitigation Measure AQ-2.1b: Vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour as a means of reducing dust and PM_{10} / $PM_{2.5}$ generation.

Significance Conclusion for Impact AQ-2.1 with Implementation of Mitigation Measures

With implementation of **Mitigation Measure AQ-2.1a** and **Mitigation Measure AQ-2.1b**, impacts from NO_X emissions during Project construction would be less than significant (see **Table 3.8-9**.

Table 3.8-9
Daily Project Construction Emissions (With Mitigation)

	Emissions (pounds per day)					
Year	**VOC**	**NOx**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2020	5.11	54.46	66.01	0.17	6.29	3.05
2021	8.71	50.98	69.79	0.17	6.60	2.78
2022	8.58	17.45	55.18	0.14	6.59	1.87
2023	8.40	14.22	53.98	0.13	6.58	1.86
2024	8.30	14.02	53.06	0.13	6.58	1.86
2025	8.22	13.82	52.26	0.13	6.58	1.86
2026	8.15	13.64	51.59	0.13	6.58	1.86
Maximum Daily Emissions	8.71	54.46	69.79	0.17	6.60	3.05
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Impact AQ-2.2: **Total daily emissions from grading activities would exceed applicable localized significance thresholds, indicating a local exceedance of an ambient air quality standard. However, compliance with applicable South Coast Air Quality Management District (SCAQMD) rules, including implementation of Best Available Control Measures (BACMs), along with implementation of mitigation measures, would reduce impacts to a less than significant level, and the impact would therefore be *significant but mitigable*. Operational emissions would be below applicable localized significance thresholds, and their impact would therefore be *less than significant*.**

Methodology

Localized Significance Threshold Methodology for Construction

The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST methodology). SCAQMD has established that impacts on air quality are significant if there is a potential to contribute to or cause localized exceedances of the federal and/or state ambient air quality standards. Collectively, these are referred to as "localized significance thresholds" (LSTs). LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project site are above or below state standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are pollutants for which the Air Basin is in non-attainment.

For the analysis of the proposed Rancho La Habra Specific Plan, the appropriate Source Receptor Area (SRA) for the LST analysis is the SCAQMD North Orange County monitoring station (SRA 16). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

In order to determine the appropriate methodology for identifying localized impacts that could occur as a result of Project-related construction, the following process was undertaken:

- The CalEEMod™ model was used to determine the maximum daily on-site emissions that would occur during construction activity.

- The SCAQMD's Fact Sheet for Applying CalEEMod™ to Localized Significance Thresholds was used to determine the maximum site acreage that would be actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod™.
- If the total acreage disturbed would be less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables would be used to determine if a project has the potential to result in a significant impact. (The SCAQMD recommends that projects exceeding the screening look-up tables undergo dispersion modeling to determine actual impacts.) The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod™ outputs.
- If the total acreage disturbed would be greater than 5 acres per day, then the SCAQMD LSTs would be evaluated through dispersion modeling.

SCAQMD's LST methodology states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod™ "on-site" emissions outputs were considered.

As shown in **Table 3.8-10**, the Project could actively disturb approximately 6.5 acres per day during grading activity. Dispersion modeling was therefore used to calculate emissions for LSTs for peak grading activity, which represents a conservative (i.e., "worst-case") analytical scenario for purposes of construction LSTs.

Table 3.8-10
Maximum Daily Disturbed Acreage During Project Grading

	Equipment Type	Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractors	0	0.5	8	0.0
	Graders	0	0.5	8	0.0
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	6	1.0	8	6.0
			Total Acres Graded Per Day		**6.5**

Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Dispersion Modeling

The SCAQMD-approved AERMOD dispersion model was used to estimate localized pollutant concentrations resulting from Project construction. Because it is anticipated that a maximum area of approximately 6.5 acres would be disturbed on any given day (during peak grading activity), it was conservatively estimated that emissions would be concentrated over this area. LST modeling also used the highest daily peak emissions resulting from grading activity.

To model fugitive dust emissions (PM_{10} and $PM_{2.5}$) resulting from Project grading activity, an area source of 6.5 acres was used. Following SCAQMD LST methodology, a ground level release height and a 1 meter (~3.28 foot) initial vertical dimension (sigma z) were used to account for the vertical spread of emissions. Additionally, dry depletion parameters consistent with LST methodology were used. To account for equipment exhaust emissions of PM_{10}, $PM_{2.5}$, NO_2, and CO, a total of 16 volume sources measuring 40 meters by 40 meters were spread over an area of approximately 6.5 acres. To represent equipment exhaust emissions, a release height of 5.0 meters was used, which is consistent with SCAQMD's LST guidance.

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors," as they are known to be locations where an individual can remain for 24 hours. The nearest sensitive receptor to Rancho La Habra is the Westridge residential community immediately to the south of the Project site.

To account for meteorological conditions at the Project site, data from the Fullerton Airport monitoring station was used, as this is the nearest station to the Project site for which meteorological data is available. Additionally, per SCAQMD LST methodology, a receptor height of 2.0 meters and regulatory default options, and the urban dispersion coefficient were used.

Localized Significance Threshold Methodology for Operations

The proposed Rancho La Habra Specific Plan encompasses approximately 150.8 acres. As noted previously, the LST methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with a project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

The LST analysis includes on-site sources only; however, the CalEEMod™ model outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions analyzed for Rancho La Habra represent all on-site Project-related stationary (area) sources and 5 percent of Project-

related mobile sources. Considering that the trip lengths used in CalEEMod™ for the Project are approximately 16 miles, 5 percent of this total would represent an on-site travel distance of approximately 0.8 miles.

It should be noted that the Project site in its entirety spans the equivalent of approximately 1 mile. Thus, the 5 percent (0.8-mile on-site travel) assumption is conservative and would tend to overstate the actual impact, since not every vehicle would travel the entire distance of the Project site (from one end to the other). Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

As previously stated, the nearest sensitive receptor land use is located immediately adjacent to the Project site. It should be noted that the LST methodology also states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (25)." Consistent with the SCAQMD's LST methodology, a 25-meter receptor distance is utilized in this analysis and provide for a conservative (i.e., "health protective") standard of care.

Impact Assessment

Construction

Modeling of peak construction activity emissions determined that the SCAQMD's LSTs for emissions of NO_2 and PM_{10} would be exceeded without implementation of BACMs and mitigation. **Table 3.8-11** identifies the localized impacts at the nearest receptor location, the Westridge residential community south of the Project site, without implementation of BACMs or mitigation.

Table 3.8-11
Localized Emissions from Peak Project Construction Activity
Without Best Available Control Measures (BACMs) or Mitigation

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
Grading	1-hour	8-Hour	1-Hour	24-Hours	
Peak Day Localized Emissions	0.17	0.08	0.17	18.58	6.98
Background Concentration[a]	3.8	1.7	0.09	--	--
Total Concentration	**3.97**	**1.78**	**0.26**	**18.58**	**6.98**
SCAQMD Localized Significance Threshold	20.00	9.00	0.18	10.40	10.40
Threshold Exceeded?	No	No	**Yes**	**Yes**	No

Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in micrograms per cubic meter (µg/m3). All others are expressed in parts per million (ppm).
[a] Highest concentration from the last three years of available data.
Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Operations

As shown in **Table 3.8-12**, Project-related operational emissions would not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant.

Table 3.8-12
Peak Localized Operational Emissions

	CO	NO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	10.18	44.05	2.69	1.36
SCAQMD Localized Significance Threshold	221	1,311	3	2
Threshold Exceeded?	No	No	No	No

Source: Rancho La Habra Air Quality Impact Analysis, 2019

Significance Conclusion for Impact AQ-2.2

Project grading activities would result in emissions of NO_2 and PM_{10} exceeding localized significant thresholds and the Project would therefore be considered to cause a violation of applicable air quality standards during site grading. The impact would therefore be significant and require mitigation.

Ongoing Project operations would not exceed localized significant thresholds and would therefore not be considered to cause a violation of applicable air quality standards. The impact would therefore be less than significant.

Mitigation Measures

Mitigation Measure AQ-2.2: Soils exposed during grading operations shall be watered four times per day. In the event of drought conditions, defined as Water Shortage Stages 4 or 5 as determined by the City, use of non-water chemical stabilizers may be required by the City such that fugitive emissions reductions are comparable to watering four times per day. See also **Mitigation Measures AQ-2.1a** and **AQ-2.1b**, above.

Significance Conclusion for Impact AQ-2.2 with Implementation of Mitigation Measures

After implementation of applicable BACMs and **Mitigation Measures AQ-2.1a**, **AQ-2.1b**, and **AQ-2.2**, emissions during the peak construction activity would not exceed the SCAQMD's LSTs, as shown in **Table 3.8-13**. Impacts would therefore be less than significant following implementation of applicable BACMs and mitigation measures.

Table 3.8-13
Localized Emissions from Peak Project Construction Activity
With Best Available Control Measures (BACMs) and Mitigation

	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
Grading	1-hour	8-Hour	1-Hour	24-Hours	
Peak Day Localized Emissions	0.17	0.08	0.08	5.09	2.19
Background Concentration[a]	3.80	1.70	0.09	--	--
Total Concentration	**3.97**	**1.78**	**0.17**	**5.09**	**2.19**
SCAQMD Localized Significance Threshold	20.00	9.00	0.18	10.40	10.40
Threshold Exceeded?	No	No	No	No	No

Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in micrograms per cubic meter ($\mu g/m^3$). All others are expressed in parts per million (ppm).
[a] Highest concentration from the last three years of available data.
Source: Rancho La Habra Air Quality Impact Analysis, 2019.

Threshold AQ-2: Violate any air quality standard, contribute substantially to an existing or projected air quality violation.

Impact AQ-2.3: Project-generated traffic would not be sufficient to create a carbon monoxide (CO) "hot spot," nor will there be sufficient traffic along area roadways to generate a CO hot spot to which the Project might contribute emissions. The impact would therefore be *less than significant*.

Methodology

Projects that increase on-road traffic may also have the potential to contribute to CO "hot spots." A CO hot spot is an ambient CO concentration associated with traffic emissions that exceeds an ambient air quality standard in close proximity to an intersection. An adverse CO concentration, known as a "hot spot," would occur if an exceedance of the state 1-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm were to occur. At the time of the *CEQA Air Quality Handbook* published by SCAQMD in 1993, the South Coast Air Basin was designated non-attainment under the California Ambient Air Quality Standards and NAAQS for CO.

To establish a more accurate record of baseline CO concentrations affecting the South Coast Air Basin and establish a screening tool for CO concentrations in relation to traffic at an intersection, the SCAQMD conducted a CO "hot spot" analysis in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. Comparison of traffic at intersections with traffic that would be generated by the proposed Rancho La Habra Specific Plan to the

heavily traveled intersections studied in Los Angeles was undertaken to determine whether the Specific Plan-related traffic would have the potential of contributing to a CO hot spot.

Traffic volumes generating the CO concentrations for the "hot spot" analysis in the 2003 AQMP are shown in **Table 3.8-14**. The busiest intersection evaluated by the SCAQMD was Wilshire Boulevard/Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, indicating that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4 = 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[3]

Table 3.8-14
Carbon Monoxide Modeling Results at High-Volume Los Angeles Intersections

	Peak Hour Traffic		Carbon Monoxide Concentrations (ppm)		
Intersection	Morning	Afternoon	AM 1-Hour	PM 1-Hour	8-Hour
Wilshire/Veteran	8,062	7,719	4.6	3.5	3.7
Sunset/Highland	6,614	5,374	4.0	4.5	3.5
La Cienaga/Century	6,634	8,674	3.7	3.1	5.2
Long Beach/Imperial	4,212	5,514	3.0	3.1	8.4

Notes: ppm = parts per million
Source: 2003 AQMP.

Similar methods are employed by other Air Quality Management Districts' when evaluating potential CO concentration impacts. For example, the Bay Area Air Quality Management District has concluded that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—to generate a significant CO impact.

Impact Assessment

Traffic from projects in the vicinity of Rancho La Habra would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative Bay Area Air Quality Management District CO threshold considerations. At buildout of the proposed Rancho La Habra Specific Plan, the highest average daily trips on a road segment would be 84,740 daily trips on Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard, which is lower than the highest daily traffic volumes generated at the busiest intersection in the CO "hot spot" analysis. As such, the Project would not exceed the most stringent 1-hour CO standard.

[3] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

Significance Conclusion for Impact AQ-2.3

Because Project-related traffic from the Rancho La Habra Specific Plan would not exceed applicable CO standards and no "hot spots" would result, impacts would be less than significant, and no mitigation would be required.

Threshold AQ-3:	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**
Impact AQ-3	**Project construction would result in significant nitrogen oxide (NO_X) emissions and significant nitrogen dioxide (NO_2) and respirable particulate matter (PM_{10})[4] emissions in relation to localized significance thresholds. Both of these impacts would be reduced to less than significant levels with implementation of mitigation measures, as discussed in relation to Impact AQ-2.2 (see Table 3.8-12). However, because the region is in attainment for both NO_X and NO_2, significant increases in NO_X and NO_2 in relation to South Coast Air Quality Management District (SCAQMD) thresholds would not represent a net increase of a criteria pollutant for which the region is in non-attainment. Thus, impacts in relation to Threshold AQ-3 would be *less than significant*.**

Methodology

The Project area is designated as an extreme non-attainment area for ozone and a non-attainment area for PM_{10}, $PM_{2.5}$, and lead.

The SCAQMD has published a report on how to address cumulative impacts: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD 2003). This report (page D-3) states as follows:

> "…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative

[4] Localized significance thresholds for $PM_{2.5}$ would not be exceeded, and impacts would be less than significant.

> impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions….
>
> Projects that exceed the project-specific significance thresholds are considered by the AQMD to be cumulatively considerable. (Thus)… project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, any significant impact related to a criteria pollutant for which the project region is non-attainment (ozone, PM_{10}, $PM_{2.5}$, lead) would cause a cumulatively considerable increase in emissions for those pollutants and have a cumulatively considerable cumulative air quality impact.

Impact Assessment

As previously discussed in relation to **Impact AQ-2.1** and **Impact AQ-2.2**, Project construction would result in significant NO_X emissions and significant NO_2 and PM_{10} impacts in relation to LSTs. Both of these impacts would be reduced to less than significant levels with implementation of mitigation measures. The preceding analyses demonstrate that Project construction-source air pollutant emissions with mitigation measures would not exceed regional thresholds. Project operational-source emissions analyzed in **Impacts AQ-2.1, AQ-2.2**, and **AQ-2.3** would also not exceed applicable SCAQMD regional thresholds.

Significance Conclusion for Impact AQ-3

The proposed project would result in significant nitrogen oxides (NO_X) emissions during construction and significant nitrogen dioxide (NO_2) and respirable particulate matter (PM_{10}) emissions in relation to localized significance thresholds. Both of these impacts would be reduced to less-than-significant levels with implementation of mitigation measures as discussed in relation to Threshold AQ-2. However, because the region is in attainment for both NO_X and NO_2 significant increases in NO_X and NO_2 in relation to SCAQMD thresholds would not represent a net increase of a criteria pollutant for which the region is in non-attainment. Thus, impacts in relation to Threshold AQ-3 would be less than significant.

Threshold AQ-4:	**Expose sensitive receptors to substantial pollutant concentrations.**
Impact AQ-4:	**Based on the results of the localized significance thresholds and carbon monoxide (CO) "hot spot" analysis, the project would not expose sensitive receptors to substantial pollutant concentrations with implementation of Best Available Control Measures (BACMs) and localized significance thresholds-related**

Mitigation Measures AQ-2.1a, AQ-2.1b, and AQ-2.2. Although it is not possible to provide a quantified analysis of Project-induced health impacts because current scientific, technological, and modeling limitations prevent quantification of expected adverse health consequences, health-based impacts would nonetheless be reduced to less than significant, as indicated by the results of the localized significance thresholds and CO "hot spot" analysis which indicate that impacts would be *significant but mitigable*.

Methodology

Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities are also generally considered to be sensitive receptors. Determination of whether the proposed project would expose sensitive receptors to substantial pollutant concentrations was based on review of the analysis of potential for significant impacts in relation to LSTs and CO "hot spots." During grading and construction, the nearest sensitive receptors would be the Westridge residential community south of the project site. During operations, the nearest sensitive receptors would be on-site residential uses. A significant LST impact or creation of a CO "hot spot" adjacent to a sensitive use would indicate significant exposure of sensitive receptors to pollutant concentrations.

Impact Assessment

Relationship to Other Air Quality Impacts

Results of the LST analysis (**Impact AQ-2.2**) indicate that the proposed Rancho La Habra Specific Plan would not exceed the SCAQMD LSTs with implementation of BACMs and mitigation measures. In addition, the analysis of CO "hot spots" (**Impact AQ-2.3**) indicated that the Project would not result in a CO "hot spot."

Potential Health Consequences of Project Air Quality Impacts

SCAQMD Analysis of Health Consequences of Development Project Air Quality Impacts

As noted in the Brief of Amicus Curiae by the South Coast Air Quality Management District in the Friant Ranch case (Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and the District is uniquely situated to express an opinion on how lead agencies should correlate air quality

impacts with specific health outcomes. SCAQMD receives as many as 60 or more CEQA documents each month (around 500 per year) in its role as a commenting agency or an agency with "jurisdiction by law" over air quality. The SCAQMD staff provides comments on as many as 25 or 30 such documents each month. Therefore, the Rancho La Habra Air Quality Impact Analysis and its Supplemental Assessment rely on SCAQMD expertise, thresholds, and guidance to disclose the Project's air quality impacts.

The Brief notes that it may be infeasible to quantify health risks caused by individual projects due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant[s])[5]. Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk and does not necessarily mean anyone would contract cancer as a result of a project. The Brief also cites the author of the CARB methodology, which reported that a $PM_{2.5}$ methodology is not suited for small projects and may yield unreliable results. Similarly, the Brief states that SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_X or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the proposed Rancho La Habra Specific Plan), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources as part of its rulemaking activity, specifically 6,620 pounds per day of NO_X and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone.

Application of SCAQMD Analysis to Rancho La Habra

The Brief makes it clear that SCAQMD does not believe that all CEQA documents prepared for individual development projects must quantify a project's health risks. Any attempt to quantify the proposed Rancho La Habra's health risks would be considered unreliable and misleading. Rancho La Habra is much less intense than the Friant Ranch project and has dramatically fewer air quality emissions. The SCAQMD determined that an attempt to quantify the Friant Ranch project's health risks would be unreliable and misleading, due to the aforementioned factors.

[5] It should also be noted that the actual occurrence of specific health conditions is based on numerous other factors that are infeasible to quantify, such as an individual's genetic predisposition, diet, exercise regiment, stress, and other behavioral characteristics.

With mitigation, the Project would generate 54.46 pounds per day of NO_X during construction and 35.95 pounds per day of NO_X during operations, which is 0.82 percent and 0.54 percent of 6,620 pounds per day, respectively, that SCAQMD stated was a large enough emission to quantify ozone-related health impacts[6]. The Project would also generate 8.71 pounds per day of VOC emissions during construction and 40 pounds per day of VOC emissions during operations, which is 0.01 percent and 0.04 percent of 89,190 pounds per day, respectively, of the 89,190 pounds per day of VOC emissions that SCAQMD stated was a large enough emission to quantify ozone-related health impacts. Therefore, Rancho La Habra's emissions are not sufficiently large enough to use a regional modeling program to correlate health effects on a basin-wide level. Notwithstanding, as previously noted, the Rancho La Habra Air Quality Impact Analysis includes a site-specific localized impact analysis that does correlate potential project health impacts on a local level to immediately adjacent land uses.

Further Discussion of Rancho La Habra's Health Risks

The SCAQMD's numeric regional thresholds are based in part on Section 180(e) of the federal Clean Air Act. It should be noted that the numeric regional mass daily thresholds have not changed since their adoption as part of the *CEQA Air Quality Handbook* published by SCAQMD in 1993 (over 20 years ago). The numeric regional mass daily thresholds are also intended to provide a means of consistency in significance determination within the environmental review process. Notwithstanding, simply exceeding the SCAQMD's numeric regional mass daily thresholds does not constitute a particular health impact on an individual receptor. The reason for this is that the mass daily thresholds are measured in pounds per day emitted into the air, whereas health effects are determined based on the concentration of emissions in the air at a particular receptor (e.g., parts per million by volume of air, or micrograms per cubic meter of air). State and federal ambient air quality standards were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions.

For this reason, the SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from a proposed project as they relate to carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$) and particulate matter less than 10 microns in aerodynamic diameter (PM_{10}). This methodology is collectively referred to as the localized significance thresholds (LSTs). The LSTs differ from the numeric regional mass daily thresholds since the LSTs are based on the amount of emissions generated from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are based on the

[6] This is even true for the scope of the Friant Ranch project which includes the construction of approximately 2,500 single and multi-family residential units, a commercial village center, a recreation center, trails, open space, a neighborhood electric vehicle network, parks and parkways, and 250,000 square feet of commercial space on 482 acres.

ambient concentrations of the pollutant and the relative distance to the nearest sensitive receptor. (The SCAQMD performed air dispersion modeling to determine what amount of emissions generated a particular concentration at a particular distance).

The Rancho La Habra Air Quality Impact Analysis evaluated the proposed Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed Project's onsite emissions to the SCAQMD's applicable LSTs. As evaluated in the Rancho La Habra Air Quality Impact Analysis and reported in this section of the Partially Recirculated Draft EIR, the Project would not result in emissions that exceed the SCAQMD's LST thresholds. Therefore, the Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, or $PM_{2.5}$. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (children and the elderly) are protected from health-based impacts. In other words, the ambient air quality standards are purposefully set low to protect children, elderly, and those with existing respiratory problems.

Furthermore, as shown above in Section 3.8.4, emissions of NO_X, VOCs, and ozone (which is a byproduct of NO_X and VOCs) have been trending downward within the South Coast Air Basin even as development has increased over the last several years. Therefore, although the Project would exceed the SCAQMD's numeric thresholds for emissions of NO_X, this exceedance would not in itself constitute a basin-wide increase in health effects related to these pollutants.

As noted in the Brief, the SCAQMD has acknowledged that for criteria pollutants it would be extremely difficult, if not impossible to quantify health impacts for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted in the *Brief of Amicus Curiae* by the San Joaquin Valley Air Pollution Control District (SJVAPCD), SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

For analytical purposes, the LSTs for emissions of NO_X can be used as a surrogate to determine whether or not there would be a potential health impact related to emissions of VOCs (since there are no ambient air quality standards for VOCs). As shown above, LSTs for NO_X would not exceed the applicable threshold and a less than significant impact on localized (adjacent) sensitive receptors would occur. It should be noted that impacts related to air quality in the general sense are based on a source-receptor relationship – in other words, the farther away one moves from the source, the lower the concentration in the ambient air.

As noted above, with mitigation, the Project would generate substantially less than 1.0 percent of the 66,620 pounds per day of NO_X and the 89,190 pounds per day of VOC emissions that SCAQMD stated was a large enough emission to quantify ozone-related health impacts. Therefore, Rancho La Habra's emissions are not sufficiently large enough to use a regional modeling program to correlate health effects on a basin-wide level. Notwithstanding, as

previously noted, the Rancho La Habra Air Quality Impact Analysis includes a site-specific localized impact analysis that does correlate potential project health impacts on a local level to immediately adjacent land uses.

Significance Conclusion for Impact AQ-4

Because impacts in relation to LSTs and CO "hot spots" would be less than significant with implementation of BACMs and LST-related mitigation measures, impacts in relation to exposing sensitive receptors to substantial pollutant concentrations would also be less than significant.

However, current scientific, technological, and modeling limitations prevent quantification of expected adverse air quality impacts to likely health consequences. As discussed in the Impact Analysis, above, although it is not feasible to provide such a quantified analysis, health-based impacts would nonetheless be significant.

Mitigation Measures

See Mitigation Measures AQ-2.1a, AQ-2.1b, and AQ-2.2.

Significance Conclusion with Implementation of Mitigation Measures

Based on the results of the localized significance thresholds and carbon monoxide (CO) "hot spot" analysis, the project would not expose sensitive receptors to substantial pollutant concentrations with implementation of Best Available Control Measures (BACMs) and localized significance thresholds-related Mitigation Measures AQ-2.1a, AQ-2.1b, and AQ-2.2. Although it is not feasible to provide a quantified analysis of Project-induced health impacts because current scientific, technological, and modeling limitations prevent quantification of expected adverse health consequences, health-based impacts would nonetheless be reduced to less than significant, as indicated by the results of the localized significance thresholds and CO "hot spot" analysis which indicate that impacts would be reduced to less than significant.

Threshold AQ-5:	**Create objectionable odors affecting a substantial number of people.**
Impact AQ-5:	**The Rancho La Habra Specific Plan does not propose land uses having a potential for significant odor emissions. While some odors may be generated by diesel exhaust during Project construction activities, they would temporary in nature and not be likely to violate applicable South Coast Air Quality Management District (SCAQMD) regulations. Impacts would therefore be *less than significant*.**

Methodology

Based on SCAQMD criteria, a project would have a significant impact in relation to odor generation if it would create an odor nuisance pursuant to SCAQMD Rule 402.

The SCAQMD *CEQA Air Quality Handbook* identifies the following uses as having potential odor issues: wastewater treatment plants, food processing plants, agricultural uses, chemical plants, composting, refineries, landfills, dairies, and fiberglass moldings. Such uses would have the potential for creating a nuisance impact under SCAQMD Rule 402, and their introduction to the Project site would constitute a significant impact.

Impact Assessment

Construction activities have the potential to generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust), paving of asphalt street, and the application of architectural coatings. Such emissions would occur during daytime hours, would be temporary, and would be isolated to the immediate vicinity of the construction site and activity. As such, they would not affect a substantial number of people, and would not be likely to violate SCAQMD Rule 402.

Potential odor sources from Project operations would include cooking activities associated with residential and restaurant use, as well as diesel exhaust from landscaping equipment and architectural coatings used during routine maintenance. These odors would be similar to existing housing and food service uses throughout La Habra and would be confined to the immediate vicinity of new buildings. Restaurants are also typically required to have ventilation systems that avoid substantial adverse odor impacts. When compared with existing odor sources on the Project site (e.g., ongoing landscaping maintenance activities), Project operations would not increase odor impacts. Accordingly, Project operations are not expected to violate SCAQMD Rule 402.

Significance Conclusion for Impact AQ-5

Because odors from Project construction and operations are not expected to violate SCAQMD Rule 402, the impact would be less than significant, and no mitigation measures would be required.

3.8.6 REFERENCES – AIR QUALITY

California Air Resources Board (CARB), *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014. Accessed June 2, 2017: http://www.lahabracity.com/320/General-Plan-2035

South Coast Air Quality Management District, *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, August 2003. Accessed June 2, 2017: http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf

Urban Crossroads, *Rancho La Habra Air Quality Impact Analysis, City of La Habra*, August 2019.

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3.9 GREENHOUSE GAS EMISSIONS

3.9.1 INTRODUCTION

a. Overview

This section evaluates greenhouse gas (GHG) emissions associated with the proposed Rancho La Habra Specific Plan and their contribution to global climate change. The evaluation includes technical analyses prepared by Urban Crossroads, which is provided in Appendix J.

Given the scale of the planet's atmosphere, any individual project's GHG emissions cannot change atmospheric concentrations in any meaningful way when isolated from all other existing and future GHG emissions. Consequently, this section of the Partially Recirculated Draft EIR evaluates whether GHG emissions from the proposed Specific Plan would contribute considerably to the cumulative impact of elevated GHG levels in the Earth's atmosphere and, by extension, contribute to climate change and associated adverse impacts on the environment such as higher temperatures, raised sea levels, and damage to flora and fauna. This section also addresses the Specific Plan's consistency with applicable plans, policies, and pubic agency regulations adopted for the purpose of reducing the emissions of GHGs.

b. Definitions

- **Carbon Dioxide Equivalent** is a metric measure used to compare the emissions from various GHGs based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as "million metric tons of carbon dioxide equivalents ($MMTCO_2e$)." The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by the associated GWP, as follows:

  $MTCO_2e$ = (metric tons of a gas) x (GWP of the gas)

  $MMTCO_2e$ = (million metric tons of a gas) x (GWP of the gas)

- **Carbon Footprint** refers to the total amount of GHGs that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes GHG emissions from fuel that an individual burns directly, such as by heating a home or riding in a car. It also includes GHGs that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity, factories that make products, and landfills where trash is sent.
- **Carbon Sequestration** is the process by which trees and plants absorb carbon dioxide, release the oxygen, and store the carbon.
- **Emissions Inventory** is an estimate of the amount of pollutants emitted into the atmosphere from major mobile, stationary, area-wide, and natural source categories over a specific period of time, such as a day or a year.

- **Global Climate Change** is the observed increase in the average temperature of the Earth's atmosphere and oceans, along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term *global climate change* is often used interchangeably with the term *global warming,* but *global climate change* is preferred over *global warming* because it helps convey that GHG emissions may result in other changes, in addition to rising temperatures.
- **Global Warming Potential (GWP)** is the relative warming of a GHG over a specified period of time as compared to carbon dioxide (which has a GWP of 1). GWP allows for the conversion of different GHG emissions into the same emissions unit, carbon dioxide equivalents (CO_2e).
- **Greenhouse Gas (GHG)** refers to gases that absorb and emit radiation within the thermal infrared range, which is the fundamental cause of man's contribution to the greenhouse effect. The most prevalent GHG is carbon dioxide (CO_2), along with methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).
- **Greenhouse Effect** is the warming effect of the Earth's atmosphere. Light energy from the sun that passes through the Earth's atmosphere is absorbed by the Earth's surface and is radiated into the atmosphere as heat energy. The heat energy is then trapped by the atmosphere, creating a situation similar to that which occurs in a car with its windows rolled up. It is now widely accepted that the emission of CO_2 and other gases into the atmosphere increases the greenhouse effect and contributes to global warming.
- **Intergovernmental Panel on Climate Change (IPCC)** is a scientific intergovernmental body set up by the World Meteorological Organization and the United Nations Environment Programme to provide decision-makers and others interested in climate change with an objective source of information about climate change.
- **Troposphere** is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

3.9.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of federal, state, regional, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

National Climate Action Plan

In June 2013, President Obama approved a national Climate Action Plan that consisted of a wide variety of executive actions and had three pillars, as follows:

- **Cut Carbon in America –** The Climate Action Plan consists of actions to help cut carbon by deploying clean energy such as cutting carbon from power plants, promoting renewable energy, and unlocking long-term investment in clean energy innovation.
- **Prepare the United States for Impacts of Climate Change –** The Climate Action Plan consists of actions to help prepare for the impacts of climate change through building stronger and safer communities and infrastructure by supporting climate resilient investments, supporting communities and tribal areas as they prepare for impacts, and boosting resilience of building and infrastructure; protecting the economy and natural resources by identifying vulnerabilities, promoting insurance leadership, conserving land and water resources, managing drought, reducing wildfire risks, and preparing for future floods; and using sound science to manage climate impacts.
- **Lead International Efforts –** The Climate Action Plan consists of actions to help the United States lead international efforts by working with other countries to take action by enhancing multilateral engagements with major economies, expanding bilateral cooperation among major emerging economies, combating short-lived climate pollutants, reducing deforestation and degradation, expanding clean energy use and cutting energy waste, engaging in global free trade in environmental goods and services, phasing out subsidies that encourage wasteful use of fossil fuels, and leading efforts to address climate change through international negotiations.

Energy Independence and Security Act

On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act includes the following, which should aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Clean Air Act

The federal Clean Air Act requires the U.S. Environmental Protection Agency (USEPA) to define national ambient air quality standards to protect public health and welfare in the U.S. Although the act does not specifically regulate GHG emissions, the U.S. Supreme Court ruled

on April 2, 2007 in *Massachusetts v. U.S. Environmental Protection Agency* that GHGs are pollutants that can be regulated under the Clean Air Act. Currently, there are no federal regulations that establish ambient air quality standards for GHGs.

The USEPA Administrator determined that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the Clean Air Act, and on December 7, 2009, the USEPA Administrator signed the following two findings regarding GHGs under Section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The current and projected concentrations of the six key well-mixed GHGs—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations. USEPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that endangers public health and welfare under Clean Air Act Section 202(a). Subsequently, federal agencies have adopted specific GHG-related regulations and initiatives, including the following:
    - **USEPA and National Highway Traffic Safety Administration Standards to Cut Greenhouse Gas Emissions and Fuel Use for New Motor Vehicles**: These are coordinated steps to enable the production of a new generation of clean vehicles.
    - **Renewable Fuel Standard Program:** Transportation fuel sold in the United States is required to contain a minimum volume of renewable fuel.
    - **Stationary Sources:** On May 13, 2010, USEPA set GHG emissions thresholds to define when permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit covered facilities to the nation's largest GHG emitters: power plants, refineries, and cement production facilities.
    - **Timing of Applicability of the PSD Permitting Program to GHGs**: On March 29, 2010, USEPA completed its reconsideration of the December 18, 2008 memorandum entitled "EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program" (the so-called "Johnson memo"). The final action confirmed that GHGs become covered under the PSD program on January 2, 2011, when the cars rule took effect.

      In June 2014, the U.S. Supreme Court ruled that USEPA cannot classify facilities as major PSD or Title V sources based solely on their GHG emissions meeting the major source threshold. However, the Supreme Court said that USEPA could continue to require that PSD permits required due to criteria pollutant emissions contain Best Available Control Techniques (BACT) limits for GHG emissions. This ruling struck down Step 2 of the Tailoring Rule but kept in effect Step 1.

- **Cause or Contribute Finding:** The combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on developments or agencies. However, these findings were a prerequisite for implementing emissions standards for vehicles.

b. State Plans, Policies, and Regulations

A variety of state-wide rules and regulations have been implemented or are in development in California that mandate the quantification or reduction of GHGs. Several gubernatorial Executive Orders establish state-wide GHG reduction goals. As a result of Senate Bill (SB) 97, CEQA requires an analysis and mitigation of emissions of GHGs and climate change in relation to a proposed project, where a project would result in a significant increase of GHG emissions.

Assembly Bill 1493 – Pavley

In 2002, the California legislature adopted regulations to reduce GHG emissions in the transportation sector. In September 2004, pursuant to Assembly Bill (AB) 1493, the California Air Resources Board (CARB) approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. In September 2009, CARB adopted amendments to the Pavley regulations to reduce GHGs from 2009 to 2016. CARB, USEPA, and the U.S. Department of Transportation's NHTSA have coordinated efforts to develop fuel economy and GHG standards for model 2017-2025 vehicles. The GHG standards are incorporated into the "Low Emission Vehicle" (LEV) Regulations.

Executive Order S-3-05 – State-Wide Emission Reduction Targets

Executive Order S-3-05 was established by Governor Arnold Schwarzenegger in June 2005. Executive Order S-3-05 establishes state-wide emission reduction targets through the year 2050, as follows:

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

Assembly Bill 32, Global Warming Solutions Act of 2006

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 to mandate the quantification and reduction of GHGs to 1990 levels by the year 2020. The law establishes periodic targets for reductions and requires certain facilities to report emissions of

GHGs annually. The legislation authorizes CARB to reduce emissions from certain sectors that contribute the most to state-wide emissions of GHGs.

Under AB 32, CARB must adopt regulations requiring the reporting and verification of state-wide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the June 21, 2007 adoption of a report listing early action GHG emission reduction measures. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. The three original early action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" are:

- A low-carbon fuel standard to reduce the "carbon intensity" of California fuels.
- Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants.
- Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early action regulations, which were also considered "discrete early action GHG reduction measures," consist of:

- Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology.
- Reduction of auxiliary engine emissions of docked ships by requiring port electrification.
- Reduction of PFCs from the semiconductor industry.
- Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products).
- Requirements that all tune-up, smog check, and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency.
- Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 $MMTCO_2e$. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for large facilities that account for 94 percent of GHG

emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO_2 in excess of specified thresholds.

On December 11, 2008, CARB approved the *Climate Change Proposed Scoping Plan: A Framework for Change* (California Climate Change Scoping Plan) (CARB 2008) to achieve the goals of AB 32. The California Climate Change Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The California Climate Change Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the California Climate Change Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a state-wide renewables energy mix of 33 percent.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS).
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

The California Climate Change Scoping Plan also anticipates that local government actions will result in reduced GHG emissions because local governments have the primary authority to plan, zone, approve, and permit development to accommodate population growth and the changing needs of their jurisdictions (CARB 2008). The California Climate Change Scoping Plan also relies on the requirements of SB 375 (discussed below) to align local land use and transportation planning for achieving GHG reductions.

The California Climate Change Scoping Plan must be updated every five years to evaluate AB 32 policies and ensure that California is on track to achieve the 2020 GHG reduction goal. In 2014, CARB released the First Update to the Scoping Plan, which builds upon the initial Scoping

Plan with new strategies and recommendations. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. This update defines CARB's climate change priorities for the next five years and sets the groundwork to reach long-term goals set forth in Executive Order S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals in the original 2008 Scoping Plan. It also evaluates how to align the state's "longer-term" GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB adopted a 2017 Scoping Plan in November 2017, discussed in further detail below.

Senate Bill 1368

In September 2006, Governor Schwarzenegger signed SB 1368, which requires the California Energy Commission (CEC) to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low or lower than new combined-cycle natural gas plants, by requiring imported electricity to meet GHG performance standards in California, and by requiring that the standards be developed and adopted in a public process.

Executive Order S-1-07

Issued on January 18, 2007, Executive Order S-1-07 sets a declining LCFS for GHG emissions measured in CO_2e gram per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources such as algae, wood, and agricultural waste. In addition, the LCFS would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The LCFS is anticipated to lead to the replacement of 20 percent of the fuel used in motor vehicles with alternative fuels by 2020.

Senate Bill 375

In August 2008, the legislature passed and on September 30, 2008, Governor Schwarzenegger signed SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see

AB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations (MPOs) are responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or Alternative Planning Strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional MPOs. Achieving these goals through adoption of a SCS will be the responsibility of the MPOs.

Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce state-wide GHG emissions to 40 percent below 1990 levels by 2030. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32. The research used a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance with existing and future GHG-reducing policies. The CALGAPS model showed that GHG emissions through 2020 could range from 317 to 415 MTCO2e per year, "indicating that existing state policies will likely allow California to meet its target [of 2020 levels under AB 32]." CALGAPS also showed that by 2030, emissions could range from 211 to 428 MTCO2e per year, indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40 percent below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80 percent reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050.

2017 Climate Change Scoping Plan Update

In November 2017, CARB released the final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the 2017 Scoping Plan builds upon include the Cap-and- Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, using cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes.

The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent state-wide decrease in 1990 levels by 2030 mandated by SB 32.

The major elements of the 2017 Scoping Plan include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicle (ZEV) buses and trucks.
- Implementing the LCFS, with an increased stringency (18 percent by 2030).
- Implementing SB 350, which expands the Renewable Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- Carrying out the California Sustainable Freight Action Plan, which would improve freight system efficiency using near-zero emissions technology and deployment of ZEVs.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continuing to implement SB 375.
- Implementing a post-2020 Cap-and-Trade Program that includes declining caps.
- Reducing GHG emissions from refineries by 20 percent by 2030.
- Developing a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

The 2017 Scoping Plan acknowledges that:

> …[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA. Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term GHG goals, and climate change

> science. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize onsite design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally. For example, on-site design features to be considered at the planning stage include land use and community design options that reduce VMT, promote transit oriented development, promote street design policies that prioritize transit, biking, and walking, and increase low carbon mobility choices, including improved access to viable and affordable public transportation, and active transportation opportunities.

The 2017 Scoping Plan Update provides that California's climate strategy will require contributions from all sectors of the economy, including land use, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; and greater use of low carbon fuels. With respect to the land use sector, and the development of residential and commercial uses, the 2017 Scoping Plan Update recommends integrated land conservation and development strategies and an increased focus on integrated land use planning to support livable, transit-connected communities. The 2017 Scoping Plan further states that requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources.

In addition to the state-wide strategies listed above, the 2017 Scoping Plan also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO2e (MTCO2e) or less per capita by 2030 and 2 MTCO2e or less per capita by 2050. For the purpose of analyzing the significance of GHG emissions under CEQA, the 2017 Scoping Plan provides that:

> … [s]ufficiently detailed and adequately supported GHG reduction plans (including CAPs) also provide local governments with a valuable tool for streamlining project-level environmental review. Under CEQA, individual projects that comply with the strategies and actions within an adequate local CAP can streamline the project-specific GHG analysis. The California Supreme Court recently called out this provision in CEQA as allowing tiering from a geographically specific GHG reduction plan. The Court also recognized that GHG determinations in CEQA should be consistent with the statewide Scoping Plan goals, and that CEQA documents taking a goal-consistency approach may soon need to consider a project's effects on meeting the State's longer term post-2020 goals. The recommendation above that local governments develop local goals tied to the statewide per capita goals of six metric tons CO2 e by 2030 and no more than two metric

tons CO2 e per capita by 2050 provides guidance on CARB's view on what would be consistent with the 2017 Scoping Plan and the State's long-term goals.

Executive Order S-21-09 Renewable Portfolio Standard

On September 15, 2009, Governor Schwarzenegger issued Executive Order S-21-09. This Executive Order directed CARB to adopt a regulation consistent with the goal of Executive Order S-14-08 by July 31, 2010. CARB is further directed to work with the CPUC and CEC to ensure that the regulation builds upon the Renewable Portfolio Standard (RPS) program and is applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB is to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB adopted regulations to implement a "Renewable Electricity Standard," which would achieve the goal of the Executive Order with the following intermediate and final goals for use of renewable energy sources: 20 percent for 2012–2014, 24 percent for 2015–2017, 28 percent for 2018–2019, and 33 percent for 2020 and beyond. Under the regulation, the following would be considered sources of renewable energy: wind, solar, geothermal, small hydroelectric, biomass, ocean wave, thermal, and tidal energy; landfill and digester gas; and biodiesel. The regulation would apply to investor-owned utilities and public (municipal) utilities.

Senate Bill X1 2 – Renewable Portfolio Standard Expansion

On April 12, 2011, Governor Jerry Brown signed SB X1 2, which would expand the RPS by establishing a goal of 20 percent of the total electricity sold to retail customers in California per year, by December 31, 2013, and 33 percent by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts (MW) or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20 percent by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets, and the governing boards would be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

Executive Order B-16-2012 – Zero Emission Vehicles

Executive Order B-16-2012 (March 2012) specifically focuses on reducing emissions from California's vehicle fleet and directs that California achieve a 2050 target for GHG emission reductions from the transportation sector equaling 80 percent less than 1990 levels. This would be accomplished by achieving benchmarks by 2020 and 2025 for advancements of zero-emission vehicle (ZEV) infrastructure and technology advancement.

Executive Order B-30-15 – 2030 State-Wide Emission Reduction Target

Executive Order B-30-15 was signed by Governor Jerry Brown on April 29, 2015, establishing an interim state-wide GHG reduction target of 40 percent below 1990 levels by 2030, which is necessary to guide regulatory policy and investments in California in the midterm and put California on the most cost-effective path for long-term emission reductions. Under this Executive Order, all state agencies with jurisdiction over sources of GHG emissions are required to continue to develop and implement emissions reduction programs to reach the state's 2050 target and attain a level of emissions necessary to avoid dangerous climate change. According to the Governor's Office, this Executive Order is in line with the scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius (°C)—the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels.

California Green Building Standards Code

In 2013, the California Building Standards Commission adopted the 2013 California Green Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce 3 million metric tons (MMT) of GHG emissions by 2020, reduce water use by 20 percent or more, and divert 50 percent of construction waste from landfills. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014.

Clean Energy and Pollution Reduction Act

The Clean Energy and Pollution Reduction Act of 2015, SB 350 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 will (1) increase standards by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) require the State Energy Resources Conservation and Development Commission to establish annual targets for state-wide energy efficiency savings and demand reduction that would achieve a cumulative doubling of state-wide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provide for the evolution of the Independent

System Operator (ISO) into a regional organization; and (4) require the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions. This Act is intended to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation (Brown 2015).

c. Regional Plans, Policies, and Regulations

The South Coast Air Quality Management District (SCAQMD) released draft guidance regarding interim CEQA GHG significance thresholds. In its October 2008 document, the SCAQMD proposed the use of a percent emission reduction target (e.g., 30 percent) to determine significance for commercial/residential projects that emit greater than 3,000 metric tons (MT) per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MT per year for stationary source/industrial projects where the SCAQMD is lead agency. In addition, the Southern California Association of Governments (SCAG) provides a recommended threshold that applies to mixed-use and plan-level projects and is based on a performance standard of 4.1 $MMTCO_2e$ per service population annually.[1] The SCAQMD has not yet adopted any of the recommended thresholds; however, the intent is to provide thresholds that capture 90 percent of development projects.

d. Local Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to GHG emissions include the following.

Chapter 2, Community Development

> **LU 3.1 Sustainable Development Pattern**. Provide for an overall pattern of land uses that promotes efficient development; reduces pollution, automobile dependence, and greenhouse gas emissions and the expenditure of energy and other resources; ensures compatibility between uses; enhances community livability and public health; and sustains economic vitality.

[1] The concept of an "efficiency threshold" based on GHG emissions per service population (total number of residents and jobs for a given project or area) was formulated based on AB 32 and California Climate Change Scoping Plan reduction targets to provide for analysis and mitigation of both smaller and larger-sized development projects. The SCAQMD's proposed efficiency threshold of 4.8 metric tons of CO2e per service population annually correlates to achieving consistency with AB 32 and California Climate Change Scoping Plan GHG emissions reduction targets, and according to SCAQMD indicates indicates consistency with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of both small-scale and large-scale projects.

LU 5.4 Sustainable Sites and Land Development. Promote land development practices that reduce energy and water consumption, pollution, greenhouse gas emissions, and disposal of waste materials incorporating such techniques as:

a. Concentration of uses and design of development to promote walking, bicycling, and use of public transit in lieu of the automobile;
b. Capture and reuse of storm water on-site for irrigation;
c. Management of wastewater and use of recycled water, including encouraging the use of grey water;
d. Orientation of buildings to maximize opportunities for solar energy use, daylighting, and ventilation;
e. Use of landscapes that conserve water and reduce green waste;
f. Use of permeable paving materials or reduction of paved surfaces;
g. Shading of surface parking, walkways, and plazas and incorporation of solar technology; and/or
h. Recycling and/or salvaging for reuse of construction and demolition debris.

Chapter 3, Mobility/Circulation

RN 1.1 Regional Transportation Plan. Support the regional transportation and growth management plan to conserve energy, improve air quality, and reduce greenhouse gas emissions (GHG) as appropriate

TDM 1.3 GHG Emission Targets. Achieve greenhouse gas emission (GHG) targets through two principal strategies: reducing motor vehicle use and changing land use development patterns.

Chapter 4, Infrastructure

WS 1.6 Best Practices. Employ best practices to maintain the highest possible energy efficiency in the water infrastructure system to reduce costs and greenhouse gas emissions.

SS 1.6 Wastewater Best Practices. Work with OCSD to identify and implement, as feasible, best practices and technologies for wastewater collection and treatment including those that reduce the amount of wastewater requiring treatment, avoid sewage spills affecting stream courses and reservoirs, maintain the highest possible energy efficiency, and reduce costs and greenhouse gas emissions.

WQ 1.8 City Department Integration. Integrate water management planning, land use planning, watershed planning, environmental planning, greenhouse gas reductions,

climate change measures, and hazard mitigation planning into local decision-making processes to protect the watershed.

Chapter 6, Conservation/Natural Resources

AQ 1.2 Greenhouse Gas Emission Targets. Implement a Climate Action Plan (CAP) that defines transportation, energy, area source, water, and solid waste reduction measures for La Habra to achieve AB 32 compliant reduction targets and provide local transportation strategies that support the Sustainable Communities Strategy (SCS) adopted by the Southern California Association of Governments' (SCAG) in the 2012 Regional Transportation Plan.

City of La Habra Climate Action Plan

The City of La Habra (City) adopted a Climate Action Plan (CAP) in January 2014. The CAP was designed under the premise that the City and the community it represents are uniquely capable of addressing emissions associated with sources under the City's jurisdiction. The City's CAP acts as a guideline to ensure that reduction efforts are consistent with the AB 32 GHG emissions reduction target, and that the City will be providing local GHG reductions that will complement state efforts to reduce GHG emissions. The stated goals of the CAP are to:

- Provide a list of specific General Plan policies and goals that will reduce GHG emissions;
- Reduce emissions attributable to La Habra to levels at or below 1990[2] GHG emissions by year 2020 consistent with the target reductions of AB 32; and
- Reduce emissions attributable to La Habra to levels 30 percent below 2010 GHG emissions by year 2035.

As described in the CAP, 2020 is one of three milestones in GHG reduction planning. In addition to 2020 and 2035 reduction goals, Executive Order S-03-05 calls for a reduction of GHG emissions to a level 80 percent below 1990 levels by 2050, which is consistent with the estimated reductions needed to stabilize atmospheric levels of CO_2 at 450 parts per million (ppm). The CAP thus acknowledges that "there will be a need to start planning ahead for the post-2020 period" such that an updated CAP for the post-2020 period would be ready for full implementation, including potential new policies, revisions to the General Plan (as necessary), programs, ordinances, and financing by 2020. The updated plan is intended to include "a specific target for GHG reductions for 2035, 2040, and 2050. The targets will be consistent with broader State and federal reduction targets and with the scientific understanding of the needed reductions by 2050." As stated in the adopted CAP, the City intends to adopt the new CAP by January 1, 2020.

[2] Following the AB 32 Scoping Plan recommendation, 1990 levels of GHG emissions are approximated at 15 percent below baseline year 2010 GHG emissions.

Specific GHG reduction measures included in the adopted CAP are discussed in Section 3.9.5 below.

3.9.3 ENVIRONMENTAL SETTING

a. Greenhouse Gases and Global Climate Change

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there are varying estimates of the rate of global climate change and the extent of change that is attributable to human activities, there is general consensus in the scientific community that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The most important GHG in human-induced global warming is carbon dioxide (CO_2). While many gases have higher global warming potential than the naturally occurring GHGs, CO_2 is emitted in higher quantities and accounts for 84 percent of the global warming potential of all GHGs emitted within the United States. Fossil fuel combustion, especially from the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions, and thus substantial increases in global atmospheric CO_2 concentrations over the last century.

In addition to CO_2, the principal GHGs are methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, SF_6 is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF_6, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 22,800 times the global warming potential of CO_2. Therefore, an emission of one metric ton (MT) of SF_6 could be reported as an emission of 22,800 MT of CO_2e. Large emission sources are reported in million metric tons (MMT) of CO_2e. The principal GHGs, along with their global warming potential, are described as follows:

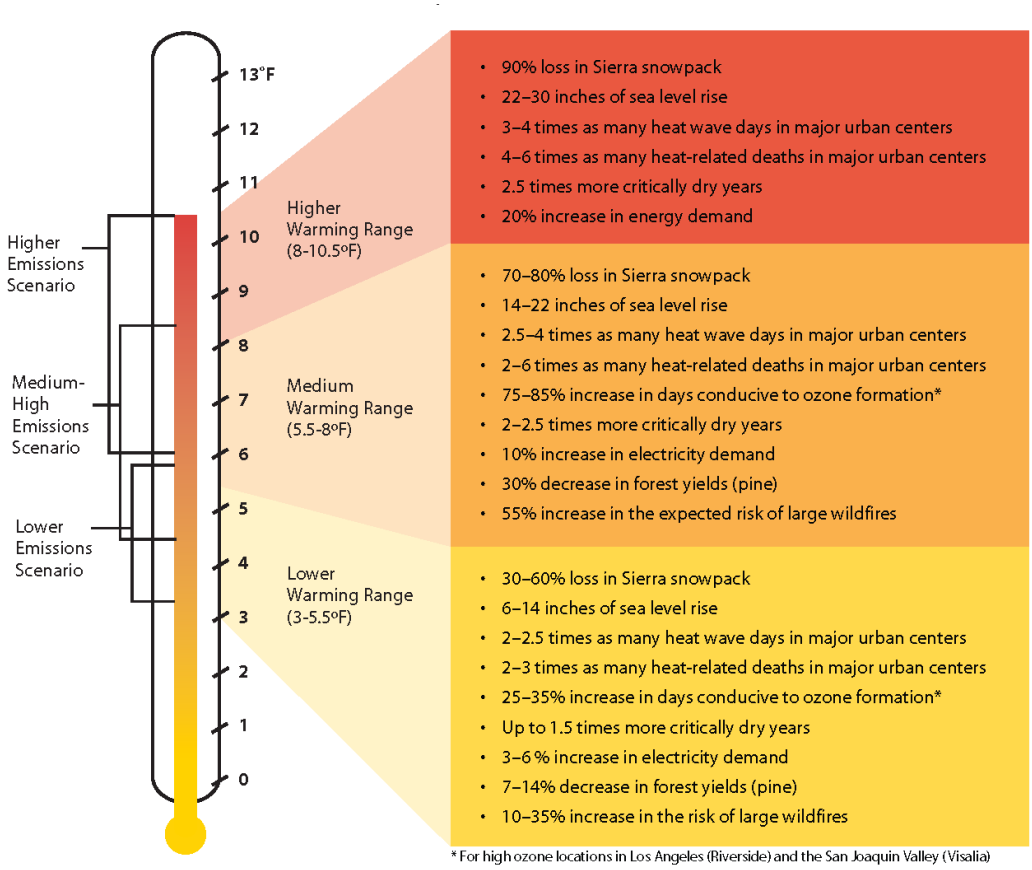
- **Carbon dioxide (CO_2)** is an odorless, colorless, natural GHG. Its global warming potential (GWP) is 1. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (man-made) sources are from burning coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.
- **Methane (CH_4)** is a flammable gas and is the main component of natural gas. Methane is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10 to 12 years), compared to other

GHGs. Its GWP is 28. Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.

- **Nitrous oxide (N_2O)** (laughing gas) is a colorless GHG that has a lifetime of 121 years, and its GWP is 265. Sources include microbial processes in soil and water, fuel combustion, and industrial processes. It is also used as an aerosol spray propellant.
- **Sulfur hexafluoride (SF_6)** is an inorganic, odorless, colorless, and non-toxic, non-flammable gas that has a lifetime of 3,200 years and the highest GWP of any GHG (23,900). This gas is man-made and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
- **Chlorofluorocarbons (CFCs)** are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are non-toxic, non-flammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs are no longer being used. First synthesized in 1928, they were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, an extremely successful global effort to halt their production was undertaken, and levels of the major CFCs are now remaining steady or declining.
- **Perfluorocarbons (PFCs)** have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above Earth's surface, are able to destroy the compounds. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Their GWP ranges from 7,000 to 11,000. Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
- **Hydrofluorocarbons (HFCs)** are synthetic, man-made chemicals that are used as a substitute for CFCs in applications such as automobile air conditioners and refrigerants. Their GWP ranges from 100 to 12,000.

Potential health effects related directly to the emissions of carbon dioxide, methane, and nitrous oxide from individual developments such as the Project are still being debated in the scientific community. Cumulatively, however, these GHG emissions have the potential to cause adverse effects on human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change would likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. **Figure 3.9-1** presents the potential impacts of global warming in California.

Figure 3.9-1
Projected Global Warming Impacts in California, 2070-2099 (As Compared with 1961-1990)



Source; University of California, Agriculture and Natural Resources, http://calag.ucanr.edu/Archive/?article=ca.v063n02p51.

b. Existing GHG Emissions at Project Site

As previously described, the Project site is currently developed as the Westridge Golf Club, a privately owned 18-hole golf course with 22,500 square feet of building floor area including a golf shop, clubhouse, and restaurant/banquet facility. It is estimated that the existing golf course use results in a total of 867.59 $MTCO_2e$ annually from stationary and mobile sources.

3.9.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of GHG emission impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

Threshold GHG-2 Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

3.9.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold GHG-1: Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact GHG-1: Development of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 8,095.99 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year in 2026 and 7,554.69 $MTCO_2e$ per year in 2030, which would exceed the South Coast Air Quality Management District (SCAQMD) screening threshold of 3,000 $MTCO_2e$ per year. In addition to 2019 CALGreen building code requirements, Mitigation Measures GHG-1a through GHG-1i set performance standards for the installation of solar panels and electric vehicle (EV) charging stations within the Project site, require provision of subsidies for EV purchases and transit use by residents, provide subsidies for purchase of up to three electric school buses, and include requirements for use of electric landscape maintenance equipment in common open spaces. These measures would also increase shading in commercial areas by 10 percent and reduce heat gain in commercial and multi-family residential areas by 50 percent. Implementation of these measures would achieve consistency with the City of La Habra's Climate Action Plan (CAP) and would reduce GHG emissions. However, even if stationary source emissions were reduced to zero and mobile source emissions mitigated through application of feasible mitigation measures recommended in the Partially Recirculated Draft EIR, mobile source emissions would still exceed 3,000 $MTCO_2e$. In addition, because the Project would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel, the Project would be inconsistent with the regional RTP/SCS. Therefore, even with the implementation of mitigation measures, the impact would be *significant and unavoidable*.

Methodology

Although GHG emissions from a single site-specific development project such as the proposed Rancho La Habra Specific Plan would not cause or measurably affect global climate change, GHG emissions from multiple projects throughout the world result in a cumulative impact with respect to global climate change. Therefore, analyses presented in this section of the Draft EIR evaluate the GHG emissions that would result from construction and operation of the proposed project by assessing their direct and indirect contribution to the cumulative environmental effects of GHG emissions.

Methodology for Determining Significance

Overview

The City has not adopted its own numeric threshold of significance for determining the significance of impacts with respect to GHG emissions and has therefore looked to CEQA Guidelines Section 15064.4 which incorporates recent court decisions into State CEQA Guidelines[3], for guidance. As stated in CEQA Guidelines Section 15064.4(b):

> "In determining the significant of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when assessing determining the significance of impacts from greenhouse gas emissions on the environment:
>
> (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
>
> (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
>
> (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must

[3] Current CEQA Guidelines (revised in 2019) identify the following additional court decisions as "authorities cited": Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497; Mission Bay Alliance v. Office of Community Investment & Infrastructure (2016) 6 Cal.App.5th 160; Center for Biological Diversity v. Dept. of Fish & Wildlife (2015) 62 Cal.4th 204; Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70.

> reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable."

To determine whether the Rancho La Habra Specific Plan would generate GHG emissions that either directly or indirectly may have a significant impact on the environment, this EIR relies on two tests:

(1) The first test is based on guidance provided by the SCAQMD suggesting use of a 3,000 $MTCO_2e$ per year screening threshold for all non-industrial projects.

(2) The second test is based on compliance with the State of California's long-term climate goals or strategies through an analysis of the Project's consistency with the (a) applicable goals and policies of CARB's 2017 Scoping Plan, (b) the Southern California Association of Government's (SCAG's) Regional Transportation Plan/ Sustainable Community Strategy (SCAG RTP/SCS), which is the SB 375 Sustainable Communities Strategy applicable to the Project, and (c) the City of La Habra's CAP.

Substantial Evidence for Use of a 3,000 $MTCO_2e$ per Year Emissions Threshold

In December 2008, the SCAQMD proposed, but did not adopt, a 3,000 $MTCO_2e$ per year threshold for mixed-use developments, a 3,500 $MTCO_2e$ per year threshold for residential developments, and a 1,400 $MTCO_{2e}$ per year threshold for commercial developments.[4] The SCAQMD has also recommended the use of a single numerical threshold of 3,000 $MTCO_2e$ per year for all non-industrial projects.

The threshold of 3,000 $MTCO_2e$ per year suggested by the SCAQMD is intended as a screening threshold that would "achieve an emission capture rate of 90 percent of all new or modified stationary source projects" as described the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold") based on SCAQMD's policy objective for its interim GHG significance threshold. As noted by the SCAQMD, such a threshold would "exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions… based on the fact that [SCAQMD] staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 [MMTCO2e/yr]). In addition, these

[4] In December 2008, the SCAQMD also adopted a 10,000 $MTCO_2e$ per year CEQA threshold to be used for industrial facilities when the SCAQMD is the lead agency.

small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to [Best Available Control Technology] (BACT) for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility."

While CARB has acknowledged that the use of a zero-emissions threshold may be achievable in certain cases, no city or county in California has adopted a zero-emissions significance threshold for residential or commercial projects. As the California Supreme Court has observed, for "residential and commercial development, which are designed to accommodate long-term growth in California's population and economic activity ... a certain amount of greenhouse gas emissions is as inevitable as population growth."

Use of the 3,000 MTCO2e per year of GHG emissions screening threshold as a significance criterion would subject 90 percent of all new or modified stationary source projects representing over 99 percent of future 2050 statewide GHG emissions to mitigation requirements due to the cumulative significance of GHG emissions impacts. Thus, based on guidance from the SCAQMD, if a non-industrial project would emit 3,000 $MTCO_2e$ or more per year of GHG, the project would be considered a substantial GHG emitter and the project's GHG impact would be considered to be significant, requiring additional analysis and mitigation.

Substantial Evidence for Use of Compliance with Plans Adopted for the Purpose of Achieving State of California GHG Reduction Targets

Using consistency with AB 32's state-wide goal for GHG reduction, rather than a numerical threshold, as a significance criterion is also consistent with the broad guidance provided by Section 15064.4 of the CEQA Guidelines. Section 15064.4 was drafted to reflect "the existing CEQA principle that there is no iron-clad definition of 'significance.'" Section 15064.4 was not intended to closely restrict agency discretion in choosing a method for assessing greenhouse gas emissions, but rather "to assist lead agencies" in investigating and disclosing "all that they reasonably can" regarding a project's GHG emissions impacts. While CEQA Guidelines Section 15064.4 states a lead agency "should consider," among other factors, "[t]he extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting" (id., subd. (b)(1)) and "[w]hether the project emissions exceed a threshold of significance that the lead agency determines applies to the project" (id., subd. (b)(2)), the factors listed in subdivision (b) are not exclusive but are rather intended "to assist lead agencies in collecting and considering information relevant to a project's incremental contribution of GHG emissions and the overall context of such emissions." (Center for Biological Diversity v. Cal. Dep't of Fish and Wildlife (2015) 62 Cal.4th 204.)

In addition to the 3,000 $MTCO_2e$ per year screening threshold suggested by the SCAQMD for all non-industrial projects, and consistent with CEQA Guidelines Section 15064.4, a qualitative analysis and the application of performance-based methodology for determining whether the Project's incremental contribution to climate change would be cumulatively considerable was

undertaken. Thus, regardless of whether the Project's GHG emissions exceed 3,000 $MTCO_2e$ per year or not, this EIR considers the extent to which the Project complies with the State of California's long-term climate goals or strategies through an analysis of the Project's consistency with the applicable goals and policies of CARB's 2017 Scoping Plan and the City's CAP.

The Project would be considered to have a significant impact if it would either:

(1) Generate 3,000 $MTCO_2e$ or more per year, **or**

(2) Be inconsistent with applicable goals and policies of:

   a. CARB's 2017 Scoping Plan;

   b. The Southern California Association of Government's (SCAG's) Regional Transportation Plan/Sustainable Community Strategy (SCAG RTP/SCS), which is the SB 375 Sustainable Communities Strategy applicable to the Project; or

   c. The City of La Habra's Climate Action Plan.

Analytical Methodology

GHG emissions from the existing Westridge Golf Club and the proposed Rancho La Habra Specific Plan were estimated using the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2, which was developed to accurately calculate construction-source and operational-source criteria pollutant (nitrogen oxides [NO_x], volatile organic compounds [VOCs], respirable particulate matter [PM_{10}], fine particulate matter [$PM_{2.5}$], sulfur oxides [So_x], and carbon monoxide [CO]) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures.

For construction phase emissions, GHGs were quantified and amortized over an assumed project life of 30 years as recommended by the SCAQMD. Amortized GHG construction emissions were then added to annual operational GHG emissions to determine total annual GHG emissions.

Operational GHG emissions were analyzed as follows:

- Building energy use (combustion emissions associated with natural gas and electricity) GHG emissions were analyzed using CalEEMod™ default parameters.
- Water supply, treatment, and distribution GHG emissions were analyzed using CalEEMod™ default parameters.
- Solid waste GHG emissions were analyzed using CalEEMod™ default parameters.
- Mobile source emissions were estimated through CalEEMod™ using traffic generation figures derived from the Rancho La Habra Traffic Impact Analysis.
- Stationary source emissions were estimated through CalEEMod™ based on the assumption that a 500 horsepower, diesel-powered emergency generator may be in use for up to a total

of 50 hours per year within the proposed commercial area and Community Center (25 hours of operation each).

Impact Assessment

Net Increase in GHG Emissions

Construction activities associated with the Rancho La Habra Specific Plan would result in emissions of CO_2 and CH_4. A total of 9,051.24 $MTCO_2e$ would be generated during construction. Amortized over 30 years, annual construction emissions would be 301.71 $MTCO_2e$.

Operational activities associated with the proposed Rancho La Habra Specific Plan would result in emissions of CO_2, CH_4, and N_2O from the following primary sources:

- **Building Energy Use.** GHGs would be emitted from buildings as a result electrical and natural gas use. Combustion of natural gas to heat water and buildings emits CO_2 and other GHGs directly into the atmosphere. GHGs are also emitted during the generation of electricity from fossil fuels at off-site generating plants; these are considered to be indirect emissions.
- **Water Supply, Treatment, and Distribution.** Indirect GHG emissions would result from the production of electricity used to convey, treat, and distribute water and wastewater.
- **Solid Waste.** Residential and retail land uses would result in the generation and disposal of solid waste. A large percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste (i.e., the waste not diverted) would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material.
- **Mobile Sources.** These emissions sources would include the typical daily operation of motor vehicles by residents, visitors, and commercial area employees and customers.
- **Stationary Sources.** These emissions sources would include the potential use of a diesel-powered emergency generator within the proposed commercial area and Community Center during power outages.

As shown in **Table 3.9-1**, the Project's net total GHG emissions would be approximately 8,095.99 $MTCO2e$ per year in 2026 and 7,554.69 $MTCO_2e$ per year in 2030. These figures are based on commercial development within Planning Area 5, which results in a greater level of emissions and therefore a worst-case analysis compared to the alternative multi-family use of that Planning Area.

Table 3.9-1
Net Total Project Greenhouse Gas Emissions (Annual)

Emission Source	Emissions (Metric Tons Per Year)			
	CO_2	CH_4	N_2O	Total CO_2e
Year 2026				
Annual Construction-Related Emissions Amortized Over 30 Years	300.56	0.04	0.00	307.71
Area	98.32	8.56E-03	0.00	99.03
Energy	1,085.98	0.05	0.02	1,092.48
Mobile Source	4,862.71	0.32	0.00	4,870.63
Stationary	9.52	1.33E-03	0.00	9.55
Waste	142.53	8.42	0.00	353.12
Water Usage	206.42	1.08	0.03	241.77
Vegetation	1,995.39	0.00	0.00	1,995.39
Project Total CO_2e (All Sources)		**8,963.58**		
Existing Total CO_2e (All Sources)		**867.59**		
Net Total Increase CO_2e		**8,095.99**		
SCAQMD Suggested Threshold		**3,000**		
Significant?		**YES**		
Year 2030				
Annual Construction-Related Emissions Amortized Over 30 Years	300.56	0.04	0.00	307.71
Area	98.32	8.56E-03	0.00	99.03
Energy	1,008.76	0.05	1.67E-03	1,015.27
Mobile Source	4,422.23	0.29	0.00	4,430.01
Stationary	9.52	1.33E-03	0.00	9.55
Waste	142.53	8.42	0.00	353.12
Water Usage	182.94	1.08	0.03	218.29
Vegetation	1,995.39	0.00	0.00	1,995.39
Project Total CO_2e (All Sources)		**8,422.28**		
Existing Total CO_2e (All Sources)		**867.59**		
Net Total Increase CO_2e		**7,554.69**		
SCAQMD Suggested Threshold		**3,000**		
Significant?		**YES**		

Source: Rancho La Habra Greenhouse Gas Analysis, 2019.

Compliance with the State of California's Long-Term Climate Goals/Strategies

CARB 2017 Scoping Plan

Table 3.9-2 addresses consistency with the 2017 Scoping Plan Update, which reflects the 2030 target of a 40 percent reduction below 1990 levels codified by SB 32.

SCAG's Regional Transportation Plan/Sustainable Community Strategy (SCAG RTP/SCS)

The analysis of the Project's consistency with the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) conducted for Impact LUP-2.1 of the Draft EIR concluded that the proposed Specific Plan would be inconsistent with the RTP/SCS. As indicated in Draft EIR Table 3.2-1, the Project would be inconsistent with the following goals and policy of the RTP/SCS.

Table 3.9-2
Project Consistency with State of California 2017 Climate Change Scoping Plan

Action	Consistency
Implement SB 350 by 2030	
Increase the Renewables Portfolio Standard to 50 percent of retail sales by 2030 and ensure grid reliability.	**Consistent**. This measure is not directly applicable to development projects, but the Project would use energy from Southern California Edison, which has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	**Consistent**. Although this measure is directed toward policymakers, the Project would be designed and constructed to implement energy efficiency measures for new residential and commercial developments in excess of applicable code requirements and would include several measures designed to reduce energy consumption.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.	**Consistent**. The Project would be designed and constructed to implement the energy efficiency measures, where applicable, by including several measures designed to reduce energy consumption. The Project would include energy-efficient field lighting and fixtures that meet the current Title 24 standards throughout the Project site and would be a modern development with energy-efficient boilers, heaters, and air conditioning systems. The Project would also be designed and constructed to implement energy efficiency measures for new residential and commercial developments in excess of applicable code requirements.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)	
At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles (EV) by 2025. At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.	**Consistent**. 240-volt circuits and EV chargers would be installed in each home. Subsidies would be provided to initial homebuyers for purchase of EVs. EV charging stations would be provided in multi-family residential and commercial areas.

Action	Consistency
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
Medium- and Heavy-Duty GHG Phase 2.	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project. However, the Project would provide subsidies for purchase of EVs by initial homeowners and for transit use by residents. The Project would also provide a subsidy for purchase of electric buses by local school districts.
Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	**Not Applicable**. The Project does not include freight transport.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."	**Consistent.** The Project would provide subsidies for purchase of EVs by initial homeowners and for transit use by residents. The Project would also provide a subsidy for purchase of electric buses by local school districts.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
By 2019, Adjust Performance Measures Used to Select and Design Transportation Facilities	
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project. The Project would provide subsidies for transit use by residents.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project. The Project would provide subsidies for transit use by residents.
Implement California Sustainable Freight Action Plan	
Improve freight system efficiency.	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project. When adopted, this measure would apply to all trucks traveling to and from the Project site, possibly including existing trucks or new trucks that are part of the state-wide goods movement sector.

Action	Consistency
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18 percent.	**Not Applicable**. This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project. When adopted, this measure would apply to all fuel purchased and used by the Project in the state.
Implement the Short-Lived Climate Pollutant Strategy by 2030	
40 percent reduction in methane and hydrofluorocarbon emissions below 2013 levels.	**Consistent.** When this measure is adopted, the Project would be required to comply with the Short-Lived Climate Pollutant Strategy measure.
50 percent reduction in black carbon emissions below 2013 levels.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
By 2018, Develop Integrated Natural and Working Lands Implementation Plan to Secure California's Land Base as a Carbon Sink	
Protect land from conversion through conservation easements and other incentives.	**Not Applicable.** This measure is intended to be implemented on a state-wide scale. The Project would, however, represent a loss of open land.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.	**Not Applicable.** This measure is intended to be implemented on a state-wide scale.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments	**Not Applicable.** This measure is intended to be implemented on a state-wide scale.
Establish scenario projections to serve as the foundation for the Implementation Plan.	**Not Applicable.** This measure is intended to be implemented on a state-wide scale.
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.	**Not Applicable.** This measure is intended to be implemented on a state-wide scale.
Implement Forest Carbon Plan.	**Not Applicable.** This measure is beyond the City's authority to require and cannot be implemented for a site-specific development project.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	**Not Applicable.** This measure is intended to be implemented on a state-wide scale.

- **RTP/SCS Goal: Maximize mobility and accessibility for all people and goods in the region.**

  The proposed Specific Plan would place additional low-density housing dependent on vehicular access in an area already experiencing substantial congestion. The proposed Specific Plan would provide improvements to area pedestrian and bicycle facilities, but the area is without access to convenient transit service to major jobs centers other than bus service along Beach Boulevard.

- **RTP/SCS Goal: Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).**

  The proposed Specific Plan would be inconsistent with the adopted Air Quality Management Plan, result in significant unavoidable air quality impacts, and exceed SCAQMD's suggested screening GHG emissions threshold of 3,000 $MTCO_2e$. While the Project would provide substantial bicycle and pedestrian facilities on-site, it would also introduce housing in an area without major transit. The result would be reliance on the use of automobile travel.

- **RTP/SCS Goal: Encourage land use and growth patterns that facilitate transit and active transportation.**

  The proposed Specific Plan would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel.

- **RTP/SCS Policy: Plan for additional housing and jobs near transit.**

  The Specific Plan would substantially increase the number of dwelling units in an area without major transit.

Consistency with the City of La Habra's CAP

Table 3.9-3 identifies GHG reduction measures set forth in the City's CAP and evaluates the extent to which the Project would implement those measures.

Table 3.9-3
Project Implementation of Applicable Greenhouse Gas Reduction Measures in La Habra Climate Action Plan

Applicable Climate Action Plan Measures		Measure Implemented?
Transportation Measures		
R2-T1	**Land Use Based Trips and VMT Reduction Policies**. By changing the focus of land use from automobile centered transportation to walkable mixed-use development, this measure seeks to achieve a reduction in vehicle miles traveled.	**Not Applicable**. While the Project includes a commercial component, the Specific Plan also provides the potential for the commercial area to be developed for multi-family residential use. The Project site is not identified in the General Plan or CAP as an opportunity area for mixed-use development. The Project would, however, be located adjacent to major commercial development and provide on-site open space uses.

	Applicable Climate Action Plan Measures	Measure Implemented?
R2-T2	**Bicycle Infrastructure**. This measure provides for implementation of General Plan policies related to improvements of the city's bicycle facilities, along with provision of secure bicycle parking to encourage use of bicycles for commuting, shopping, and recreational purposes.	**Implemented**. The Project would provide access to the Coyote Creek Bikeway. In addition, pursuant to Policy AT 2.8 of the City General Plan, a percentage of parking spaces would be set aside in the non-residential land uses to accommodate secure bicycle parking.
R2-T3	**Electric Vehicle Incentives Program**. This program reflects General Plan Policy AQ 4.5 which encourages use of zero-emission vehicles, low-emission vehicles, bicycles, and other non-motorized vehicles and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in multi-family residential, mixed-use, and high-density centers and corridors.	**Implemented.** The Project would encourage the use of zero-emission vehicles and low-emission vehicles by providing incentives for the purchase of electric vehicles by homeowners, charging facilities within single-family homes, and charging stations within commercial and multi-family residential areas (see Mitigation Measures GHG-1a, GHG-1b, and GHG-1c).
	Energy Reduction Measures	
R2-E1	**New Construction Residential Energy Efficiency Requirements**. This measure facilitates the implementation of energy efficient design for all new residential buildings to be 20 percent beyond the current Title 24 Standards.	**Implemented**. The Project would incorporate applicable energy efficiency measures for residential buildings to demonstrate a minimum 20 percent improvement over current Title 24 Standards. This measure would be implemented through compliance with the 2019 CALGreen building code.
R2-E2	**New Construction Residential Renewable Energy**. This measure facilitates the voluntary incorporation of renewable energy (such as photovoltaic panels) into new residential developments.	**Implemented**. This voluntary program would become mandatory for the Project. Single-family dwelling units and multi-family residential structures would be required to have solar panel systems installed. This measure is addressed in Mitigation Measures GHG-1a and GHG-1b.
R2-E5	**New Commercial Energy Efficiency Requirements**. This measure facilitates the implementation of energy-efficient design for all new commercial buildings to be 20 percent beyond the current Title 24 Standards.	**Implemented**. This measure would be implemented through compliance with the 2019 CALGreen building code. Additional measures such as installation of solar panel systems are addressed in Mitigation Measure GHG-1d.
R2-E6	**New Commercial/Industrial Renewable Energy**. This measure facilitates the voluntary incorporation of renewable energy (such as photovoltaic panels) into new commercial/ industrial developments.	**Implemented**. This voluntary program would become mandatory for the Project. Commercial structures would be required to have solar panel systems installed. This measure is addressed in Mitigation Measure GHG-1d.
R2-A1	**Electric Landscape Equipment Program**. This measure encourages the use of electric landscaping equipment instead of traditional gas-powered equipment. The measure is implemented by requiring new developments to install outdoor electric outlets and requiring landscape maintenance of large mixed-use and commercial development to use electric landscape equipment.	**Implemented**. Information regarding the SCAQMD's electric lawn equipment program would be provided to initial homeowners within the Project site and outdoor electrical outlets would be provided to facilitate use of electric lawn equipment (see Mitigation Measure GHG-1a). In addition, all multi-family structures would be designed with outdoor electrical outlets provided to facilitate use of electric lawn equipment (see Mitigation Measure GHG-1a). Parks and open space areas would be designed to facilitate use of electric landscape equipment (see Mitigation Measure GHG-1g) and contracts for maintenance of common space areas would include provisions requiring use of electric landscape equipment (see Mitigation Measure GHG-1h).

	Applicable Climate Action Plan Measures	Measure Implemented?
	Area Source Reduction Measures	
R3-A1	**Expand City Tree Planning**. This measure encourages commercial and retail developments to exceed the shading requirements by a minimum of 10 percent and to plant low-emission trees.	**Implemented**. Commercial development would be required to exceed applicable City shading requirements by a minimum of 10 percent and to plant low emission trees (see Mitigation Measure GHG-1i).
R3-A2	**Heat Island Plan.** The measure promotes the use of cool roofs, cool pavements, and parking lot shading. The measure is implemented by encouraging new developments incorporate strategies to reduce heat gain by 50 percent.	**Implemented.** Commercial and multi-family residential development would be required to implement sufficient measures to reduce heat gain by 50 percent. This measure is addressed in Mitigation Measure GHG-1h.
	Water Reduction Measures	
R2-W1	**Water Use Reduction Initiative.** Among other City actions, this measure provides incentives for developers to comply with the California Green Building Standards Code as requirements for all new development. Under this code, new developments are required to reduce indoor potable water use by 20 percent beyond the Energy Policy Act of 1992 fixture performance requirements, and to reduce outdoor potable water use by 50 percent from a mid-summer baseline average consumption through irrigation efficiency, native plant selection, and the use of recycled water and/or captured rainwater, for example.	**Implemented.** The Project would comply with California Green Building Standards Code requirements regarding indoor and outdoor water conservation.
R2-S1	**City Diversion Program.** This measure would implement a city-wide waste diversion goal of diverting 75 percent of all waste from landfills by 2020.	**Implemented.** The Project would implement the city-wide measures established in relation to this measure. Additionally, the Project would comply with Municipal Code Section 15.78.040 by implementing a Waste Management Plan for Project construction and demolition activities.

Source: Rancho La Habra Greenhouse Gas Analysis, 2019.

Significance Conclusion for Impact GHG-1

The total increase in annual GHG emissions (7,554.69 $MTCO_2e$), including construction and operational emissions, would exceed the SCAQMD's suggested screening threshold of 3,000 $MTCO_2e$. In addition, the Project is inconsistent with three goals and one policy of the regional RTP/SCS. Therefore, the net increase in GHG emissions that would result from Specific Plan development would be significant, and mitigation measures would be required.

Mitigation Measures

Mitigation Measure GHG-1a: All new single-family homes shall have the following installed:

- Solar panels providing 1.5 watts (W) solar energy per square foot of building area (e.g., 2,000-square-foot home = 3 kilowatts [kW]) with a minimum 2 kW per home to the extent determined feasible by the City.
- Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating.
- A minimum of one single-port electric vehicle (EV) charging station that achieves a similar or better functionality as a Level 2 charging station.
- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the single-family property.

In addition, initial homebuyers within the Project site shall be provided with information regarding all current SCAQMD programs designed to encourage homeowners to use electrical lawnmowers and replace gasoline-powered yard maintenance equipment with electric-powered equipment.

Mitigation Measure GHG-1b: All new multi-family dwelling units shall be all electric, meaning that electricity is the only permanent source of energy for water heating, mechanical powering, space heating and cooling (i.e., heating, ventilation, and air conditioning [HVAC]), cooking, and clothes drying and there is no gas meter connection. All major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, and water heaters) provided and/or installed shall be electric-powered Energy Star-certified or of equivalent energy efficiency where applicable.

In addition, all new multi-family homes shall have the following installed:

- Solar panels providing 0.75 W solar energy per square foot of building area (e.g., 20,000-square-foot building = 15 kW), to the extent determined feasible by the City;
- Electric vehicle charging equipment that achieves a similar or better functionality as a Level 2 charging station for 5 percent of the total number of parking spaces; and
- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1c: The Project applicant or its designee shall establish and fund a dedicated account for the provision of subsidies for the purchase by homeowners within the first year of occupancy of a zero-emission vehicles (ZEV), as defined by the California Air Resources Board (CARB) equal to the provision of a $1,000 subsidy per residence, available on a first-come, first-served basis, for up to 50 percent of the Project's for-sale dwelling units.

Mitigation Measure GHG-1d: All new non-residential buildings, including commercial buildings and the clubhouse/Community Center, shall have the following installed:

- Solar panels providing at least 1 W per square foot of building area (e.g., 20,000 square feet = 20 kW), unless the installation is impracticable as determined by the City. Solar panels for the clubhouse/Community Center may be installed within adjacent parking areas.
- Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating.
- Electric vehicle (EV) charging equipment that achieves a similar or better functionality as a Level 2 charging station with the minimum number of charging stations being no less than 7.5 percent of the total number of parking spaces. In the event that the installed charging stations provide superior functionality/technology than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2

charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour.

- Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1e: The Project applicant or its designee shall provide a subsidy of $50,000 per bus for the replacement of up to a total of 3 diesel or compressed natural gas school buses with electric zero emission buses by the La Habra City School District, Lowell Joint School District, and/or Fullerton Joint Union High School District.

Mitigation Measure GHG-1f: Parks and open space within the Project site shall be designed to facilitate the use of electric landscape equipment throughout the property.

Mitigation Measure GHG-1g: Contracts for maintenance of common open space within the Project site, as well as contracts for maintenance of multi-family residential or commercial landscaped areas within Planning Area 5, shall include requirements for use of electric landscape equipment.

Mitigation Measure GHG-1h: Commercial and multi-family development shall implement sufficient measures to reduce heat gain by 50 percent (CAP Measure R3-A2).

Mitigation Measure GHG-1i: Commercial development shall exceed applicable City shading requirements by a minimum of 10 percent and plant low-emission trees (CAP Measure R3-A1).

Significance Conclusion for Impact GHG-1 with Implementation of Mitigation Measures

In addition to 2019 CALGreen building code requirements, to reduce the Project's GHG impacts, **Mitigation Measures GHG-1a** through **GHG-1i** set performance standards for the installation of solar panels and EV charging stations within the Project site, require provision of subsidies for EV purchases and transit use by residents, require subsidies for purchase of up to three electric school buses by area school districts, and require use of electric landscape maintenance equipment in common open spaces. These measures would also increase shading

in commercial areas by 10 percent and reduce heat gain in commercial and multi-family residential areas by 50 percent.

Implementation of these measures would achieve consistency with the City's CAP and would reduce GHG emissions. However, even if stationary source emissions were reduced to zero and mobile source emissions mitigated through application of feasible mitigation measures recommended in the Partially Recirculated Draft EIR, the mobile source emissions alone would still cause a net increase in GHG emissions exceeding 3,000 $MTCO_2e$. In addition, because the Project would introduce increased housing in an area without major transit and increase reliance on the use of automobile travel, the Project would be inconsistent with the regional RTP/SCS.

Therefore, even with the implementation of mitigation measures, the impact would be significant and unavoidable.

Threshold GHG-2:	**Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.**
Impact GHG-2:	**The Project would implement all applicable measures from the State of California's 2017 Scoping Plan and the City of La Habra's Climate Action Plan (CAP), including programs identified to reach GHG reduction targets through 2030 and 2035, respectively. Although Mitigation Measures GHG-1a, GHG-1b, GHG-1c, GHG-1d, GHG-1g, GHG-1h, and GHG-1i would achieve consistency with the City's CAP and the 2017 Scoping Plan, the Project would remain inconsistent with three goals and one policy of the regional RTP/SCS. This impact would therefore be *significant and unavoidable*.**

Methodology

A significant impact would occur if the proposed Specific Plan would be:

- Inconsistent with the 2017 Scoping Plan Update, which reflects a 2030 GHG emissions reduction target of 40 percent below 1990 levels as codified by SB 32;
- Inconsistent with the Regional Transportation Plan/Sustainable Community Strategy, which is the SB 375 Sustainable Communities Strategy applicable to the Project or
- Fail to implement applicable GHG reduction measures set forth in the City's CAP.

Impact Assessment

Consistency with 2017 Scoping Plan Update

Table 3.9-2, above, addresses consistency with the CARB 2017 Scoping Plan Update, which reflects the 2030 target of a 40 percent reduction below 1990 levels codified by SB 32. The analysis provided in that Table demonstrates that the Project would be consistent with the provisions of the CARB 2017 Scoping Plan Update.

Consistency with the Regional RTP/SCS

The analysis provided in response to Impact GHG-1 concludes that the Project would be inconsistent with three goals and one policy of the RTP/SCS since the Specific Plan would increase housing in an area without major transit and increase reliance on the use of automobile travel.

Implementation of La Habra Climate Action Plan GHG Reduction Measures

Table 3.9-3 identifies GHG reduction measures set forth in the City's CAP and evaluates the extent to which the Project would implement those measures.

Significance Conclusion for Impact GHG-2

The Project would implement all applicable measures from the State of California's 2017 Scoping Plan and the City of La Habra's Climate Action Plan (CAP), including programs identified to reach GHG reduction targets through 2030 and 2035, respectively. Although Mitigation Measures GHG-1a, GHG-1b, GHG-1c, GHG-1d, GHG-1g, GHG-1h, and GHG-1i would achieve consistency with the City's CAP and the 2017 Scoping Plan, the Project would remain inconsistent with three goals and one policy of the regional RTP/SCS. This impact would therefore be significant and unavoidable.

3.9.6 REFERENCES

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3.10 ENERGY RESOURCES

3.10.1 INTRODUCTION

This section assesses the significance of the use of energy, including electricity, natural gas, and gasoline and diesel fuels, that would result from the proposed Rancho La Habra Specific Plan. This section discusses existing energy use patterns and examines whether the proposed Specific Plan would result in the consumption of large amounts of fuel or energy or use of such resources in a wasteful manner.

Refer to Section 3.9, *Greenhouse Gas Emissions*, for a discussion of the relationship between energy consumption and greenhouse gas (GHG) emissions. Refer to Draft EIR Section 3.16, *Utilities, Service Systems, and Water Supply*, for a discussion of water consumption.

3.10.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of federal, state, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

In response to the *Massachusetts et al. vs. Environmental Protection Agency et al.* ruling, the Bush Administration issued an executive order on May 14, 2007, directing the U.S. Environmental Protection Agency (USEPA) and U.S. Department of Transportation (US DOT) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law, requiring an increased Corporate Average Fuel Economy (CAFÉ) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by the 2020 model year.

In addition to setting increased CAFÉ standards for motor vehicles, the Energy Independence and Security Act includes the following additional provisions:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the Act address energy savings in government and public institutions, promotion of research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

b. State Plans, Policies, and Regulations

California Public Utilities Commission Plans and Programs

The California Public Utilities Commission (CPUC) has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. The CPUC has established rules for the planning and construction of new transmission facilities, distribution facilities, and substations. Utility companies are required to obtain permits to construct certain power line facilities or substations. The CPUC also has jurisdiction over the siting of natural gas transmission lines.

The CPUC regulates distributed energy generation policies and programs for both customers and utilities. This includes incentive programs (e.g., California Solar Initiative) and net energy metering policies. Net energy metering allows customers to receive a financial credit for power generated by their on-site system and fed back to the utility. The CPUC is involved with utilities through a variety of energy procurement programs, including the Renewable Portfolio Standard program.

In 2008, the CPUC adopted the Long Term Energy Efficiency Strategic Plan, which is a road map to achieving maximum energy savings in California through 2020. Consistent with California's energy policy and electricity "loading order," the Energy Efficiency Strategic Plan indicates that energy efficiency is the highest priority resource in meeting California's energy needs. The CPUC also adopted energy goals that require all new residential construction in California to be zero net energy by 2020. The zero net energy goal means new buildings must use a combination of improved efficiency and distributed renewable energy generation to meet 100 percent of their annual energy need. In addition to the zero net energy goals for residential buildings by 2020, the CPUC has adopted goals that all new commercial construction in California will be zero net energy by 2030 and 50 percent of existing commercial buildings will be retrofit to zero net energy by 2030.

California Green Building Standards Code, California Code of Regulations Title 24

The 2013 California Green Building Standards Code ([Title 24] California Code of Regulations [CCR] Part 11 [CALGreen Code]) took effect January 1, 2014. These comprehensive regulations are designed to achieve major reductions in GHG emissions, energy consumption, and water use. The CALGreen Code requires every new building constructed in California to reduce water consumption by 20 percent, divert 50 percent of construction waste from landfills, and install low-pollutant-emitting materials. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects and mandatory inspections of energy systems (e.g., heat furnace, air conditioner, and mechanical equipment) for non-residential buildings larger than

10,000 square feet to ensure that all are working at their maximum capacity and according to their design efficiencies.

Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (Senate Bill [SB] 350) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased from 33 percent to 50 percent by December 31, 2030, thereby doubling energy efficiency within the state. SB 350 revises the California Renewable Portfolio Standard program and certain other requirements for public utilities and publicly owned electric utilities. SB 350 also requires local publicly owned electric utilities to establish annual targets for energy efficiency savings and demand reduction consistent with a state-wide goal established by the CPUC and provides incentives for electrification of rail facilities. Local utilities would be required to develop more detailed strategies and incentives for use of renewable energy sources, resulting in an increased demand for renewable energy generation.

SB 350 emphasizes the important role of electric vehicles in California's overall scheme to combat climate change, declaring that "[d]eploying electric vehicles should assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers...." The bill promotes the development of additional electric vehicle charging infrastructure to encourage greater use of electric cars and requires electrical utilities to include expansion of electrical vehicle charging facilities as part of their strategies and incentives for reducing overall energy consumption.

SB 350 does not establish specific development standards for projects such as the proposed Rancho La Habra Specific Plan.

Assembly Bill 1007 (Pavley, Chapter 371, Statutes of 2005)

Assembly Bill (AB) 1007 required the California Energy Commission (CEC) to prepare a state plan (State Alternative Fuels Plan) to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board (CARB) and in consultation with other state, federal, and local agencies. The final State Alternative Fuels Plan, published in December 2007, attempts to achieve an 80 percent reduction in GHG emissions associated with personal transportation, even as California's population increases. Measures proposed that would reduce petroleum fuel use include:

1. Lowering the energy needed for personal transportation by tripling the energy efficiency of on-road vehicles by 2050 through:
    a. Conventional gas, diesel, and flexible fuel vehicles (FFVs) averaging more than 40 mpg.
    b. Hybrid gas, diesel, and FFVs averaging almost 60 mpg.

c. All electric and plug-in hybrid electric vehicles (PHEVs) averaging well over 100 mpg (on a GHG equivalents [GGE] basis) on the electricity cycle.

d. Fuel cell vehicles (FCVs) averaging over 80 mpg (on a GGE basis).

2. Moderating growth in per capita driving, reducing today's average per capita driving miles by about 5 percent or back to 1990 levels.
3. Changing the energy sources for transportation fuels from the current 96 percent petroleum-based to approximately:
   a. 30 percent from gasoline and diesel from traditional petroleum sources or lower GHG emission fossil fuels such as natural gas.
   b. 30 percent from transportation biofuels.
   c. 40 percent from a mix of electricity and hydrogen.
4. Producing transportation biofuels, electricity, and hydrogen from renewable or very low carbon-emitting technologies that result in, on average, at least 80 percent lower life cycle GHG emissions than conventional fuels.
5. Encouraging more efficient land uses and greater use of mass transit, public transportation, and other means of moving goods and people.

Performance Standard for Baseload Power Generation

SB 1368 (Chapter 598, Statutes of 2006) required the CPUC to establish a GHG emissions performance standard for "baseload" generation from investor-owned utilities of 1,100 pounds of carbon dioxide (CO_2) per megawatt-hour (MWh). The CEC established a similar standard for local publicly owned utilities. All electricity provided to California, including imported electricity, must be generated from plants that meet or exceed this standard.

SB 1, California Solar Initiative

Also known as "Million Solar Roofs" legislation, SB 1 set a goal of installing 3,000 megawatts of new solar energy generation by 2017.

Renewable Portfolio Standard

California law (SB X1-2, Statutes of 2011) requires retail suppliers of electricity to procure at least 33 percent of annual retail sales from eligible renewable energy sources by 2020.

Executive Order S-03-05

Executive Order S-03-05 mandates that California emit 80 percent fewer GHGs in 2050 than it emitted in 1990. Energy efficiency and reduced vehicle miles traveled (VMT) would play important roles in achieving this aggressive goal.

Executive Orders S-14-08 and S-21-09

Since 2006, California has had a mandate to increase the use of renewable generation to 20 percent of retail electricity sales by 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which raises California's renewable energy goals to 33 percent by 2020. This enhanced target is intended to help California meet state-wide GHG emission reduction targets. This has been reiterated by California Executive Order S-21-09 which required CARB, by July 31, 2010, to establish a regulation consistent with this 33 percent-by-2020 target.

c. Local Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to energy resources include the following.

Chapter 2, Community Development

LU 3.1 Sustainable Development Pattern. Provide for an overall pattern of land uses that promotes efficient development; reduces pollution, automobile dependence, and greenhouse gas emissions and the expenditure of energy and other resources; ensures compatibility between uses; enhances community livability and public health; and sustains economic vitality.

LU 5.1 Regulating Sustainable Development. Require that new development and reconstruction comply with the California Green Building Standards Code with amendments and update periodically to reflect future amendments.

LU 5.2 Sustainable Building Practices. Promote sustainable building practices that utilize architectural design features, materials, interior fixtures and finishes, and construction techniques to reduce energy and water consumption, human exposure to toxic and chemical pollution, and disposal of waste materials.

LU 5.4 Sustainable Sites and Land Development. Promote land development practices that reduce energy and water consumption, pollution, greenhouse gas emissions, and disposal of waste materials incorporating such techniques as:

a. Concentration of uses and design of development to promote walking, bicycling, and use of public transit in lieu of the automobile;
b. Capture and reuse of stormwater on-site for irrigation;
c. Management of wastewater and use of recycled water, including encouraging the use of grey water;

d. Orientation of buildings to maximize opportunities for solar energy use, daylighting, and ventilation;

e. Use of landscapes that conserve water and reduce green waste;

f. Use of permeable paving materials or reduction of paved surfaces;

g. Shading of surface parking, walkways, and plazas and incorporation of solar technology; and/or

h. Recycling and/or salvaging for reuse of construction and demolition debris.

H 2.13 Energy Conservation. Encourage the design and construction of new homes and rehabilitation of existing homes in accordance with both voluntary and mandatory green building standards and energy saving criteria adopted by the City.

CI 2.6 Sustainable Streetscapes. Develop a consistent palette of drought-tolerant and native street plantings, permeable hardscapes, and low energy lighting fixtures that contribute to a high quality visual environment, while distinguishing La Habra as a model of sustainability.

Chapter 3, Mobility/Circulation

RN 1.1 Regional Transportation Plan. Support the regional transportation and growth management plan to conserve energy, improve air quality, and reduce greenhouse gas emissions (GHG) as appropriate and beneficial to the public welfare of the City and adjacent communities.

TDM 1.1 Sustainable Communities Strategy. Support consistency with the Orange County Sustainable Communities Strategy (OC SCS) and SCAG RTP/SCS by providing an integrated land use and transportation plan to meet mandated emissions reduction targets consistent with SB 375.

Chapter 4, Infrastructure

WS 1.6 Best Practices. Employ best practices to maintain the highest possible energy efficiency in the water infrastructure system to reduce costs and greenhouse gas emissions.

E 2.2 Title 24 Energy Efficiency. Continue to enforce energy conservation measures and efficient design standards related to residential and nonresidential buildings as required by Title 24.

E 2.3 California Green Building Standards Code. Continue to enforce California Green Building Standards Code sustainable construction building practices in the planning, design, and energy efficiency of new construction in La Habra.

E 2.4 California Energy Code. Continue to enforce California Energy Code practices regulating and controlling the energy efficiency of buildings in La Habra.

E 2.7 Energy Efficient Design. Encourage site, building, and landscape design that reduces exterior heat gain and heat island effects (e.g., building orientation and exposure, tree plantings, reflective paving materials, covered parking, cool roofs) to reduce energy demands.

E 2.8 Renewable Energy. Encourage the installation and construction of solar (photovoltaic) panel systems in private and public projects as a viable renewable energy source.

E 2.9 Solar Access. Ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize solar access.

E 2.10 Land Use Practices. Implement energy conserving land use practices (e.g., compact and mixed use development, bikeway and pedestrian paths, and transit routes and facilities).

Chapter 5, Community Services

OS 2.13 Sustainable Parks. Require that new parks are designed and existing parks are retrofitted over time to incorporate sustainable development and landscape practices that reduce water and energy consumption.

Chapter 6, Conservation/Natural Resources

AQ 1.2 Greenhouse Gas Emission Targets. Implement a Climate Action Plan (CAP) that defines transportation, energy, area source, water, and solid waste reduction measures for La Habra to achieve Assembly Bill 32 compliant reduction targets and provide local transportation strategies that support the Sustainable Communities Strategy (SCS) adopted by the Southern California Association of Governments' (SCAG) in the 2012 Regional Transportation Plan.

AQ 2.1 Land Use and Urban Form. Reduce air pollution and GHG emissions by discouraging dependence on the private automobile; promoting development that is compact, mixed-use, pedestrian- and bicycle-friendly, and transit-oriented; improving the jobs-housing balance; promoting energy-efficient building design and site planning; using water-efficient systems; and comparable methods defined in the *Land Use Section of the Community Development Chapter*.

AQ 3.3 Private Development Infrastructure. Facilitate the use of renewable energy and water-efficient systems in residential, commercial, industrial, and other private development projects, provided that they are located and designed consistent with the character and quality of La Habra's neighborhoods and districts.

SM 1.7 Night Sky Lighting. Permit the reasonable use of outdoor lighting for nighttime safety, utility, security, and enjoyment; minimize glare caused by limiting excessive or unnecessary outdoor lighting; conserve energy and resources; and protect the natural environment from the damaging effects of night lighting.

City of La Habra Climate Action Plan

In January 2014, the City of La Habra (City) adopted a Climate Action Plan (CAP) to address GHG emissions associated with sources under the City's jurisdiction. The stated purposes of the CAP are to:

- Create a GHG baseline from which to benchmark GHG reductions;
- Provide a plan that is consistent with and complementary to the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB 32), the federal government through the actions of USEPA, and the global community through the Kyoto Protocol;
- Guide the development, enhancement, and implementation of actions that aggressively reduce GHG emissions; and
- Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects.

The overall goals of the CAP are to reduce emissions attributable to La Habra to levels at or below:

- 1990 GHG emissions[1] by 2020 consistent with the target reductions of AB 32; and
- 30 percent below 2010 GHG emissions by year 2035.

To accomplish these goals, the CAP sets forth recommended policies and actions that can reduce GHG emissions to meet state, federal, and international targets.

New Sustainable Development Program

A voluntary Sustainable Development Program included in the CAP provides incentives such as priority plan check service, guaranteed plan check timelines, priority field inspection service, and release of electrical meters prior to final inspection. Specific requirements include that proposed developments provide for (1) building to exceed current state energy efficiency standards by at least 15 percent, (2) diverting at least 50 percent of construction and job site waste, (3) reducing water use by at least 20,000 gallons each year for a typical single-family dwelling, (4) guidelines for efficient lumber and wood usage, and (5) improved indoor air

[1] Following the AB 32 Scoping Plan recommendation, 1990 levels of GHG emissions are approximated at 15 percent below baseline year 2010 GHG emissions.

quality through mechanical filtration and reduced use of volatile organic chemicals in paint and other construction materials. Builders (including owner-builders) and developers who voluntarily obtain Leadership in Energy and Environmental Design (LEED) certification or comply with the California Building Industry Association's California Green Builder Program (CGB), the USEPA Energy Star Program, or other approved, nationally recognized sustainable development standards will be eligible to receive these incentives.

Energy Reduction Measures

The CAP includes the following relevant energy reduction measure:

> **R3-A2: Heat Island Plan**. This measure promotes using cool roofs, cool pavements, and parking lot shading, and expanding upon La Habra General Plan Infrastructure Policy E 2.7 (Energy Efficient Design) by increasing the number of strategically placed shade trees and encouraging site, building, and landscape design that reduces exterior heat gain and heat island effects to reduce energy demands. Further, all new developments and major renovations (additions of 25,000 square feet or more) would be encouraged to incorporate the following strategies such that heat gain would be reduced for 50 percent of the non-roof impervious site landscape (including parking, roads, sidewalks, courtyards, and driveways):
>
> - Strategically placed shade trees;
> - Paving materials with a Solar Reflective Index (SRI) of at least 29;
> - Open grid pavement system; or
> - Covered parking (with shade or cover having an SRI of at least 29).

3.10.3 ENVIRONMENTAL SETTING

a. Electricity

Southern California Edison (SCE) is the primary electricity provider in La Habra. SCE maintains electrical facilities and infrastructure within the City and surrounding areas, including the Specific Plan area, that provide service under the applicable rules and tariffs approved by the CPUC. SCE has three substations that serve La Habra: (1) south of Imperial Highway, east of La Habra Hills Drive; (2) at the northwest corner of Lambert Road and Harbor Boulevard; and (3) east of Palm Street, north of Brookdale Avenue.

California consumes more energy than any other state except Texas. However, in energy consumption per person, California ranks 49th among the 50 states and District of Columbia. Current annual energy consumption in California (for all purposes including transportation) is

approximately 7,641 trillion British thermal units (Btu), which represents approximately 7.9 percent of the nation's total energy consumption.

On November 5, 2014, SCE announced that it entered into contracts for 2,221 megawatts of power to satisfy its customers' demand, including contracts for 262 megawatts of long-term storage capacity. The new contracts result from an SCE plan in response to state forecasts of local reliability needs due to the closure of the San Onofre Nuclear Generating Station and the anticipated retirement of older, natural gas generation plants along the Southern California coastline that rely on ocean water for their cooling needs.

b. Natural Gas

The Southern California Gas Company provides natural gas service in La Habra, including the project site. The Gas Company maintains medium-pressure facilities in nearly every street of the City.

California imports approximately 87 percent of its state-wide natural gas supply. The Gas Company purchases natural gas from several bordering states and is continuously expanding its network of gas pipelines to meet the needs of new commercial and residential developments in Southern California—including Orange County and the City. The Gas Company provides natural gas as customers request the service. The 2016 "Gas Report," prepared by a consortium of California gas and electrical utilities, including SCE and the Gas Company, analyzed projected 20-year natural gas supply and demand, and concluded that adequate supply and pipeline capacity was available to meet projected 20-year needs.

c. Existing Golf Course Energy Use

The project site is the current location of the Westridge Golf Club, which is comprised of an 18-hole golf course, a lighted driving range with upper and lower levels, and a clubhouse with a pro shop, bar, and banquet rooms. Energy use is required for operations of these facilities, including energy expended for irrigation, landscaping, maintenance, lighting, and operation of the clubhouse facilities.

Existing building operations and site maintenance activities consume both natural gas and electricity on a daily basis. Natural gas is supplied to the existing golf club by the Southern California Gas Company; electricity is supplied by SCE. The energy usage associated with electricity and natural gas use was calculated using CalEEMod™ defaults. CalEEMod™ uses the California Commercial End Use Survey (CEUS) database to develop energy intensity values for non-residential buildings. Some land use categories (such as a golf course) have not been included in the CEUS and therefore their natural gas usage is not calculated in CalEEMod™. Additionally, no information on the existing use's natural gas demand is readily available. As such, the natural gas demand for the golf course is considered negligible and is not quantified

in CalEEMod™, which estimates annual electrical consumption at the Westridge Golf Club to be 35,035 kilowatt hours (kWh).

Based on the trip frequency and trip length methodologies cited in the Rancho La Habra Air Quality Impact Analysis, the existing golf course use would generate an estimated 1,332,274 annual vehicle miles traveled (VMT) along area roadways. As generated by EMFAC2017, the aggregated fuel economy of LDAs ranging from model year 1974 to model year 2019 is estimated to have a fuel efficiency of 28.55 mpg. Based on the VMT and average fuel efficiency cited above, it is estimated that the existing golf course use results in 46,670 gallons of fuel being consumed.

3.10.4 SIGNIFICANCE CRITERIA

Appendix F of the CEQA Guidelines provides guidance for assessing energy impacts of projects. The appendix provides three goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

Consistent with Appendix F goals, the significance criteria used to evaluate environmental impacts in this analysis focus on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Thus, the proposed Rancho La Habra Specific Plan would have a significant effect on the environment if it were to:

Threshold EN-1 Use large amounts of energy or fuel, or consume energy or fuel in a wasteful manner:

- During construction, either:
  - As the result of construction activities; or
  - By resulting in the construction or expansion of energy infrastructure that would cause significant environmental effects.
- Following construction, during project operations, either:
  - Within buildings or other on-site operations (stationary source consumption);
  - By resulting in the construction or expansion of energy infrastructure that would cause significant environmental effects; or
  - As the result of vehicle trips associated with project site development (mobile source consumption).

3.10.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold EN-1: Use large amounts of energy or fuel in a wasteful manner.

Impact EN-1.1: The Rancho La Habra Specific Plan would require energy during construction of proposed residential and commercial land uses. However, construction would comply with all federal, state, and/or local energy standards. Thus, the project's energy usage would not be considered "wasteful," and the impact would be *less than significant*.

Methodology

A number of factors are considered when weighing whether a project would use a proportionately large amount of energy or whether the use of energy would be wasteful. According to Appendix F of the CEQA Guidelines, conserving energy is defined as decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Appendix F of the CEQA Guidelines does not offer a numerical threshold of significance that might be used to evaluate the potential significance of energy consumption of a project. Rather, the emphasis is on "avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy."

Construction activities would result in wasteful use of energy if construction equipment is old or not well maintained, if equipment is left to idle when not in use, if travel routes are not planned to minimize VMT, or if excess lighting or water is used during construction activities.

Information from the CalEEMod™ v2016.3.2 outputs for the Rancho La Habra Air Quality Impact Analysis (Urban Crossroads 2019a) was used in this analysis, detailing Project-related construction equipment, transportation energy demands, and facility energy demands. The analysis of energy demands assumes all required air quality mitigation measures would be implemented. Estimated energy use during construction includes energy use from the following sources:

- Construction equipment electrical use.
- Construction equipment fuel use.
- Construction worker fuel use.
- Construction vendor and materials hauling fuel use.

The types, timing, number, and hours of operation for construction equipment are the same as were used for the Project's air quality and greenhouse gas (GHG) emissions analyses.

Impact Assessment

Construction is expected to last approximately six years from demolition and site clearing through completion of the final structure within the site. Construction activities would include demolition of the existing Westridge Golf Club, site clearing and grading, and construction of site roads and infrastructure, 402 dwelling units, and either 20,000 square feet of commercial space or an additional 46 dwelling units.

During construction, energy would be consumed in three general forms:

1. Electricity associated with providing temporary power for lighting and electric equipment;
2. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project site; and
3. Fuel for construction worker travel to and from the Project site, as well as delivery truck trips.

Construction activities within the Specific Plan area would not be expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in Southern California, with the exception that demolition of existing golf course facilities would need to be undertaken. While such demolition may be typical for infill development in more urban settings, demolition activities would result in energy consumption that would not occur on sites where demolition is unnecessary.

As shown in the Rancho La Habra Energy Analysis prepared by Urban Crossroads, the total energy usage from on-site Project construction-related activities would be as follows:

- Construction equipment electrical use: 5,819,629 kilowatt-hours (kWh)
- Construction equipment fuel use (diesel): 464,964 gallons
- Construction worker fuel use (gasoline): 249,420 gallons
- Construction vendor/materials hauling fuel use: 158,491 gallons

Installation of electrical and gas facilities to serve new uses would correspond with proposed roadway improvements and site-specific building construction, the impacts of which have been addressed throughout this EIR.

Currently, construction contractors are required to demonstrate compliance with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. In addition, compliance with existing CARB idling restrictions and the use of newer engines and equipment would reduce fuel combustion and energy consumption.

Furthermore, the following conditions of approval would be placed on Project construction to implement existing regulations and prevent the wasteful use of energy during construction:

- Implement work schedules and procedures that minimize equipment idle time and double-handling of material;
- Minimize equipment idling time either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxic Control Measure Title 13, Section 2485 of the California Code of Regulations [CCR]);
- Switch off office equipment and lighting when not in use;
- Design all temporary roads to minimize travel distances; and
- Maintain and properly tune all construction equipment in accordance with manufacturer's specifications. It shall be the contractor's responsibility to ensure that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to operation.

Significance Conclusion for Impact EN-1.1

Construction activities related to the Project would comply with all federal, state, and/or local energy standards, including requirements for upgrading and maintaining construction equipment. Conditions of approval would be placed on site construction to address equipment left running when not in use, design of off-road travel routes, and design and use of lighting during construction. As a result, the Project's energy usage would not be considered wasteful, and the impact would be less than significant.

Impact EN-1.2: **The Rancho La Habra Specific Plan would require energy during operations of proposed residential and commercial land uses. However, proposed development would comply with all federal, state, and/or local energy standards. Thus, the project's energy usage would not be considered "wasteful," and the impact would be *less than significant*.**

Methodology

A number of factors are considered when weighing whether a project would use a proportionately large amount of energy or whether the use of energy would be wasteful during operations. Factors such as the use of on-site renewable energy features, energy conservation features or programs, and relative use of transit are considered.

According to Appendix F of the CEQA Guidelines, conserving energy is defined as decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Appendix F of the CEQA Guidelines does not offer a numerical threshold of significance that might be used to evaluate the potential significance of energy consumption of a project. Rather, the emphasis is on "avoiding or reducing inefficient, wasteful and unnecessary consumption of energy."

Energy usage during project operation would be considered wasteful if a project were to violate federal, state, and/or local energy standards, including Title 24 of the California Code of Regulations; preclude use of on-site renewable energy systems; inhibit pedestrian or bicycle mobility; inhibit access to transit; or inhibit feasible opportunities to use alternative energy sources (e.g., solar energy) or otherwise conserve energy.

Information from the CalEEMod™ v2016.3.2 outputs for the Rancho La Habra Air Quality Impact Analysis (Urban Crossroads 2019a) was used in this analysis to evaluate the Project's operational energy demands.

Impact Assessment

Once operational, development within the Specific Plan area would include residential uses and either 20,000 square feet of retail space or an additional 46 dwelling units that would generate demand for electricity, natural gas, and gasoline for motor vehicle trips. However, the types of land uses proposed for the Project site involve energy consumption quantities that are typical for suburban development, and no operational activities or land uses are proposed that would result in extraordinary energy consumption.

Operational use of energy includes the heating, cooling, and lighting of buildings; water heating; operation of electrical systems and plug-in appliances within buildings; parking lot and outdoor lighting; and the transport of electricity, natural gas, and water to the areas where they would be consumed.

The energy usage associated with electricity and natural gas use were calculated using CalEEMod™ defaults. This analysis indicated that development of the Rancho La Habra project would result in an annual increase from the existing golf course use of:

- 3,851,945 thousand kilowatt hours (kWh); and
- 12,497,990 thousand British Thermal Units (kBTU).

New development that would be permitted by the proposed Specific Plan would be required to meet 2019 Title 24 energy efficiency standards. Compliance with these standards would minimize the Project's impacts on peak energy usage periods and reduce its impacts on state-wide and regional energy needs.

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles traveling to and from the Project site. With respect to estimated VMT and based on the trip frequency and trip length methodologies cited in the Rancho La Habra Air Quality Impact Analysis, the Project at full buildout would generate an estimated 17,464,807 annual VMT along area roadways for all passenger cars, representing a net increase of 16,132,533 VMT.

As generated by EMFAC2017, an aggregated fuel economy for automobiles ranging from model year 1974 to model year 2026 is estimated to have a fuel efficiency of 37.13 mpg. Thus, Project-related automobile travel would consume an average of 470,369 gallons of gasoline annually, representing a 434,488-gallon net increase from the site's existing golf course use.

Significance Conclusion for Impact EN-1.2

The overall energy usage that would result from buildout of the proposed Specific Plan represents a substantial increase from the site's existing golf course use. However, the level of energy use for the Project would be typical for the proposed land uses, and no aspect of the Project or land use would involve higher-than-typical energy demands. Further, the Specific Plan would be required to comply with all applicable CALGreen Code/Title 24 standards and the City's CAP. Therefore, the energy demand from the Project would not result be considered wasteful, and the impact would be less than significant.

3.10.6 REFERENCES

California Energy Commission, News Release: July 1, 2014. Accessed June 12, 2017: http://www.energy.ca.gov/releases/2014_releases/2014-07-01_new_title24_standards_nr.html.

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City of La Habra, *City of La Habra General Plan 2035*, adopted January 21, 2014, Accessed June 9, 2017: http://www.lahabracity.com/320/General-Plan-2035.

Urban Crossroads, Rancho La Habra Air Quality Analysis, September 2019a.

Urban Crossroads, Rancho La Habra Energy Analysis, September 2019b.

3.11 NOISE AND VIBRATION

3.11.1 INTRODUCTION

a. Overview

This section evaluates the noise impacts that would result from development occurring pursuant to the proposed Rancho La Habra Specific Plan. It discusses the existing noise environment within and around the Project site, as well as the regulatory framework for regulation of noise. It also analyzes the effect of the development that would be permitted by the Specific Plan on the existing ambient noise environment during construction, demolition, and operational activities, and evaluates the Specific Plan's noise effects for consistency with relevant local agency noise policies and regulations. The analysis in this section also addresses impacts in relation to groundborne vibration, and is based on a comprehensive review of existing documentation for the Specific Plan area and technical noise and vibration analyses prepared by A/E Tech, for which modeling results are provided in Appendix L.

b. Fundamentals of Noise

Sound is defined as mechanical energy transmitted by pressure waves through a medium such as air. "Noise" is defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency or pitch), the speed of propagation, and the pressure level or energy content (amplitude).

Sound always has a source. Sound sources include construction activities, automobile and rail traffic, jets flying overhead, people talking, or on-site operations. How loud the sound source actually is depends on how rapidly the object converts energy into sound energy. In contrast, an individual's perception of the loudness of a sound depends on his or her distance from the sound source.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequencies spanning 20 to 20,000 Hz. The sound pressure level therefore constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) is used. Therefore, when assessing potential noise impacts on the surrounding community, sound is measured using an electronic filter that de-emphasizes

frequencies that are largely undetectable by the human ear. This method of frequency weighting is referred to as "A-weighting." It is expressed in units of A-weighted decibels (dBA),[1] following an international standard methodology of frequency de-emphasis, and is typically applied to community noise measurements. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise Exposure and Community Noise

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. Rather, community noise varies continuously with time with respect to the contributing sound sources. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The level of background noise typically changes throughout the day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. Additionally, short-duration single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), many of which are readily identifiable to the individual, also contribute to the variability of community noise, beyond the fluctuations attributable to varying background noise levels.

These successive additions of sound to the community noise environment vary the community noise level from instant to instant, requiring that noise exposure be measured over a period of time to characterize a community noise environment and evaluate noise impacts. Because the noise environment is continually changing, average noise over a period of time is generally used to describe the community noise environment, which requires the measurement of noise over a period of time to accurately characterize a community noise environment. This time-varying characteristic of environmental noise is described using various noise descriptors, which are summarized as follows:

- L_{eq} The equivalent sound level, which is used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.
- L_{max} The instantaneous maximum noise level experienced during a given period of time.
- L_{min} The instantaneous minimum noise level experienced during a given period of time.
- L_x The sound level that is equaled or exceeded "x" percent of a specified time period. The "x" thus represents the percentage of time a noise level is exceeded. For instance, L50

[1] All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

and L90 represent the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

Ldn Also termed the "day-night" average noise level (DNL); a measure of the average of A-weighted sound levels occurring during a 24-hour period, accounting for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted by adding 10 dBA to take into account the greater annoyance of nighttime noises.

CNEL The Community Noise Equivalent Level, which, similar to the Ldn, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of approximately 5 dBA to measured noise levels between the hours of 7:00 p.m. to 10:00 p.m. and after an addition of 10 dBA to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The "ambient noise level" is the background noise level associated with a given environment at a specified time and is usually a composite of sound from many sources from many directions, near and far, with no particular dominant sound.

Sensitive Uses

Noise-sensitive land uses are generally defined to include places where people sleep, such as residences, hospitals, and hotels; institutional land uses where it is important to avoid interference with speech or reading, such as schools, libraries, and churches; and outdoor areas where quiet is fundamental to its specific use (i.e., amphitheaters). Noise may be perceived at a sensitive use as "intrusive" when noise levels exceed ambient noise levels. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.

Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects refer to

interruption of daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity. **Table 3.11-1** lists typical human perceptions of common types of noise.

Table 3.11-1
Common Sound Levels and Their Noise Source Characteristics

Noise Source			A-Weighted Sound Level (dB)	Relative Sound Intensity	Noise Environment	Relative Human Perception
Commercial/ Industrial	Construction	Residential				
Fireworks			140	100,000,000	Deafening	128 times as loud
Jet takeoff, 100 feet	Jack hammer	Civil defense siren	130	10,000,000	Threshold of Pain	64 times as loud
Police siren	Sandblasting		120	1,00,000	Extremely Loud	32 times as loud
Heavy truck	Pile driver	Baby crying	110	100,000	Very Loud	16 times as loud
Jet flyover at 1,000 feet	Bulldozer	Blender	100	10,000	Very Loud	8 times as loud
Railroad	Exterior finishing, 50 feet	Power mower	90	1,000	Very Loud	4 times as loud
Airplane at 1 mile	Front loader, 50 feet	Garbage disposal	80	100	Loud	2 times as loud
Noisy restaurant		Vacuum cleaner, 10 feet	70	10	Moderately Loud	Reference Level
Busy office		Piano practice	65	—		
Average office		Electric shaver	60	1	Quiet	½ as loud
Suburban street		Birds, 10 feet	55	—	Quiet	—
Quiet office		Home office	50	1×10^{-2}	Quiet	¼ as loud
		Refrigerator hum	40	1×10^{-3}	Faint	⅛ as loud
Library		Whisper	30	1×10^{-4}	Faint	—
		Bedroom at night	20	1×10^{-5}	Very Faint	—
		Rustling leaves	10	1×10^{-6}	Very Faint	—
		Threshold of hearing	0	—	Very Faint	—

Source: Metis Environmental Group, 2017.

Overall, a wide variation of tolerance to noise exists, based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way the noise compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be

judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3-dBA change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in noise levels of 10 dBA is subjectively heard as doubling or halving of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence, the decibel scale was developed. Because the decibel scale is based on logarithms, an increase of 10 decibels is equivalent to a 10-times increase in sound energy and is perceived by humans as approximately a doubling of loudness. Thus, using the decibel scale, sound levels from two or more sources cannot be directly added together to determine the overall sound level. Rather, the combination of two sounds at the same level yields an increase of 3 dBA. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dBA per doubling of distance from the source over hard surfaces to 7.5 dBA per doubling of distance from the source over soft surfaces, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions, noise barriers [either vegetative or manufactured]). Thus, a noise measured at 90 dBA 50 feet from the source would attenuate to about 84 dBA at 100 feet, 78 dBA at 200 feet, 72 dBA at 400 feet, and so forth. Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate, approximately 4 to 6 dBA per doubling of distance from the source.

Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.

c. Fundamentals of Vibration

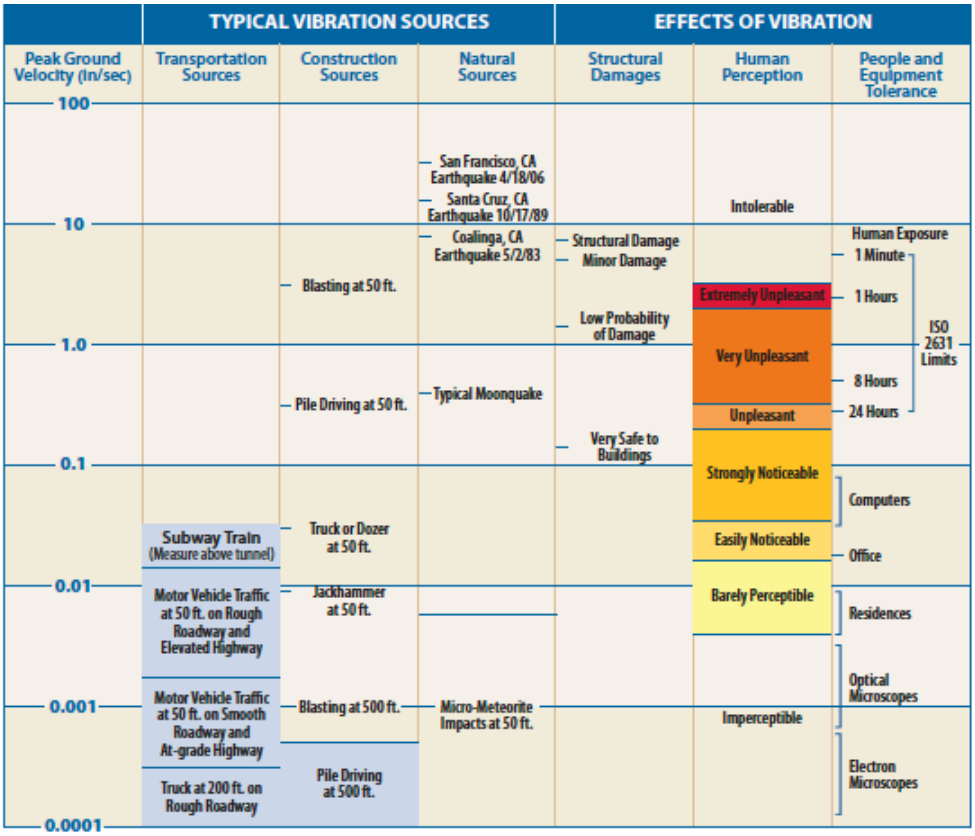
Vibration is energy transmitted in waves through the ground or man-made structures. These energy waves generally dissipate with distance from the vibration source. As described in the Federal Transit Administration (FTA) 2006 *Transit Noise and Vibration Impact Assessment*, groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and generating audible rumbling sounds. In contrast to airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibrations from sources such as buses and trucks on a normal roadway to be perceptible by individuals, even in locations close to major roads. However, there are some common sources of groundborne vibration, including trains, buses on rough roads, and construction activities such as blasting, pile driving, and operating heavy earth-moving equipment.

There are several different methods used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts on buildings. Although PPV is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response since it takes time for humans to perceive and react to vibration. Alternatively, the root mean square (RMS) amplitude, which is defined as the average of the squared amplitude of the signal, is most frequently used to describe the effect of vibration on the human body. RMS is commonly measured with the decibel notation (Vdb). Vdb acts to compress the range of numbers required to describe vibration. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly and sick), and vibration-sensitive equipment.

The effects of groundborne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. **Figure 3.11-1** illustrates human perceptions of typical vibration sources.

The California Department of Transportation (Caltrans) measure of the threshold of architectural damage due to continuous/frequent intermittent vibration sources is 0.5 inches per second (in/sec) PPV for new residential structures and modern commercial buildings and 0.25 in/sec PPV for historic and older buildings. Caltrans vibration annoyance potential criteria characterize 0.1 in/sec PPV as "strongly perceptible" and 0.4 in/sec PPV as "severe" for continuous/frequent intermittent sources (Caltrans 2013).

Figure 3.11-1
Typical Vibration Sources and Sensitivities



Source: Nugent & Amick, 1992.

In residential areas, the background vibration velocity level is usually approximately 0.0013 in/sec PPV. This level is well below the vibration velocity level threshold of perception for humans, which is approximately 0.0017 in/sec PPV. The approximate dividing line between vibration being "barely perceptible" and "distinctly perceptible" for many people is 0.0020 in/sec PPV.

3.11.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of federal, state, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

Noise Standards

Department of Housing and Urban Development Noise Abatement and Control

The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24 Code of Federal Regulations (CFR), Part 51, Subpart B, Noise Abatement and Control. According to the regulations, "It is HUD's general policy to provide minimum national standards applicable to HUD programs to protect citizens against excessive noise in their communities and places of residence." These regulations include criteria for assessing whether a HUD project is suitable for a particular site, given the background noise levels. HUD has defined the suitability of a site for new housing construction based on existing noise levels as follows:

- Acceptable—65 dB day-night average sound level (DNL) or less;
- Normally unacceptable—Exceeding 65 dB DNL but not exceeding 75 dB DNL; and
- Unacceptable—Exceeding 75 dB DNL.

The HUD regulations also include a goal (rather than a standard) that interior noise levels not exceed 45 dB DNL. Sound-attenuating features such as barriers or sound-attenuating building materials must be used to achieve the interior noise goal where feasible. Standard building construction generally provides 20 dB DNL of sound attenuation; therefore, if the exterior noise environment is classified as "acceptable," according to HUD standards, the interior noise environment should not exceed 45 dB DNL. The HUD regulations also encourage the use of quieter construction equipment and methods.

Federal Aviation Regulations Part 150 - Noise

Federal Aviation Administration (FAA) Order 1050.1E, FAA Order 5050.4B, and Title 14 - Aeronautics and Space Chapter I - Federal Aviation Administration, Department of Transportation Subchapter I - Airports Part 150 - Airport Noise Compatibility Planning (FAR Part 150) provide the regulatory framework for noise related to aircraft operations. Appendix A of FAR Part 150 states that "for the purpose of compliance with this part, all land uses are considered to be compatible with noise levels less than DNL (or CNEL in California) 65 dB. Local needs or values may dictate further delineation based on local requirements or determinations."

Vibration Standards

Federal Transit Administration Vibration Standards

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities (see **Table 3.11-2**). The FTA has also adopted standards for groundborne vibration impacts related to human annoyance (see **Table 3.11-3**). No thresholds have been adopted or recommended for commercial and office uses.

Table 3.11-2
Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, 2006.

Table 3.11-3
Groundborne Vibration Sensitivity Criteria

Building Category	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Category 1: High Sensitivity. Buildings where vibration would interfere with interior operations (e.g., vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and research operations).	65 VdB[d]	65 VdB[d]	65 VdB[d]
Category 2: Residential uses and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses, such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.	75 VdB	78 VdB	83 VdB

[a] More than 70 vibration events of the same source per day.
[b] Between 30 and 70 vibration events of the same source per day.
[c] Fewer than 30 vibration events of the same kind per day.
Source: Federal Transit Administration, 2006.

b. State Plans, Policies, and Regulations

Noise Standards

Title 24, California Building Code

State regulations related to noise include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. The requirements are intended to limit the extent of noise transmitted into habitable spaces. These

requirements are collectively known as the California Noise Insulation Standards and are found in California Code of Regulations, Title 24 (known as the Building Standards Administrative Code), Part 2 (known as the California Building Code), Appendix Chapters 12 and 12A. For limiting noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior sources, the noise insulation standards set forth an interior standard of DNL 45 dBA in any habitable room and, where such units are proposed in areas subject to noise levels greater than DNL 60 dBA, require an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard. If the interior noise level depends upon windows being closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment. Title 24 standards are enforced through the building permit application process in the City of La Habra (City).

Guidelines for Land Use and Noise Exposure

The California Department of Health Services has established guidelines for land use and noise exposure compatibility that are listed in **Table 3.11-4**.

Table 3.11-4
Land Use and Noise Exposure Compatibility (CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 75
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 70
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 75
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 75
Golf Courses, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business & Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

[a] **Normally Acceptable:** Use is satisfactory for buildings of normal conventional construction without special noise insulation requirements.

[b] **Conditionally Acceptable:** New construction or development should be undertaken only after detailed analysis of noise reduction requirements and needed noise insulation features are provided. Conventional construction, with closed windows and fresh air supply systems or air conditioning will normally suffice.

[c] **Normally Unacceptable:** New construction or development should generally be discouraged. If it does proceed, detailed analysis of noise reduction requirements must be made and needed noise insulation features provided.

[d] **Clearly Unacceptable:** New construction or development should generally not be undertaken.

In addition, the California Government Code (Section 65302(g)) requires a noise element to be included in general plans, and requires that the noise element (1) identify and appraise noise problems in the community, (2) recognize Office of Noise Control guidelines, and (3) analyze and quantify current and projected noise levels.

The state has noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state pass-by standard is consistent with the federal limit of 80 dBA. The state pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters from the center line.

Vibration Standards

There are no state vibration standards applicable to the proposed Specific Plan. In addition, the Caltrans *Transportation and Construction Vibration Guidance Manual* (2013) does not provide official Caltrans standards for vibration. However, this manual provides guidelines that can be used as screening tools for assessing the potential for adverse vibration effects related to structural damage and human perception. The manual is meant to provide guidance related to vibration issues associated with the construction, operation, and maintenance of Caltrans projects. The vibration criteria established by Caltrans for assessing structural damage and human perception are shown in **Tables 3.11-5** and **3.11-6**, respectively.

Table 3.11-5
Caltrans Criteria for Vibration Damage Potential

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/ Frequent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans, 2006.

Table 3.11-6
Caltrans Criteria for Vibration Annoyance Potential

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/ Frequent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans, 2006.

c. City of La Habra Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to noise and vibration include the following:

Chapter 2, Community Development

> **LU 4.1 Development Compatibility**. Require that development is located and designed to assure compatibility among land uses, addressing such elements as building orientation and setbacks, buffering, visibility and privacy, automobile and truck access, impacts of noise and lighting, landscape quality, and aesthetics.

Chapter 7, Community Safety

> **N 1.1 Land Use Compatibility**. Restrict the development of noise-sensitive land uses (i.e., schools, medical centers and hospitals, senior centers, and residences) in areas with noise levels that exceed those considered clearly incompatible with the use, as shown in General Plan Figure 7-2 and General Plan Table 7-1 (Land Use Compatibility with Community Noise Environments), unless measures can be implemented to reduce noise to acceptable levels.

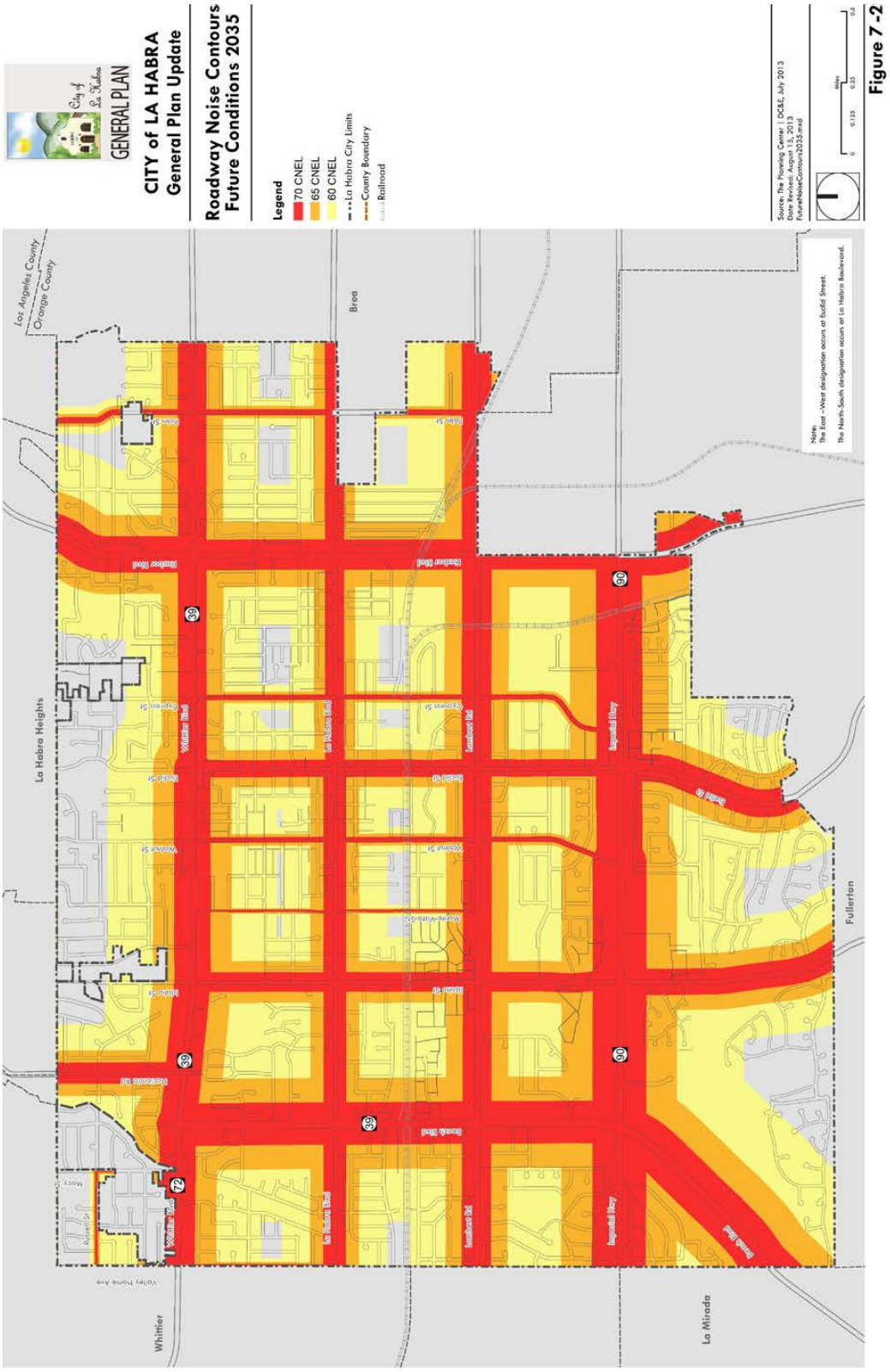

GENERAL PLAN
CITY of LA HABRA
General Plan Update
Roadway Noise Contours
Future Conditions 2035
Legend
70 CNEL
65 CNEL
60 CNEL
La Habra City Limits
County Boundary
Railroad
Source: The Planning Center | DC&E, July 2013
Date Revised: August 15, 2013
FutureNoiseContours2035.mxd
Miles
0
0.125
0.25
0.5
Figure 7-2
Note:
The East –West designation occurs at Euclid Street
The North-South designation occurs at La Habra Boulevard.
Los Angeles County
Orange County
Brea
La Habra Heights
Whittier
La Mirada
Fullerton
Harbor Blvd
Beach Blvd
Imperial Hwy
Valley Home Ave
Whittier Blvd
La Habra Blvd
Idaho St
Lambert Rd
Colima Rd
Orchard Dr
Euclid St
Walnut St
Mona Vista St
Cypress St
Central Ave
Rose Dr
Rosecrans Ave
Telegraph Rd
Pioneer Blvd
Norwalk Blvd
Valley View Ave
Santa Fe Springs
Artesia Blvd
Alondra Blvd
Firestone Blvd
Florence Ave
Gardendale St
Foster Rd
Slauson Ave
Rivera Rd
Whittier Narrows Dam
Mines Field
Whittier Narrows Recreation Area
Rio Hondo
San Gabriel River
Los Angeles River
Puente Hills
Whittier Hills
Coyote Hills
Fullerton Hills
Chino Hills
Santa Ana Mountains
Santa Ana River
Prado Dam
Prado Flood Control Basin
Yorba Linda
Anaheim
Placentia
Chino
Corona
Norco
Riverside County
San Bernardino County
Orange County
Los Angeles County

Table 7-1 Land Use Compatibility with Community Noise Environments

Land Use Categories and Uses		Compatible Land Use Zones						
Categories	Uses	CNEL <55	55-60	60-65	65-70	70-75	75-80	CNEL >80
Residential	Single Family, Duplex, Multiple Family	A	A	B	B	C	D	D
	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	A	A	A	A	B	B	C
Commercial, Industrial, Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Recreation Institutional Civic Center	Amphitheater, Concert Hall, Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools' Classroom, Day Care	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

Source: Governor's Office of Planning and Research, General Plan Guidelines, 2003, Appendix C.

INTERPRETATION:

Zone A Clearly Compatible: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B Compatible with Mitigation: New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction with closed windows and fresh air supply systems or air conditioning, will normally suffice. Note that residential uses are prohibited within Airport CNEL greater than 65.

Zone C Normally Incompatible: New construction or development should generally be discouraged. If construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D Clearly Incompatible: New construction or development should generally not be undertaken.

N 1.2 Noise Standards. Require noise attenuation for residential development where the projected exterior and interior noise levels exceed those shown in Table 7-2 (Residential Exterior and Interior Noise Standards).

Table 7-2 Residential Exterior and Interior Noise Standards

	Exterior Noise Levels	Interior Noise Levels
7:00 am to 10:00 pm	55 dBA	55 dBA
10:00 pm to 7:00 am	50 dBA	45 dBA

SOURCE: City of La Habra, La Habra Municipal Code, Noise Ordinance Section 9.32.050 and Section 9.32.060.

N 1.3 Noise Studies for New Development. Require an acoustical study for all new residential developments that lie within the 65 dBA noise contour based on projections of future noise conditions resulting from the Plan's traffic increases to ensure indoor levels will not exceed City standards. In addition, the City will continue to enforce the California Building Code for indoor noise levels.

N 1.4 Noise Attenuation through Building Design. Require measures that attenuate exterior and/or interior noise levels to acceptable levels to be incorporated into all development projects where current and/or future noise levels may be unacceptable.

N 1.5 Noise Attenuation through Site Design. Require noise reduction features to be used in the site planning process for new projects where current and/or future noise levels may be unacceptable. The focus of these efforts will be site design techniques. Techniques include:

- Designing landscaped building setbacks to serve as a buffer between the noise source and receptor.
- Placing noise-tolerant land uses such as parking lots, maintenance facilities, and utility areas between the noise source and receptor.
- Orienting buildings to shield noise-sensitive outdoor spaces from a noise source.
- Locating bedrooms or balconies on the sides of buildings facing away from noise sources.
- Utilizing noise barriers (e.g., fences, walls, or landscaped berms) to reduce adverse noise levels in noise-sensitive outdoor activity areas.

N 1.6 Noise Between Adjacent and Mixed Uses. Require that mixed-use and multi-family residential developments demonstrate adequate isolation of noise between adjacent uses through building design and location of loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development.

N 1.7 Interior Vibration Standards. Require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels

at nearby residential and commercial uses based on current City or Federal Transit Administration (FTA) criteria.

N 1.8 Construction Noise. Require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

N 3.1 Protection from Stationary Noise Sources. Continue to enforce interior and exterior noise standards to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary sources such as machinery, equipment fans, and air conditioning equipment.

N 3.2 High-Noise Generating Uses. Require that bars, clubs, entertainment venues, and other uses characterized by high levels of patronage and activity be constructed and designed consistent with the City's noise standards to isolate noise to the interiors and limit perceptible exterior noise.

N 3.3 Compatibility with Parks and Recreation Uses. Limit the hours of operation for parks and active recreation uses in residential areas to minimize disturbances to residents.

N 3.4 Regulation of Sound-Amplifying Equipment. Continue to regulate the use of sound-amplifying equipment to prevent impacts on sensitive receptors.

N 3.5 Construction Activity Hours. Continue to enforce restrictions on the hours of construction activity to minimize impacts of noise and vibration on adjoining uses from the use of trucks, heavily drilling equipment, and other heavy machinery.

La Habra Municipal Code

Chapter 9.32 of the La Habra Municipal Code pertains to control of non-transportation noise sources within the City's boundaries. Municipal Code Sections 9.32.050 and 9.32.060 indicate that the noise standards listed in **Table 3.11-7** apply to all residential properties.

Table 3.11-7
City of La Habra Residential Exterior and Interior Noise Standards

	Exterior Noise Levels	Interior Noise Levels
7:00 a.m. to 10:00 p.m.	55 dBA	55 dBA
10:00 p.m. to 7:00 a.m.	50 dBA	45 dBA

Source: La Habra Municipal Code Sections 9.32.050 and 9.32.060.

Exterior Noise Standards

Noise generated within the City is not permitted to exceed **exterior** noise standards as follows:

1. The noise standard for a cumulative period of more than 30 minutes in any hour; or
2. The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour; or

3. The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour; or
4. The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour; or
5. The noise standard plus 20 dBA for any period of time.

Each of the noise limits specified in **Table 3.11-7** are to be reduced by 5 dBA for impact or simple tone noises, or for noises consisting of speech or music. In addition, in the event the ambient noise level exceeds any of the five exterior noise limit categories described above, the cumulative period applicable to the category is to be increased to reflect the ambient noise level. Furthermore, the maximum permissible noise level must never exceed the maximum ambient noise level.

Interior Noise Standards

Noise generated within the City is not permitted to exceed **interior** noise standards as follows:

1. The noise standard for a cumulative period of more than 5 minutes in any hour; or
2. The noise standard plus 5 dBA for a cumulative period of more than 1 minute in any hour; or
3. The noise standard plus 10 dBA for any period of time.

Each of the noise limits specified in **Table 3.11-7** are to be reduced by 5 dBA for impact or simple tone noises, or for noises consisting of speech or music. In the event the ambient noise level exceeds any of the three noise limit categories identified above, the cumulative period applicable to the category must be increased to reflect the ambient noise level. Furthermore, the maximum permissible noise level must never exceed the maximum ambient noise level.

Exempted Noise Sources

Municipal Code Section 9.32.070 exempts "noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. weekdays, including Saturday or at any time on Sunday or a federal holiday." Noise generated outside of the hours specified by the Municipal Code would be subject to the City's noise standards.

3.11.3 ENVIRONMENTAL SETTING

Sources of noise in and around the Project site are typical of those found in other urban developed areas. They include but are not limited to traffic, golf course maintenance activities, construction work (although no construction work was observed during Project-related noise

monitoring, commercial operations, human activities, emergency vehicles, and occasional distant aircraft overflights.

a. Noise Measurements at Sensitive Uses

Three long-term (24-hour) and 16 short-term (10 to 15-minute) noise measurements of existing ambient noise levels were conducted at locations representative of the nearest noise-sensitive uses in the vicinity of the Project site and proposed future homes within the Project site to characterize existing ambient noise levels. **Figure 3.11-2** shows the locations of long- and short-term noise measurements. Noise monitoring results are shown in **Table 3.11-8** (long-term) and **Table 3.11-9** (short-term).

b. Traffic Noise Measurements

General Plan Figure 7-2 (see Section 3.11.2.c above) indicates that portions of the Project site adjacent to Beach Boulevard and Idaho Street are within the 65 CNEL noise contour of those roadways. Short-term traffic noise measurements were taken on the east side of the project site along South Idaho Street and on the west side of the site along Beach Boulevard. The results of the traffic noise level measurements and concurrent traffic counts are summarized in **Table 3.11-10**.

Figure 3.11-2: Noise Monitoring Locations

Source: Google Earth Pro; A/E Tech LLC

As shown in **Table 3.11-8**, the CNEL within interior portions of the Project site ranges from 52 to 55 dBA.

Table 3.11-8
Long-Term Noise Measurements in Project Site Vicinity

Hour Beginning	LT-1: Southwest Portion of Project Site dBA (L_{eq})	LT-2: Adjacent to Westridge Plaza Shopping Center dBA (L_{eq})	LT-3: Adjacent to Westridge Plaza Shopping Center dBA (L_{eq})
12:00 a.m.	46.6	45.6	43.6
1:00 a.m.	45.1	44.2	42.2
2:00 a.m.	48.8	43.9	41.9
3:00 a.m.	44.5	43.6	41.6
4:00 a.m.	45.0	42.4	40.4
5:00 a.m.	49.3	46.5	44.5
6:00 a.m.	51.3	45.1	43.1
7:00 a.m.	53.0	44.6	42.6
8:00 a.m.	51.5	61.6	59.6
9:00 a.m.	50.0	56.8	40.3
10:00 a.m.	49.3	56.1	42.1
11:00 a.m.	48.5	56.5	41.3
12:00 p.m.	49.8	54.6	41.4
1:00 p.m.	50.0	59.0	44.3
2:00 p.m.	51.2	45.3	43.0
3:00 p.m.	50.2	45.2	43.2
4:00 p.m.	49.2	48.1	46.1
5:00 p.m.	50.0	43.3	41.3
6:00 p.m.	51.0	45.3	43.3
7:00 p.m.	51.0	45.5	43.5
8:00 p.m.	49.9	51.1	49.1
9:00 p.m.	49.8	49.3	47.3
10:00 p.m.	48.8	49.5	47.5
11:00 p.m.	48.5	46.0	44.0
CNEL	**55.3**	**55.3**	**51.9**

Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Table 3.11-9
Short-Term Noise Measurements in Project Site Vicinity

Monitoring Location	Date	Start Time	Duration (Minutes)	L_{eq}	L_{min}	L_{max}	L_{25}	L_{50}	L_{90}
ST-1	7/22/15	8:57 a.m.	15	48.0	41.3	59.7	48.0	46.5	43.0
ST-2	7/22/15	9:29 a.m.	15	51.6	44.3	57.2	52.5	50.5	47.0
ST-3	7/22/15	12:39 p.m.	15	45.1	39.7	50.7	46.0	44.5	41.5
ST-4	7/22/15	10:53 a.m.	15	40.8	34.6	55.0	40.5	39.0	36.0
ST-5	7/22/15	11:20 a.m.	15	45.6	39.9	52.3	46.5	45.0	42.5
ST-6	7/22/15	11:52 a.m.	15	47.6	38.1	59.4	48.5	46.5	40.0
ST-7	7/22/15	12:19 p.m.	15	59.3	45.4	70.3	60.5	58.0	51.5
ST-8	7/22/15	12:43 p.m.	15	49.7	42.2	62.7	49.5	47.5	45.0
ST-9	7/22/15	1:08 p.m.	15	44.8	34.8	59.7	43.0	41.0	39.0
ST-10	7/22/15	1:35 p.m.	15	46.0	36.0	59.1	46.0	43.0	39.0
ST-11	8/5/15	2:35 p.m.	15	50.8	39.6	70.4	49.0	45.5	41.5
		2:51 p.m.	15	51.3	40.1	64.1	51.5	46.5	42.0
		3:07 p.m.	15	53.4	39.1	73.1	52.5	48.0	40.5
ST-12	8/5/15	1:33 p.m.	15	53.7	39.0	74.2	47.5	44.0	41.0
		1:51 p.m.	15	45.3	40.0	58.4	45.5	43.5	41.0
		2:07 p.m.	15	45.3	40.0	62.7	45.5	44.0	41.5
ST-13	8/5/15	3:32 p.m.	15	56.0	53.2	71.6	56.0	55.0	54.0
		3:48 p.m.	15	56.1	53.0	70.2	56.0	55.0	54.0
		4:04 p.m.	15	56.5	53.7	64.4	56.5	56.0	54.5
ST-14	9/4/15	2:15 p.m.	10	67.8	---	---	72.0 (L_{10})	---	52.0
		2:25 p.m.	10	68.5	---	---		---	48.5
ST-15	7/24/15	12:30 p.m.	15	52.7	38.5	69.7	53.0	50.5	43.0
ST-16	7/24/15	1:15 p.m.	15	56.0	34.9	65.0	57.5	53.0	43.5

Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Table 3.11-10
Existing Traffic Noise in Project Site Vicinity

Location	Start Time	Measured Sound Level			Traffic Counts (15 minutes)					
					Southbound			Northbound		
		L_{eq}	L_{min}	L_{max}	A	MT	HT	A	MT	HT
T-1: Idaho Street, northeast corner of project site, 85 feet from roadway center line	8:12 a.m.	62.5	41.0	74.4	98	0	0	106	0	0
	8:30 a.m.	64.3	40.7	82.6	109	0	0	100	1	0
T-2: Idaho Street, southeast corner of project site, 86 feet from roadway center line	9:09 a.m.	63.2	40.1	80.4	91	0	0	83	0	0
	9:26 a.m.	62.3	41.3	72.7	73	0	0	107	0	0
T-3: Beach Boulevard, golf course frontage, 142 feet from roadway center line	12:21 p.m.	59.6	40.4	74.1	437	4	2	432	7	4
T-4: Beach Boulevard, golf course frontage, 306 feet from roadway center line	12:42 p.m.	52.7	39.4	64.6	429	5	1	449	3	4

Notes: A = Automobiles; MT = Medium Trucks; HT = Heavy Trucks
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

c. Commercial Noise Measurements

Noise level measurements of specific activities associated with goods delivery and movement at or near the delivery bays of the stores within the Westridge Plaza shopping center were measured. The measurements were conducted near short-term sites ST-11 and ST-12. **Table 3.11-11** summarizes the results of the commercial source noise levels within the Project site.

Table 3.11-11
Measured Noise from Area Commercial Activities

Source	Approximate Distance from Source (Feet)	Noise Level Range (dBA)
Forklift	200	55-60
Cart/Pallet Drops	200	70-75
Heavy Truck Backing into Delivery Bay	150-300	70-75
Heavy Truck Idling	150	60-65
PA Speaker	300	55

Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

d. Existing Vibration Levels

Aside from periodic road repair work that may occur in the vicinity of the Specific Plan area, the primary sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on area roadways. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV) and could reach 72 VdB (approximately 0.016 in/sec PPV) when trucks pass over bumps in the road (FTA 2006).

3.11.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of noise and vibration impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold NOI-1 Expose persons to or generate noise levels in excess of standards established in the local (City of La Habra) general plan or noise ordinance, or applicable standards of other affected agencies;

Threshold NOI-2 Expose persons to or generate excessive groundborne vibration or groundborne noise levels;

Threshold NOI-3 Result in a substantial permanent increase in ambient noise levels in the project vicinity or above levels existing without the project;

Threshold NOI-4 Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

Threshold NOI-5 For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels; or

Threshold NOI-6 For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

3.11.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold NOI-1: Expose persons to or generate noise levels in excess of established standards.

Impact NOI-1.1: Traffic along Beach Boulevard and Idaho Street would combine with commercial activities at the Westridge Plaza shopping center to exceed a Community Noise Equivalent Level (CNEL) of 60 A-weighted decibels (dBA), exposing future residential uses within the Project site to noise levels exceeding the City of La Habra's land use compatibility noise standard. The impact would be *significant but mitigable*.

Methodology

Because construction noise between 7:00 a.m. and 8:00 p.m. weekdays and Saturday is exempted from City noise standards, construction activities undertaken during those hours

would not exceed City noise standards. Because Project construction activities would occur only within the exempted hours, no further analysis of construction noise in relation to the City's noise standards is needed. See Impact NOI-4 for discussion of Project-related construction noise.

For the purpose of determining whether the proposed Specific Plan would result in the exposure of persons to or generate noise levels that would exceed established noise standards, operational noise levels associated with the proposed Specific Plan were compared to the City noise standards set forth in Section 3.11.2 above. A significant impact would result if residential uses were proposed within areas having a CNEL greater than 60 dBA, which corresponds to the upper limit of noise levels identified in the La Habra General Plan Noise Element as being "clearly compatible."

To identify future noise conditions and compliance with exterior noise standards, future (2035) with-Project traffic noise was modeled to determine whether the first row of the proposed single-family homes along Idaho Street and the exterior of the first row of proposed multi-family units and the nearest proposed single-family homes along Beach Boulevard would meet applicable noise standards.

Impact Assessment

With respect to operational noise levels, the City has established exterior noise standards that are correlated with land use zoning classifications, as shown in General Plan Table 7-1 presented in Section 3.11.2.c, above. Residential uses are "clearly compatible" with an average daily noise level of up to 60 dBA CNEL and can be considered compatible with the provision of mitigation in areas with a CNEL up to 70 dBA.

Future (2035) with-Project traffic noise was modeled based on proposed site topography to determine the CNEL at locations including the backyards of the first row of proposed single-family homes along Idaho Street and the exterior of the first row of proposed multi-family units and the nearest proposed single-family homes along Beach Boulevard (see **Figure 3.11-3**). The results of this modeling are presented in **Table 3.11-12**.

Table 3.11-12
Average Daily Traffic Noise Levels along Idaho Street and Beach Boulevard

Receiver Location	Vesting Tentative Tract Map 17845 Lot No.	PM Peak Hour L_{eq}	CNEL
Along Idaho Street			
E1	Lot 2	66	**66**
E2	Lot 3	68	**67**
E3	Lot 11	65	**64**
E4	Lot 12	66	**66**
E5	Lot 28	64	**63**
E6	Lot 29	58	58
Along Beach Boulevard			
W1	Lot 278 (pool)	71	**72**
W2	Lot 278	69	**69**
W3	Lot 279	56	56
W4	Lot 279	63	**64**
W5	Lot 239	61	**62**
W6	Lot 241	59	59
W7	Lot 243	59	60
W8	Lot 245	57	57
W9	Lot 247	56	56
W10	Lot 250	57	58
W11	Lot 253	58	59
W12	Lot 256	59	59

Notes: **Bold** text indicates that City exterior noise standards would be exceeded
Calculated noise levels are at first-floor elevations.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

As shown in **Table 3.11-12**, at the exterior activity areas of the first row of future single-family homes along Idaho Street, future traffic noise levels would exceed the City's exterior noise standard for being "clearly compatible" for residential uses (60 CNEL). In addition, the calculated future peak-hour traffic noise levels at first-floor exterior areas of both the multi-family and single-family homes along Beach Boulevard would exceed the City exterior noise standard for being "clearly compatible" for residential uses (60 dB CNEL).

Figure 3.11-3: Traffic Noise Receiver Locations

Source: Google Earth Pro; A/E Tech LLC

Significance Conclusion for Impact NOI-1.1

Traffic along Beach Boulevard and Idaho Street would combine with commercial activities at the Westridge Plaza Shopping Center to exceed a CNEL of 60 dBA, exposing future residential uses within the Project site to noise levels exceeding the City's land use compatibility noise standard. A significant impact would result.

Mitigation Measures

Mitigation Measure NOI-1.1a: Noise barriers shall be constructed in the locations identified in the Rancho La Habra Noise and Vibration Analysis Report (Partially Recirculated Draft EIR Appendix L) as exceeding applicable noise standards.

Mitigation Measure NOI-1.1b: Exterior activity areas such as balconies shall be placed at the opposite side of buildings from the roadways within areas subject to a CNEL in excess of 60 dBA.

Significance Conclusion for Impact NOI-1.1 with Implementation of Mitigation Measures

With the implementation of **Mitigation Measures NOI-1.1a** and **NOI-1.1b**, adequate noise barriers would be constructed to achieve the City's 60 CNEL land use compatibility noise standard, resulting in a less-than-significant impact with mitigation.

Impact NOI-1.2: Although currently proposed dwelling units would meet applicable interior noise standards, modifications to single-family and multi-family dwelling unit plans could be proposed prior to the submittal of building permit applications, and it is possible that such future dwelling unit plans might not meet applicable interior noise standards. The impact would be *significant but mitigable*.

Methodology

To document whether interior noise levels would meet City standards, a detailed analysis of the proposed construction was conducted to determine the noise level reduction that would be provided by proposed buildings. The worst-case exterior noise exposures were determined to be 72 dB at the proposed multi-family building facades along Beach Boulevard and 67 dB at exterior areas of proposed single-family homes along Idaho Street (see Table **3.11-12**). Since experience has shown that the transmission loss performance reported for laboratory test conditions cannot be expected from normal "as-built" housing, a 3-dB adjustment was applied to determine compliance with applicable noise level standards. Construction details, based

upon floor plans provided by the applicant, are summarized as follows, including the Sound Transmission Class (STC) of each sound transmitting component:

- Exterior Walls: Stucco siding, 2"x4" wood studs, ½" gypsum board on the inside with cavity insulation (STC 46)
- Windows: Low air-infiltration-rate aluminum frame sliders with dual glazing (STC 26)
- Doors: Solid core wood or French doors with perimeter weather-stripping and threshold seals (STC 31)
- Interior Floors: Carpet and pad or a combination of carpet and vinyl or other soft tile
- Interior Walls and Ceiling: Gypsum board walls and ceiling

Impact Assessment

The interior noise level standard of the City is 55 dB during daytime and 45 dB during nighttime. The worst-case future exterior noise exposure of 72 dB CNEL would occur at the exterior of multi-family homes closest to Beach Boulevard (Lot 278 of Vesting Tentative Tract Map 17845). The highest daytime hourly traffic noise at this same location would be 71 dB L_{eq}. Therefore, if the interior CNEL is below 45 dB at this location, the project would comply with both the daytime and nighttime noise standards. This means that an outdoor to indoor noise level reduction of up to 17 dB (72-55=17) would be required to comply with the City's interior noise level standard during daytime. A noise level reduction of up to 27 dB may be required in the unlikely event that the same noise levels occur during nighttime hours. **Table 3.11-13** presents a summary of calculated noise level reduction values based upon the above-described construction details.

As shown in **Table 3.11-13**, residential construction as currently proposed would achieve the noise level reductions needed for compliance with the City's interior noise level standards.

Significance Conclusion for Impact NOI-1.2

Although dwelling units as currently proposed would provide sufficient outdoor-to-indoor noise level reductions to meet applicable City interior noise standards, modifications to proposed single-family and multi-family dwelling unit plans could be proposed by the applicant prior to the submittal of building permit applications. Because it is possible that future proposed single-family and multi-family dwelling unit plans might not meet applicable interior noise standards, a significant impact would result.

Table 3.11-13
Outdoor to Indoor Noise Level Reduction of Proposed Construction

Room	Exterior Noise Level	Building Attenuation (Noise Level Reduction)	Resulting Interior Sound Level
Proposed Multi-Family Unit Plan D			
First Floor Living Room/Dining/Kitchen	72 dBA	28 dBA	44 dBA
Second Floor Master Bedroom/Retreat	72 dBA	27 dBA	45 dBA
Second Floor Bedroom 3	72 dBA	39 dBA	33 dBA
Third Floor Optional Bedroom	72 dBA	30 dBA	42 dBA
Proposed Multi-Family Unit Plan E			
First Floor Living/Dining/Kitchen	72 dBA	30 dBA	42 dBA
Second Floor Master Bedroom	72 dBA	32 dBA	40 dBA
Second Floor Bedroom 2	72 dBA	30 dBA	42 dBA
Third Floor Bedroom 4 Suite	72 dBA	31 dBA	41 dBA
Proposed Single-Family Plan 1			
First Floor Great Room/Dining/Kitchen	67 dBA	26 dBA	41 dBA
Second Floor Master Bedroom	67 dBA	27 dBA	40 dBA
Second Floor Master Bath	67 dBA	32 dBA	35 dBA

Note: Noise level reduction values include a +3 dBA adjustment for "as-built" construction.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Mitigation Measures

Mitigation Measure NOI-1.2: To ensure that interior sound levels of future homes within the Project comply with the City's interior noise standards, the following requirements shall be met for residences on Lots 2, 3, 11, 12, 28, 29, 239, 278, and 279:

1. Windows and sliding glass doors shall be mounted in low air infiltration rate frames (0.5 cubic feet per minute/foot [cfm/ft.] or less per American National Standards Institute [ANSI] specifications).
2. Exterior doors of residences shall be solid core with perimeter weather-stripping and threshold seals.
3. Air conditioning or mechanical ventilation shall be provided to allow occupants to close doors and windows for the required acoustical isolation.

4. Roof or attic vents directly facing the traffic and commercial noise sources shall be baffled so that sound must take an indirect route when entering the attic space.

Significance Conclusion for Impact NOI-1.2 with Implementation of Mitigation Measures

With the implementation of **Mitigation Measure NOI-1.2**, adequate construction techniques would be implemented to ensure that the City's interior noise standards would be achieved, thereby resulting in a less-than-significant impact with mitigation.

Threshold NOI-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Impact NOI-2: Because local ground attenuation would provide sufficient dampening of vibration from construction equipment to below commonly used human perception and building damage thresholds within existing residential neighborhoods, the impact would be *less than significant*.

Methodology

The state CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noise would be considered "excessive." Additionally, there are no federal, state, or local vibration regulations or guidelines directly applicable to the proposed Specific Plan. However, publications of the FTA and Caltrans are two of the seminal works for the analysis of vibration relating to transportation- and construction-induced vibration. Although the proposed Specific Plan is not subject to FTA or Caltrans regulations, these guidelines serve as a useful tool to evaluate vibration impacts. For the purpose of this analysis, the vibration criteria for structural damage and human annoyance established in the FTA guidance manual are used to determine the significance of Project impacts.

A vibration assessment was conducted for the Project based on impact thresholds provided in the FTA guidance manual. The FTA criteria include limits on the building vibration that may be perceptible and hence annoying to building occupants and also limits on vibration levels that might cause building damage. The FTA criteria for groundborne vibration include limits for various building types, including residential.

The specific groundborne vibration impact limit applicable to residential uses is the threshold of "feelable" vibration, which is a PPV of approximately 0.03165 in/sec. **Table 3.11-2** in Section 3.11.2.a, taken from the FTA guidance manual, shows vibration damage criteria for various building types.

Impact Assessment

Construction activities typically result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Many types of construction equipment, such as air compressors, light trucks, and hydraulic loaders, are of the type that generate little or no ground vibration, while equipment, including bulldozers and rollers to be used during site grading could cause perceptible vibration levels.

To determine the potential vibration effects of grading activities at the homes adjoining the Project site, vibration source levels for construction equipment were obtained from the FTA guidance manual. **Table 3.11-14** summarizes the vibration data for typical types of construction equipment.

Table 3.11-14
Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 Feet (in/sec)
Clam shovel drop (slurry wall)		0.202
Hydromill (slurry wall)	in soil	0.008
	in rock	0.017
Vibratory roller		0.210
Hoe ram		0.089
Large bulldozer		0.089
Caisson drilling		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003

Source: FTA, 2006.

The shortest distances between nearby existing residential structures and the nearest Project-related grading activities would be 50 to 100 feet or more at the first row of single-family homes northeast of the Project site. Based on the local ground vibration attenuation rate, the predicted vibration PPV from mechanical rollers or soil compactors near the single-family homes northeast of the Project site would be between 0.045 and 0.17 in/sec at distances between 50 to 100 feet from the equipment. Therefore, ground vibration from such equipment would certainly be felt at the adjacent homes but would not cause structural damage to typical single-family construction.

The nearest distances from homes within the adjacent Westridge residential community to proposed construction activities are expected to be greater than 100 feet. In addition, the backyards and building structures of these homes are elevated above the local ground within the Project site. The vertical separation of proposed construction activities from the Westridge community would result in substantial additional dampening of vibration from Project construction equipment. The combination of these factors would result in vibration levels from vibratory rollers, which are the equipment that generate the highest vibration levels, to below 0.011 in/sec.

The findings of the vibration analysis show that the local ground attenuation would provide sufficient dampening of vibration so that future groundborne vibration levels from construction equipment would be below commonly used human perception and building damage thresholds within the backyards and at structures of homes adjoining the Project site. In

addition, in order to ensure that vibration impacts on existing homes and residents are further minimized, the applicant has committed to restrict the use of vibratory rollers near the existing residential area adjacent to the northeast boundary of the Specific Plan area. This restriction would be made a condition of approval of the Project.

Significance Conclusion for Impact NOI-2

Because local ground attenuation would provide sufficient dampening of vibration from construction equipment to below commonly used human perception and building damage thresholds within existing residential neighborhoods, impacts would be less than significant, and no mitigation would be required.

Threshold NOI-3: **Result in a substantial permanent increase in ambient noise levels in the project vicinity or above levels existing without the project.**

Impact NOI-3: **The proposed Project would not directly cause applicable La Habra General Plan land use compatibility noise standards to be exceeded. While Project-related traffic would add to existing exceedances of the City's noise standards, such increases in roadway noise levels would be negligible. In all cases, the addition of Project-related traffic would result in less than a 1.0 dBA noise increase in roadway noise levels, which would not be audible. The addition of a retail store and a restaurant to the northwest portion of the Project site would have negligible noise effects. As a result, the impact would be *less than significant*.**

Methodology

The significance of the Project's traffic noise impacts is determined by comparing estimated Project-related noise levels to applicable noise exposure standards. Increases in traffic noise exposure due to vehicle trips generated by the Project were evaluated using forecast peak-hour and average daily traffic (ADT) volumes on local roadways in future year conditions (Year 2035) with and without the Project, representing short-term and long-term impacts.

A significant noise impact would occur if the proposed Specific Plan would cause applicable General Plan land use compatibility noise standards to be exceeded. In cases where that standard would be exceeded with Project site development, a significant impact would result if the Project would cause a 3-dBA or greater increase in noise levels.

Impact Assessment

Roadway Noise

Table 3.11-15 summarizes the With- and Without-Project impacts for Year 2035 AM and PM peak-hour traffic volumes and ADT volumes on the roadway segments where project-related traffic would be most concentrated (and therefore have the potential for greatest noise effects).

As shown in **Table 3.11-15**, while in many cases, Project-related traffic would add to exceedances of the City's noise standards, such increases in roadway noise levels would be negligible. In all cases, the addition of Project-related traffic would result in less than a 1.0-dBA noise increase. Such increases would not be audible.

Table 3.11-15
Comparison of Forecast Future Year (2035) Traffic Noise Levels (in DBA) With and Without Project

	AM Peak Hour						PM Peak Hour					
	2035		2035 + Project		Difference		2035		2035 + Project		Difference	
	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB
Imperial Highway												
West of Valley View Ave.	69.9	70.6	70.0	70.7	0.1	0.1	70.2	69.9	70.3	70.0	0.1	0.1
Valley View Ave. – La Mirada Blvd.	70.6	71.1	70.8	71.1	0.2	0.0	70.6	70.5	70.6	70.5	0.0	0.0
La Mirada Blvd. – Santa Gertrudes Ave.	70.9	71.4	70.9	71.4	0.0	0.0	70.9	70.9	71.0	70.9	0.1	0.0
Santa Gertrudes Ave. – 1st Ave.	70.7	71.0	70.8	71.1	0.1	0.1	70.8	70.7	70.9	70.8	0.1	0.1
1st Av to Beach Blvd.	70.8	71.0	70.9	71.1	0.1	0.1	70.7	70.8	70.9	70.9	0.2	0.1
Beach Blvd. – La Habra Hills Dr.	71.6	71.5	71.7	71.6	0.1	0.1	71.1	71.1	71.3	71.3	0.2	0.2
La Habra Hills Dr. – Idaho St.	71.4	71.3	71.5	71.3	0.1	0.0	70.9	71.0	71.1	71.1	0.2	0.1
Idaho St. – Walnut St.	72.6	72.4	72.6	72.5	0.0	0.1	72.3	72.4	72.4	72.5	0.1	0.1
Walnut St. – Euclid St.	72.5	72.4	72.6	72.4	0.1	0.0	72.2	72.5	72.3	72.6	0.1	0.2
Euclid St. – Harbor Blvd.	73.1	72.9	73.1	72.9	0.0	0.0	72.4	72.7	72.4	72.8	0.0	0.1
East of Harbor Blvd.	71.9	71.8	72.0	71.9	0.1	0.1	71.5	71.8	71.6	71.8	0.1	0.0
Beach Boulevard												
Artesia Blvd. – Malvern Ave.	69.7	70.5	69.8	70.5	0.1	0.0	69.5	70.8	69.6	70.9	0.1	0.1
Malvern Ave. – Rosecrans Ave.	72.7	72.3	72.8	72.4	0.1	0.1	72.5	72.8	72.6	73.0	0.1	0.2
Rosecrans Ave. – Hillsborough Dr.	73.8	73.7	74.1	73.8	0.2	0.1	73.4	74.0	73.6	74.2	0.2	0.2
Hillsborough Dr. – Hillsborough Park Apts.	72.3	72.5	72.5	72.7	0.2	0.2	72.5	73.1	72.7	73.2	0.2	0.1
Hillsborough Park Apts. – Imperial Hwy.	73.2	73.2	73.3	73.3	0.1	0.1	73.2	73.6	73.4	73.7	0.2	0.1
Imperial Hwy. – Lambert Rd.	71.1	70.4	71.1	70.5	0.0	0.1	71.7	71.6	71.7	71.6	0.0	0.0

Table 3.11-15
Comparison of Forecast Future Year (2035) Traffic Noise Levels (in DBA) With and Without Project

	AM Peak Hour						PM Peak Hour					
	2035		2035 + Project		Difference		2035		2035 + Project		Difference	
	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB
Lambert Rd. – La Habra Blvd.	70.5	70.2	70.6	70.3	0.1	0.1	70.4	70.6	70.4	70.7	0.0	0.1
La Habra Blvd. – Whittier Blvd.	69.8	69.3	69.9	69.4	0.1	0.1	69.9	70.0	69.9	70.3	0.0	0.1
Artesia Boulevard												
West of Beach Blvd.	67.5	67.7	67.6	67.7	0.1	0.0	68.1	67.9	68.2	67.9	0.1	0.0
Beach Blvd. – Gilbert St.	67.8	67.5	67.9	67.5	0.1	0.0	67.5	67.3	67.7	67.5	0.2	0.2
Malvern Avenue												
West of Beach Blvd.	68.4	69.0	68.4	69.0	0.0	0.0	68.3	68.9	68.3	69.0	0.0	0.1
Beach Blvd. – Gilbert St.	68.2	68.1	68.3	68.1	0.1	0.0	68.3	68.6	68.4	68.6	0.1	0.0
Gilbert St. – Euclid St.	67.8	68.1	67.9	69.1	0.1	0.0	68.2	68.8	68.2	68.8	0.0	0.1
Euclid St. – Harbor Blvd.	67.2	66.8	67.2	66.8	0.0	0.0	67.1	67.4	67.2	67.4	0.1	0.0
Rosecrans Avenue												
West of Beach Blvd.	68.2	67.6	68.2	67.7	0.0	0.1	68.2	67.5	68.3	67.5	0.1	0.0
Beach Blvd. – Gilbert St	67.8	67.5	67.9	67.5	0.1	0.0	67.5	67.3	67.7	67.5	0.2	0.2
Gilbert St. – Euclid St.	66.5	67.1	66.6	67.1	0.1	0.0	65.5	66.9	65.5	67.0	0.0	0.1
Lambert Road												
Wall St. – Beach Blvd.	68.1	68.0	68.1	68.1	0.0	0.1	68.3	68.5	68.3	68.5	0.0	0.0
Beach Blvd. Idaho St.	68.1	68.1	68.1	68.1	0.0	0.0	68.7	69.2	68.7	69.2	0.0	0.0
Idaho St. – Euclid St.	68.2	68.1	68.2	68.1	0.0	0.0	68.6	69.1	68.6	69.1	0.0	0.0
Euclid St. – Harbor Blvd.	67.7	67.4	67.7	67.4	0.0	0.0	68.5	69.2	68.5	69.2	0.0	0.0
East of Harbor Blvd.	68.4	68.1	68.4	68.1	0.0	0.0	68.9	69.7	68.9	69.8	0.0	0.0
La Habra Boulevard												
West of Beach Blvd.	65.4	65.7	65.4	65.7	0.0	0.0	66.7	66.0	66.2	66.0	0.0	0.0
East of Beach Blvd.	65.6	65.8	65.7	65.8	0.1	0.0	66.5	66.1	66.5	66.1	0.0	0.0
Whittier Boulevard												
West of Beach Blvd.	67.7	67.7	67.7	67.7	0.0	0.0	67.8	67.8	67.9	67.8	0.1	0.0
East of Beach Blvd.	68.4	68.8	68.4	68.8	0.0	0.0	69.3	69.2	69.3	69.2	0.0	0.0
Valley View Avenue												
South of Imperial Hwy.	68.5	68.4	68.5	68.4	0.0	0.0	68.5	68.6	68.5	68.6	0.0	0.0
North of Imperial Hwy.	65.1	64.6	65.1	64.6	0.0	0.0	64.7	64.7	64.7	64.7	0.0	0.0
La Mirada Boulevard												
South of Imperial Hwy.	68.2	67.7	68.2	67.7	0.0	0.0	67.3	67.2	67.3	67.2	0.0	0.0
North of Imperial Hwy.	67.5	66.7	67.5	66.7	0.0	0.0	66.8	66.6	66.8	66.7	0.0	0.1
Santa Gertrudes Avenue												
South of Imperial Hwy.	65.4	65.2	65.4	65.2	0.0	0.0	66.2	66.7	66.2	66.7	0.0	0.0
North of Imperial Hwy.	64.8	64.4	64.8	64.4	0.0	0.0	65.8	66.3	65.8	66.3	0.0	0.0

Table 3.11-15
Comparison of Forecast Future Year (2035) Traffic Noise Levels (in DBA) With and Without Project

	AM Peak Hour						PM Peak Hour					
	2035		2035 + Project		Difference		2035		2035 + Project		Difference	
	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	NB/WB
1st Avenue												
South of Imperial Hwy.	55.2	55.2	55.2	55.2	0.0	0.1	55.4	55.3	55.5	55.4	0.1	0.1
North of Imperial Hwy.	62.4	62.1	62.4	62.2	0.0	0.1	61.7	61.9	61.7	61.9	0.0	0.0
Gilbert Street												
South of Malvern Ave.	67.7	68.1	67.7	68.2	0.0	0.1	67.4	68.7	67.5	68.7	0.1	0.0
Malvern Ave. – Rosecrans Ave.	66.5	66.3	66.6	66.3	0.1	0.0	66.7	67.2	66.8	67.3	0.1	0.1
Idaho Street												
Rosecrans Ave. – Sandlewood Ave.	66.8	66.0	67.1	66.2	0.3	0.2	67.4	67.5	67.5	67.6	0.1	0.1
Sandlewood Ave. – Imperial Hwy.	67.9	67.6	68.0	67.7	0.1	0.1	68.0	68.3	68.1	68.4	0.1	0.1
Imperial Hwy. – Lambert St.	65.9	65.4	65.9	65.4	0.0	0.0	66.2	66.4	66.3	66.4	0.1	0.0
North of Lambert St.	64.9	64.3	64.9	64.3	0.0	0.0	65.0	65.2	65.0	65.3	0.0	0.1
Euclid Street												
Commonwealth Ave. – Malvern Ave.	65.9	65.6	65.9	65.7	0.0	0.1	65.9	66.0	65.9	66.0	0.0	0.0
Malvern Ave. – Rosecrans Ave.	66.6	66.9	66.6	66.9	0.0	0.0	66.2	67.6	66.3	67.6	0.1	0.0
Rosecrans Ave. – Sandlewood Ave.	69.9	67.1	69.9	67.1	0.0	0.0	69.8	68.1	69.9	68.2	0.1	0.1
Sandlewood Ave. – Imperial Hwy.	68.8	67.2	68.8	67.3	0.0	0.1	68.4	67.5	68.5	67.6	0.1	0.1
Imperial Hwy. – Lambert St.	67.0	66.7	67.0	66.7	0.0	0.0	65.4	65.8	65.4	65.8	0.0	0.0
North of Lambert St.	64.9	64.3	64.9	64.3	0.0	0.0	65.0	65.2	65.0	65.3	0.0	0.1
Harbor Boulevard												
South of Imperial Hwy.	70.7	70.2	70.7	70.2	0.0	0.0	70.1	70.4	70.1	70.4	0.0	0.0
Imperial Hwy. – Lambert St.	69.6	69.0	69.6	69.1	0.0	0.1	69.4	69.5	69.4	69.6	0.0	0.1
North of Lambert St.	69.5	68.5	69.6	68.5	0.1	0.0	69.8	69.7	69.8	69.7	0.0	0.0

Notes: SB = southbound, EB = eastbound, NB = northbound, WB = westbound
Traffic noise levels are calculated at a distance of 100 feet from the centerline of each roadway.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Commercial Area Noise Generation

The addition of a retail store and a restaurant to the northwest portion of the Project site would introduce additional noise sources to the east side of the proposed new commercial buildings, where delivery bays and other noise-generating sources would be located. Potential noise effects from these sources on existing noise-sensitive land uses would be negligible due to building shielding and distance attenuation effects. Furthermore, cumulative noise from traffic

on Beach Boulevard and other existing commercial sources is expected to be at levels that would not change by the introduction of these new noise sources.

Significance Conclusion for Impact NOI-3

The Project would not cause applicable General Plan land use compatibility noise standards to be exceeded. While Project-related traffic would add to exceedances of the City's noise standards, such increases in roadway noise levels would be negligible. In all cases, the addition of Project-related traffic would result in less than a 1.0-dBA noise increase. The addition of a retail store and a restaurant to the northwest portion of the Project site would have negligible noise effects. As a result, the impact would be less than significant.

Threshold NOI-4: **Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

Impact NOI-4: **Project-related demolition and crushing, site grading, and infrastructure and building construction would temporarily expose persons to noise levels substantially in excess of existing conditions. Even with implementation of Mitigation Measures NOI-4a through NOI-4j, construction noise levels would remain substantially above ambient conditions and would be clearly audible to area residents. The resulting impact would be *significant and unavoidable*.**

Methodology

Because construction noise is exempted from City noise standards between 7:00 a.m. and 8:00 p.m. weekdays and Saturdays, City noise standards cannot be used to determine the significance of construction noise. Therefore, recognizing the intermittent and temporary nature of construction activities and their potential for created one-time noise events, a significant construction noise impact would occur if construction activities lasting more than 10 working days within a 3-month period would exceed ambient noise levels at a noise-sensitive use by 5 dBA or more.

Typical construction equipment noise level data were obtained from the Roadway Construction Noise Model developed by the Federal Highway Administration (FHWA). The noise database used for estimating construction noise levels includes maximum noise levels from each piece of machinery at a reference distance of 50 feet and usage factors of equipment as percentages during a typical activity hour. For each piece of construction equipment, the L_{eq} is estimated using its reference noise level and usage factor combined with the distance to the receiver and local shielding factors, if applicable.

For grading operations, noise levels at representative noise-sensitive receivers were estimated for each grading phase by using the equipment reference noise levels in a noise model developed for each of the three grading areas. Each noise model takes into account the maximum number of runs per hour for each piece of machinery in the given grading area, locations of noise-sensitive receivers, and noise attenuation due to distance and local shielding effects.

For analysis of construction traffic noise, only the AM peak hour is analyzed since projected traffic would constitute a greater proportion of total traffic (and therefore exhibit a greater impact) in the AM peak hour than in the PM peak hour.

Impact Assessment

Project construction would include several components generally consisting of (1) demolition, crushing, and site preparation; (2) site grading; and (3) infrastructure and building construction. During these activities, overall noise levels would vary based on the intensity of construction activity, the types of equipment used, and the orientation and distance between construction activities and noise-sensitive receivers.

Demolition and Crushing

Initial construction activities would include demolition of some existing buildings, removal of hardscape and pathways within the golf course, and crushing of concrete and asphalt debris. The applicant is proposing to set up and operate a temporary aggregate plant to recycle on-site concrete and asphalt demolition debris into suitable sizes for use in deep fills or as road base material. The aggregate crushing plant would be located in the northern portion of the Project site along the south side of La Habra Hills Drive across from the rear of the Westridge Plaza shopping center, east of the existing driving range.

Construction equipment used for demolition of buildings and hardscape would include loaders, dozers, articulated hauler, excavators, and other industrial equipment. The crushing and screening plant would include a crusher, screen, conveyors, receiving hopper, grizzly, and jaw crusher. Crushing operations duration would occur for approximately 50 working days over a 3-month span.

Noise levels at representative locations were estimated for the combined demolition and crushing operations. **Table 3.11-16** summarizes the average hourly noise level (L_{eq}) estimates from the demolition, excavation, and crushing operations, and compares them to existing background noise levels for "worst-case" situations when all equipment would be operating simultaneously and without interruptions.

Table 3.11-16
Comparison of Demolition and Crushing Construction Noise with Existing Noise Levels

Monitoring Location	Demolition L_{eq}	Crushing L_{eq}	Combined Construction L_{eq}	Existing L_{eq}	Combined Construction + Existing L_{eq}	Estimated Increase over Existing L_{eq}
ST-1	43	32	43	48	49	1
ST-2	56	49	57	49	58	**9**
ST-3	61	57	62	45	62	**17**
ST-4	46	59	59	42	59	**17**
ST-5	56	60	61	46	61	**15**
ST-5A	59	67	68	46	68	**22**
ST-6	33	44	44	48	49	1
ST-7	30	34	35	59	59	-0-
ST-8	51	57	58	50	59	**9**
ST-9	54	62	63	45	63	**18**
ST-10	54	63	64	40	64	**24**
ST-14	55	50	56	68	68	-0-
ST-15	39	49	49	53	54	1
ST-16	28	38	38	56	56	-0-

Note: Locations shown in **bold** identify increases audible increases of 5 dBA or more.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

As indicated in **Table 3.11-16**, the combined demolition and crushing activities would result in substantial increases in daytime exterior noise levels at adjoining residential uses to the south and north of the project site, with noise being perceived as more than double existing ambient daytime noise levels at some locations.

Site Grading

The highest construction noise levels are expected to occur when mass grading and finishing grading activities occur. Grading of the Project site would take place in three distinct physical areas within the project site. The grading areas are described as follows:

- **Area 1** encompasses the eastern portion of the Project site. This area is bounded by the northern project boundary, South Idaho Street, and the easternmost bluff on which the existing Westridge community homes along South Runyan Street are located. The north limit of this area is along the southern property boundaries of existing homes along Lemon Tree Drive and Rain Tree Drive. The western limit of this area is a straight north-south line at the western edge of the property at the western end of Lemon Tree Drive.
- **Area 2** lies in the north-central portion of the Project site and is bounded to the north by the existing commercial properties and to the south by the residential bluff of the Westridge community.

- **Area 3** encompasses the area west of La Habra Hills Drive.

Mass grading of Area 1 would take place over a period of 30 working days. Area 2 would be graded over a period of 30 working days. Grading of Area 3 would take 100 working days to complete.

Table 3.11-17 summarizes the mass grading noise level estimates in terms of hourly L_{eq} for each grading area and compares the overall resultant noise levels to existing background noise levels at representative monitoring locations. These noise levels are based on a conservative assumption that non-stop grading activities by multiple construction equipment would occur in each area during a full construction day throughout the entirety of site grading activities.

As indicated in **Table 3.11-17**, comparison of the combined construction and background noise levels to existing levels at each location shows that grading operations would result in substantial increases in daytime exterior noise levels at adjoining residential uses to the south and north of the Project site, with noise being perceived as more than double existing ambient daytime noise levels at some locations.

Table 3.11-17
Comparison of Grading Operations Noise to Existing Noise Levels

Monitoring Location	Grading L_{eq}	Existing L_{eq}	Grading + Existing L_{eq}	Increase Over Existing
Area 1				
ST-1	23	48	48	--
ST-2	39	49	49	--
ST-3	40	45	46	1
ST-4	41	42	45	3
ST-5	37	46	47	1
ST-5A	39	46	47	1
ST-6	70	48	70	**22**
ST-7	60	59	63	4
ST-8	70	50	70	**20**
ST-9	71	45	71	**26**
ST-10	59	40	59	**19**
ST-14	42	68	68	--
ST-15	61	53	62	**9**
ST-16	58	56	60	4
Area 2				
ST-1	29	48	48	--
ST-2	50	49	53	3
ST-3	55	45	56	**11**
ST-4	65	42	65	**23**

Table 3.11-17
Comparison of Grading Operations Noise to Existing Noise Levels

Monitoring Location	Grading L_{eq}	Existing L_{eq}	Grading + Existing L_{eq}	Increase Over Existing
ST-4A	63	42	63	**21**
ST-5	64	46	64	**18**
ST-5A	69	46	69	**23**
ST-6	52	48	53	5
ST-7	45	59	59	--
ST-8	55	50	56	**6**
ST-9	64	45	64	**19**
ST-10	70	40	71	**30**
ST-14	50	68	68	--
ST-15	51	53	55	2
ST-16	43	56	56	--
Area 3				
ST-1	55	48	56	**8**
ST-2	64	49	64	**15**
ST-3	65	45	65	**20**
ST-4	35	42	43	1
ST-5	51	46	52	**6**
ST-5A	55	46	56	**10**
ST-6	34	48	48	--
ST-7	32	59	59	--
ST-8	42	50	51	1
ST-9	45	45	48	3
ST-10	48	40	49	**9**
ST-14	62	68	69	1
ST-15	33	53	53	--
ST-16	33	56	56	--

Note: **Bold** indicates locations where grading noise would exceed ambient noise levels by 5 dB or more.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Infrastructure and Building Construction

Construction of infrastructure and building site preparation would commence toward the end of grading activities. Infrastructure improvements, including storm drains, water and sewer mains, and streets, would be installed over an approximately 6- to 8-month period. Construction of residential structures would begin approximately 1 month after site grading and would be completed within approximately 30 months.

Table 3.11-18 summarizes the noise level estimates from the combined infrastructure installation and building construction activities. As shown, construction noise levels during this period of construction would be generally lower than during grading operations. However, construction noise would still be clearly audible above existing background sound levels at the majority of adjoining noise-sensitive residential uses, in some cases by enough to be perceived as a doubling of ambient noise levels.

Construction Traffic Noise

Table 3.11-19 summarizes the comparison of AM peak-hour L_{eq} values between existing conditions and with-construction conditions. As shown in **Table 3.11-19**, construction traffic would increase noise levels in the AM peak hour by 0.2 dBA at noise-sensitive locations along Imperial Highway and by 0.1 dBA along Beach Boulevard. Such noise increases would not be audible.

Table 3.11-18
Comparison of Infrastructure and Building Construction Noise to Existing Noise Levels

Monitoring Location	Infrastructure and Building Construction	Existing Leq	Construction + Existing Leq	Increase Over Existing
ST-1	49	48	52	4
ST-2	58	49	59	**10**
ST-3	62	45	62	**17**
ST-4	52	42	52	**10**
ST-5	54	46	55	9
ST-5A	61	48	61	**13**
ST-6	61	48	61	**13**
ST-7	54	59	60	1
ST-8	61	50	61	**11**
ST-9	61	45	61	**16**
ST-10	58	40	58	**18**
ST-14	59	68	69	1
ST-15	55	53	57	4
ST-16	52	56	57	1

Note: **Bold** indicates locations where increases of 5 dBA or more over existing conditions would occur.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Table 3.11-19
Contribution of Construction Traffic to Area Traffic Noise in AM Peak Hour

Roadway Segment	AM Peak-Hour Traffic Volume		Predicted Peak-Hour Traffic Noise Level at 100 Feet from Roadway Center Line (dBA)		
	Existing	With Construction	Existing	With Construction	Noise Level Change
EB Imperial Hwy. - West of Beach Blvd.	1,177	1,184	69.8	68.6	+0.2
WB Imperial Hwy. - West of Beach Blvd.	1,730	1,800			
SB Beach Blvd. - South of Imperial Hwy.	2,294	2,300	72.5	72.6	+0.1
NB Beach Blvd. - South of Imperial Hwy.	1,761	1,829			

Notes: SB = southbound, EB = eastbound, NB = northbound, WB = westbound
Source: Rancho La Habra Noise and Vibration Analysis Report, 2019.

Significance Conclusion for Impact NOI-4

Although construction activities are exempt from City noise standards during the hours that Project-related construction would occur, demolition and crushing, site grading, and infrastructure and building construction would expose persons to noise levels substantially in excess of existing conditions. Even with implementation of all feasible mitigation measures, construction noise levels would remain substantially above ambient conditions and would be clearly audible to area residents. The resulting impact would be significant and require mitigation.

Mitigation Measures

Mitigation Measure NOI-4a: All construction equipment, stationary and mobile, shall be operated with closed engine doors, if so equipped, and shall be equipped with properly operating and maintained muffling devices, intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.

Mitigation Measure NOI-4b: During Project construction, each construction contractor shall properly maintain and tune all construction equipment to minimize noise emissions.

Mitigation Measure NOI-4c: Each construction contractor shall locate all stationary noise sources (e.g., generators, compressors) no closer than 50 feet from residential receptor locations to allow for natural dissipation of noise.

Mitigation Measure NOI-4d: The on-site operation of construction equipment that generates high levels of noise, such as large bulldozers, shall be

conducted no closer than 100 feet from residential receptor locations to allow for natural dissipation of noise. Within 100 feet of residential receptor locations small bulldozers not exceeding 310 horsepower shall be used.

Mitigation Measure NOI-4e: Construction contractors shall select and use quieter tools or construction methods whenever feasible. Examples include using plasma cutters, which produce less noise than power saws with abrasive blades and ordering precut materials to specifications to avoid on-site cutting.

Mitigation Measure NOI-4f: The construction contractor shall maximize, as feasible, the use of enclosures such as four-sided or full enclosures with a top for compressors and other stationary machinery, and locate activities, such as metal stud and rebar cutting, within constructed walled structures to minimize noise propagation.

Mitigation Measure NOI-4g: The nearest edge of equipment staging areas shall be no closer than 330 feet from residential receptor locations.

Mitigation Measure NOI-4h: The nearest edge of outdoor materials storage areas shall be no closer than 50 feet from residential receptor locations.

Mitigation Measure NOI-4i: Electric power from a grid connection shall be used to run air compressors and similar power tools and to power any temporary equipment.

Mitigation Measure NOI-4j: The construction contractor shall post a contact name and telephone number of the owner's authorized representative on-site.

Significance Conclusion for Impact NOI-4 with Implementation of Mitigation Measures

While **Mitigation Measures NOI-4a** through **NOI-4j** would reduce construction noise intrusion into sensitive uses, due to the large amount of demolition and grading required for proposed site development, construction noise within adjacent residential neighborhoods would continue to be clearly audible during construction. The impact would therefore be significant and unavoidable.

Threshold NOI-5: For a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Impact NOI-5: Because the Project site is not within an airport land use plan and there is no public or public use airport within 2 miles of the Project site, *no impact* would result.

Methodology

A significant impact would result if the Project were to be inconsistent with the noise standards of an applicable airport land use plan, or if the project site were located within the 65-dBA noise contour of a public or public use airport. However, because the site is not subject to an airport land use plan, nor is there a public or public use airport within 2 miles of the Project site, detailed analysis was unnecessary.

Impact Assessment

The Project site is not located within an airport land use plan or within 2 miles of a public airport. Fullerton Municipal Airport is the closest airport to the Project site and is over 2.3 miles south of the Specific Plan area.

Significance Conclusion for Impact NOI-5

Because the Project site is not subject to an airport land use plan, nor is there a public or public use airport within 2 miles of the Project site, no impacts would result.

Threshold NOI-6: For a project located within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Impact NOI-6: Because no private airstrips are located within 2 miles of the Specific Plan area, *no impact* would result.

Methodology

A significant impact would result if the Project were to be within the 65-dBA noise contour of a private airstrip. However, because there are no private airstrips within 2 miles of the Specific Plan area, detailed analysis was unnecessary.

Impact Assessment

There are no private airstrips within 2 miles of the Specific Plan area. Therefore, the Specific Plan would not expose people working in the area to excessive noise levels associated with a private airstrip.

Significance Conclusion for Impact NOI-6

Because there is no private airstrip within 2 miles of the Specific Plan area, and the Specific Plan would not expose people working in the area to excessive noise levels, no impacts would result.

3.11.5 REFERENCES

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CHAPTER 6 CUMULATIVE IMPACTS

This chapter analyzes ways in which those impacts of the Rancho La Habra Specific Plan addressed in the Partially Recirculated Draft EIR might combine with the impacts of other past, present, and probable future projects causing related impacts that when considered together create or result in significant "cumulative impacts." If the effects of the proposed Specific Plan are significant, when considered in combination with the effects of other past, present, and probable future projects, the project's contribution to the combined cumulative significant impact is analyzed as required by the California Environmental Quality Act (CEQA) to determine if the Project's impact is "cumulatively considerable." Cumulative impacts for the environmental issues addressed in this Partially Recirculated Draft EIR are organized by resource topic and analyzed below.

6.1 DEFINITIONS

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts… The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355).

Cumulatively considerable means that the incremental effects of an individual project would be significant when viewed in connection with the effects of past, current, and probable future projects (CEQA Guidelines Section 15065(a)(3)).

6.2 CEQA REQUIREMENTS AND APPROACH TO CUMULATIVE IMPACT ANALYSIS

In accordance with CEQA Guidelines Section 15130(b), the discussion of cumulative impacts provided in this chapter is intended to "reflect the severity of the impacts and their likelihood of occurrence." CEQA Guidelines Section 15130(b) states that the discussion of cumulative impacts "need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The CEQA Guidelines direct that the discussion should be guided by practicality and reasonableness and focus on the cumulative impacts that would result from the combination of the proposed project and other closely related projects, rather than the attributes of other projects that do not contribute to cumulative impacts.

Pursuant to CEQA Guidelines Section 15130(a)(1), this environmental impact report (EIR) discusses only those cumulative impacts that would result at least in part from the proposed

Rancho La Habra Specific Plan. Thus, cumulative impact analysis is not provided for any environmental issue where the proposed Specific Plan would have no environmental impact. Analysis of cumulative impacts in the Partially Recirculated Draft EIR is, however, provided for all biological resources, traffic and transportation, air quality, greenhouse gas emissions, energy, and noise and vibration impacts, whether they were determined to be significant and unavoidable, significant but mitigable, or less than significant.

When incorporating the impacts of past and present projects into the cumulative analysis set forth below, the currently developed portions of ongoing phased projects as they existed in 2019 at the time of preparation of updated technical studies are incorporated in the environmental setting/baseline described in the individual resource sections. The portions of ongoing phased development projects that were yet to be built as of 2019 are included as part of the analysis of cumulative impacts.

The CEQA Guidelines provide two approaches to analyzing cumulative impacts (CEQA Guidelines Section 15130(b)(1)). The first is the "list approach," which requires a listing of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, projects outside the control of the lead agency. The second approach relies upon projections contained in an adopted local, regional, or statewide plan or related planning document as the basis of the cumulative analysis. A reasonable combination of the two approaches may also be used.

The cumulative analysis for air quality, greenhouse gas emissions, and traffic relies on projections contained in adopted local, regional, or statewide plans or related planning documents, such as the Southern California Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and relevant regional plans developed by the Southern California Association of Governments (SCAG). The analysis of cumulative transportation impacts (and transportation-related traffic and air quality) also relies on regional traffic model travel demand estimates, which were also used to evaluate the impacts of proposed area development. The land use and socioeconomic database, as well as growth forecasts for Southern California that were described in the 2016 RTP/SCS, were also used in the traffic analysis. The cumulative analyses for other environmental issues use the list of projects approach. The list of past present, and probable closely related future projects within the geographic scope of the impact analyses is based upon information provided by the neighboring cities of Brea, Buena Park, Fullerton, La Habra Heights, La Mirada, and Whittier.

Different types of cumulative impacts occur over different geographic areas. For example, the geographic scope of the cumulative air quality analysis, where cumulative impacts occur over a large area, is different from the geographic scope considered for cumulative analysis of noise, for which cumulative impacts are limited due to the attenuation of noise as distance increases. Thus, in assessing cumulative noise impacts, for example, only development within and immediately adjacent to the Rancho La Habra Specific Plan area that would contribute to a

cumulative construction noise effect is analyzed, whereas cumulative air quality impacts are based upon all development within the South Coast Air Basin. Because the geographic scope and other parameters of each cumulative analysis discussion can vary, the cumulative geographic scope, and the cumulative projects included in the geographic scope (when the list of projects approach is used), are described for each environmental topic.

A total of 61 closely related projects were identified within the vicinity of the project site as of August 2019 when preparation of the updated Rancho La Habra Traffic Impact Analysis was under way, whose physical environmental effects might combine with those of the proposed project to create one or more cumulative impacts. These cumulative projects are identified in **Table 6-1** and illustrated in **Figure 6-1**.

TABLE 6-1: CUMULATIVE PROJECTS LIST

	Project	Location	Land Use
City of La Habra			
1	City Hall Relocation/Residential	Northeast corner of Euclid Street and La Habra Boulevard	9 Single family dwellings 62 Condominium units
2	Skylark	1220-1240 W. La Habra Boulevard	32 Condominium units
3	701 E. Imperial Highway Mixed-Use Development	North of Imperial Highway at Village Drive, east of Leslie Street	105 Room Hotel, 2,250 SF Fast-Food with drive-thru, 2,250 SF Fast Food with drive-thru,10,000 SF Day Care Center
4	Pinnacle Residential	1101 N. Harbor Boulevard	7 DU Single family dwellings
5	Olson Co.	1801 West La Habra Boulevard	50 Condominium units
6	Mountain View Apartments	320-330 South Monte Vista Street	30 Apartment units
7	Bonanni Development	104-118 East Electric Avenue	65 Condominium units
City of La Habra Heights			
8	Sempra Oil Field Phase 3	NW Part of the City of La Habra Heights	18-acre Oil Field
City of Fullerton			
9	West Coyote Hills	Generally north of Rosecrans Avenue between Beach Boulevard and Euclid Avenue	556 Single family dwellings 204 Condominium units 68,000 s.f. Retail/Office
10	Demolition of Beckman Coulter Facility and Construction of Beckman Business Center	4300 North Harbor Boulevard	978,665 s.f. warehouse, manufacturing, and industrial Floor
City of Whittier			
11	Morningstar Christian Chapel	16233 Leffingwell Road	10,000 s.f. Church expansion
12	Park Place	14640-14660 Whittier Boulevard	50 Condominium units
13	Amesbury	12423-12425 Whittier Boulevard	55 Condominium units

	Project	Location	Land Use
14	S. Chen Condos Project	7941 Greenleaf Avenue	12 Condominium units
15	Lincoln Specific Plan (former Fred C. Nelles Youth Correctional Facility)	11850 Whittier Boulevard (at Whittier Boulevard and Sorensen Avenue)	750 residential dwelling units: 187 single family dwellings 296 apartment unit 267 Condominium units 208,350 s.f. commercial: 8,000 s.f. medical office 127,850 s.f. shopping center with supermarket, bank, restaurants, and fast-food restaurant with drive-thru
16	Catalina Apartments	14339 Whittier Boulevard	76 Multi-family dwelling units
17	Cambridge Place	11757 Hadley Street	32 Townhome units
18	Former ICC	5360 Workman Mill Road	32 Single family dwellings
19	New Apartments	14021 Whittier Boulevard	24 Apartment units
20	G & M Gas Station	12559 Lambert Road	1,960 s.f. Gas station
21	Xtreme Tint	13443 Lambert Road	11,705 s.f. Commercial
22	Enchanted Flowers Site	15807 Whittier Boulevard	1,032 s.f. Tire store
23	US Bank	13525 Whittier Boulevard	4,120 s.f. Bank
24	Whittier Blvd Apartments	14021 Whittier Boulevard	22 Apartment units
25	Five Points	8016 Santa Fe Springs Road	60 Apartment units 4,561 s.f. Express car wash
26	King Taco Office Replacement	11533 Whittier Boulevard	4,420 s.f. Office building
27	Washington Blvd Apartments	12428 Washington Boulevard	14 Apartment units
28	Road Runner Towing	12087 Whittier Boulevard	4,700 s.f. Office building
29	Poet Gardens	13002 Philadelphia Street	14,000 s.f. Brewery/restaurant
30	Lambert Road Car Wash	13001 Lambert Road	4,000 s.f. Automated car wash
31	Whittier Boulevard Motel	14116-14128 Whittier Boulevard	41 Room motel
32	College Avenue Apartments	8343 College Avenue	30 Apartment units
33	WACC	8100 Colima Road	25,960 s.f. Church
34	ABS Properties	12100 Hadley Street	28,757 s.f. Manufacturing
City of Brea			
35	Central Park Village	340-420 W. Central Avenue	83 townhome units 369 apartment units 31,000 s.f. retail 35,000 s.f. medical office building
36	La Floresta	Northeast corner of Valencia Avenue and Imperial Highway	1,220 Single family dwellings 156,000 SF Commercial

	Project	Location	Land Use
			(90% Complete)
37	CVS	390 N. Brea Boulevard	13,000 s.f. CVS pharmacy 1,700 s.f. Coffee shop with drive-thru
38	Brea Place	State College Boulevard and Birch Street	790 Apartment units 150 Room hotel 5,000 s.f. Office
39	Brea Imperial Center	311-391 S. State College Boulevard 1130-1160 E. Imperial Highway	45,283 s.f. Commercial
40	Downtown Hotel	220 S. Brea Boulevard	116 Room hotel
41	Mercury Apartments	Southeast corner of Berry Street and Mercury Lane	120 Apartment units
42	Brea 265	Brea 265 Specific Plan	301 Low Density Residential units 273 Med. Density Residential units 526 High Density Residential units
City of Buena Park			
43	Los Coyotes Country Club Development Plan	Los Coyotes Country Club (8888 Los Coyotes Drive)	80 Condominium units 4,000 s.f. Office
44	The Source, Beach/Orangethorpe Mixed-Use Development	6940 Beach Boulevard	319 Condominium units *(Phase 1 Complete)*
45	7301 Artesia Blvd/Nabisco Site	7301 Artesia Blvd	149 Condominium units *(10% Remain to be Constructed)* 102 room hotel *(Complete but not yet Open)* 31,800 SF Automobile Sales *(Complete)*
46	Olson IndigoWalk	8281 Page Street	54 Condominium units
47	Arte Home	7411 Artesia Boulevard	21 Apartment units
48	Aloft Hotel	7851 Beach Boulevard	149 Room hotel
49	Stanford Hotel	7860 Beach Boulevard	150 Room hotel
50	Org/Mag Townhomes	8925 Orangethorpe Avenue	108 Condominium units
51	6555 Beach	6555 Beach Boulevard	34 Apartment units 1,418 s.f. Commercial
52	Exbon	8422 Commonwealth Avenue	24,237 s.f. Contractor yard
53	Butterfly Palladium	7711 Beach Boulevard	57,300 s.f. Entertainment attraction
City of La Mirada			
54	Apartments	11628 La Mirada Boulevard	28 Apartment units
55	Single Family Homes	13400 Biola Avenue	6 DU Single family dwellings

	Project	Location	Land Use
56	Multi-Family Residential	13811 Valley View Avenue	52 Condominium units
57	Commercial	14447 Firestone Boulevard	28,000 s.f. Commercial
58	Valley View Ave Multi-Family	12841 Valley View Avenue	39 Condominium units
59	Firestone Blvd Restaurant	14303 Firestone Boulevard	5,132 s.f. Fast-food with drive-thru
60	UPS Parcel Hub	16301 Trojan Way	498,000 s.f. Parcel hub
61	Movie Theater	15296 Rosecrans Avenue	24,900 s.f. Movie theater
62	Imperial Highway Restaurant	15809 Imperial Highway	2,260 s.f. Fast-food with drive-thru
63	Imperial Highway Retail	15745 Imperial Highway	30,720 s.f. Retail

Source: City of La Habra, La Habra Heights, Fullerton, Whittier, Brea, Buena Park and La Mirada Planning Departments.

6.3 ANALYSIS OF CUMULATIVE IMPACTS

The following sections analyze cumulative impacts, as well as the proposed project's contribution to any significant cumulative impacts for the following subjects:

- Biological Resources
- Traffic and Circulation
- Air Quality
- Greenhouse Gas Emissions
- Energy Resources
- Noise and Vibration

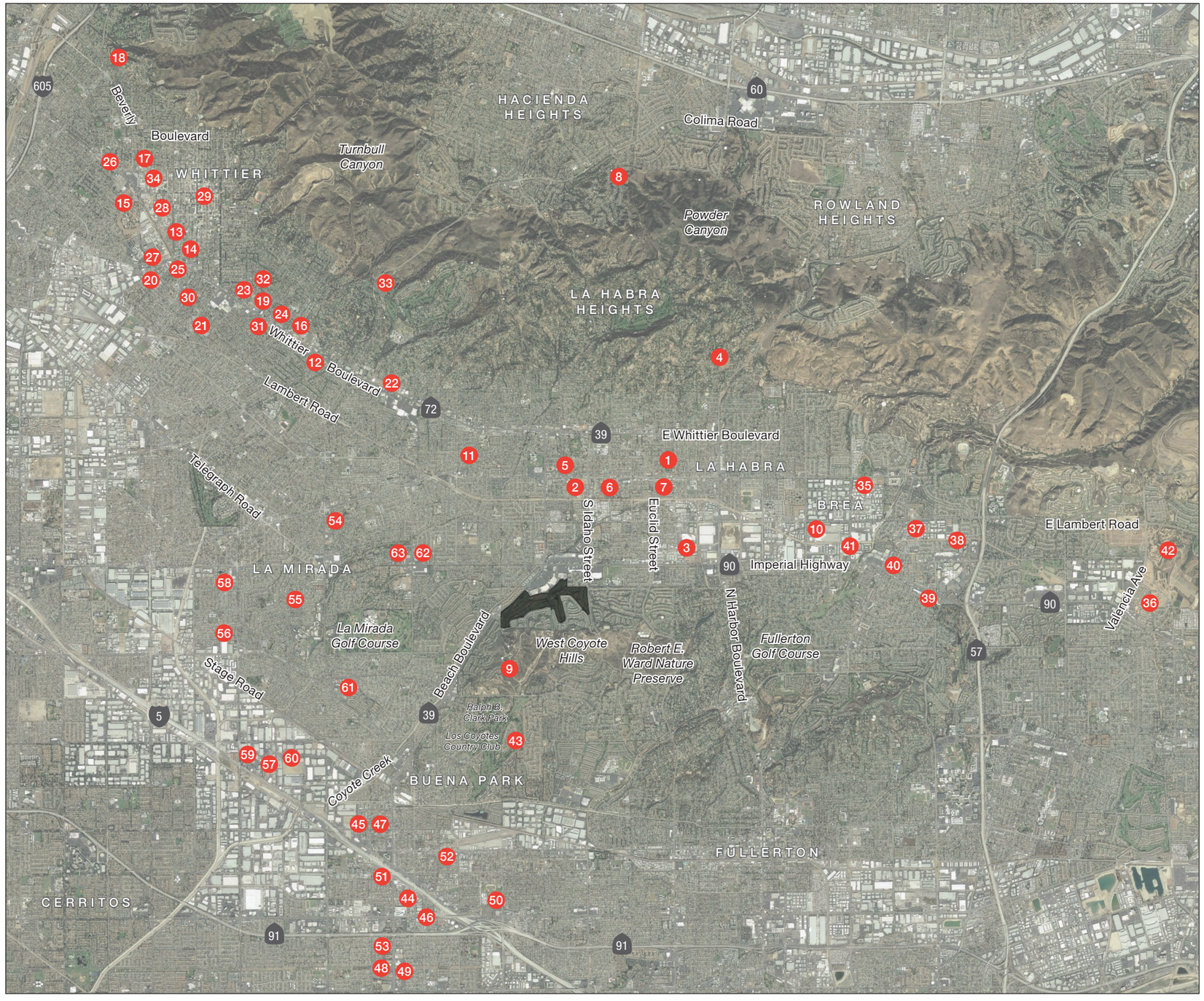
6.3.1 BIOLOGICAL RESOURCES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative biological resources impacts?

Would the proposed project's contribution to significant cumulative impacts be cumulatively considerable?

a. Cumulative Impacts

The Project's direct impacts include loss of existing coastal sage scrub, riparian resources, and jurisdictional waters that could combine with impacts from other past, present, and probable future projects to result in a cumulative biological impact. Although onsite deed restrictions are unique to the Project site and would not directly combine with impacts from other past, present, and probable future projects to result in a cumulative biological impact, onsite deed-restricted areas encompass much of the site's coastal sage scrub and riparian



1 City Hall Relocation/Residential
2 Skylark
3 701 E. Imperial Highway Mixed-Use Development
4 Pinnacle Residential
5 Olson Co.
6 Mountain View Apartments
7 Bonanni Development
8 Sempra Oil Field Phase 3
9 West Coyote Hills
10 Beckman Business Center
11 Morningstar Christian Chapel
12 Park Place
13 Amesbury
14 S. Chen Condos Project
15 Lincoln Specific Plan
16 Catalina Apartments
17 Cambridge Place
18 Former ICC
19 New Apartments
20 G & M Gas Station
21 Xtreme Tint
22 Enchanted Flowers Site
23 US Bank
24 Whittier Blvd Apartments
25 Five Points
26 King Taco Office Replacement
27 Washington Blvd Apartments
28 Road Runner Towing
29 Poet Gardens
30 Lambert Road Car Wash
31 Whittier Boulevard Motel
32 College Avenue Apartments
33 WACC
34 ABS Properties
35 Central Park Village
36 La Floresta
37 CVS
38 Brea Place
39 Brea Imperial Center
40 Downtown Hotel
41 Mercury Apartments
42 Brea 265
43 Los Coyotes Country Club Development Plan
44 The Source Mixed-Use Development
45 7301 Artesia Blvd/Nabisco Site
46 Olson Indigo Walk
47 Arte Home
48 Aloft Hotel
49 Stanford Hotel
50 Org/Mag Townhomes
51 6555 Beach
52 Exbon
53 Butterfly Palladium
54 Apartments
55 Single Family Homes
56 Multi-Family Residential
57 Commercial
58 Valley View Ave Multi-Family
59 Firestone Blvd Restaurant
60 UPS Parcel Hub
61 Movie Theater
62 Imperial Highway Restaurant
63 Imperial Highway Retail

0 1 Mile

Project Site Boundary
Cumulative Project Locations

Figure 6-1: Cumulative Project Locations

Source: Google Earth Pro; Linscott, Law & Greenspan

resources. Thus, vacating the site's existing deed restrictions could combine with impacts from other past, present, and probable future projects to result in a cumulative biological impact in relation to those habitat types.

Therefore, this section discusses those projects that when considered in combination with the Rancho La Habra Specific Plan could cumulatively affect coastal sage scrub and riparian resources: Cumulative Project 9, the West Coyote Hills Specific Plan/VTTM No. 17609 (Coyote Hills Development)[1], immediately south of the Project site.

Historical Background

The approved West Coyote Hills Specific Plan and La Habra Hills Specific Plan (inclusive of the proposed Rancho La Habra Specific Plan) areas were originally part of the 915-acre West Coyote Hills oil field operated by Chevron Corporation. The oil field was located within both the cities of La Habra and Fullerton. In 1992, the City of La Habra adopted the La Habra Hills Specific Plan to create a master-planned community on the 380 acres of the former oil field located within the city limits.

Development of the La Habra Hills Specific Plan nearly severed the remaining open land area by placing the Westridge residential neighborhood between the Westridge Golf Club to the north and the remaining West Coyote Hills to the south (see **Figure 6-2**). The remaining 661-acre open land area wrapped around the residential neighborhood with only a 500-wide interface, depicted on **Figure 6-2**, west of the Westridge neighborhood connecting open lands within the golf course and the West Coyote Hills, giving the remaining open lands their distinctive shape. A paved private street, Nicklaus Avenue, which provides access to the Westridge community traverses this interface and includes open split rail fencing and ornamental landscaping adjacent to the roadway.

Subsequent to development of the La Habra Hills Specific Plan, the West Coyote Hills Specific Plan and VTTM No. 17609 were approved by the City of Fullerton[2] on the open lands south of the Westridge neighborhood for development of up to 760 residences, a small commercial center, and funding of public benefits outlined in the VTTM including, but not limited to, permanently dedicating over 60 percent of the 510-acre site to restored habitat/open space with over 220 acres of open space in addition to the Robert E. Ward Nature Preserve. In addition, the

[1] The West Coyote Hills project was subject to previous biological review including U.S. Army Corps of Engineers Permit No. 2001-0063-0-YJC and U.S. Fish and Wildlife Service Biological Opinion (BO) No. FWS-OR-1446.3.

[2] The West Coyote Hills project has undergone extensive litigation (Friends of Coyote Hills v. City of Fullerton, culminating on February 27, 2019 when the California Supreme Court refused to hear an appeal from an open space preservation group, ending a three-year legal battle. The California Fourth Appellate District Court of Appeal sided with the City of Fullerton and affirmed the City's actions approving the West Coyote Hills development on December 6, 2018.

Rancho La Habra Specific Plan was proposed for the 150.8-acre golf course north of the Westridge neighborhood.

VTTM No. 17609 for the West Coyote Hills set forth a process that provides the City of Fullerton with the ability to purchase additional acreage to preserve as open space by acquiring "neighborhoods 1 and 3" in the eastern portion of the site (unconnected to Rancho La Habra), as well as additional neighborhoods or the entire project site if funding is available. The State of California has made $15 million available for expenditure to enhance public access and for other public purposes concerning West Coyote Hills and set forth a process through the Department of Finance for distribution of the funds to the City of Fullerton.

Cumulative Biological Resources Effects of Rancho La Habra and West Coyote Hills

The cumulative effect of the Rancho La Habra and West Coyote Hills projects would be to further reduce the size of the formerly 915-acre West Coyote Hills open land area (former Chevron oil field). As shown in **Figure 6-3**, much of the existing Westridge Golf Club would be developed, concentrating preserved and enhanced biological habitat areas near the existing interface with the West Coyote Hills. The approved West Coyote Hills Specific Plan and VTTM No. 17609 would physically separate the Rancho La Habra site and open lands in the northwestern portion of the West Coyote Hills from the Robert E. Ward Nature Preserve and adjacent open lands in the southern and southeastern portion of the West Coyote Hills site.

The two projects would preserve an approximately 143-acre unbroken block of open land spanning both sides of the interface between the Rancho La Habra and West Coyote Hills projects[3]. Both projects preserve a substantial amount of open space, include substantial biological resources mitigation, and preserve an unbroken block of open land at the interface between the two project sites[4]. While the cumulative development of the Rancho La Habra and West Coyote Hills Specific Plans can be viewed as creating substantial edge effects along the boundary between proposed development and open space areas, such edge effects need to be considered in the context of the existing edge effects that occur between the Westridge neighborhood and the open lands wrapping around that neighborhood to the north, west and south. In addition, habitat areas within the Rancho La Habra site, particularly coastal sage scrub

[3] The approved VTTM provides the City of Fullerton with the ability to purchase additional acreage to preserve as open space up to and including the entire West Coyote Hills Specfic Plan area, if funding is available. To that end, the State is making $15 million available for open space acquisition.

[4] Approximately 60 percent of the West Coyote Hills project site is preserved in open space and provided for habitat preservation and enhancement.. The Rancho La Habra Specific Plan preserves approximately 31 percent of the site in open space, including 9.86 acres of preserved/ restored CSS habitat, and requires compensation for loss of onsite habitat with functionally equivalent or better habitat. The Rancho La Habra Specific Plan also requires compensation for loss of onsite habitat with functionally equivalent or better habitat.

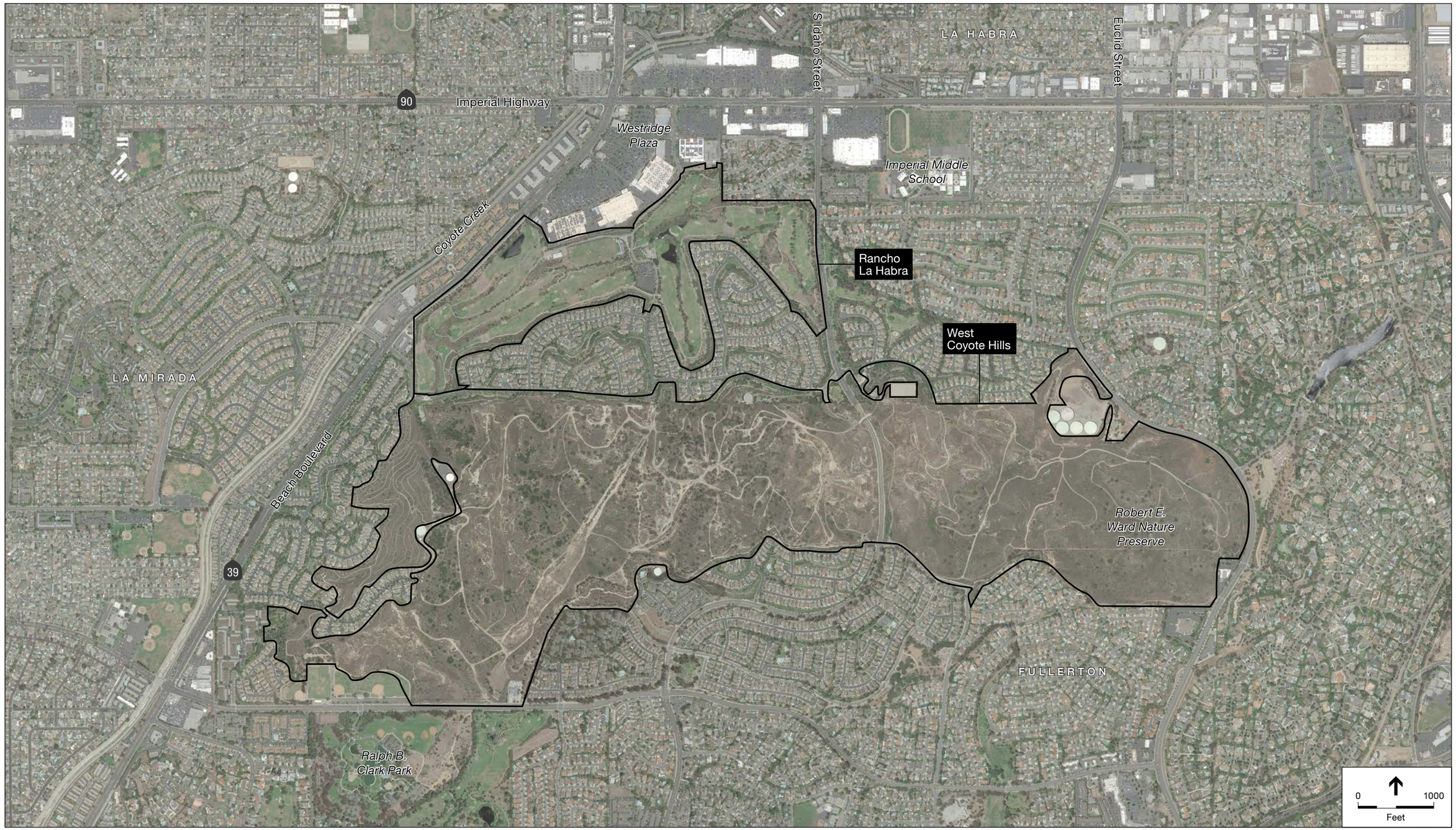


Figure 6-2: Rancho La Habra and West Coyote Hills Pre-Development Cumulative Setting

Source: Hamilton Biological, Walden & Associates, Google Earth Pro

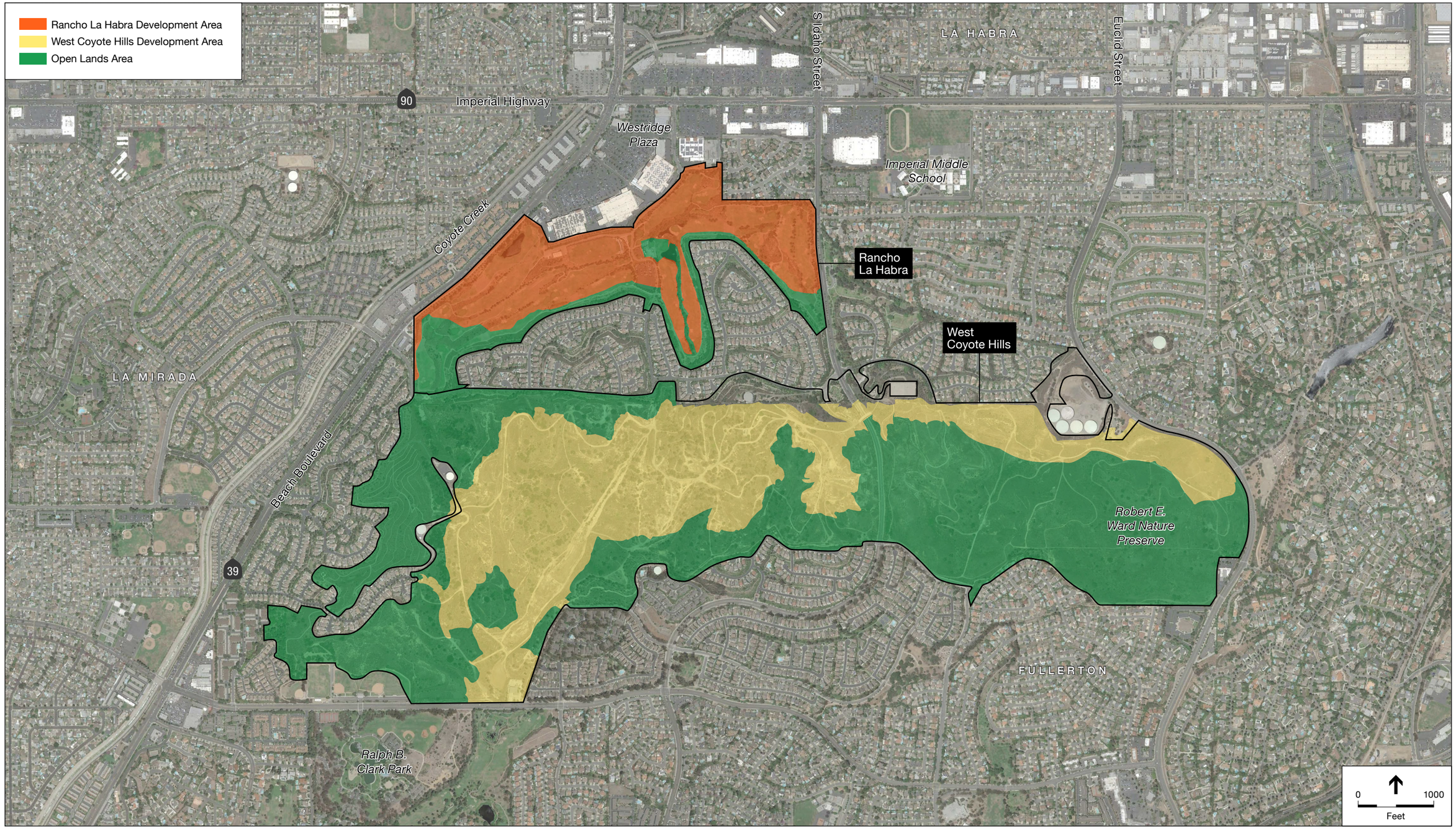


Figure 6-3: Rancho La Habra and West Coyote Hills Post-Development Cumulative Setting

Source: Hamilton Biological, Walden & Associates, Google Earth Pro

areas are interspersed within the existing golf course and are subject to daily human intrusion, as well as night lighting from the existing driving range and street lights along La Habra Hills Drive. Together, however, the Rancho La Habra and West Coyote Hills projects represent a substantial loss of remaining open land within a highly urbanized area that once supported these habitat types. The approved West Coyote Hills project and the proposed Rancho La Habra Specific Plan both include extensive mitigation for impacts to biological resources. However, the substantial loss of open lands including some isolated areas of coastal sage scrub and riparian resources, along with the additional separation or loss of connectivity between open land areas in the western portions of Rancho La Habra and West Coyote Hills from the Robert E. Ward Nature Preserve and adjacent open lands constitutes a significant cumulative impact.

b. Contribution of the Project to Significant Cumulative Impacts

Project site grading would directly remove approximately 13.62 acres of habitat much of which is suitable for special status species, of which approximately 9.66 acres is within CDFW deed-restricted areas. Such site grading would remove the majority of onsite coastal sage scrub habitat (7.55 acres removed) and all of the riparian woodland (2.83 acres) and riparian scrub (1.70 acres) alliances onsite.

Project mitigation measures require compensation for the loss of 13.62 acres of habitat that includes areas suitable for special status species and 4.63 acres of riparian and wetland habitats, along with compensation for the loss of 5.765 acres of CDFW jurisdictional waters within the Project site. Compensation is required to be provided in the form of:

- Onsite establishment/ restoration/enhancement and/or offsite purchase of functionally equivalent or better habitat; and/or
- Offsite restoration/enhancement of functionally equivalent or better habitat as determined by CDFW in consultation with USFWS, USACE and RWQCB.

No physical modifications to the existing 500-foot wide vegetative interface depicted on **Figure 6-3** between the Project site and West Coyote Hills habitat areas are proposed. Mitigation Measures BIO-4a and BIO-4b would protect the functionality of this existing 500-foot wide vegetative interface.

Consolidation of habitat areas through restoration and enhancement of CSS in the western portion of the Project site adjacent to the interface with West Coyote Hills would have a positive benefit to special status avian species that utilize CSS habitat and move between the Rancho La Habra and West Coyote Hills habitats.

In addition, offsite purchase of existing CSS and riparian habitats that could include restoration or enhancement such that the Project would result in provision of functionally equivalent or better habitat as determined by CDFW in consultation with USFWS, USACE and RWQCB and would ensure that the Project's contribution to cumulative impacts is mitigated. Thus, the

Project's contribution to a significant cumulative impact on special status species and coastal sage scrub habitats would not be cumulatively considerable.

6.3.2 TRAFFIC AND CIRCULATION

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative traffic and circulation impacts?

Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The Rancho La Habra Traffic Impact Analysis, updated in August 2019, provides a cumulative analysis of Project traffic along with traffic from all of the cumulative projects identified in **Table 6-1**, and a 1 percent growth factor for background traffic to account for additional unspecified future socioeconomic growth in the communities surrounding La Habra. The Traffic Impact Analysis analyzed cumulative impacts, along with the contributions of the proposed project for both Year 2023 and Year 2035 conditions, and concluded as follows:

- **Impact TRA-1.5: Local Intersections, Year 2023**. Three of the 32 intersections studied would fail to meet applicable LOS standards, resulting in a significant cumulative effect.
- **Impact TRA-1.6, Caltrans Intersections, Year 2023**. Five of the 19 Caltrans intersections studied would fail to meet applicable standards when analyzed with Caltrans methodology, resulting in a significant cumulative effect.
- **Impact TRA-1.7, Roadway Segments, Year 2023**. Fourteen of the 37 roadway segments analyzed would fail to meet applicable LOS standards.
- **Impact TRA-1.8, Local Intersections, Year 2035**. Eighteen of the 32 intersections studied would fail to meet applicable LOS standards.
- **Impact TRA-1.9, Caltrans Intersections, Year 2035**. Eight of the 19 Caltrans intersections studied would fail to meet applicable standards when analyzed with Caltrans methodology.
- **Impact 1.10, Roadway Segments, Year 2035**. Eighteen of the 37 roadway segments analyzed would fail to meet applicable LOS standards.
- **Impact 1.11, Freeway Mainline Segments, Year 2023 and 2035**. Both of the two freeway mainline segments analyzed would fail to meet applicable LOS standards.
- **Impact 1.12, Freeway Ramp Junction Merge and Diverge Locations, Year 2023 and 2035**. One of the three merge diverge locations analyzed would fail to meet applicable LOS standards in 2023.

- **Impact TRA-2, Congestion Management Program (CMP) Intersections, Year 2023 and 2035**. Two of the four CMP intersections studied would fail to meet applicable LOS standards.

b. Contribution of the Proposed Project to Significant Cumulative Impacts

The analysis provided in Draft EIR Section 3.7, *Traffic and Circulation*, concludes that the proposed project would result in significant and unavoidable significant traffic impacts under cumulative plus project conditions. The proposed project would thus have a cumulatively considerable contribution to a significant cumulative impact at the following locations:

- **Impact TRA-1.5: Local Intersections, Year 2023**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at three intersections.
- **Impact TRA-1.6, Caltrans Intersections, Year 2023**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at five Caltrans intersections.
- **Impact TRA-1.7, Roadway Segments, Year 2023**. The proposed project's contribution to cumulative impacts was determined not to be significant at any location; therefore, the Project's contribution to cumulative impacts to roadway segments in 2023 would not be cumulatively considerable.
- **Impact TRA-1.8, Local Intersections, Year 2035**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at three intersections.
- **Impact TRA-1.9, Caltrans Intersections, Year 2035**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at 11 Caltrans intersections.
- **Impact 1.10, Roadway Segments, Year 2035**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at six locations.
- **Impact 1.11, Freeway Mainline Segments, Year 2023 and 2035**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at one location.
- **Impact 1.12, Freeway Ramp Junction Merge and Diverge Locations, Year 2023 and 2035**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at one location.
- **Impact TRA-2, Congestion Management Program (CMP) Intersections, Year 2023 and 2035**. The proposed project's contribution to cumulative impacts was determined to be less than significant (and therefore not cumulatively considerable) at all CMP intersections.

6.3.3 AIR QUALITY

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative air quality impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The analysis area for the consideration of cumulative emissions is the South Coast Air Basin, which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino counties, including the project site. Because toxic air contaminants dissipate quickly beyond approximately 300 to 500 feet from the emissions source, the analysis area for cumulative localized health risk impacts extends to 1,000 feet from the Project site and includes Cumulative Project 17.

The following discussion reviews cumulative impacts in relation to the significance criteria outlined in CEQA Guidelines Appendix G.

Obstruction of Implementation of the Applicable Air Quality Management Plan

According to the RTP/SCS Program EIR, build-out of the entire Southern California region through 2040 would result in a less-than-significant air quality impact related to the potential to conflict with or obstruct implementation of the adopted AQMPs/Attainment Plans in the SCAG region. This is because the projected long-term emissions of regional growth are in alignment with the AQMPs, which is demonstrated in the transportation conformity analysis, found in the appendices to the RTP/SCS Program EIR. The emissions resulting from the RTP/SCS are within the applicable emissions budgets for the South Coast Air Basin for all milestone, attainment, and planning horizon years. However, the proposed project, in combination with other projects in the Air Basin seeking General Plan amendments to increase the build-out of local General Plans, would result in a significant cumulative impact.

Implementation of the proposed Specific Plan, when taken into consideration with other development and infrastructure projects within the South Coast Air Basin, would have the potential to result in a significant cumulative impact related to violating an air quality standard or contributing substantially to an existing or projected air quality violation from construction emissions. This is because the large number of construction projects that would occur within the Air Basin on a daily basis into the future would cumulatively exceed applicable impact thresholds.

Projected long-term operations emissions were determined in the RTP/SCS Program EIR to have a less-than-significant cumulative impact because the RTP/SCS is consistent with the local AQMPs and state implementation plans. The modeling of emissions was inclusive of all

potential air emissions in the SCAG region that could occur as a result of the RTP/SCS. However, the proposed project, in combination with other projects in the Air Basin seeking General Plan amendments to increase the build-out of local General Plans, would result in a significant cumulative impact.

The South Coast Air Basin is currently designated as an extreme non-attainment area for ozone, and as non-attainment for ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). The emissions creating this non-attainment of applicable standards come from a myriad of mobile (primarily transportation) sources, as well as industrial and other stationary sources throughout the Air Basin. The proposed project and other projects in the Air Basin would contribute emissions of criteria pollutants. However, as demonstrated in the RTP/SCS Program EIR, implementation of the RTP/SCS and the South Coast Air Quality Management Plan would result in either no change or a reduction of air pollutant emissions in for every pollutant in every county in the SCAG region (see **Table 6-2**). Thus, emissions of ozone precursors, PM_{10}, and $PM_{2.5}$ would be considered to be a less-than-significant cumulative impact.

Table 6-2
Daily Criteria Pollutant Emissions By County, 2015 and 2040

		Emissions (Tons/Day)								
		ROG		NOx			CO	PM_{10}	$PM_{2.5}$	SOx
		Summer	Annual	Summer	Annual	Winter	Winter	Annual	Annual	Annual
Imperial	2015	4	4	10	11	11	28	1	0	0
	2040	2	2	3	3	3	13	1	0	0
	Change	-2	-2	-7	-7	-7	-14	0	0	0
Los Angeles	2015	103	101	179	194	190	851	17	9	1
	2040	21	21	35	37	36	141	14	6	1
	Change	-81	-80	-144	-157	-154	-711	-3	-3	0
Orange	2015	28	28	42	46	45	225	5	2	0
	2040	7	7	8	8	8	44	5	2	0
	Change	-21	-21	-35	-38	-37	-181	0	-1	0
Riverside	2015	26	23	66	70	69	183	5	3	0
	2040	8	7	14	15	15	42	5	2	0
	Change	-19	-17	-52	-55	-55	-141	0	-1	0
San Bernardino	2015	32	28	81	86	84	225	6	3	0
	2040	8	7	22	22	22	46	6	2	0
	Change	-24	-21	-59	-64	-63	-179	0	-1	0
Ventura	2015	9	8	12	14	14	70	1	1	0
	2040	2	2	2	2	2	11	1	0	0
	Change	-7	-7	-10	-11	-11	-59	0	0	0

Note: Numbers may not add due to rounding.
Source: Table 3.3.4-1, 2016 RTP/SCS Program EIR, 2016; SCAG Transportation Modeling, 2015.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Although the West Coyote Hills Specific Plan (Cumulative Project 17) was approved in July 2012, Vesting Tentative Tract Map (VTTM) No. 17609 is currently subject to litigation; as of the date of this publication, the VTTM is awaiting hearing at the California Court of Appeals. As a result, it is unlikely that major construction activities (e.g., grading) would be undertaken for the proposed project simultaneously with similar activities for Cumulative Project 17, which is the only other Cumulative Project that could affect the same sensitive receptors as the proposed project. Because major grading activities would occur at different times, cumulative impacts would be less than significant.

The RTP/SCS PEIR determined that because all projects would be required to comply with odor regulations as prescribed by the South Coast Air Quality Management District and local municipalities, a less than significant cumulative impact to exposing a substantial number of people to objectionable odors would occur.

b. Contribution of the Proposed Project to Significant Cumulative Impacts

The South Coast Air Quality Management District (SCAQMD) has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*. In this report (page D-3), the SCAQMD states: "…the [SC]AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

The project-specific evaluation of air quality impacts presented in Section 3.8, *Air Quality*, demonstrates that project-related emissions impacts would be less than significant or significant but mitigable; therefore, the proposed project would have a less than cumulatively considerable contribution to significant cumulative impacts. However, Section 3.8, *Air Quality*, also concludes that the proposed project would result in housing and population growth that would be inconsistent with the AQMP for the South Coast Air Basin. This would result in a significant unavoidable impact that would represent a cumulatively considerable contribution to a

significant cumulative impact regarding consistency with the regional air quality management plan. As noted in Section 3.8:

> "While the proposed project would not result in or cause violations of NAAQS or California Ambient Air Quality Standards, it would exceed the level of housing and employment growth assumed in development of the AQMP. Therefore, the proposed Specific Plan would be inconsistent with the AQMP, and a significant impact would result. Because there are no feasible mitigation measures available to achieve consistency with AQMP growth assumptions, this impact would be *significant and unavoidable*."

Although all feasible mitigation will be implemented to reduce project-related emissions of criteria air pollutants, there are no available mitigation measures to achieve consistency with the AQMP. This is because the La Habra General Plan, upon which the AQMP's growth projections were based, did not contemplate any residential development within the existing Westridge Golf Club.

6.3.4 GREENHOUSE GAS EMISSIONS

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative greenhouse gas impacts?

Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

Greenhouse gas (GHG) emissions impacts are assessed in terms of a project's contribution to a cumulative effect, since no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, as well as past and present human activities. Therefore, the area in which a proposed project in combination with other past, present, or future projects could contribute to a significant cumulative climate change impact due to GHG emissions cannot be defined by a geographical boundary such as a combination of sites, a city, a county, a metropolitan region, or an air basin.

Assembly Bill (AB) 32 recognizes the significance of the statewide cumulative impact of greenhouse gas emissions from sources throughout the state and sets a performance standard for mitigation of that cumulative impact. As evidenced by the findings of AB 32 (California Health and Safety Code, Section 38501(a)), continued growth within the California would result in a significant cumulative greenhouse gas emission impact.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Section 3.9, *Greenhouse Gas Emissions*, summarizes the net increase in GHG emissions associated with construction and operation of the proposed project. As indicated in that section, the proposed project, with mitigation, would result in a net increase of 5,746.61 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, which is greater than the recommended threshold of 3,000 $MTCO_2e$. Thus, the proposed project would make a cumulatively considerable contribution to the significant cumulative greenhouse gas emission impact.

Development of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 7,554.69 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, which would exceed the South Coast Air Quality Management District (SCAQMD) screening threshold of 3,000 MTCO2e per year. In addition to 2019 CALGreen building code requirements, Mitigation Measures GHG-1a through GHG-1j set performance standards for the installation of solar panels and electric vehicle (EV) charging stations within the Project site, require provision of subsidies for EV purchases and transit use by residents, provide subsidies for purchase of up to three electric school buses, and include requirements for use of electric landscape maintenance equipment in common open spaces. These measures would also increase shading in commercial areas by 10 percent and reduce heat gain in commercial and multi-family residential areas by 50 percent. Implementation of these measures would achieve consistency with the City of La Habra's Climate Action Plan (CAP) and would reduce GHG emissions.

However, even if the Specific Plan's stationary source emissions were reduced to zero, mobile source emissions would still exceed 3,000 $MTCO_2e$. In addition, the Project would be inconsistent with the regional RTP/SCS. Therefore, even with the implementation of mitigation measures, the Specific Plan's GHG impact would generate a cumulatively considerable contribution to a significant cumulative GHG impact.

6.3.5 ENERGY RESOURCES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative energy resources impacts?

Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The geographic context for analysis of cumulative impacts regarding energy resources includes past, present, and future development within Southern California because energy (including electricity, natural gas, and petroleum) is both generated and distributed throughout California.

All development projects throughout the region would be required to comply with the energy efficiency standards in the California Green Building Standards Code (CalGreen Code)/Title 24 requirements. Additionally, some of the developments could provide for additional reductions in energy consumption by use of solar panels, sky lights, or other Leadership in Energy and Environmental Design (LEED)-type energy efficiency infrastructure. With implementation of the existing energy conservation regulations, cumulative electricity and natural gas consumption would not be cumulatively wasteful.

Petroleum consumption associated with new development in Southern California would be primarily attributable to transportation, especially vehicular use. However, pursuant to the RTP/SCS, development patterns throughout the region would provide for greater use of transit and alternative modes of transportation from development of new mixed uses that allow residents to work, shop, and live within a small area, reducing average trip lengths, which would in turn result in lower consumption of fuels. These considerations would reduce wasteful petroleum consumption associated with unnecessary automobile trips and long commutes. State fuel efficiency standards and alternative fuels policies (pursuant to AB 1007 [Pavely]) would also contribute to a reduction in fuel use.

In addition, modifications to the CEQA Guidelines within the next two to three years pursuant to Senate Bill (SB) 743 would introduce substantial increases in vehicle miles traveled (VMT) as a new significance threshold under CEQA. The intent of this new threshold is to reduce VMT within the region, including increasing transit usage and decreasing per capita energy consumption for vehicular travel. Other existing regulations are likely to result in more efficient use of all types of energy, and reduction in reliance on non-renewable sources of energy over the next 20+ years. These include the federal Energy Independence and Security Act and the state Long Term Energy Efficiency Strategic Plan (described in Section 3.10, *Energy Resources*), which are designed to reduce reliance on non-renewable energy resources and reduce demand by providing federal tax credits for purchasing fuel-efficient items. For these reasons, cumulative impacts associated with energy use would be less than significant.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because cumulative energy resources impacts would be less than significant, discussion of the proposed project's contribution to a significant cumulative impact is unnecessary.

6.3.6 NOISE AND VIBRATION

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative noise and vibration impacts?

Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The geographic area considered for cumulative traffic noise analysis includes the roadways examined in the transportation impact analysis and evaluated in Section 3.7, *Traffic and Circulation*, of this EIR. The cumulative development program assumed in the traffic forecasts used in the noise modeling effort includes Cumulative Projects 1 through 51, as well as a 1 percent growth rate for background traffic to represent overall socioeconomic growth in the area. As shown in the project noise study (Appendix L), future cumulative traffic conditions would exceed applicable noise standards along major roadways, including Whittier Boulevard, Imperial Highway, Beach Boulevard, Artesia Boulevard, Malvern Avenue, Rosecrans Avenue, Lambert Road, La Habra Boulevard, Valley View Avenue, La Mirada Boulevard, Santa Gertrudes Avenue, 1st Avenue, Gilbert Street, Idaho Street, Euclid Street, and Harbor Boulevard. The cumulative effects of noise generated by existing sources, the proposed project, cumulative projects, and anticipated increases in background traffic are documented in Table 3.11-15 in Section 3.11, *Noise,* for Year 2023 cumulative conditions, and in Table 3.11-16 for Year 2035 cumulative conditions. As shown in these tables, significant cumulative noise impacts would result.

Cumulative construction noise impacts would occur if construction activities associated with the proposed project and one or more cumulative projects in close physical proximity would overlap in time. Due to the distance of cumulative projects from the project site, and the low likelihood that major noise-producing activities (e.g., grading) would occur at the same time, cumulative construction noise impacts would not be significant.

Similarly, because vibration impacts dissipate quickly with distance, given the physical separation of cumulative projects from the project site and the low likelihood that vibration-generating activities (e.g., site grading) would occur simultaneously, cumulative vibration impacts would be less than significant.

b. Contribution of Proposed Project to Significant Cumulative Impacts

As discussed in Section 3.11, *Noise and Vibration*, although the proposed project would add traffic to area roadways, given high background traffic volumes, the proposed project's noise impacts along those roadways would be less than 1.0 dBA on area roadways, as indicated in Table 3.11-15 for Year 2023 conditions, and Table 3.11-16 for Year 2035 conditions, indicating a less than significant impact[5]. Thus, the proposed project's contribution to significant cumulative noise impacts would not be cumulatively considerable.

[5] Because noise is measured on a logarithmic scale, incremental increases in traffic from individual sources tend to have little effect on noise levels unless they are relatively large in relation to existing traffic volumes. However, incremental increases from a large number of sources, including projected 1.0 percent annual increases in background traffic and cumulative projects can combine to result in significant cumulative impacts.

6.4 REFERENCES – CUMULATIVE IMPACTS

City of La Habra, *City of La Habra Final Environmental Impact Report for: General Plan 2035,* certified January 21, 2014. Accessed June 2, 2017: http://www.lahabracity.com/DocumentCenter/Home/View/196.

Goss, Tracy A. and Kroeger, Amy, *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, South Coast Air Quality Management District, 2003. Accessed June 1, 2017: http://www.aqmd.gov/rules/ciwg/final_white_paper.pdf.

Southern California Association of Governments (SCAG), *Final Program Environmental Impact Report for the 2012-2035 RTP/SCS*, March 12, 2012. Accessed June 1, 2017: http://rtpscs.scag.ca.gov/Pages/Final-2012-PEIR.aspx.

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CHAPTER 8 MITIGATION MONITORING & REPORTING PROGRAM

Section 21081.6 of the *California Public Resources Code* and Sections 15091(d) and 15097 of the *State CEQA Guidelines* require public agencies "to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment."

The following Mitigation Monitoring and Reporting Program (MMRP) is based on the mitigation measures presented in the Partially Recirculated Draft Environmental Impact Report prepared by the City of La Habra to analyze impacts of proposed development associated with the Rancho La Habra Specific Plan. As lead agency for the proposed Specific Plan, and pursuant to AB 3180, the City of La Habra is responsible for implementation of this MMRP.

Pursuant to the State CEQA Guidelines, a Mitigation Monitoring and Reporting Program must:

- Identify the entity that is responsible for each monitoring and reporting task, be it the City of La Habra (as lead agency), another agency (responsible or trustee agency), or a private entity (i.e., the project sponsor);
- Be based on the project description and the required mitigation measures presented in the environmental document prepared for the project by the lead agency (Rancho La Habra Partially Recirculated Draft EIR); and
- Be approved by the lead agency at the same time as project entitlement action or approvals.

A Partially Recirculated Draft Environmental Impact Report has been prepared for the proposed Rancho La Habra Specific Plan that addresses the anticipated environmental impacts of development pursuant to that plan. Where significant impacts are identified, the Partially Recirculated Draft EIR sets forth measures to mitigate these impacts. It is the purpose of this MMRP to identify the implementation strategy for each mitigation measure set forth in the Partially Recirculated Draft EIR to ensure that adopted mitigation measures are successfully implemented. Upon adoption of the MMRP by the La Habra City Council, mitigation monitoring and reporting requirements will become conditions of project approvals and permits for all mitigation measures. Therefore, in accordance with the aforementioned requirements, this Chapter of the Partially Recirculated Draft EIR lists each mitigation measure for the environmental impacts identified in this document, describes the methods for implementation and verification for each of these measures, and identifies the responsible party or parties as detailed below in the MMRP Implementation section.

As shown in the following pages, each required mitigation measure set forth in the Partially Recirculated Draft EIR is listed, with an accompanying notation of:

- Monitoring Phase, describing the timing of when the mitigation measure is to be implemented;

- Implementation Party, identifying the party responsible for implementing the mitigation measure;
- Enforcement Agency, specifying the agency with the power to monitor and enforce implementation of the mitigation measure; and
- Monitoring Agency, identifying the agency with the power to monitor and enforce implementation of the mitigation measure, and agency responsible for determining compliance with specified mitigation measures.

The MMRP for the Rancho La Habra Specific Plan will be in place throughout all phases of the Plan's implementation. The City's existing planning, engineering, review and inspection processes will be used as the basic foundation for the MMRP procedures and will also serve to provide the documentation for the reporting program.

The substance and timing of each certification report that is submitted to the City shall be at the discretion of the City. Generally, each report will be submitted to the City in a timely manner following completion/implementation of the applicable mitigation measure and project design feature and shall include sufficient information to reasonably determine whether the intent of the measure has been satisfied. The City, in conjunction with the project applicant, shall assure that project construction occurs in accordance with the MMRP. The South Coast Air Quality Management District (SCAQMD) will be responsible for the implementation of corrective actions relative to violations of SCAQMD rules associated with mitigation. Departments listed in the MMRP are all departments of the City of La Habra, unless otherwise noted.

Table 8-1
Mitigation Monitoring and Reporting Requirements

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Biological Resources			
Mitigation Measure BIO-1.1a: Compensatory Replacement of Special-Status Species Habitat. Compensatory Replacement of Special-Status Species Habitat. The loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within the Project site shall be compensated through on-site or off-site establishment/restoration/enhancement and/or off-site purchase of functionally equivalent or better habitat. The determination of functional equivalency of on-site establishment/ restoration/enhancement and/or off-site purchase shall be made by the California Department of Fish and Wildlife for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas and by the City of La Habra for mitigation of loss of these habitats outside of existing deed-restricted areas and jurisdictional areas. It is recognized, however, that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase/restoration/enhancement could be established to provide compensation for loss of (1) previous mitigation resulting from vacating existing deed restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be determined to be jurisdictional waters. Compensation for lost on-site habitat with functionally equivalent or better habitat shall be detailed on an acreage-specific basis in a Habitat Mitigation and Monitoring Plan (HMMP), which shall be developed in coordination and compliance with State of California and federal regulatory agency requirements. Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet agencies' standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, the HMMP shall include:	Sufficient habitat land shall be acquired such that the California Department of Fish and Wildlife verifies that a combination of on-site establishment/restoration/enhancement and/or off-site purchase of land will result in functionally equivalent or better habitat than the coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas and jurisdictional areas. Should such on-site establishment/restoration/ enhancement and/or off-site purchase of land not also result in functionally equivalent or better habitat than the coastal sage scrub, riparian woodland, and riparian scrub alliances that would be lost outside of existing deed-restricted areas and jurisdictional areas, mitigation credits shall be acquired by the Project sponsor within an agency-approved mitigation bank at a 1:1 ratio for any such shortfall.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance

• Baseline information, including the findings and conclusions of a Biological Assessment demonstrating that:
  o Off-site compensatory mitigation lands are functionally equivalent or better than the habitats lost on-site; and
  o On-site establishment of coastal sage scrub through restoration will result in functionally equivalent or better habitat than that lost on-site.
• Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration, or off-site habitat acquisition, creation, or enhancement); and
• Measurable performance standards and criteria, including but not limited to the overall amount or percent of cover and species diversity for restoration or enhancement in the Specific Plan development footprint that must meet state and federal regulatory resources agency approval and must be documented for City review at the end of the five-year monitoring period. Should the restoration or enhancement fail to meet success criteria as defined in the HMMP, implementation of remedial restoration shall be required.
• Contingency funds shall be established and deposited in escrow account(s) to ensure successful implementation of the HMMP, such funds to be refunded to the applicant at the time the HMMP performance criteria are met.
  o One account in an amount to be determined by the California Department of Fish and Wildlife (CDFW) to be held by CDFW for mitigation of the loss of coastal sage scrub, riparian woodland, and riparian scrub alliances within existing deed-restricted areas.
  o Should the HMMP being overseen by the California Department of Fish and Wildlife not be adequate to address mitigation of loss of coastal sage scrub habitat outside of existing deed-restricted areas, a second escrow account is to be established with the City of La Habra in an amount to be determined by the City.			

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure BIO-1.1b: Construction Avoidance of Active Bird Nests. ***Coastal Sage Scrub.*** If grading or soil disturbance of any kind is proposed within 50 feet of coastal sage scrub, or if upland conservation enhancement or restoration activities are proposed between March 1 and August 15, a qualified biologist shall conduct pre-construction nesting California gnatcatcher surveys. Surveys shall be conducted using USFWS focused survey protocol methods and shall be conducted during the spring breeding season during the year construction occurs. Where an active bird nest is located, a 500-foot radius surrounding the active nest shall not be disturbed until after the nest becomes inactive and the family group can be confirmed, by a qualified biologist familiar with the species, to have left the nest territory. Prior to initiating vegetation clearing of coastal sage scrub, a qualified biologist shall walk ahead of the clearing activities to flush any birds from the habitat to be cleared. ***Riparian Woodland.*** Proposed removal of riparian woodland within the development footprint shall be scheduled to occur during the non-breeding season for birds, which is between August 15 and January 31. If removal is scheduled to occur between February 1 and August 15, pre-construction breeding bird surveys shall be performed by a qualified biologist familiar with local bird species no later than 14 days prior to start of construction. If active nests are found during preconstruction surveys, a buffer of 250 feet shall be established and temporary fencing shall be placed to prevent encroachment into the buffer area by construction equipment or workers.	The applicant shall retain a qualified biologist acceptable to the City to conduct pre-construction nesting bird surveys as described in **Mitigation Measure BIO-1.1b** at the appropriate period and consistent with protocol and agency survey guidelines current at the time of construction. Any required setbacks shall be defined by the qualified biologist undertaking pre-construction surveys and shall be maintained during grading and construction.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure BIO-1.1c: Setbacks and Erosion Protection for Coastal Sage Scrub. All viewing areas, signage, benches, and other park features shall be located at least 50 feet from the edge of coastal sage scrub. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub habitats may be included in the setback, and shall be designed in coordination with a qualified biologist of the City's choosing to confirm that proposed fencing, signage, or efforts to reduce potential habitat encroachment would not create additional perches or vegetative features used by birds of prey compared to existing conditions. In addition, construction of proposed	The applicant shall provide sufficient evidence to the City in the form of plans and specifications that all stages of development meet the requirements set forth in in **Mitigation Measure BIO-1f** and the erosion control measures in EIR Section 3.13, *Hydrology and Water Quality*.	Prior to issuance of a grading permit and/or action that would permit site disturbance (whichever occurs first).	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
fencing or features intended to deflect potential human encroachment onto coastal sage scrub habitat shall be subject to erosion control strategies included in the required Storm Water Pollution Prevention Plan (SWPPP), which would establish Best Management Practices (BMPs) to reduce sedimentation and erosion and prevent construction pollutants from leaving the site and the erosion and sediment control plan to be reviewed and approved by the City of La Habra prior to issuance of grading permit (see Impact HWQ-1.1 in Section 3.13, *Hydrology and Water Quality*, of the Draft EIR). Posted park rules shall identify coastal sage scrub habitats in the conservation areas and shall state that encroachment onto coastal sage scrub areas is prohibited. Educational signage and other signs proposed in the upland conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting. Signage in public access areas shall advise that access is to approved trails, from 7:00 a.m. to 9:00 p.m. Lighting poles shall be located no closer than 50 feet from conservation areas wherever feasible. Where lighting poles cannot be located outside of setback areas, such as along permitted trails within the upland habitat conservation area, such lighting poles shall be low level and designed so as to discourage birds of prey from using them as perches for hunting activities. All lighting shall be directed downward so as not to intrude into habitat areas after sundown. The lighting plan shall be reviewed by a biologist prior to installation and submitted to the City for approval to confirm conformance with this measure.			
Mitigation Measure BIO-1.2: Compensatory Replacement of Previously Provided Mitigation within Onsite Deed Restricted Areas. Compensatory Replacement of Previously Provided Mitigation within On-Site Deed-Restricted Areas. The loss of previously provided mitigation within on-site deed-restricted areas within the Project site shall be compensated through on-site establishment/restoration/enhancement and/or off-site purchase/restoration/enhancement of functionally equivalent or better habitat. The determination of functional equivalency of on-site establishment/ restoration/enhancement and/or off-site purchase/restoration/ enhancement shall be made by the California Department of Fish and	Sufficient habitat land shall be acquired such that the California Department of Fish and Wildlife verifies that a combination of on-site establishment/restoration/enhancement and/or off-site purchase of land will result in functionally equivalent or better habitat than that for which the deed restrictions were intended to mitigate the loss of.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Wildlife. It is recognized that a single mitigation program consisting of on-site establishment/restoration/enhancement and/or off-site purchase/ restoration/enhancement could provide compensation for (1) loss of previous mitigation resulting from vacating existing deed-restrictions, (2) loss of coastal sage scrub habitat both within and outside of deed-restricted areas, and (3) loss of riparian woodland and riparian scrub alliances that may also be classified as jurisdictional waters. Compensation for loss of on-site deed-restricted areas with functionally equivalent or better habitat shall be detailed as set forth in Mitigation Measure BIO-1.1a.			
Mitigation Measure BIO-2a: Preventing Degradation of Natural Communities. The applicant shall avoid or minimize adverse effects on sensitive natural communities within the Project site. The measures described below shall be employed to avoid degradation of sensitive natural communities by maintaining water quality and controlling erosion and sedimentation during construction as required by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities. (See also Draft EIR Section 3.13, *Hydrology and Water Quality*, for discussion of NPDES requirements and requirements for preparation and implementation of a Storm Water Pollution Prevention Plan [SWPPP] and implementation of Best Management Practices [BMPs].)	The project applicant shall obtain appropriate storm water permits pursuant to the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit.	Prior to issuance of a grading permit and prior to any proposed implementation of restoration or enhancement in upland or riparian conservation areas.	Director of Community and Economic Development or his/her designee Director of Community and Economic or his/her designee
The Project applicant shall comply with requirements of the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit. This shall include construction site inspection and control programs at all construction sites, with follow-up and enforcement consistent with each Permittee's respective Enforcement Response Plan, to prevent construction site discharges of pollutants and impacts on Beneficial Uses of receiving waters. The goal of Provision C.3 of the MS4 Permit is for the Permittee, such as the City of La Habra, to use its planning authorities to include appropriate source control, site design, and storm water treatment measures in new development projects to address both soluble and insoluble storm water runoff pollutant discharges and prevent increases in runoff flows from site development. This goal is to be	The Director of Community and Economic Development and the Director of Public Works shall review and verify the agreement applicant has entered into as necessary to provide for on-going maintenance in perpetuity at no cost to the City as required by **Mitigation Measure BIO-2a**, and with compensatory terms defined should the management entity fail to perform.	Prior to recordation of the proposed Vesting Tentative Tract Map.	Development and Director of Public Works or his/her designee

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
accomplished primarily through the implementation of low impact development techniques. The Project applicant shall comply with local municipal requirements and the local storm water program as mandated under the Municipal Stormwater Permit, including, at minimum, the following measures: • Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure. • Avoid excavation and grading if there is 0.5 inch of rain or more within 48 hours. • Limit on-site construction routes and stabilize construction entrance(s) and exit(s). • For any increase in impervious surface area, include establishment of vegetated swales and permeable pavement materials, preserve vegetation, re-plant with native vegetation, and evaluate and implement appropriate measures. • Provide native vegetation buffer areas where appropriate and practicable to prevent pollutants from entering off-site native habitats or water bodies. • Construct diversion dikes and drainage swales to channel runoff around the site and away from bodies of water. • Use berms and drainage ditches to divert runoff around exposed areas. • Place diversion ditches across the top of cut slopes. • Prohibit use of fertilizers or pesticides in areas with a potential runoff into adjacent native habitats. The applicant shall prepare and implement a maintenance program as approved by the City that includes maintenance of water quality pollution-control features such as swales, sediment traps, or other passive applications of pollution prevention measures required as part of NPDES permitting. The maintenance program shall address the management of lands adjacent to off-site coastal sage scrub habitat areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:			

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
• Install temporary silt fencing or vegetative plantings between development and adjacent sensitive natural communities, specifically off-site coastal sage scrub. • Locate fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features, and otherwise isolate construction work areas from any identified jurisdictional features including California Fish and Game Code, U.S. Army Corps of Engineers, and Regional Water Quality Control Board jurisdictional areas. • Ensure on-going maintenance and management in perpetuity at no expense to the City for the preserved upland areas adjacent to the development footprint, along with provisions permitting the City to enforce management and maintenance requirements and recoup costs for enforcement should such enforcement be necessary. On-going maintenance and management of upland conservation areas shall be implemented in a manner consistent with the City of La Habra's NPDES storm water discharge permit and Regional MS4 Permit, and evidence of compliance with such permit conditions shall be provided to the City Engineer on a quarterly basis. • Provide trash receptacles at appropriate locations and provide for regular litter removal. • Maintain all improvements within the parks, trails, and Community Center in a safe and working condition.			
Mitigation Measure BIO-2b: Conservation and Protection of Sensitive Habitats Avoided by Specific Plan Grading. For on-going conservation and protection of sensitive habitats that the Specific Plan proposes to avoid, the following requirements shall apply: • A habitat conservation and protection plan for proposed upland conservation areas adjacent to the development footprint shall be prepared by a qualified biologist with implementation approved by the City of La Habra Community Development Director prior to approval of City grading permits. The habitat conservation and protection plan shall, at a minimum, include the following components to minimize the effect of night lighting on upland conservation area habitats adjacent to	Proof that in-kind replacement at a minimum 1:1 ratio of sensitive natural communities has occurred may include a City-approved on-site re-planting or habitat restoration plan that includes direction and funding of monitoring and maintenance in perpetuity at no cost to the City, and could also include In-kind replacement at a minimum 1:1 ratio of sensitive natural communities off site at an agency-approved mitigation bank.	Prior to issuance of a grading permit	Director of Community and Economic Development or his/her designee

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance

the development footprint.
• The following shall apply to any proposed lighting within 150 feet of the upland or riparian conservation areas:
  o Low-intensity streetlamps and low-elevation lighting poles shall be provided.
  o Internal silvering of the globe or external opaque reflectors shall be provided to direct light away from sensitive natural habitats.
  o Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into sensitive habitats.
• Common area lighting plans shall be reviewed by the City for conformance with these measures prior to installation. Private lighting restrictions shall be enforced by the property owners' association as described below.
• CC&Rs, as well as residential and commercial leases within the Project site shall prohibit building occupants from creating outdoor feeding stations for feral cats to prevent feral cat colonies from establishing and to prevent the attraction of other predatory wildlife such as coyotes, red fox, raccoon, and opossums. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of this requirement.
• As part of Community Center and Project trail improvements, interpretive signage regarding the sensitive habitats and the dangers of unleashed domestic animals shall be provided to the satisfaction of the City. Such information shall be provided in the vicinity of the Community Center, along trails, and at wildlife viewing areas where public access is provided.
In addition, information materials shall be prepared by the applicant for review and approval by the City regarding the sensitive habitats and the dangers of unleashed domestic animals within the Project site. Such materials shall be provided to each initial homeowner by the home builder(s), to successive homeowners by the property owners'
	In addition, the City shall review the agreement(s) the applicant enters into to verify that establishment has been made to provide for on-going management and maintenance (at no cost to the City) in perpetuity for on-site replacement of sensitive natural communities, and shall require demonstration that management is consistent with the terms included in **Mitigation Measure BIO-2a**.		

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
association, and to renters of for-rent multi-family dwellings by the building owner. The property owners' association shall establish a pet policy prohibiting unleashed domestic animals outside of fully enclosed yard areas and have the right and obligation to impose fines for violation of the pet policy.			
Mitigation Measure BIO-2c: Compensatory Mitigation for Loss of Riparian and Wetland Habitat. Loss of riparian and wetland habitat that cannot be avoided during site development shall be compensated with provision of functionally equivalent or better habitat, which may be provided as part of Mitigation Measure BIO-1.1a.	The applicant shall secure regulatory approvals, including an authorized Section 1602 Streambed Alteration Agreement, U.S. Army Corps of Engineers Permit and Section 7 Consultation, and a Section 401 Water Quality Certification for the Specific Plan, that demonstrate in-kind replacement of jurisdictional resources including their functions and values. The City shall confirm that proposed grading conforms to the terms and conditions of these federal and state agreements and permits, and that requirements for post-construction monitoring and reporting will be met.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee
Mitigation Measure BIO-4a: Locations of Structures and Trail Features. Structures and trail features shall be situated to avoid obstructing the wildlife movement interface shown in **Figure 3.5-1**. Structures or facilities that would obstruct wildlife movement between the West Coyote Hills and the development footprint habitats shall not be placed within the interface between the Project site and adjacent undeveloped land in the West Coyote Hills.	A plan showing the specific location of all parks, trails, wildlife viewing areas, kiosks, passive recreation structures, or lighting associated with proposed trail systems along the interface between the project site and adjacent undeveloped land in the West Coyote Hills shall be prepared and approved by the Director of Community and Economic Development in compliance with the provisions of **Mitigation Measure BIO-4a**.	Prior to approval of a grading plan.	Director of Community and Economic Development or his/her designee
Mitigation Measure BIO-4b: Maintenance of Vegetative Cover along Wildlife Movement Interface. Native vegetation along the existing 500-foot-wide vegetative interface in the southern portion of the Project site shall be preserved so as to maintain cover available for wildlife using the	The applicant shall provide a planting plan and implementation schedule for the fuel management zone vegetation where it occurs adjacent to the wildlife interface area to the City,	Prior to issuance of a grading permit.	Director of Community and Economic Development or

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
interface to move between the West Coyote Hills and Project site habitats.	demonstrating that no reduction in the overall amount of vegetative cover available for wildlife movement use will occur. In addition, Specific Plan trail plans shall be submitted for City approval demonstrating avoidance of the wildlife interface area shown in **Figure 3.5-2**.		his/her designee
Mitigation Measure BIO-5: Replacement of Bird Nesting and Roosting Habitat. All Project landscaping shall be in conformance with the approved Rancho La Habra Specific Plan, Landscape Plans, and plant palette and shall incorporate replacement for landscaping lost during development (combination of native and non-native plantings) that will provide equivalent or better habitat suitable for bird nesting and roosting for resident and migratory birds. Replacement for habitat lost during Project development may be in the form of landscaped slopes, street trees, preservation and enhancement of conservation habitat areas, and landscaping of the Community Center, park, and trail areas.	The project landscape plan implementing **Mitigation Measure BIO-5** shall be reviewed by the Director of Community and Economic Development to confirm that it meets the requirements of this mitigation measure, and that there are sufficient guarantees provided to ensure its implementation.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee
Traffic and Circulation			
Mitigation Measure TRA-1.1: Prior to issuance of a demolition, grading, or other permit, the applicant shall prepare and implement a Construction Management Plan, subject to approval of the City Engineer or their designee, to minimize construction-related traffic in the AM and PM peak hours, as well as to minimize disturbance to area residents. The Construction Management Plan shall, at a minimum: • Include a proposed construction phasing plan. • Identify proposed construction-related traffic controls and detours. • Provide for traffic control for any street or lane closure, detour, or other disruption to traffic circulation to minimize the effects of such disruption. • Limit the routes that construction vehicles may use for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes,	The applicant shall prepare a Construction Management Plan in accordance with the requirements of **Mitigation Measure TR-1.1a** for review and approval by the City. The construction management plan shall be made a requirement of contractors for the proposed project.	Prior to issuance of a demolition, grading, or other permit for project development.	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
etc.) and materials (i.e., lumber, tiles, piping, windows, etc.) to Beach Boulevard and Imperial Highway (via La Habra Hills Drive).[1] • Limit the routes that construction vehicles may use to dispose of any construction debris removed from the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive). • Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts on adjacent streets. • Specify requirements for the applicant to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material that may have been spilled, tracked, or blown onto adjacent streets or areas. • Specify that hauling or transport of oversize loads will be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless otherwise approved in writing by the City Engineer. • Specify that no hauling or transport shall be allowed during nighttime hours, weekends, or federal holidays. • Prohibit use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway) for construction-related traffic. • Require that haul trucks entering or exiting public streets shall at all times yield to public traffic. • Specify that, if hauling operations cause any damage to existing pavement, street, curb, and/or gutter along the haul route, the applicant will be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer. • Require that all construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur on-site. The Construction Management Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Devices* as well as City of La Habra requirements.			

[1] Both Beach Boulevard and Imperial Highway are identified in the La Habra General Plan as truck routes.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure TRA-1.2. The Applicant shall pay citywide traffic improvement fees.	The applicant shall pay applicable traffic improvement fees for the requested residential or commercial use.	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.
Mitigation Measure TRA-1.3. The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for project-related impacts at the following intersections: • Beach Boulevard at Artesia Boulevard (within Buena Park) • Hacienda Road at Whittier Boulevard (within La Habra)	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.
Mitigation Measure TRA-1.5a: The Applicant shall pay fair share fees to the City of La Habra to be distributed to the City of La Mirada for project-related impacts at the following intersections: • Beach Boulevard at Rosecrans Avenue	The Director of Public Works shall confirm that: • The City of La Mirada has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	• If the City of La Mirada has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with the City of La Mirada to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Mitigation Measure TRA-1.5b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts at the following intersection: • Beach Boulevard at La Mirada Boulevard/Malvern Avenue	The Director of Public Works shall confirm that: • The City of Buena Park has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If the City of Buena Park has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with the City of La Mirada to do so.	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Mitigation Measure TRA-1.6. The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for project-related impacts at the following intersections: • Beach Boulevard and La Mirada Boulevard/Malvern Avenue • Hacienda Road at Whittier Boulevard Beach Boulevard at Artesia Boulevard	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so.	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Mitigation Measure TR-1.7. The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for project-related impacts along the following roadway segment: • Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure TRA-1.8a: The applicant shall pay city-wide traffic improvement fees as well as fair share impact fees at the following intersection: • Euclid Street at Imperial Highway	The applicant shall pay the required fair share impact fees concurrent with payment of city-wide traffic improvement fees.	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.
Mitigation Measure TRA-1.8b: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts at the intersection of: • Beach Boulevard at Lambert Road	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.
Mitigation Measure TRA-1.9. The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for project-related impacts along the following roadway intersections: • Euclid Street and Imperial Highway • Beach Boulevard and Lambert Road	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	• If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Mitigation Measure TRA-1.10a: The applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for Project-related impacts along the following roadway segment: • Imperial Highway between Euclid Street and Harbor Boulevard	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so.	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Mitigation Measure TRA-1.10b: The applicant shall pay fair share fees to the City of La Habra to be distributed to the City of Buena Park for Project-related impacts along the following roadway segment: • Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard	The Director of Public Works shall confirm that: • The City of Buena Park has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If the City of Buena Park has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with the City of La Mirada to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.	Prior to the issuance of building permits for residential or commercial structures.	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure TRA-1.11. The Applicant shall pay fair share fees to the City of La Habra to be distributed to Caltrans for project-related impacts along the following freeway mainline segment: • SR-57 southbound lanes south of Imperial Highway	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or • If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.
Mitigation Measure TRA-1.13: The applicant shall pay to the City of La Habra the cost of reallocating additional green time to the westbound left-turn lanes at the intersection of Beach Boulevard at Imperial Highway to be distributed to Caltrans for Project-related queueing impacts at that intersection.	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program; or	Prior to the issuance of building permits for residential or commercial structures	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	• If Caltrans has not included improvements to the intersections for which fair share fees are to be paid in its Capital Improvements Program, both the Applicant and the City of La Habra have made their best good faith effort to work cooperatively with Caltrans to do so. The fees shall include fair share payment based on the project's share of traffic in the Year 2035 cumulative plus project scenario and provide the project's fair share for all improvements needed through 2035. Should Caltrans not commit to making the improvements for which the fair share payment is made within a reasonable time frame as determined by the La Habra Director of Public Works, the fair share fees contributed by the applicant shall be returned to the applicant.		
Air Quality			
Mitigation Measure AQ-2.1a: Mitigation Measure AQ-2.1a: All off-road construction equipment, except scrapers, shall be equipped with engines that meet the U.S. Environmental Protection Agency (USEPA) Tier 4 Final Emission Standards. A minimum of three of the six scrapers involved in grading operations shall be equipped with engines that meet the USEPA Tier 4 Final Emission Standards. Tier 4 Final Emission Standards result in NO_X emission reductions greater than 90 percent from unmitigated levels.	The applicant/developer shall provide written evidence to the City that contracts for site grading require implementation of the requirements of **Mitigation Measure AQ-2.1a**.	Prior to the issuance of a grading permit and/or action that would permit site disturbance (whichever occurs first).	Director of Community and Economic Development or his/her designee.
Mitigation Measure AQ-2.1b: Vehicle speeds on unpaved roads shall be limited to a maximum of 15 miles per hour as a means of reducing dust and PM_{10} / $PM_{2.5}$ generation.	The applicant/developer shall provide written evidence to the City that contracts for site grading require implementation of the requirements of **Mitigation Measure AQ-2.1b**.	Prior to the issuance of a grading permit and/or action that would permit site disturbance (whichever occurs first).	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure AQ-2.2: Soils exposed during grading operations shall be watered four times per day. In the event of drought conditions, defined as Water Shortage Stages 4 or 5 as determined by the City, use of non-water chemical stabilizers may be required by the City such that fugitive emissions reductions are comparable to watering four times per day. See also **Mitigation Measures AQ-2.1a** and **AQ-2.1b**, above.	The applicant/developer shall provide written evidence to the City that contracts for site grading require implementation of the requirements of **Mitigation Measure AQ-2.2**.	Prior to the issuance of a grading permit and/or action that would permit site disturbance (which-ever occurs first).	Director of Community and Economic Development or his/her designee.
Greenhouse Gas Emissions			
Mitigation Measure GHG-1a: All new single-family homes shall have the following installed: • Solar panels providing 1.5 watts (W) solar energy per square foot of building area (e.g., 2,000-square-foot home = 3 kilowatts [kW]) with a minimum 2 kW per home to the extent determined feasible by the City. • Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating. • A minimum of one single-port electric vehicle (EV) charging station that achieves a similar or better functionality as a Level 2 charging station. • Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the single-family property. In addition, initial homebuyers within the Project site shall be provided with information regarding all current SCAQMD programs designed to encourage homeowners to use electrical lawnmowers and replace gasoline-powered yard maintenance equipment with electric-powered equipment.	Building permit applications shall comply with Mitigation Measure GHG-1a and include energy calculations demonstrating compliance with the energy reduction requirements set forth in this mitigation measure.	Prior to issuance of building permits for single-family detached residential dwelling units.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1b: All new multi-family dwelling units shall be all electric, meaning that electricity is the only permanent source of energy for water heating, mechanical powering, space heating and cooling (i.e., heating, ventilation, and air conditioning [HVAC]), cooking, and clothes drying and there is no gas meter connection. All major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, and water heaters) provided and/or installed shall be electric-powered Energy Star-	Building permit applications for multi-family dwelling units shall comply with Mitigation Measure GHG-1b and include energy calculations demonstrating compliance with the energy reduction requirements set forth in this mitigation measure.	Prior to issuance of building permits for multi-family detached residential dwelling units.	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
certified or of equivalent energy efficiency where applicable. In addition, all new multi-family homes shall have the following installed: • Solar panels providing 0.75 W solar energy per square foot of building area (e.g., 20,000-square-foot building = 15 kW), to the extent determined feasible by the City; • Electric vehicle charging equipment that achieves a similar or better functionality as a Level 2 charging station for 5 percent of the total number of parking spaces; and • Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.			
Mitigation Measure GHG-1c: The Project applicant or its designee shall establish and fund a dedicated account for the provision of subsidies for the purchase by homeowners within the first year of occupancy of a zero-emission vehicles (ZEV), as defined by the California Air Resources Board (CARB) equal to the provision of a $1,000 subsidy per residence, available on a first-come, first-served basis, for up to 50 percent of the Project's for-sale dwelling units.	The Project sponsor shall enter into a binding agreement with the City of La Habra to establish the required account, rules and procedures for the subsidy program subject to City approval and disburse funds in accordance with Mitigation Measure GHG-1c. The Project sponsor shall prepare an information document to be provided to prospective homebuyers informing them of the subsidy program and the rules and procedures for obtaining the subsidy. The Project sponsor shall provide the City with quarterly reports documenting implementing of the subsidy program until funds have been expended.	Prior to issuance of building permits for model homes.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1d: All new non-residential buildings, including commercial buildings and the Community Center, shall have the following installed: • Solar panels providing at least 1 W per square foot of building area (e.g., 20,000 square feet = 20 kW), unless the installation is impracticable as determined by the City. Solar panels for the clubhouse/Community Center may be installed within adjacent parking areas.	Building permit applications for the community center and commercial buildings shall comply with Mitigation Measure GHG-1d and include energy calculations demonstrating compliance with the energy reduction requirements set forth in this mitigation measure.	Prior to issuance of building permits for the community center and commercial buildings.	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
• Solar water heaters or other efficiency technology, unless the installation is impracticable as determined by the City. Other efficiency technology would include installation of a renewable energy technology system that uses renewable energy as the primary energy source for water heating. • Electric vehicle (EV) charging equipment that achieves a similar or better functionality as a Level 2 charging station with the minimum number of charging stations being no less than 7.5 percent of the total number of parking spaces. In the event that the installed charging stations provide superior functionality/technology than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range miles per hour. • Outdoor electric outlets in convenient locations to facilitate use of electric landscape equipment throughout the property.			
Mitigation Measure GHG-1e: The Project applicant or its designee shall provide a subsidy of $50,000 per bus for the replacement of up to a total of 3 diesel or compressed natural gas school buses with electric zero emission buses by the La Habra City School District, Lowell Joint School District, and/or Fullerton Joint Union High School District.	The Project sponsor shall provide evidence to the City that that the subsidies required by Mitigation Measure GHG-1e have been offered to the La Habra City School District, Lowell Joint School District, and Fullerton Joint Union High School Districts, which shall be given 90 days from the time a written offer of the subsidy is provided to determine whether or not to accept the subsidy.	Evidence that the subsidy has been offered to the school districts shall be provided to the City prior to issuance of the 200th residential building permit. Within 100 days after the subsidy offers have been made, the Project sponsor shall provide evidence to the City of each district's response.	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure GHG-1f: Parks and open space within the Project site shall be designed so as to facilitate the use of electric landscape equipment throughout the property.	The City shall review park and open space improvement plans to ensure convenient locations are provided for electrical connections and recharge of electrical landscape equipment.	Prior to issuance of grading permits.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1g: Contracts for maintenance of common open space within the Project site, as well as contracts for maintenance of multi-family residential or commercial landscaped areas within Planning Area 5, shall include requirements for use of electric landscape equipment.	The Project sponsor shall provide evidence to the satisfaction of the City that Project CC&Rs for the Project require the property's homeowners' association(s) and commercial property owner(s) to specify use of electric landscape equipment.	Prior to issuance of grading permits.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1h: Commercial and multi-family development shall implement sufficient measures to reduce heat gain by 50 percent (CAP Measure R3-A2).	Landscape plans and site plans shall be designed to meet the provisions of this mitigation measure.	Prior to approval of landscape and site plans for commercial and/or multi-family development.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1i: Commercial development shall exceed applicable City shading requirements by a minimum of 10 percent, and plant low-emission trees (CAP Measure R3-A1).	Building permit applications shall include energy calculations demonstrating compliance with the energy reduction requirements set forth in this mitigation measure.	Prior to issuance of building permits for commercial structures.	Director of Community and Economic Development or his/her designee.
Noise and Vibration			
Mitigation Measure NOI-1.1a: Noise barriers shall be constructed in the locations identified in the Noise Study (Appendix L) as exceeding applicable noise standards.	Applications for building permits for Lots 2, 3, 11, 12, 28, 29, 239, 241, 243, 245, 247, 250, 253, 256, 278, or 279 shall provide confirmation that a noise barrier of sufficient height to achieve compliance with the City's 60 dB CNEL land use compatibility noise standard in single-family rear yard areas and multi-family open space areas would be constructed, recognizing both roadway and commercial noise sources.	Prior to the issuance of building permits for Lots 2, 3, 11, 12, 28, 29, 239, 241, 243, 245, 247, 250, 253, 256, 278, or 279. Prior to the issuance of certificates of occupancy for these lots, the required	Director of Community and Economic Development or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
		noise barriers shall be constructed.	
Mitigation Measure NOI-1.1b: Exterior activity areas such as balconies shall be placed at the opposite side of buildings from the roadways within areas subject to a CNEL in excess of 60 dBA.	Building permit applications for Lots 2, 3, 11, 12, 28, 29, 239, 241, 243, 245, 247, 250, 253, 256, 278, and 279 will be reviewed by the City to confirm that the requirements of **Mitigation Measure NOI-1.1b** have been incorporated into building plans, and that dwelling units on these lots will meet the City's interior noise standards.	Prior to the issuance of building permits for Lots 2, 3, 11, 12, 28, 29, 239, 241, 243, 245, 247, 250, 253, 256, 278, or 279	Director of Community and Economic Development or his/her designee.
Mitigation Measure NOI-1.2: To ensure that interior sound levels of future homes within the proposed project comply with the City's interior noise standards, the following requirements shall be met for residences on Lots 2, 3, 11, 12, 28, 29, 239, 278, and 279: 1. Windows and sliding glass doors shall be mounted in low air infiltration rate frames (0.5 cubic feet per minute/foot [cfm/ft.] or less per American National Standards Institute [ANSI] specifications). 2. Exterior doors of residences shall be solid core with perimeter weather-stripping and threshold seals. 3. Air conditioning or mechanical ventilation shall be provided to allow occupants to close doors and windows for the required acoustical isolation. 4. Roof or attic vents directly facing the traffic and commercial noise sources shall be baffled so that sound must take an indirect route when entering the attic space.	Building permit applications for residences on Lots 2, 3, 11, 12, 28, 29, 239, 278, or 279., the City shall verify that the requirements of **Mitigation Measure NOI-1.2** have been incorporated into building plans, and that dwelling units on these lots will meet the City's interior noise standards.	Prior to issuance of building permits for residences on Lots 2, 3, 11, 12, 28, 29, 239, 278, or 279.	Director of Community and Economic Development or his/her designee.
Mitigation Measure NOI-4a: All construction equipment, stationary and mobile, shall be equipped with properly operating and maintained muffling devices, intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4a**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4a**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure NOI-4b: The construction contractor shall properly maintain and tune all construction equipment to minimize noise emissions.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4b**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4b**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4c: Each construction contractor shall locate all stationary noise sources (e.g., generators, compressors) no closer than 50 feet from residential receptor locations to allow for natural dissipation of noise.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4c**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4c**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4d: The on-site operation of construction equipment that generates high levels of noise, such as large bulldozers, shall be conducted no closer than 100 feet from residential receptor locations to allow for natural dissipation of noise. Within 100 feet of residential receptor locations small bulldozers not exceeding 310 horsepower shall be used.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4d**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4d**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure NOI-4e: Construction contractors shall select and use quieter tools or construction methods whenever feasible. Examples include using plasma cutters, which produce less noise than power saws with abrasive blades and ordering precut materials to specifications to avoid on-site cutting.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4e**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4e**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4f: The construction contractor shall maximize, as feasible, the use of enclosures such as four-sided or full enclosures with a top for compressors and other stationary machinery, and locate activities, such as metal stud and rebar cutting, within constructed walled structures to minimize noise propagation	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4f**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4f**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4g: The nearest edge of equipment staging areas shall be no closer than 330 feet from residential receptor locations.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4g**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4g**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure NOI-4h: The nearest edge of outdoor materials storage areas shall be no closer than 50 feet from residential receptor locations.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4h**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4h**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4i: Electric power from a grid connection shall be used to run air compressors and similar power tools and to power any temporary equipment.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4i**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4i**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure NOI-4j: The construction contractor shall post a contact name and telephone number of the owner's authorized representative on-site.	The City shall review construction contracts for demolition, grading, and building construction to verify inclusions of requirements implementing **Mitigation Measure NOI-4j**. The City shall also review construction contracts for construction of project-related water, sewer, drainage, and roadway improvements to verify inclusion of requirements implementing **Mitigation Measure NOI-4j**.	Prior to issuance of demolition, grading, and building permits. Prior to permits for construction of project-related infrastructure improvements.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.