RANCHO LA HABRA SPECIFIC PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH No. 2015111045

CITY OF LA HABRA

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Metis Environmental Group

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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; (2) the level of significance of the 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 this 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 (refer to **Figure 1-1**, Project Location in Chapter 1, *Introduction*). 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. 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 adopted La Habra Hills Specific Plan. The currently proposed Rancho La Habra Specific Plan would remove the 151-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, small amphitheater, habitat conservation areas, passive recreational uses including trails, wildlife viewing, picnic areas and tot lots on the approximately 151-acre site.

The applicant, CalAtlantic, is requesting that the City of La Habra approve the following:

- General Plan Amendment
- Change of Zone
- Rancho La Habra Specific Plan
- Amendment to the existing La Habra Hills Specific Plan
- Vesting Tentative Tract Map 17845
- Development Agreement with the City of La Habra
- Design Review for Planning Areas 1-4 and 6.
- Conditional Use Permits for three Model Home Complexes
- Establishment of a Community Facilities District or another financing mechanism

In addition, the applicant is requesting the California Department of Fish and Wildlife to release and relocate existing deed restrictions that were previously established on the project site. These deed restrictions were 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. Release and relocation of these deed restrictions would be required in order for development of the proposed project to proceed.

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."

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, CalAtlantic Homes 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, CalAtlantic Homes, has established the following project objectives for its proposed Specific Plan development:

- Implement the City's Housing Element by providing a range of 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 **Table ES-1** and **Table ES-2**, as well as **Figure ES-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 an approximately 2.6-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 open space uses, including conversion of the existing golf course clubhouse to a City-owned Community Center, a small outdoor amphitheater, habitat conservation areas, passive recreation areas for hiking and wildlife viewing, picnic areas, tot lots. Planning Area 7 encompasses the landscaped slopes separating the Westridge neighborhood residences from the existing golf course. The Westridge neighborhood south of the Project site, which was developed as part of the La Habra Hills Specific Plan, retains an easement over the landscaped slopes, along with the obligation for slope maintenance. The Specific Plan includes proposed modifications to the landscaped as a fuel modification area for fire safety.

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 golf course references from the Specific Plan.
  - Approval of the Rancho La Habra Specific Plan.

[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."

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	8.4	-	-	-	-	-	-	**8.4**
Single-Family Lots	-	14.2	8.1	12.4	-	-	-	**34.7**
Commercial or Multi-Family Homes	-	-	-	-	2.4	-	-	**2.4**
Open Space Uses								
Public Community Center and Park	-	-	-	-	-	4.1	-	**4.1**
Public Park and Picnic Area	-	-	-	-	-	10.4	-	**11.4**
Public Linear Park	-	-	-	-	-	10.6	-	**10.4**
Upland Habitat Conservation Area	-	-	-	-	-	12.2	-	**12.58**
Riparian Habitat Conservation Area	-	-	-	-	-	2.1	-	**1.23**
Private Open Space	1.7	14.6	5.8	6.2	0.2	-	-	**25.6**
Existing Slope	-	-	-	-	-	-	19.3	**19.3**
Roads	0.3	6.8	3.1	4.9	-	3.0	-	**18.1**
Total Acres	**10.4**	**35.6**	**17.0**	**23.5**	**2.6**	**42.4**	**19.3**	**150.8**

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, 2017.

  - 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 divide the property into single-family residential, multi-family residential, commercial retail, and open space lots.
  - Design Review, including proposed architectural design for each Planning Area;
  - Approval of a Conditional Use Permit: The Applicant seeks approval of a Conditional Use Permit (CUP) for the construction and operation of model home complexes, including signage and flags.
  - 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
  - Release and relocation of 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.

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)
  - Orange County Sanitation District (Sewage Collection Permit)

[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.

  - 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 (Section 1600 Streambed Alteration Agreement; Release of Deed Restriction)
- 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 implementation of the proposed Specific Plan.

- **Land Use and Planning Impact LUP-1.1**: The proposed Specific Plan would be inconsistent with a goal and several policies of the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Since these inconsistencies are reflected in significant air quality, greenhouse gas (GHG), and traffic impacts, impacts related to inconsistencies with the 2016 RTP/SCS would be significant even with implementation of all feasible mitigation measures.
- **Population and Housing Impact POP-1:** Implementation of the proposed Rancho La Habra Specific Plan would generate population growth as the direct result of the housing proposed by the Specific Plan. While the proposed project would not necessarily increase the City's projected growth rate through 2040, it would substantially increase La Habra's inventory of land for the development of housing, and therefore result in substantial population growth. Such population growth would exceed the growth projections used for preparation of the current regional Air Quality Management Plan, would therefore be inconsistent with that plan, and a significant impact would result. This increased population growth would also result in significant and unavoidable physical environmental effects in relation to aesthetics and visual resources, traffic and circulation, and greenhouse gas emissions.
- **Aesthetics Impact AES-3:** Implementation of the proposed Rancho La Habra Specific Plan would result in the loss of a major open space resource. While the proposed project would be well planned and designed, the substantial loss of open space that would result from the proposed development would degrade the existing visual character of the site.

- **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 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.

Table ES-3
Summary of Traffic Impacts

		Jurisdiction	Significant Impact?	Included in Fee Program?	Can La Habra Implement Mitigation?	Included in Fair Share?	Level of Significance
1.	Beach Boulevard at Rosecrans Avenue	La Mirada/Caltrans	Yes	No	No	Yes	SU
2.	Gilbert Street at Rosecrans Avenue	Fullerton	No	--	--	--	LTS
3.	Euclid Street at Rosecrans Avenue	Fullerton	No	--	--	--	LTS
4.	Beach Boulevard at Hillsborough Drive	La Mirada/Caltrans	No	--	--	--	LTS
5.	Beach Boulevard at Hillsborough Park Apt.	La Habra/Caltrans	No	--	--	--	LTS
6.	Idaho Street at Sandlewood Avenue	La Habra	No	--	--	--	LTS
7.	Euclid Street at Sandlewood Avenue	La Habra	Yes	--	--	--	LTS
8.	Santa Gertrudes Ave at Imperial Highway	La Mirada	No	--	--	--	LTS
9.	1st Avenue at Imperial Highway	La Mirada	No	--	--	--	LTS
10.	Beach Boulevard at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
11.	La Habra Hills Drive at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
12.	Idaho Street at Imperial Highway	La Habra/Caltrans	No	--	--	--	LTS
13.	Euclid Street at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
14.	Harbor Boulevard at Imperial Highway	La Habra/ Fullerton/ Caltrans	Yes	No	No	Yes	SU
15.	Beach Boulevard at Lambert Road	La Habra/ Caltrans	Yes	No	No	Yes	SU

		Jurisdiction	Significant Impact?	Included in Fee Program?	Can La Habra Implement Mitigation?	Included in Fair Share?	Level of Significance
16.	Idaho Street at Lambert Road	La Habra	Yes	Yes	Yes	No	SM
17.	Euclid Street at Lambert Road	La Habra	Yes	Yes	Yes	No	SM
18.	Harbor Boulevard at Lambert Road	La Habra	Yes	Yes	Yes	No	SM
19.	La Mirada Boulevard at Imperial Highway	La Mirada	Yes	Yes	Yes	No	SM
20.	Beach Blvd at La Mirada Blvd/Malvern Ave	Buena Park/ Caltrans	Yes	No	No	Yes	SU
21.	Beach Boulevard at La Habra Boulevard	La Habra/ Caltrans	No	--	--	--	LTS
22.	Valley View Avenue at Imperial Highway	La Mirada	Yes	No	No	Yes	SU
23.	Beach Boulevard at Artesia Boulevard	Buena Park/ Caltrans	Yes	No	No	Yes	SU
24.	Beach Boulevard at Commonwealth Avenue	Buena Park/ Caltrans	No	--	--	--	LTS
25.	I-5 NB Ramps at Auto Center Drive	Buena Park/ Caltrans	No	--	--	--	LTS
26.	Beach Boulevard at Auto Center Drive	Buena Park/ Caltrans	No	--	--	--	LTS
27.	Beach Boulevard at I-5 SB Ramps	Buena Park/ Caltrans	Yes	No	No	Yes	SU
28.	Beach Boulevard at Whittier Boulevard	La Habra/ Caltrans	No	--	--	--	LTS
29.	Hacienda Road at Whittier Boulevard	La Habra/ Caltrans	Yes	No	No	Yes	SU
30.	Walnut Street at Imperial Highway	La Habra/ Caltrans	Yes	No	No	Yes	SU
31.	Gilbert Street at Malvern Avenue	Fullerton	Yes	No	No	Yes	SU
32.	Euclid Street at Malvern Avenue	Fullerton	Yes	No	No	Yes	SU

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

- **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:** Implementation of the proposed Rancho La Habra Specific Plan would result in a net increase in GHG emissions of 6,037.55 $MTCO_2e$

per year, which would exceed the SCAQMD's screening threshold of 3,000 $MTCO_2e$ per year.

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.

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.

c. Release and Relocation of Existing Deed Restriction

Construction of the Westridge Golf Club pursuant to the 1992 La Habra Hills Specific Plan involved impacts on biological resources resulting in the need for regulatory permits and mitigation. Regulatory permits and mitigation requirements were embodied in a Streambed Alteration Agreement (February 23, 1995) and resulted in recordation of a deed restriction in favor of the California Department of Fish and Game (now California Department of Fish and

Wildlife [CDFW]) on November 9, 2009 to protect resources "having wildlife and habitat values of great importance to the State of California."

As noted in the Declaration of Deed Restriction (Appendix F-7), the conservation area established by the deed restriction "provides mitigation in perpetuity for certain impacts associated with the development of a 300-acre abandoned oil field including pre-development activities and subsequent construction of 540 homes and an 18-hole golf course, and associated infrastructure that impacts 18 acres of highly disturbed coastal sage scrub." The recorded deed restriction established a total of 11.43 acres of area on site to be conserved in perpetuity as mitigation for loss of habitat areas identified in **Table ES-4**. **Figure 2-11** in Chapter 2, *Project Description*, shows the extent and distribution of the existing CDFW deed restriction within the project site.

Table ES-4
Habitat Areas Identified for Protection in Existing Deed Restriction

Habitat Type	Acreage
Coastal Sage Scrub	2.27
Southern Willow Scrub	3.52
Mulefat Scrub	1.40
Oak Woodland	2.00
Freshwater Marsh	0.52
Open Water	1.72
Total	**11.43**

Source: Declaration of Deed Restriction, October 28, 2009

The recorded deed restriction states that the conservation area defined in the deed restriction (see **Figure 2-11**) "shall not be utilized in any manner inconsistent with the conservation of regional wildlife using the conservation area (including sensitive species)." The deed restriction specifically prohibits the following activities within the conservation area:

- Development within the Conservation Area for residential, commercial, retail, industrial, institutional, or recreational purposes, and/or for any other land uses, other than habitat preservation-related uses (such as hiking, bird watching, etc.);
- Use of motor vehicles, except on a temporary basis as may be necessary for activities directed at benefitting regional wildlife and habitat for those species which may utilize the Conservation Area;
- Depositing of trash, garbage, refuse, ash, waste material, other offensive or toxic material not consistent with the purpose of this instrument;
- Erecting of any building;
- Excavating dredging or removing of loam, gravel, soil, rock, sand, or other material, and grading or any other land disturbing activity; and

- Agricultural cultivation or plowing for cultivation.

Since the deed restriction was established to mitigate impacts of the previously approved and constructed La Habra Hills Specific Plan build out, the proposed Ranch La Habra Specific Plan project includes a request to the California Department of Fish and Wildlife to release portions of the existing deed restriction placed on the golf course property as mitigation for development of the golf course and adjacent Westridge residential community, with the intention to relocate some areas subject to the current deed restriction to an upland conservation area to be established in the western portion of the project site.

Because the existing deed restriction within the project site was established as mitigation in perpetuity for development of the La Habra Hills Specific Plan, including the Westridge Golf Club and the Westridge residential community, no portion of the deed restriction could be released without providing equivalent mitigation for the original impacts of the La Habra Hills Specific Plan. Thus, release of any portion of the existing deed restriction would be accompanied by the provision of equivalent mitigation for the original impacts of the La Habra Hills Specific Plan.

Release of any portion of the existing deed restriction would (1) remove state-imposed restrictions that stipulate conservation of sensitive natural habitat as the only permitted use of the deed-restricted area and (2) result in loss of mitigation previously required to address impacts from development of the La Habra Hills Specific Plan. However, provision of an equivalent replacement of wildlife and habitat values with "no net loss" that would be a requirement of any agreement between the project applicant and the California Department of Fish and Wildlife, should that agency agree to remove or relocate the existing deed restrictions in the Rancho La Habra Specific Plan area, would avoid significant impacts. Thus, the impact of removal or redistribution of wildlife and habitat values protected in the existing deed restricted areas within the Rancho La Habra Specific Plan, if approved by CDFW, would be less-than-significant.

ES.5.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

a. Land Use and Planning

Threshold LUP-1: Physically divide an existing community.

Impact LUP-1: Implementation of the proposed Rancho La Habra Specific Plan would result in the temporary closure of the La Habra Hills Drive entrance to the Westridge residential community during site grading, temporarily restricting use of one of the three current entries to the community. Connectivity to and from the Westridge residential community during project site grading would be temporarily reduced due to the closure of La Habra Hills Drive, increasing travel time between housing and

shopping. However, connectivity for the Westridge community would not be eliminated. Because the condition would be temporary, the community's access points to Idaho Street and Beach Boulevard would remain unaffected, and emergency access from the two closest fire stations serving the Westridge community would not be affected, the impact would *less than significant*.

Threshold LUP-2: Conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2.1: The proposed Specific Plan would be inconsistent with a goal and several policies of the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Since these inconsistencies are reflected in significant air quality, greenhouse gas (GHG), and traffic impacts, impacts related to inconsistencies with the 2016 RTP/SCS would be significant even with implementation of all feasible mitigation measures. Impacts would therefore be *significant and unavoidable*.

Impact LUP-2.2 The proposed Rancho La Habra Specific Plan would be inconsistent with certain policies of the La Habra General Plan resulting from an increase in the allowable buildout of the General Plan. However, approval of the proposed General Plan Amendment would include the proposed project in the General Plan's buildout, thereby achieving consistency between the proposed project and the General Plan. Therefore, *no impact* would result.

Impact LUP-2.3 Although the proposed project would increase the citywide GHG emissions identified in the City's Climate Action Plan (CAP) by 5,746.61 $MTCO_2e$ annually, the proposed project would not impede achievement of the CAP's GHG emissions reduction goals, which are based on AB 32 targets. Because (1) the proposed project would implement all applicable GHG reduction measures set forth in the Climate Action Plan and (2) emissions per service population would be consistent with AB 32 goals as discussed in Section 3.9, *Greenhouse Gas Emissions*, the proposed project would be consistent with the adopted City's Climate Action Plan. Impacts would therefore be *less than significant*.

Threshold LUP-3: Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact LUP-3: The Specific Plan area is not located within a "sub-regional focus area" that would be protected by the Central and Coastal Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP). Therefore, *no impact* would result.

b. Population and Housing

Threshold POP-1: Induce substantial population growth.

Impact POP-1: Implementation of the proposed Rancho La Habra Specific Plan would generate population growth as the direct result of the housing proposed by the Specific Plan. While the proposed project would not necessarily increase the City's projected growth rate through 2040, it would substantially increase La Habra's inventory of land for the development of housing, and therefore result in substantial population growth. Such population growth would exceed the growth projections used for preparation of the current regional Air Quality Management Plan, would therefore be inconsistent with that plan, and a significant impact would result. This increased population growth would also result in significant and unavoidable physical environmental effects in relation to aesthetics and visual resources, traffic and circulation, and greenhouse gas emissions. The resulting population and housing impact would therefore be *significant and unavoidable*.

Threshold POP-2: Displace housing or people, necessitating the construction of replacement housing elsewhere.

Impact POP-2: Implementation of the proposed Rancho La Habra Specific Plan would not result in displacement of existing housing or people that would necessitate the construction of replacement housing. *No impact* would result.

c. Aesthetic Resources

Threshold AES-1: Adverse effect on a scenic vista.

Impact AES-1: While portions of proposed Rancho La Habra Specific Plan residential and commercial development would be visible from public locations, such development would not block scenic vistas. The impact would be *less than significant*.

Threshold AES-2: Damage scenic resources within a state scenic highway.

Impact AES-2: The project site is not within or visible from a designated or eligible state scenic highway. Implementation of the proposed Rancho La Habra Specific Plan would not, therefore, damage scenic resources within a state scenic highway, and there would be *no impact*.

Threshold AES-3: Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact AES-3: Implementation of the proposed Rancho La Habra Specific Plan would result in the loss of a major open space resource. While the proposed project would be well planned and designed, the substantial loss of open space that would result from project development would degrade the existing visual character of the site. Even with implementation of project design features and compliance with existing regulations, this impact would remain *significant and unavoidable*.

While no feasible mitigation measures are available to reduce Impact AES-3 to a less than significant level, as discussed in Chapter 7, *Alternatives*, the following Project Alternatives (in addition to No Project Alternatives) would eliminate or reduce the identified significant impact in relation to visual character:

Alternative 3: Golf Course and Hotel

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

Alternative 5: Reduced Density Single-Family Development

Threshold AES-4: New source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Impact AES-4.1: Implementation of proposed Rancho La Habra Specific Plan would not create substantial new sources of nighttime lighting that would spillover onto sensitive uses (i.e., residences) for a substantial portion of the night or would impair drivers' vision at night. Project lighting impacts would, therefore, be *less than significant*.

Impact AES-4.2: Implementation of the proposed Rancho La Habra Specific Plan would not create a substantial new source of glare. The impact would be *less than significant*.

d. 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: Site grading and construction in the development footprint would directly remove special-status plant and animal species and nesting birds.

Construction activities and the use of parks, trails, and the Community Center could increase human foot traffic and direct encroachment into habitats that support special-status species, degrading the quality of the habitat compared to existing conditions. Proposed draining and re-lining and removal of golf course ponds could directly remove or damage western pond turtles. Compliance with applicable regulatory requirements of federal and state law, along with implementation of mitigation measures, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Mitigation Measure BIO-1a: In-Kind Replacement of Special-Status Species Habitat. Any special-status species habitat that cannot be avoided during site development shall be replaced in-kind. The applicant shall purchase credits at a U.S. Fish and Wildlife Service (USFWS)/California Department of Fish and Wildlife (CDFW) approved mitigation bank or fund the creation and preservation of habitat at an off-site location such as the West Coyote Hills to demonstrate a minimum replacement ratio of at least 1:1 and meets the state regulatory agency's performance standard of "no net loss" for direct loss of special-status species habitat within the development footprint. Compensation shall be detailed on an acreage-specific basis and shall include a habitat mitigation and monitoring plan, which shall be developed in coordination and compliance with state and federal regulatory agency performance standards of "no net loss." Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet stated "no net loss" standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, such plans shall include:

- Baseline information, including the findings and conclusions of the Biological Assessment prepared by the applicant and submitted to the USFWS and CDFW as part of the regulatory permitting process;
- Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration or off-site habitat creation); and
- Measurable performance standards and criteria including but not limited to the overall amount of percent cover and species diversity for restoration or enhancement in the Specific Plan development footprint must meet state and federal regulatory resources agency approval, and must be provided for City review at the end of the 5-year monitoring period. Should the restoration or enhancement fail to meet success criteria as defined in the mitigation and monitoring plan required as part of the state and federal agency permitting

process, the City would implement remedial restoration or enhancement efforts at the cost to the applicant. Contingency funds will be established and deposited in an escrow account with the City, to be refunded to the applicant at the time the resource agency performance criteria that is established as "no net loss" is met.

Mitigation Measure BIO-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 and Landscaped Slopes. Proposed enhancements to the riparian conservation area (i.e., removal of non-native invasive species, draining and re-lining of Ponds 1 and 2) and any tree trimming or tree removal in the landscaped slopes associated with fuel management activities 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 tree trimming or removal, or proposed riparian enhancement activities, are 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 pre-construction 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-1c: Avoidance and Replacement of Special-Status Plants. Avoidance and Replacement of Special-Status Plants. Pre-construction botanical surveys for special-status plants shall be conducted within coastal sage scrub, mulefat scrub, and riparian woodland habitats in the development footprint during the appropriate flowering periods as identified in Table 3.5-1a of this EIR, which summarizes special-status plants with the potential to occur in the

development footprint. Pre-construction botanical surveys of coastal sage scrub, mulefat scrub, and riparian woodland habitats shall be conducted in the spring season prior to initiation of grading. Compliance with survey dates and protocol survey methods included in Table 3.5-1a, or protocol current at the time of development, shall be demonstrated.

If special-status plant species are found during pre-construction botanical surveys conducted during the appropriate survey period by a City-approved qualified botanist familiar with the species, **Mitigation Measure BIO-1a** will apply, including in-kind replacement and development of a mitigation and monitoring plan that would be provided, (along with monitoring reports prepared to meet rigorous regulatory standards applied by state and federal resources agencies), to the City as evidence that the mitigation measure has been successfully implemented.

Mitigation Measure BIO-1d Avoidance of Special-Status Bats in Coastal Sage Scrub and Riparian Woodland Habitats. Prior to direct removal of coastal sage and riparian woodland within the grading limits, and prior to tree trimming or tree removal activities for habitat enhancement proposed in the conservation areas and in the landscaped slopes subject to fuel management treatment, surveys shall be conducted for special-status bat species. At least 10 days before surveys begin, the applicant shall confer with CDFW to confirm current bat survey methodology. Surveys shall be conducted by a bat biologist familiar with the local bat species, and results of the surveys shall be summarized in a report to be provided to the City for review and approval. If individual roosting bats are detected, direct removal of habitat and proposed tree removal and tree trimming shall occur only after it has been confirmed that roosting bats have departed. If a confirmed bat roosting tree is lost, installation of bat roosting boxes in the vicinity of the cut tree shall be required.

Mitigation Measure BIO-1e: Finding and Relocating Western Pond Turtles. Pre-construction surveys to find western pond turtles that may occur in open water habitat in Ponds 1 through 3 within the development footprint shall be conducted 14 days prior to proposed fill and removal of Pond 3 and proposed draining and re-lining of Ponds 1 and 2. If the species is present in work areas, City-approved biologists shall capture turtles prior to construction activities and relocate them to nearby suitable habitat (the closest water body) out of harm's way (e.g., upstream or downstream from the work area). The applicant shall provide notification

to CDFW regarding any relocation of western pond turtles in the development footprint.

Mitigation Measure BIO-1f: Setbacks and Erosion Protection for Coastal Sage Scrub and Riparian Woodland. All viewing areas, signage, benches, the amphitheater, or other park features shall be located at least 50 feet from the edge of coastal sage scrub and 50 feet from the edge of riparian woodland habitat conservation areas. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub or riparian woodland 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 or riparian woodland 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*). Posted park rules shall identify riparian woodland and coastal sage scrub habitats in the conservation areas, and shall state that encroachment onto riparian woodland or coastal sage scrub areas is prohibited. Educational signage and other signs proposed in the upland or riparian conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting.

Public-access within upland and riparian conservation areas shall be restricted to approved trails, begin no earlier than 7:00 a.m., and conclude no later than 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.

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 sensitive natural habitats within the development footprint. Sensitive natural habitats proposed to be avoided by the project could be damaged or reduced in quality during construction and use of the Specific Plan trails, parks, and Community Center and as a result of proposed habitat enhancement. Compliance with applicable regulatory requirements of federal and state law, along with implementation of mitigation measures, 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 in Development Footprint. The applicant shall avoid or minimize adverse effects on sensitive natural communities in the Specific Plan development footprint. 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 Section 3.13, *Hydrology and Water Quality*, of this EIR 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.
- Phase grading operations to reduce disturbed areas and time of exposure.
- Avoid excavation and grading during wet weather.
- 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.
- Whenever practicable, provide native vegetation buffer areas to prevent pollutants from entering on-site and off-site water bodies, and substitute vegetation for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.
- 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.

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 riparian and upland conservation areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Installing silt fencing or vegetative plantings between sensitive natural communities and project parks, trails, kiosks, the Community Center, and the amphitheater.

- Locating fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features, and otherwise isolating construction work areas from any identified jurisdictional features including California Fish and Game Code Section 1602 jurisdictional areas.
- Ensure on-going maintenance and management in perpetuity at no expense to the City for the upland and riparian conservation areas within 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 and riparian 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: In-Kind Replacement of Sensitive Natural Communities. Where grading or removal of sensitive natural habitats cannot be avoided, compensation shall be provided to demonstrate that no net loss of sensitive natural communities would occur as a result of build-out of the Specific Plan.

Mitigation Measure BIO-2c: 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 and riparian conservation areas 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 and riparian conservation area habitats within the project development footprint, the following shall apply to any proposed lighting adjacent within 150 feet of the upland or riparian conservation areas:
        - Low-intensity street lamps 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.

- 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 red fox, raccoon, or opossums. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of this requirement.
- An education program for residents and Community Center and trail users shall be developed, including posted interpretive signs and informational materials regarding the sensitive habitats and the dangers of unleashed domestic animals in this area. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of the pet policy. Such information shall be provided in the vicinity of proposed kiosks and wildlife viewing areas where public access is provided.

Mitigation Measure BIO-2d: In-Kind Replacement of Jurisdictional Resources in Sensitive Habitats. Where direct removal of vegetation within Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1602 jurisdictional areas would occur, suitable habitat replacement shall be provided to meet the required performance standard of no net loss of sensitive habitats, including regulatory jurisdictional areas.

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, site grading, and habitat enhancement proposed in the Specific Plan would directly remove, and could damage or degrade during construction, protected Section 404 wetland areas in the development footprint. 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-3: Implement Mitigation Measures BIO-2a through BIO-2d.

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: Construction of the Specific Plan's proposed trails, enhancement of upland and riparian conservation areas, and vegetation removal and re-planting in fuel management areas could impede seasonal and localized movement of wildlife between habitats in the project development footprint and the West Coyote Hills. However, compliance with applicable regulatory requirements of federal and state law, along with implementation of mitigation measures, would reduce impacts to less than significant levels. 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 3.5-2 of this EIR. 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. Vegetation management in the fuel modification zone shall not reduce the overall amount of vegetative cover available for wildlife using the interface to move between the West Coyote Hills and the Specific Plan development footprint 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 Specific Plan would result in removal of trees and landscaping that provide avian nesting and roosting habitat, conflicting with La Habra General Plan Policy BR.1-8, which encourages preservation of such resources in the City. The impact would be *significant but mitigable*.

Mitigation Measure BIO-5: Replacement of Bird Nesting and Roosting Habitat. The Specific Plan landscape plan shall provide for replacement of bird nesting and roosting habitat lost during site development. Such

replacement shall be in the form of landscaped slopes, street trees and plantings, enhancement of conservation areas, and vegetation in parks and adjacent to environmental education kiosks, the Community Center, and proposed trails. To replace nesting and roosting habitat for resident and migratory birds, the Specific Plan planting plan shall include native tree and shrub species. The landscape design and Specific Plan plant palette shall be prepared in coordination with a qualified biologist and shall be subject to approval by the City of La Habra Director of Community and Economic Development.

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 proposed project would be consistent with the Orange County Central and Coastal NCCP/HCP, and *no impact* would result.

e. Cultural Resources

Threshold CUL -1: Substantial adverse change in the significance of a historic resource.

Impact CUL-1: Because no significant historic resources are present within the project site, implementation of the proposed Rancho La Habra Specific Plan would not result in a substantial adverse change in the significance of a historic resource. *No impact* would result.

Threshold CUL-2: Substantial adverse change in the significance of an archaeological resource.

Impact CUL-2: Implementation of the proposed Rancho La Habra Plan could result in a substantial adverse change in the significance of a previously unknown subsurface archaeological resource during site grading activities within areas previously undisturbed by golf course construction. However, compliance with existing regulations and implementation of mitigation measures would reduce this potential impact to a less- than-significant level. The impact would therefore be *significant but mitigable*.

Mitigation Measure CUL-2a: A qualified archaeologist shall be retained to conduct spot-checking of site grading activities and to respond on an as-needed basis to address unanticipated archaeological discoveries. In addition, a qualified Native American Monitor shall be present onsite

during construction-related ground disturbance activities, including but not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, trenching, and vegetation removal.

In the event that archaeological materials, including stone tools, shells, bones, glass shards, ceramics, or other materials older than 50 years in age, are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist approved by the City and a qualified Native American Monitor have assessed the discovery and appropriate treatment pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15064.5 is determined and implemented.

If archaeological resources are found to be significant, the archaeologist and Native American Monitor shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Pursuant to CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts on archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

Mitigation Measure CUL-2b: Prior to removal of any native vegetation from the project site, Native American monitors or representatives of the Gabrieleño Band of Mission Indians-Kizh Nation shall be invited to the project site to document and distinguish native vegetation that is preferred by the Tribe. All plants preferred by the Tribe that are proposed to be removed as part of site development shall be made available to the Tribe prior to their removal.

Threshold CUL-3: Cause a substantial adverse change in the significance of a tribal cultural resource.

Impact CUL-3: No tribal cultural resources meeting the definition set forth in Public Resources Code Section 21074 as either a site, feature, place, cultural

landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe is known to exist within the project site. However, there is still a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities. With implementation of **Mitigation Measure CUL-2a** and **Mitigation Measure CUL-2b** impacts will be *less than significant*

Threshold CUL-4: Destruction of a unique paleontological resource or unique geologic feature.

Impact CUL-4: Implementation of the proposed Rancho La Habra Specific Plan could destroy a unique paleontological resource or unique geologic feature as the result of future site grading within areas previously undisturbed by golf course construction. However, compliance with existing regulations and implementation of EIR mitigation measures would reduce this potential impact to a less- than-significant level. The impact would therefore be *significant but mitigable*.

Mitigation Measure CUL-4: The applicant/developer shall retain a County-certified paleontologist approved by the City to conduct full-time monitoring during all earth-moving activities involving previously undisturbed sediments of the La Habra and San Pedro Formations along with periodic paleontological spot checks within excavation areas mapped as Quaternary alluvium exceeding depths of 5 feet to determine if older, paleontologically sensitive sediments are present. If such older, paleontologically sensitive sediments are present, full-time monitoring shall be implemented.

If paleontological resources are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a County-certified paleontologist has assessed the discovery and appropriate treatment is determined and implemented.

Threshold CUL-5: Disturb any human remains, including those interred outside of formal cemeteries.

Impact CUL-5: Implementation of the proposed Rancho La Habra Specific Plan could disturb previously unknown human remains interred outside of formal cemeteries. However, compliance with existing regulations would ensure that this potential impact would be *less than significant*.

f. 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*. Implementation of 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 traffic 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, address the following:

- Proposed construction phasing plan.
- 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 utilize for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e. lumber, tiles, piping, windows, etc.) to access the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive)[4].
- Identify proposed construction related traffic controls and detours.
- 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 to adjacent streets.
- 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 which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads will be allowed between the hours of 9:00 am and 3:00 pm only, Monday through Friday, unless otherwise approved in writing by the City Engineer.
- No hauling or transport shall be allowed during nighttime hours, weekends or Federal holidays.
- Use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway for construction-related traffic shall be prohibited.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- 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.
- All construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur onsite.

This Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Device* as well as City of La Habra requirements.

Impact TRA-1.2: *Local Intersections, Existing Plus Project Condition*. Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system. Project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at two of the 32 intersections analyzed in the project traffic study under existing plus project conditions. Although implementation of improvements at these intersections would reduce LOS to acceptable levels, because one of these intersections is outside of the City of La Habra, the City cannot require implementation of such mitigation measures. Therefore, this impact would *remain significant and unavoidable*.

Mitigation Measure TRA-1.2a. The Applicant shall pay citywide traffic improvement fees as well as fair share impact fees for the intersection of Beach Boulevard at Imperial Highway.

Mitigation Measure TRA-1.2b. 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

Impact TRA-1.3: *Caltrans Intersections, Existing Plus Project Condition* Project-generated increases at Caltrans intersections will exceed applicable thresholds at three of the 19 state-controlled intersections analyzed in the project traffic report under existing plus project conditions. The remaining 16 state-controlled study intersections are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic to existing traffic. The implementation of improvements at the intersection of Beach Boulevard/Artesia Boulevard would offset the impact of increased project traffic; however, this location would still operate at unacceptable LOS E during the PM peak hour. The implementation of improvements at the intersections of Hacienda Road/Whittier Boulevard and Walnut Street/Imperial Highway would fully mitigate the impact of project traffic. With the recommended improvements set forth in the Traffic Impact Analysis, these intersections would operate at an acceptable LOS during the AM and PM peak hours. However, because these 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
- Hacienda Road at Whittier Boulevard (within La Habra)
- Walnut Street at Imperial Highway (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. Of the 7 locations 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 traffic delay. Therefore, impacts to area roadway links would be *less than significant*.

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

the surrounding roadway system. Project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at three of the 32 intersections analyzed in the project traffic impact analysis under Year 2023 plus project conditions. Implementation of improvements at three of the four impacted intersections (Beach Boulevard at Imperial Highway, Walnut Street at Imperial Highway, Euclid Street at Sandlewood Avenue) mitigates the effects of project-related traffic on ICU and/or delay, and the intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours. Implementation of improvements at one of these intersections (Beach Boulevard at Rosecrans Avenue) would reduce project-related increases in ICU and/or delay; however, the intersection would continue to operate at an unacceptable LOS F during the pm peak hour. Because one affected intersections is outside of the City of La Habra, the City cannot require implementation of such improvements. Thus, the proposed project's impact would be *significant and unavoidable* (Beach Boulevard at Rosecrans Avenue).

See **Mitigation Measure TRA-1.2a** for mitigation of impacts to the intersections of Beach Boulevard at Imperial Highway and Walnut Street at Imperial Highway.

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

Impact TRA-1.6: *Caltrans Intersections, Year 2023 Cumulative Plus Project Condition*. Cumulative Project-generated increases at State of California intersections will exceed applicable thresholds at seven of the 19 state-controlled intersections analyzed in the project traffic report. The remaining 12 state-controlled intersections are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2023. With the implementation of improvements, the state-controlled intersections of La Habra Hills Drive at Imperial Highway, Beach Boulevard at La Mirada Boulevard/Malvern 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. The implementation of proposed improvements at the intersections of Beach Boulevard at Imperial Highway, Harbor Boulevard at Imperial Highway and Beach Boulevard at Artesia Boulevard would offset the impact of project traffic; however, these locations would still 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-1.6a. The Applicant shall construct the recommended improvements set forth in the project traffic study for the intersection of La Habra Hills Drive and Imperial Highway.

Mitigation Measure TRA-1.6b. 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
- Harbor Boulevard at Imperial Highway
- Beach Boulevard at Artesia Boulevard

Impact TRA-1.7: *Roadway Segments, Year 2023 Cumulative Plus Project Condition*. Sixteen of the 37 roadway segments analyzed in the project traffic study are forecast to operate at an unacceptable level of service on a daily basis in the Year 2023 with the proposed project. Of the sixteen locations operating at an unacceptable level of service, project-related traffic would increase delays exceeding applicable thresholds at one location: (Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard), which will operate in the Year 2023 at unacceptable LOS E in the northbound direction during the weekday PM peak hour both without and with the proposed project. With implementation of recommended improvements, this roadway segment is forecast to operate at acceptable LOS D or better with the addition of project-generated traffic in the Year 2023 cumulative plus project condition. However, because Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard is outside of the City of La Habra, the City cannot require implementation of such mitigation measures. Therefore, this impact would be *significant and unavoidable*.

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

Impact TRA-1.8: *Local Intersections, Year 2035 Cumulative Plus Project Condition*. Implementation of the proposed Specific Plan would increase traffic at

intersections on the surrounding roadway system, resulting in increased ICU and/or delay at area intersections. Project-related increases in ICU and/or delay will exceed applicable thresholds at three of the 32 intersections analyzed in the project traffic report. Although an additional 15 of the 32 intersections analyzed in the traffic report 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 to cumulative traffic in 2035, project-generated increases in ICU and/or delay would not exceed the applicable significance threshold. The remaining 13 intersections analyzed in the project traffic report are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2035. The implementation of improvements at the impacted intersections of Beach Boulevard at Rosecrans Avenue and Beach Boulevard at Imperial Highway, which are within the City of La Habra, offsets the impact of project traffic; however, these locations are still forecast to operate at unacceptable LOS F during the PM peak hour. The implementation of improvements at the impacted intersection of Walnut Street at Imperial Highway offsets the impact of project traffic and the intersection is forecast to operate at an acceptable LOS during the AM and PM peak hours. However, because this intersection is outside of La Habra and on a state highway, improvements would require Caltrans and City of La Mirada approval. As a result, the City of La Habra cannot guarantee implementation of needed improvements, and impacts of the proposed project would be *significant and unavoidable*.

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

- Beach Boulevard at Imperial Highway
- Walnut Street at Imperial Highway

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

- Beach Boulevard at Rosecrans Avenue

Impact TRA-1.9: See **Mitigation Measure TRA-1.2a** 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
- Walnut Street and Imperial Highway
- Beach Boulevard and Artesia Boulevard

See **Mitigation Measure TRA-1.6a** for mitigation of impacts at the intersection of:

- La Habra Hills Drive and Imperial Highway

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

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

Impact TRA-1.10: *Roadway Segments, Year 2035 Cumulative Plus Project Condition*. Eighteen of the 37 roadway segments analyzed in the project traffic study are forecast to operate at an unacceptable level of service on a daily basis in the Year 2035 with the proposed Project. The proposed project will have a cumulative impact along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard, as this location is forecast to operate in the Year 2035 at unacceptable LOS E in the southbound direction during the weekday AM peak hour and at unacceptable LOS F in the northbound direction during the weekday PM peak hour with the proposed project. With implementation of recommended improvements, Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard would operate at acceptable LOS D or better with the addition of project-generated traffic in the Year 2035 traffic condition. Because this roadway segment is located outside of the City of La Habra and is subject to City of Buena Park and Caltrans approval, La Habra cannot guarantee implementation of the applicable mitigation measure. Therefore, this impact would be *significant and unavoidable*.

See **Mitigation Measure TRA-1.7a** for mitigation of impacts at:

- Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard

Impact TRA-1.11: *Freeway Mainline Segments*. Development of the proposed project in combination with cumulative development and ambient traffic growth would cumulatively impact one of two SR-57 mainline freeway segments (southbound south of Imperial Highway). However, because the SR-57 Freeway is controlled exclusively by the State and there is no mechanism by which the City of La Habra can construct or guarantee construction of any freeway improvements, proposed project's impact is *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 Ramp Junction Merge and Diverge Analysis*. Development of the proposed project in combination with cumulative development and ambient traffic growth would result in a significant impact one of the three freeway ramp junctions assessed in the project traffic report. Because the SR-57 Freeway is controlled exclusively by the State 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 proposed project's impact is *significant and unavoidable*.

See **Mitigation Measure TRA-1.11**.

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: Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system, resulting in increased ICU and/or delay at area intersections. These increases will not exceed applicable thresholds at any congestion management program location. Therefore, this impact would be *less than significant*.

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: Implementation of the proposed project would not result in any changes to air traffic patterns, there would be *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: Implementation of the proposed Specific Plan would be subject to City 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: Implementation of the proposed Specific Plan would provide adequate emergency access to 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. Implementation of Mitigation Measure TRA-1.1a, requiring implementation of a traffic management plan would ensure adequate emergency access during construction. The resulting impact would 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: Implementation of the proposed project would provide enhanced bicycle and pedestrian facilities within the project site, and implement applicable requirements for transit, bicycle, and pedestrian facilities. The resulting impact would be *less than significant*.

g. Air Quality

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

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. The resulting impact would be *significant and unavoidable*.

While no feasible mitigation measures are available to reduce Impact AES-3 to a less than significant level, as discussed in Chapter 7, *Alternatives*, in addition to No Project Alternatives, the following Project Alternatives would eliminate or reduce the identified significant impact in relation to air quality:

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: Implementation of 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 (NOX), 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 methods 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: The proposed project would not generate sufficient traffic to create a carbon monoxide (CO) "hot spot." 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: 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 NOX and NO2 significant increases in NO_X and NO2 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 LST-related mitigation measures. The impacts would therefore be *less than significant*.

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

Impact AQ-5: The proposed 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 not be likely to violate applicable South Coast Air Quality Management District (SCAQMD) regulations and would temporary in nature. Impacts would therefore be *less than significant*.

h. 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: Implementation of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 6,037.55 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 $MTCO_2e$ per year. The impact would be *significant and unavoidable*.

Mitigation Measure GHG-1a: All structures shall be designed to be 20 percent more efficient than current (2017) Title 24 Standards, consistent with La Habra Climate Action Plan (CAP) Energy Reduction Measure R2-E1, New Construction Residential Energy Efficiency Requirements. Compliance with this requirement shall be achieved through incorporation of technologies listed in CAP Energy Reduction Measure R2-E1, such as installation of energy efficient appliances and lighting, as well as readily available light-colored pavements, natural shading, and other technologies.

Mitigation Measure GHG-1b: Electrical vehicle charging stations shall be provided within the proposed commercial and multi-family development areas (CAP Measure R2-T3). The number and location of these stations shall be approved by the City\.

Mitigation Measure GHG-1c: Single-family detached residential dwelling units shall be designed and constructed to accommodate the installation of solar panel systems, and solar panel systems shall be offered to initial buyers as an option (CAP Measure R2-E2).

Mitigation Measure GHG-1d: All enclosed residential garages shall be provided with 220-volt electrical wiring suitable for installation of electrical vehicle chargers.

Mitigation Measure GHG-1e: Multi-family detached residential structures shall have solar panel systems installed (CAP Measure R2-E2).

Mitigation Measure GHG-1f: Commercial structures shall be designed and constructed to accommodate the installation of solar panel systems (CAP Measure R2-E6).

Mitigation Measure GHG-1g: Outdoor electric outlets shall be provided in all residential and commercial development to facilitate use of electric landscape equipment (CAP Measure R2-A1).

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

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

Mitigation Measure GHG-1j: Project development shall comply with the California Green Building Standards Code, including but not limited to requirements 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 (CAP Measure R3-W1).

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

Impact GHG-2: Because the proposed project would implement all applicable measures from the City's Climate Action Plan, and resulting GHG emissions per service population would be less than the SCAQMD's proposed 4.8 $MTCO_2e$ per year efficiency threshold, the impact would be *less than significant.*

i. Energy Resources

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

Impact EN-1.1: Implementation of the proposed Rancho La Habra Specific Plan would require energy during construction of proposed 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: Implementation of the proposed Rancho La Habra Specific Plan would require energy during operations of proposed 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*.

j. 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'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 Noise Study (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 nearly all cases, the addition of project-related traffic would result in less than a 1.0 dBA noise increase in roadway noise levels. The greatest increase in noise would occur in the PM peak hour along eastbound Rosecrans Avenue, where the addition of project-related traffic would increase noise levels by 1.5 dBA, 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 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 unavoidable*.

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.

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

Mitigation Measure NOI-4c: The construction contractor shall locate all stationary noise sources (e.g., generators, compressors, staging areas) as far from residential receptor locations as feasible.

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

Mitigation Measure NOI-4e: The construction contractor shall select and use quieter tools or construction methods whenever feasible. Examples of this 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 the use of enclosures as feasible. This includes four-sided or full enclosures with a top for compressors and other stationary machinery. This also includes locating activities, such as metal stud and rebar cutting, within constructed walled structures to minimize noise propagation.

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.

k. Hazards and Hazardous Materials

Threshold HAZ-1: **Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.**

Impact HAZ-1: Because site demolition and construction activities, as well as operation of proposed new residential and commercial uses, would be required to comply with applicable regulations for the use of hazardous materials, the impact related due to routine transport, use, or disposal of hazardous materials would be *less than significant*.

Threshold HAZ-2: **Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.**

Impact HAZ-2.1: Demolition, grading, and construction activities related to the proposed Specific Plan would be required to comply with existing laws and regulations for the routine transport, use, and disposal of hazardous materials. As a result, the impact would be *less than significant*.

Impact HAZ-2.2: Soils containing petroleum hydrocarbons would be encountered during site grading. A Soils Management Plan approved by the Orange County Health Care Agency sets forth extensive controls that make a substantial health risk unlikely; however, a health risk is nevertheless possible. The impact would be *significant but mitigable*.

Mitigation Measure HAZ-2.2: Excavation, handling, and placement of contaminated soils within the project site shall be undertaken so as to achieve a residential cleanup standard of an acceptable excess cancer risk (ECR) of 1×10^{-5} for construction workers, residents and workers within proposed uses on-site, and residents of adjacent neighborhoods.

Impact HAZ-2.3: Three dwelling units are proposed directly over previously abandoned wells, and site grading, including lowering of ground elevations over previously abandoned wells, could affect their integrity. Compliance with site review requirements of the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) would ensure public safety. The impact would be *less than significant*.

Impact HAZ-2.4: Proposed residential and commercial uses would routinely use and store result small quantities of common chemicals (e.g., paints, solvents, and cleaning products). Such hazardous materials would be used and stored in accordance with applicable regulations. As a result, reasonably foreseeable upset and accident conditions involving the release of

hazardous materials into the environment would be unlikely, and the impact would be *less than significant*.

Threshold HAZ-3: **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within 0.25 mile of an existing or proposed school.**

Impact HAZ-3: While project site development would not result in hazardous emissions or handling of acutely hazardous materials, site grading would result in the excavation, stockpiling, and placement of total petroleum hydrocarbon (TPH)-affected soils below the project site, which is within 0.25-mile of Las Positas Elementary School. TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the Orange County Health Care Agency, and the project would be required to comply with applicable rules of the South Coast Air Quality Management District; however, a hazard is nevertheless possible. The impact would be *significant but mitigable*.

Threshold HAZ-4: **Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

Impact HAZ-4: Due to past oil extraction activities, the project site is included on a list of hazardous materials sites. TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the Orange County Health Care Agency, and such handling would be required to comply with applicable rules of the South Coast Air Quality Management District; however, a hazard is nevertheless possible. The impact would be *significant but mitigable*.

See **Mitigation Measure HAZ-2.2**.

Threshold HAZ-5: **Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such plan has not been adopted, be within 2 miles of a public airport use airport or public use airport.**

Impact HAZ-5: Because the project site is not within an airport land use plan or within 2 miles of a public airport for which an airport land use plan has not been adopted, *no impact* would result.

Threshold HAZ-6: **Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area.**

Impact HAZ-6: Because the project site is not within an airport land use plan or within two miles of a private airstrip, there would be *no impact*.

Threshold HAZ-7: **Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.**

Impact HAZ-7: La Habra Hills Drive would be temporarily closed during site grading, temporarily eliminating emergency access to the Westridge community during project construction. The temporary closure of La Habra Hills Drive that would occur during project site grading would not affect emergency access from the two closest fire stations serving the project site and the Westridge community. In addition, as a standard condition for issuance of a building permit, the applicant would be required to prepare and implement a Construction Phase Emergency Fire Access Plan and a Construction Phase Emergency Access Plan, which would ensure adequate emergency response is available to the project site and the adjacent Westridge community in the event of an emergency. Therefore, the impact would be *less than significant*.

Threshold HAZ-8: **Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.**

Impact HAZ-8: Proposed project site development would place new residential uses within a Very High Fire Hazard Area and intensify development along a wildland-urban interface, increasing fire hazards. Compliance with existing codes, along with implementation of the proposed Fire Management Plan as approved by the Los Angeles County Fire Department, would ensure an adequate level of fire safety. As a result, the impact would be *less than significant*.

1. Hydrology and Water Quality

Threshold HWQ-1: Violate any water quality standards or waste discharge requirements.

Impact HWQ-1.1 Site grading and construction activities would result in short-term increases in the transport of silt and sediment, along with hydrocarbon-based pollutants, to receiving waters. Site construction activities would also allow for infiltration of hydrocarbon and other pollutant discharges into the groundwater. However, compliance with National Pollutant Discharge Elimination System (NPDES) requirements, as well as implementation of a Stormwater Pollution Prevention Plan (SWPPP), including Best Management Practices (BMPs), would avoid the potential

to violate any water quality standards or waste discharge requirements. The impact would therefore be *less than significant*.

Impact HWQ-1.2: Following completion of grading and construction, urban runoff and waste discharges from project site streets, parking lots, and other paved areas, as well as runoff from landscaped areas, would carry a variety of pollutants to receiving waters. However, implementation of Best Management Practices (BMPs) as required to be set forth in the project's Stormwater Management Plan and Water Quality Management Plan would avoid the potential to violate any water quality standards or waste discharge requirements during ongoing operations. The impact would therefore be *less than significant*.

Threshold HWQ-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Impact HWQ-2: Implementation of the proposed Rancho La Habra Specific Plan would increase the impervious surface area within the project site, reducing groundwater infiltration. However, because the proposed project would also substantially reduce the amount of groundwater consumed within the project site, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. This impact would be *less than significant*.

Threshold HWQ-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Impact HWQ-3: The proposed Rancho La Habra Specific Plan would maintain existing drainage patterns within the project site but would substantially increase the site's impervious surface area, increasing runoff. Because drainage would be directed through a series of detention basins, runoff from the project site would not increase beyond the capacity of downstream drainage facilities, with one exception: the existing 48-inch drainage pipe crossing Beach Boulevard, which is deficient in the existing condition.

The on-site flooding that could result would be addressed by construction of a second drainage pipeline under Beach Boulevard. The impact therefore would be *significant but mitigable*.

Mitigation Measure HWQ-3: The applicant shall construct a 48-inch storm drain underneath Beach Boulevard parallel to the existing storm drain pipe that connects the on-site detention basin with the existing storm drain pipe on the west side of Beach Boulevard. The applicant shall perform the work using a jack and bore method to avoid impacts on traffic on Beach Boulevard. The applicant shall also obtain (1) approval from Caltrans to jack and bore underneath Beach Boulevard and, (2) to the extent necessary, a temporary construction easement from the Hillsborough Apartment complex on the west side of Beach Boulevard. Furthermore, the applicant shall recalculate the size of the detention basin, and if additional storage is necessary, the Applicant shall show underground buried storm water storage adjacent to the detention basin shown on the Vesting Tentative Tract Map. The final hydraulic calculations document that existing off-site storm flows and the additional on-site storm flows would not exceed the design capacity of the existing and new storm drain pipes under Beach Boulevard. All final calculations and design plans shall be approved by the City of La Habra.

Threshold HWQ-4: Otherwise substantially degrade water quality.

Impact HWQ-4: Implementation of the proposed project would introduce water quality pollutants during site grading and construction and ongoing operations. Implementation of BMPs and compliance with applicable requirements designed to protect water quality would ensure that water quality in receiving waters and groundwater would not be substantially degraded. The impact would therefore be *less than significant*.

Threshold HWQ-5: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Impact HWQ-5: Implementation of the proposed Specific Plan would not place housing within a 100-year flood hazard area. *No impacts* would occur.

Threshold HWQ-6: Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Impact HWQ-6: Implementation of the Rancho La Habra Specific Plan would not place structures within a 100-year flood area that could impede or redirect flood flows. *No impacts* would occur.

Threshold HWQ-7: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact HWQ-7: Implementation of the proposed Rancho La Habra Specific Plan would not expose people or structures to risks related to flooding due to the failure of a levee or dam. *No impacts would not occur*.

Threshold HWQ-8: Cause inundation by seiche, tsunami, or mudflow.

Impact HWQ-8: Implementation of the proposed Rancho La Habra Specific Plan would not cause or be subject to inundation due to seiche, tsunami, or mudflow. *No impact* would result.

m. Geology, Soils, and Seismicity

Threshold GEO-1: Expose people or structures to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, and/or landslides.

Impact GEO-1.1: Proposed residential structures on Lots 12, 28 and 29 would be located within the Alquist-Priolo Earthquake Fault Zone, which could potentially expose those structures and people to a significant safety risk should active faults or active fault splays be located within 100 feet of the lots. The resulting impact would be *significant but mitigable*.

Mitigation Measure GEO-1.1: A minimum 100-foot setback for all residential structures shall be maintained from any active fault or fault splay.

Impact GEO-1.2: Implementation of the Rancho La Habra Specific Plan would expose people and structures to strong seismic groundshaking. However, compliance with existing California Building Code requirements as they would apply to site-specific conditions would ensure that impacts related to risk of loss, injury, or death involving strong seismic groundshaking would be *less than significant*.

Impact GEO-1.3: Implementation of the Rancho La Habra Plan would expose people and structures to seismic-related ground failure, including liquefaction. The project site contains relatively isolated sandy layers within alluvial soils that are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface. Potential dynamic settlement is estimated to be on the order of 1 to 2 inches. Differential dynamic settlement is

estimated at half of the total settlement over a horizontal span of 30 feet. Impacts would be *significant, but mitigable*.

Mitigation Measure GEO-1.3a: Stiffened and/or post-tensioned slab foundations shall be used to support all new proposed development within the project site. Pre-soaking of the subgrade soils shall be required to reduce the potential impact of expansive soils.

Impact GEO-1.4: The mechanically stabilized earth (MSE) wall below proposed Lots 241 through 245 would be at risk from landslide. The impact related to risk of loss, injury, or death involving landslides would be *significant but mitigable*.

Mitigation Measure GEO-1.4a: Additional geogrid reinforcement length beyond local stability requirements to be determined by the MSE wall designer and approved by the City shall be required to provide adequate global stability factors of safety (greater than 1.5 and 1.1 for static and pseudo-static [seismic] loading conditions, respectively, for the MSE wall located below Lots 241 through 245 of Vesting Tentative Tract Map 17845.[5]

Threshold GEO-2: **Result in substantial soil erosion or the loss of topsoil.**

Impact GEO-2: Site grading and construction activities would result in short-term increases in the transport of silt and sediment to receiving waters. However, compliance with National Pollutant Discharge Elimination System (NPDES) requirements, as well as implementation of a Stormwater Pollution Prevention Plan (SWPPP), including best management practices (BMPs), would avoid substantial erosion or loss of topsoil. The resulting impact would therefore be *less than significant*.

Threshold GEO-3: **Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.**

[5] Preliminary slope stability analysis set forth in the project geotechnical report indicates at least 6 layers of geogrid reinforcement lengths of 60 feet, with an allowable strength (after appropriate reduction factors are applied by the manufacturer) of approximately 3.5 kips per foot, spaced at a maximum vertical spacing of 2 feet, are required for adequate global factors of safety. Further refinement of the design for required global stability geogrid will occur during preparation of the 40-scale grading plan and with input from the MSE wall designer subject to approval of the City of La Habra.

Impact GEO-3: Slopes within the project site will have an appropriate factor of safety with one exception -- the mid slope MSE walls located below Lots 241 through 245, which will require reinforcement will be necessary to provide an adequate factor of safety. In addition, the project site contains relatively isolated sandy layers within alluvial soils that are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface, resulting in the potential for liquefaction and dynamic settlement. The project site contains previously placed non-structural fill and near-surface alluvium soils that lack sufficient compaction for the proposed development. The proposed increase of grades over existing alluvium in portions of the site will induce up to 2½ inches of settlement which is estimated to occur over approximately 6 to 12 months after completion of rough grading. Finally, the presence of corrosive soil could affect the long-term integrity of proposed structures' foundation systems. However, implementation of mitigation measures based on the recommendations of the Rancho La Habra Geotechnical Report and compliance with the California Building Code will would resolve soil stability issues. Impacts will therefore be *significant but mitigable*.

Mitigation Measure GEO-3a: Removals of unsuitable fill material up to approximately 50 feet deep below existing grades shall be performed for the western portion of the project site and within several isolated small canyon areas at the eastern portion of the site, in accordance with recommendations of the Geotechnical Report. Precise locations and depths of removals shall be made by the project's geotechnical consultant, as approved by the City, and noted on the final approved grading plans.

Mitigation Measure GEO-3b: As part of remedial grading, unsuitable soils shall be removed to competent soils, temporarily stockpiled (where necessary) and replaced as properly compacted fill. Prior to placement as compacted fill, significant organic materials or other unsuitable materials shall be removed and properly exported off-site.

Mitigation Measure GEO-3c: Any concrete material from site demolition used in general fill shall be environmentally suitable and crushed such that it is no larger than 8 inches in maximum dimension and well blended (i.e., no nesting and voids) into site fills. Any concrete material placed in MSE wall backfill areas (refer to **Mitigation Measure GEO-3i**) shall be crushed to meet gradation requirements of aggregate base in accordance with the last edition of the Greenbook: Standard Specifications for Public Works Construction. The actual depths and lateral extents of grading shall be determined by the geotechnical consultant, based on subsurface conditions encountered during grading.

Mitigation Measure GEO-3d: Stabilization fill keyways shall be constructed for design cut slopes that are not undercut by remedial grading. Locations of the stabilization fill keyways shall be constructed in accordance with recommendations made in the Geotechnical Report, with final locations and design specifications made by the project's geotechnical consultant subject to review and approval by the City xxx. Keyways shall be shown on the final grading plans. Design cut lots, or lots with less than 5 feet of design fill, shall be overexcavated a minimum of 5 feet below respective pad grades.

Mitigation Measure GEO-3e: Proposed fill slopes shall be constructed at a slope ratio of 2:1 (horizontal to vertical) or flatter so as to achieve the factors of safety recommended in the Geotechnical Report.

Mitigation Measure GEO-3f: Fills placed deeper than 40 feet below proposed grade shall be compacted to an increased minimum relative compaction of 93 percent relative compaction. Fill shall be moisture-conditioned to be between optimum moisture content and 2 percent over optimum moisture content, pursuant to ASTM D1557.

Mitigation Measure GEO-3g: Settlement monuments shall be installed within four weeks after completion of grading within fill areas greater than approximately 40 feet below finish grade and where significant amounts of fill are placed over left-in-place alluvium. Settlement monuments shall be read by a licensed surveyor with an off-site benchmark. The survey readings shall be obtained four times in the first two months, twice in the third month, and then once a month unless otherwise requested by the geotechnical consultant. Shallow footings and slab-on-grade foundations shall be constructed after settlement monitoring data indicate future total settlements are within tolerable limits. Tolerable limits shall include a determination by the project's geotechnical engineer, subject to review and approval by the City, that the surveyed areas would maintain a predicted 3 inches or less of settlement for the next 50 years. If a determination is made that tolerable limits are not met, either impacted areas shall be surcharged with additional fill material and surveyed for an additional three months to determine that tolerable limits are met, or construction shall be delayed until additional settlement monitoring determines that tolerable limits are met.

Mitigation Measure GEO-3h: Additional geogrid reinforcement length (beyond local stability requirements) shall be required for adequate global stability factors of safety of the MSE retaining wall located at

various areas throughout the site, as determined during final design and as approved by the City. Final design requirements including geogrid reinforcement length shall be determined by the MSE wall designer during preparation of the 40-scale grading plan and approved by the City based on the recommendation made in the Geotechnical Report. Geogrid reinforcement length requirements shall be noted on the final approved construction plans.

Mitigation Measure GEO-3i: MSE walls and conventional retaining walls shall be backfilled with relatively sandy soils obtained from either on-site or off-site locations. Sandy soils shall comprise the geogrid zone required for local stability as determined by the MSE wall designer and approved by the City. For conventional retaining walls, the sandy import zone shall be a minimum of one-half the height of the retaining wall. These requirements shall be noted on the final approved construction plans.

Mitigation Measure GEO-3j: Soil samples shall be collected and tested for presence of corrosive soils at the completion of rough grading. If corrosive soils are detected with (1) pH levels of 5.5 or less, (2) chloride concentration of 500 parts per million (ppm) or greater, or (3) sulfate concentration of 2,000 ppm or greater, specific remediation methods—such as increased compressive strength for structural concrete, decreased water-to-cement ratio for structural concrete and/or encapsulation of post-tensioned cables—shall be implemented as approved by the City. Specific remediation methods shall include one or more of the above-listed options as determined by the foundation design engineer and as approved by the City. If corrosive soils are not detected at levels described above, no mitigation shall be required.

Threshold GEO-4: **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.**

Impact GEO-4: Soils within portions of the project site tested as having very high potential for expansion. However, implementation of mitigation measures based on the recommendations of the project's Geotechnical Report and compliance with the California Building Code would resolve expansive soil issues. Impacts will therefore be *significant but mitigable.*

Mitigation Measure GEO-4: Soil samples shall be collected and tested at the completion of rough grading to assess expansive soil conditions. Based on the test results, the project shall incorporate specific recommendations set forth by the foundation design engineer, subject to review and approval by the City, such as the use of stiffened and/or post-

tensioned slab foundations, pre-soaking of the subgrade soils, and establishment of minimum setbacks for structures located near slopes.

Threshold GEO-5: **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.**

Impact GEO-5: Implementation of the Rancho La Habra Plan would require all development to connect to municipal sewage systems, and no septic tanks or alternative wastewater disposal systems would be used. As a result, there would be *no impact*.

n. Public Services

Threshold PSF-1 **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**

Impact PSF-1.1: Implementation of the proposed Rancho La Habra Specific Plan would increase demand for police services during construction and ongoing operations, but would not necessitate provision of new facilities or physical expansion of existing police facilities. Thus, *no impact* would result.

Impact PSF-1.2: Implementation of the proposed Rancho La Habra Specific Plan would increase demand for fire protection services, but would not necessitate provision of new facilities or physical expansion of existing fire protection facilities. Thus, *no impact* would result.

Impact PSF-1.3: Implementation of the proposed Rancho La Habra Specific Plan would generate additional students within the Lowell Joint School District and the La Habra City School District for grades Kindergarten (K)-8, and within the Fullerton Joint Union High School District for grades 9-12. Payment of required school impact fees to these districts would constitute mitigation in full for the increased number of students. Thus, *no impact* would result.

Impact PSF-1.4: Implementation of the proposed Rancho La Habra Specific Plan would increase demand for library services but would not necessitate provision of new facilities or physical expansion of existing facilities. Thus, *no impact* would result.

o. Recreational Resources

Threshold REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact REC-1: The proposed Rancho La Habra Specific Plan provides for parks and recreational land in excess of La Habra Municipal Code requirements. Thus, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project would include closure of the Westridge Golf Club, resulting in the loss of a major recreational resource; however, this closure would not cause or accelerate physical deterioration of other golf courses, which are available within a 5-mile radius of the project site. The impact would therefore be *less than significant.*

Threshold REC-2: Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact REC-2: Construction and operation of proposed parks and recreation facilities would contribute to impacts addressed throughout this EIR, except for those impacts specifically related to population growth or to the project's proposed residential and commercial areas and their operations. The significance of these impacts would be as identified in other EIR sections.

p. Utilities, Service Systems, and Water Supply

Threshold UTI-1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Impact UTI-1: Because proposed land uses would not discharge wastewater that contains harmful levels of chemicals and would not exceed the capacity of Orange County Sanitation District (OCSD) Reclamation Plant No. 2, implementation of the proposed Specific Plan would not exceed applicable wastewater treatment requirements, and the impact would be *less than significant.*

Threshold UTI-2: Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact UTI-2.1: Construction of needed water infrastructure would not result in any on-site physical effects on the environment other than those that are analyzed as part of development of proposed residential and commercial uses (e.g., site grading). In addition, off-site improvements, other than connections to existing water lines adjacent to the project site, would not be needed. The off-site connections to existing water lines would occur exclusively within existing road rights-of-way. While such connections would require roadway lane closures during construction, such closures would be temporary and subject to standard City and Caltrans requirements to ensure public safety and minimal disruption of roadway operations. As a result, impacts related to construction of water facilities would be *less than significant*.

Impact UTI-2.2: Construction of needed sewer infrastructure would not result in any on-site physical effects on the environment other than those analyzed as part of development of proposed residential and commercial uses (e.g., site grading). In addition, the necessary off-site sewer improvements would occur exclusively within existing road rights-of-way. While such connections would require roadway lane closures during construction, the closures would be temporary and subject to standard City and Caltrans requirements to ensure public safety and minimal disruption of roadway operations. As a result, impacts related to construction of sewer facilities would be *less than significant*.

Threshold UTI-3: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact UTI-3: Construction of needed drainage infrastructure would not result in any on-site physical effects on the environment other than those that would occur as the result of development of proposed residential and commercial uses (e.g., site grading). In addition, the off-site construction of a 48-inch storm drain connection under Beach Boulevard would occur exclusively within existing rights-of-way. By using jack and bore, this construction would not cause lane closures or traffic interruptions. Boring for the storm drain would occur within an existing right-of-way in ground that was largely previously disturbed for construction of an adjacent storm drain. The equipment used in the jack and bore operation would generate less noise than the on-site grading operations analyzed in Section 3.11, *Noise and Vibration*. As a result, impacts related to construction of drainage facilities would be *less than significant*.

Threshold UTI-4: **Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.**

Impact UTI-4: Development under the proposed Specific Plan would require approximately 101 acre-feet less water annually than the existing golf course use. In addition, because La Habra's water supplies are adequate to meet projected demands in normal, dry, and multiple dry years through 2040 even without the proposed project, new or expanded entitlements would not be needed. Therefore, *no impact* would result.

Threshold UTI-5: **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

Impact: UTI-5: Adequate treatment capacity is available at Orange County Sanitation District (OCSD) Reclamation Plant No. 2 to treat wastewater generated by the proposed project in addition to OCSD's existing commitments. The project's impact would therefore be *less than significant*.

Threshold UTI-6: **Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.**

Impact UTI-6: Because the Olinda Alpha Landfill and the Orange County landfill system have adequate daily capacity, the addition of 1.42 tons of solid waste per day from project operations would not exceed the permitted daily capacity of area landfills. Adequate daily landfill capacity also exists at area landfills to accept waste from project construction activities, which will be required to implement waste reduction programs. In addition, OC Waste & Recycling projects that, by 2066, Orange County's disposal system would have 71 million tons of remaining capacity, which is more than sufficient to accommodate the 51,900 tons of solid waste that would be generated by the project operations over this 50-year period. Thus, the proposed project would not exceed the total capacity of area landfills, and impacts would be *less than significant*.

Threshold UTI-7 **Fail to comply with federal, state, and local statutes and regulations related to solid waste.**

Impact UTI-7: Implementation of the proposed Specific Plan would comply with federal, state, and local statutes and regulations related to solid waste. *No impact* would occur.

ES.6 ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, while avoiding or reducing the significant environmental effects of the proposed Project and to evaluate the comparative merits of the alternatives. Chapter 7 also evaluates alternatives to the proposed Project as required by CEQA. These alternatives include:

- Alternative 1: No Project – No Development
- Alternative 2: No Project - General Plan Buildout
- Alternative 3: Golf Course and Hotel
- Alternative 4: Residential with Nine-Hole Golf Course (314 dwelling units)
- Alternative 5: Reduced Residential Density with Nine-hole Golf Course (144 dwelling units)
- Alternative 6: Reduced Residential Density

ES.6.1 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an EIR identify an environmentally superior alternative. If the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)).

The No Project – No Development Alternative would avoid all of the significant impacts of the proposed project, including inconsistency with the La Habra General Plan, providing for the continued use of the existing Westridge Golf Club. This alternative would also reduce all other environmental effects of the proposed Specific Plan with the exception of water use.

Of the other alternatives evaluated in this EIR, Alternative 4, the Reduced Density Residential/Nine-Hole Golf Course Alternative with 144 dwelling units, would be the environmentally superior alternative since it would avoid the significant impacts of the proposed project, reduce other impacts compared to the proposed project, meet City project objectives, and partially meet most applicant objectives (although to a lesser degree than the proposed project).

Table ES-3 compares the effects each of the six alternatives would have in relation to the seven significant unavoidable impacts that would result from the proposed project.

Table ES-5
Comparison of Alternatives in Relation to Significant Unavoidable Impacts on Proposed Project

Significant Unavoidable Impact of Proposed Project	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Land Use and Planning (inconsistency with the Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS] and the La Habra General Plan)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and greenhouse gas impacts)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Traffic and Circulation (increased traffic exceeding established significance thresholds)	Avoid	Avoid	Reduce	Reduce	Reduce	Reduce
Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan)	Avoid	Avoid	Reduce	Avoid	Reduce	Avoid
Greenhouse Gas Emissions (annual emissions exceeding established significance thresholds)	Avoid	Avoid	Reduce	Avoid	Reduce	Avoid
Noise (construction noise)	Avoid	Reduce	Reduce	Reduce	Reduce	Reduce

ES.7 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123 specifies that the EIR summary shall identify "areas of controversy" known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. To date, the following areas of controversy and issues to be resolved have been identified.

- Loss of open space and opportunities to golf, as well as changes in views and the character of the project site resulting from the proposed change in land use from golf course to a residential community.
- Noise, dust and air pollutant emissions during site grading and construction.
- Impacts to local schools.
- Safety of existing and future residents.
- Traffic congestion on area roadways.

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CHAPTER 1 INTRODUCTION

This environmental impact report (EIR) has been prepared by the City of La Habra (City) as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 *et seq.*) and CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 *et seq.*). This EIR has been prepared to identify, analyze, and mitigate the significant environmental effects of the proposed Rancho La Habra Specific Plan and related actions (the project).

CEQA requires each EIR to reflect the independent judgment of the Lead Agency, including but not limited to the thresholds of significance used to analyze project impacts, analyses, and conclusions regarding the level of significance of impacts both before and after mitigation, and the mitigation measures to be implemented to avoid or reduce project-related impacts (CEQA Sections 21082.1, 15084, and 15090). In preparing this EIR, the City has retained and directed a team of CEQA and environmental technical specialists as consultants. However, the analyses and conclusions set forth in this EIR reflect the independent judgment of the City as Lead Agency.

1.1 OVERVIEW OF THE RANCHO LA HABRA SPECIFIC PLAN

1.1.1 PROJECT LOCATION

The Rancho La Habra Specific Plan (Specific Plan) proposes development of the existing Westridge Golf Course in the city, 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 151-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 the city. Direct access to the Specific Plan area (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 151-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.

Development of the proposed project requires several approvals that are being requested by the applicant, CalAtlantic Homes, 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
- Conditional Use Permit for model home complexes
- Proposed Community Facilities District
- Release of an existing deed restriction

See Chapter 2, *Project Description*, for descriptions of each of these proposed actions.

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 EIR, along with any other relevant information, in making its decisions regarding the proposed project.

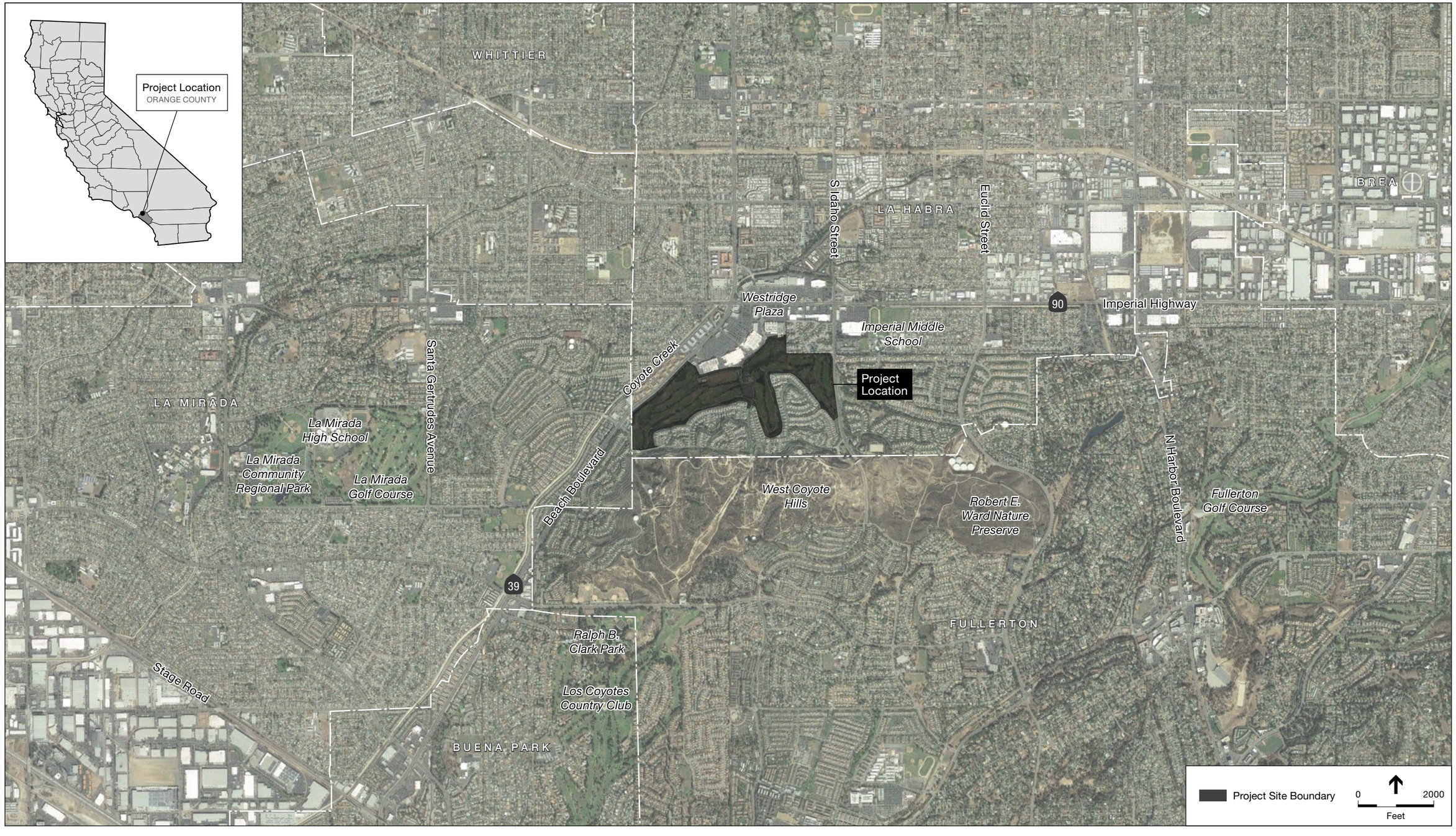


Figure 1-1: Project Location

Source: Google Earth Pro

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 a 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 Appendix A, 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 Appendix B 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. AB 52 requires that Lead Agencies consult with Native American Tribes who can prove and document traditional and cultural affiliation with the area of the 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, Native American monitors or an authorized representative of the Tribe shall be permitted 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 this project. The District noted that statutory development fees will be required at the time of building permits. Discussion of this 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 greenhouse gas emissions. The SCAQMD's 1993 Air Quality Handbook should be used in the preparation of the air quality analysis for the proposed project. The most recent update of CalEEMod land use emissions software should be used to quantify project impacts. 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 proposed 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 proposed 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 proposed 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 this proposed project's near-term and long-term impacts on the State facilities – existing and proposed – and to propose appropriate mitigation measures. • Any facilities within Caltrans' right-of-way that will be affected due to the proposed 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 proposed project will significantly affect SR-39, Beach Boulevard, and SR-90, Imperial Highway.	3.7 Traffic and Circulation

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
• The analysis shall include an intersection capacity analysis (by the HCM methodology) pertaining to the street intersections along SR-39 and SR- 90. • 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 proposed 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 nonprofit mutual benefit corporation made up of owners of homes located in the city, between the southern boundary of the proposed 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 8:00p.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 this project needs to consider the full range of sound levels that will 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 proposed 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 will reduce the project's impacts, even if they do not	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
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 proposed project on aesthetics, including scenic vistas, scenic resources, and the "juxtaposition of the proposed development with the existing community," 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 will 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 proposed project and cumulative projects. The letter also stated that the EIR needs to clearly identify the amount of parking that will be provided for residents, visitors, and users of the proposed commercial site, and identify and describe the proposed project's connection to public transit. The letter noted that it did not appear that the proposed 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 to 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 will avoid mobilizing contaminated soils and protect construction workers and nearby residents.	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
• **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 proposed 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." 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 need to disclose whether the applicant will be required to undertake hill-stabilizing measures and what those measures will 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 proposed 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 proposed 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 will 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,	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
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 proposed project would "create a significant amount of ground disturbance," the CDFW letter expressed concern over potential project impacts in relation to storm 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 proposed project, it recommends the EIR include: o A complete discussion of the purpose and need for, and description of, the proposed 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.	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
○ A thorough, recent floristic-based assessment of special status plants and natural communities, following the Department'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. ○ A current inventory of the biological resources associated with each habitat type on-site and within the area of potential effect. ○ 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: ○ 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; ▪ 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. ○ Discussions regarding indirect project impacts on biological resources. ○ Impacts on, and maintenance of, wildlife corridor/movement areas. ○ 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. ○ Cumulative effects of the proposed 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.	

Table 1-1
Summary of NOP Comment Letters

Comment Letters and Issues	Relevant EIR Sections
• 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 nongame 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 nongame 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 o 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 proposed 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 this project, and will defer to Gabrieleno 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 proposed 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 greenhouse gas emissions
- Potential for methane and sulfur to create odors
- 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

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

c. Availability and Review of the Draft EIR

The City filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this 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 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 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 45-day public review period begins on January 3, 2018 and ends at 5:00 p.m. on February 16, 2018 (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 Draft EIR should be sent to:

Mr. Andrew Ho, Community Development Director
City of La Habra
110 East La Habra Boulevard
La Habra, CA 90631

andrewh@lahabraca.gov

d. Preparation and Review of the Final EIR

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

(a) The Draft EIR or a revision of the Draft EIR;

(b) Comments and recommendations received on the Draft EIR during the public review period;

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR;

(d) The responses of the lead agency to significant environmental points raised in the review and consultation process; and

(e) Other information necessary as determined by the Lead Agency.

1.3 DEFINITIONS OF KEY CEQA TERMINOLOGY

Less than Significant Impact: A physical environmental effect that would result directly or indirectly from the 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: Includes 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 the 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 the proposed project and would exceed an identified significance threshold.

Significant Unavoidable Impact: Includes 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 DRAFT EIR

Following this Chapter 1, *Introduction*, the 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, for each environmental topic addressed in detail, the regulatory setting, existing conditions, applicable plans and policies, significance criteria, environmental impacts of the project, and mitigation measures recommended for the project. This chapter also identifies environmental issues, such as agricultural resources, for which impacts would not occur and that therefore are not examined in detail in this EIR, along with the rationale for such determinations. Finally, this chapter summarizes the project's significant unavoidable environmental impacts (i.e., those for which implementation of all feasible mitigation measures would not reduce the impact to a less than significant level).
- **Chapter 4, *Significant Irreversible Environmental Changes*,** addresses environmental effects associated with the project that have the potential for irretrievable and irreversible commitment of resources.
- **Chapter 5, *Growth Inducement*,** describes project's potential to induce growth beyond development of the project site itself.
- **Chapter 6, *Cumulative Impacts*,** provides an analysis of the combined (cumulative) impacts of the proposed project in combination with other past, present, and reasonably foreseeable projects.
- **Chapter 7, A*lternatives*,** provides a qualitative analysis of the ability of alternatives to the proposed project to avoid or reduce the extent of the impacts, particularly significant impacts, that would result from the proposed project. As required by CEQA, included in the discussion of alternatives is discussion of the No Project Alternative (environmental effects that would result should the proposed project not be approved) and a discussion of the environmentally superior alternative.
- **Chapter 8, *Mitigation Monitoring and Reporting Program (MMRP)*,** sets forth an implementation strategy for each mitigation measure to ensure that adopted mitigation measures are successfully implemented. For each mitigation measure, 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 EIR are as follows:

- Appendix A. NOP and the Distribution List
- Appendix B. NOP Comments
- Appendix C. La Habra General Plan Amendment
- Appendix D. La Habra Hills Specific Plan Amendment
- Appendix E. Rancho La Habra Specific Plan
- Appendix F. Biological Resources
  - Appendix F-1. Plant Species Recorded During Field Surveys
  - Appendix F-2. Avian Species Recorded During Field Surveys
  - Appendix F.3. CNDDB Search Results 2017
  - Appendix F-4. Representative Photographs
  - Appendix F-5. 2014 and 2016 USFWS Protocol CAGN Surveys
  - Appendix F-6. Air Photos 2003-2016 for Habitat Comparison of Riparian Vegetation
  - Appendix F-7. Streambed Alteration Agreement
  - Appendix F-8. Recorded Deed Restriction
- Appendix G. Cultural and Paleontological Resources Survey
- 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
- Appendix M. Phase I Environmental Site Assessment and Soil Management Plan
- Appendix N. Hydrology and Hydraulics Report
- Appendix O. Water Quality Management Plan
- Appendix P. Geotechnical Report
- Appendix Q. Public Service Letters
- Appendix R. Sewer System Hydraulic Analysis
- Appendix S. Water System Hydraulic Analysis
- Appendix T. Water Supply Assessment

1.5 REFERENCES

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

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 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 area roadways include Beach Boulevard to the west and Imperial Highway to the north. Beach Boulevard provides regional access to Interstate 5 (I-5), approximately 4.5 miles to the south. Imperial Highway 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 this 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 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

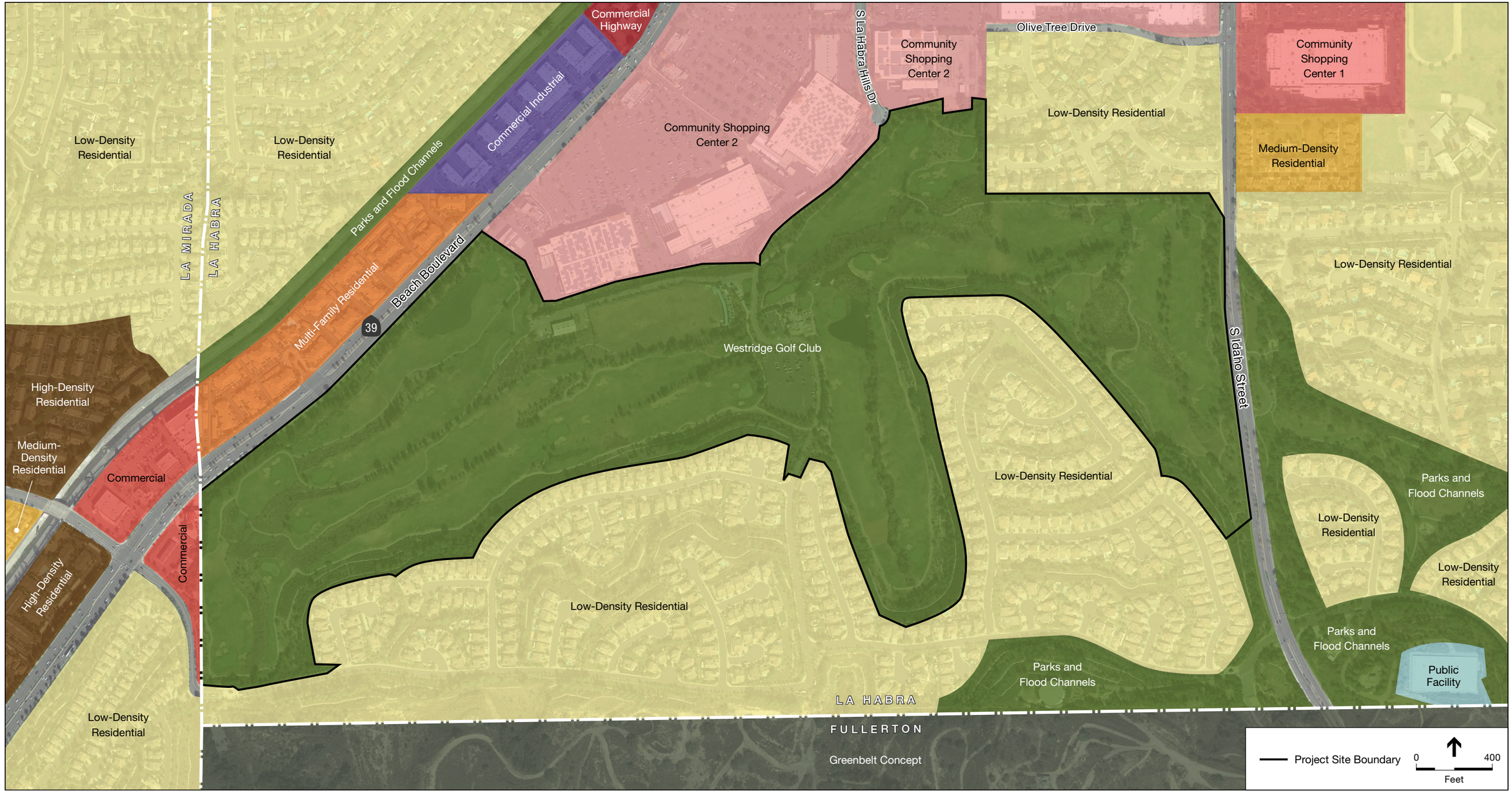
The project site was originally part of the 915-acre West Coyote Hills oil field operated by Chevron Corporation. Portions of the oil field were located in the cities of La Habra and Fullerton. In 1992, the City adopted the La Habra Hills Specific Plan to create a master-planned community on the 380 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, and driving range are open to the public. The golf course includes a clubhouse with a restaurant and pro shop. While located adjacent to

Figure 2-1: Project Site

Source: Google Earth Pro



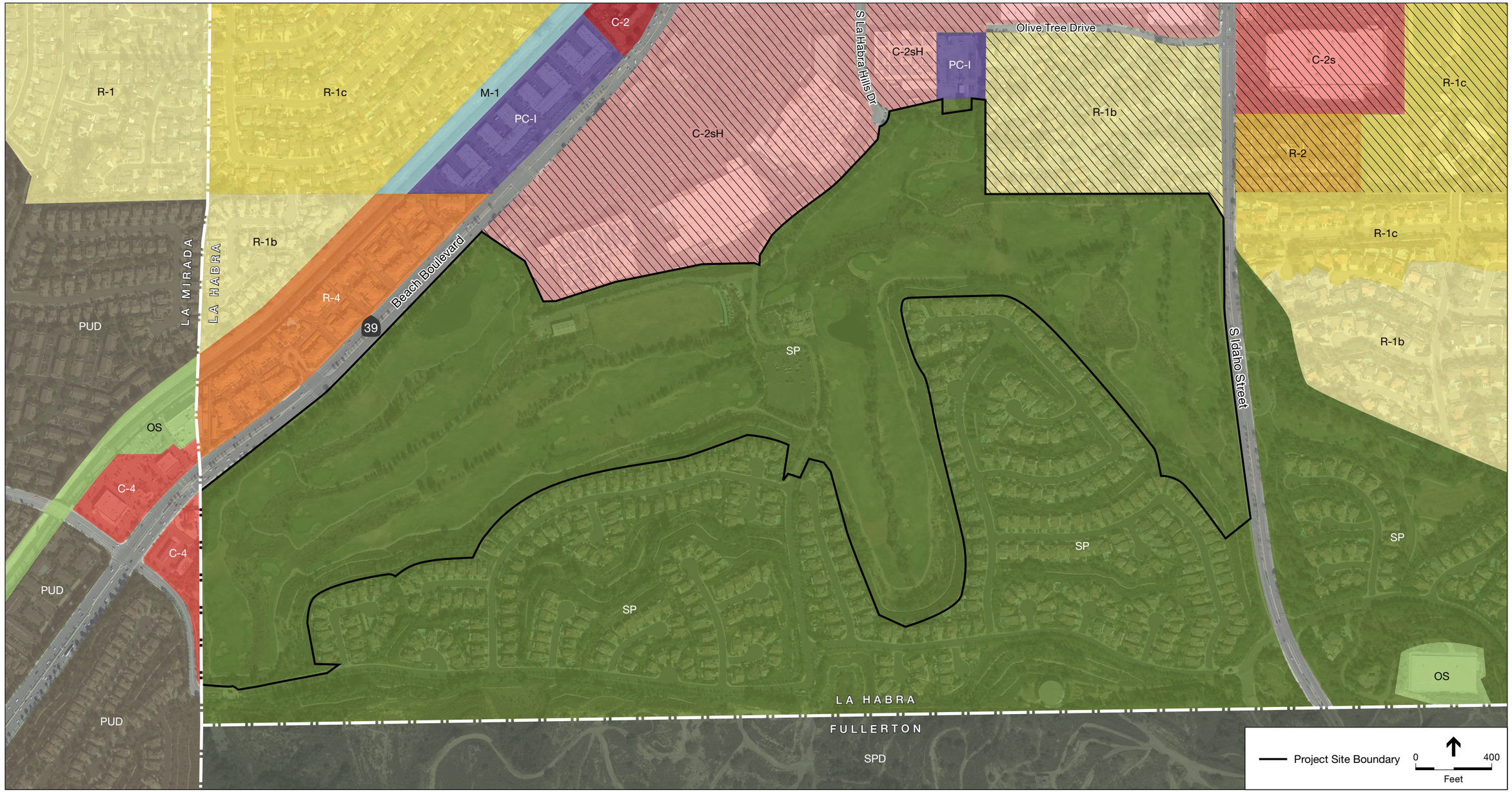
FULLERTON GENERAL PLAN:
- Greenbelt Concept

LA MIRADA GENERAL PLAN:
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Commercial

LA HABRA GENERAL PLAN:
- Low-Density Residential
- Medium-Density Residential
- Multi-Family Residential
- Community Shopping Center 1
- Community Shopping Center 2
- Commercial Highway
- Commercial Industrial
- Parks and Flood Channels
- Public Facility

Figure 2-2: Existing General Plan Designations

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

the Westridge community, the golf course is not part of the Westridge community or its homeowners' association.

2.2 PROJECT OBJECTIVES

The following identifies the objectives of the proposed project, including the underlying purpose of the project, 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, CalAtlantic Homes.

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, CalAtlantic Homes, has identified the following project 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 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

CalAtlantic Homes (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, Conditional Use Permits for three model home complexes, and the formation of a Community Facilities District. The applicant is also requesting that the California Department of Fish and Wildlife release and relocate 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 151-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 an additional 46 multi-family dwelling units 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."

2.3.2 DISCRETIONARY ACTIONS AND APPROVALS REQUIRED TO IMPLEMENT THE PROPOSED PROJECT.

Implementation of 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.
    - Approval of 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 proposed 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.
    - 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);
    - Approval of a Conditional Use Permits: The Applicant seeks approval of Conditional Use Permits (CUP) 18-01, 18-02, and 18-03 for the construction and operation of model home complexes, including signage and flags, within Planning Areas 1, 2, and 4, respectively.
    - Formation of a Community Facilities District, also known as a Mello Roos District, for financing of improvements.
- California Department of Fish and Wildlife
    - Release and relocation of 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.

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

The following identifies responsible agencies[3] and trustee agencies[4] for the proposed Rancho La Habra Specific Plan.

- Regional Agencies
    - Orange County Public Works Department (encroachment permit)
    - 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 (Section 1600 Streambed Alteration Agreement; Release of Deed Restriction)
- 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 C.

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

[4] 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.

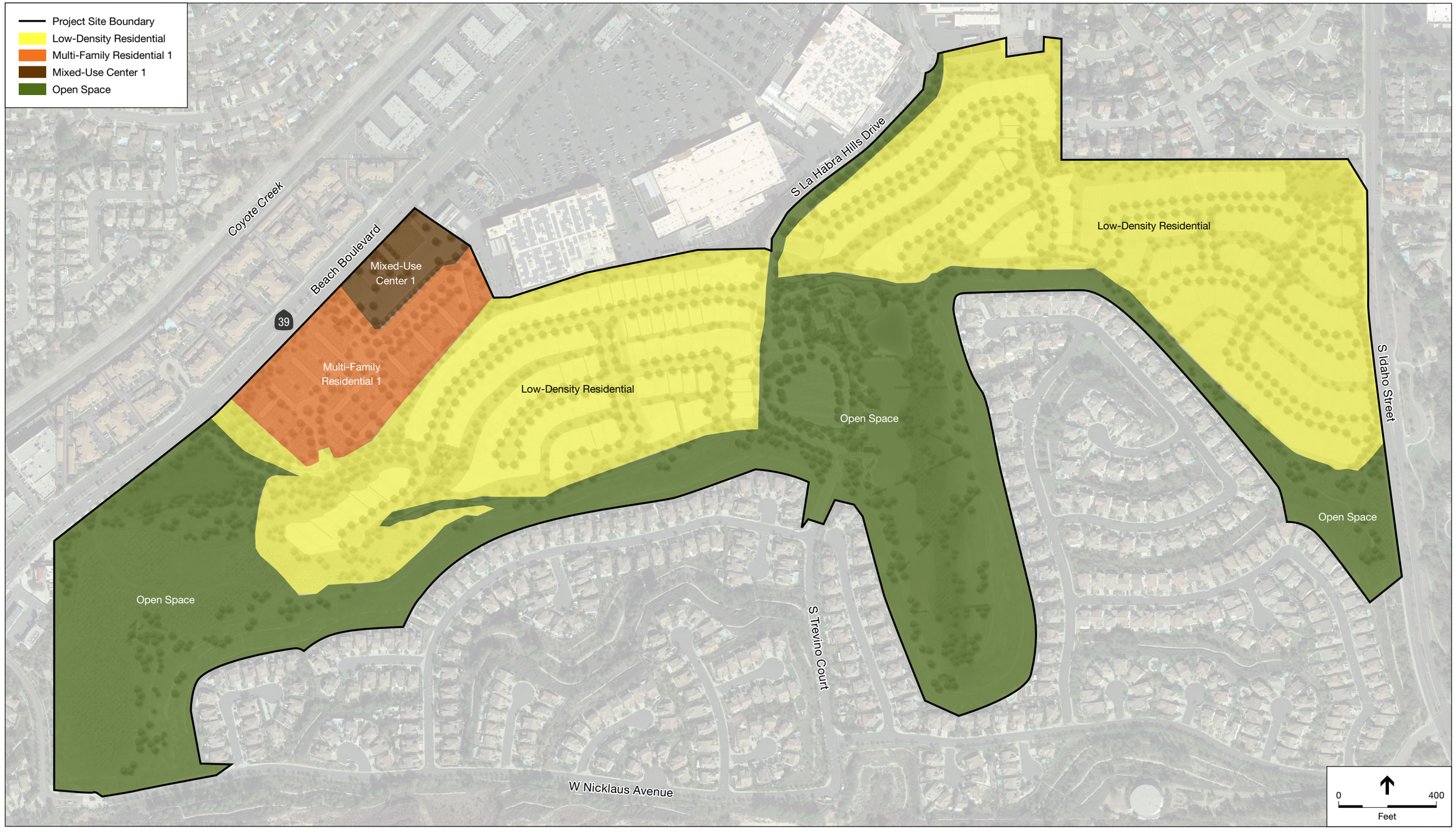


Figure 2-4: Proposed General Plan Designations

Source: Google Earth Pro; 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."

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 151-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 property 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 Appendix D.

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, commercial, 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 Appendix E.

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 151 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 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 an approximately 2.6-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 approximately 19.4-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 approximately 10.4 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 12.1 dwelling units per acre.
- Planning Area 2 consists of approximately 35.6 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 3.31 dwelling units per acre.
- Planning Area 3 consists of approximately 17.0 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 4.53 dwelling units per acre.

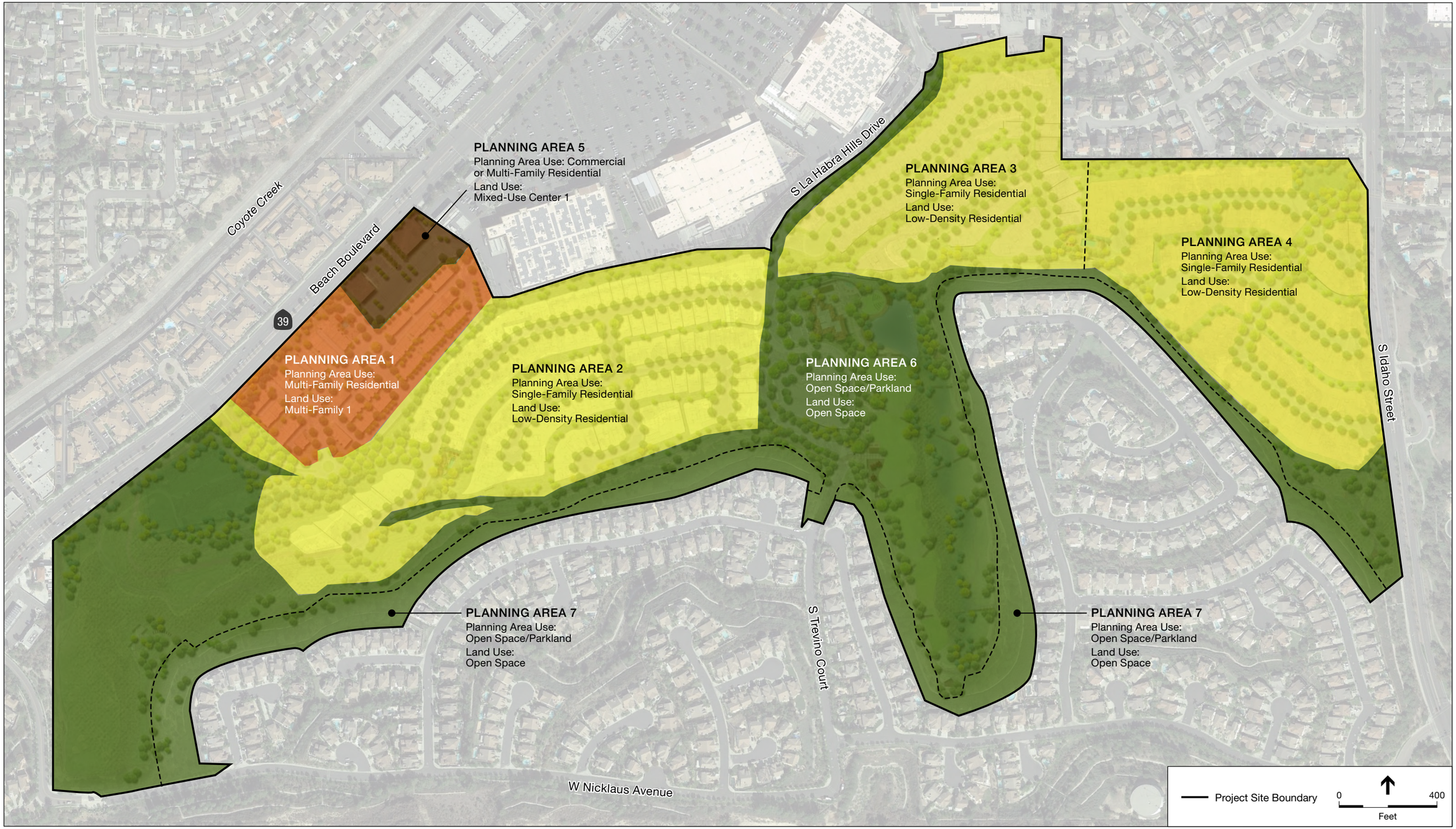


Figure 2-5: Proposed Land Use

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	8.4	-	-	-	-	-	-	**8.4**
Single Family Lots	-	14.2	8.1	12.4	-	-	-	**34.7**
Commercial or Multi-Family Homes	-	-	-	-	2.4	-	-	**2.4**
Open Space Uses								
Public Community Center and Park	-	-	-	-	-	4.1	-	**4.1**
Public Park and Picnic Area	-	-	-	-	-	10.4	-	**11.4**
Public Linear Park	-	-	-	-	-	10.6	-	**10.4**
Upland Habitat Conservation Area	-	-	-	-	-	12.2	-	**12.58**
Riparian Habitat Conservation Area	-	-	-	-	-	2.1	-	**1.23**
Private Open Space and Detention Basins	1.7	14.6	5.8	6.2	0.20	-	-	**25.6**
Existing Slope	-	-	-	-	-	-	19.3	**19.3**
Roads	0.3	6.8	3.1	4.9	-	3.0	-	**18.1**
Total Acres	**10.4**	**35.6**	**17.0**	**23.5**	**2.60**	**42.4**	**19.3**	**150.8**

Source: Rancho La Habra Specific Plan, 2017.

- Planning Area 4 consists of approximately 23.5 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 3.49 dwelling units per acre.
- Planning Area 5 consists of approximately 2.6 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 46 multi-family dwelling units at a maximum density of 18 dwelling units per acre. Commercial is the preferred land use for this Planning Area.
- Planning Area 6 consists of approximately 42.4 acres of open space, parkland, and street rights-of-way.
- Planning Area 7 consists of approximately 19.3 acres of existing vegetated slope within the Specific Plan boundaries that is 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 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 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
TOTAL WITHOUT OPTIONAL PLANNING AREA 5 RESDENTIAL		**402**		
Planning Area 5	not applicable – multi-family (option)	46	1,900 square feet	3/4
TOTAL WITHOUT OPTIONAL PLANNING AREA 5 RESDENTIAL		**448**		

Source: Rancho La Habra Specific Plan, 2017.

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 E) 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 2.6-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 an additional 46 multi-family

dwelling units at a maximum density of 18 dwelling units per acre. For each topic area presented in this EIR, the "worst case" scenario in terms of environmental impacts, either 20,000 square feet of commercial or 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. Secondary access would connect from the new retail uses to the north to the Westridge Plaza Shopping Center. For the residential development option, no direct access would be provided from Beach Boulevard. Access would occur through Planning Area 1 and the access to the Westridge Plaza Shopping Center would be limited to emergency access only.

b. Infrastructure

Roadways and Access

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).

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 private 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 north of the Community Center and public park) would be private. An emergency vehicle access drive is proposed between Planning Areas 3 and 4. Emergency access is 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 E), 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 a 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 E), 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 (see Figure 3.13-1 in Chapter 3.13, *Hydrology and Water Quality*) are proposed:

- Basin A is detention and water quality basin proposed to be constructed near the Idaho Street entry to the project site.
- Basin B is proposed as an underground water quality basin that would also provide detention of peak storm water flows. Basin B would be located in the northernmost portion of the site adjacent to La Habra Hills Drive.
- Basin C is the largest proposed detention and water quality basin within Rancho La Habra. The 2.7-acre facility is proposed adjacent to Beach Boulevard just south of the main project entry.
- Construction of an additional 48-inch storm drain under Beach Boulevard to supplement the existing 48-inch storm drain, providing capacity to handle increased drainage from the project site.

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 36.02 acres within Planning Area 6 as follows:

- Public Community Center and Park – 4.1 acres
    - Approximately 22,500-square-foot structure providing indoor banquet, dining, kitchen, meeting, and office facilities in the existing Westridge Golf Club clubhouse
    - Outdoor banquet, dining, and gathering space on patios adjacent to an existing open water pond
    - Adventure play areas; open turf
    - Event lawn and approximately 6,500 square foot amphitheater
    - Pondside boardwalk
    - Parking for daily use and special events
- Public Park and Picnic Area – 10.4 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 – 10.6 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
- Upland Habitat Conservation Area – 12.2 acres
    - Preservation, restoration and enhancement of locally rare native coastal sage habitat
- Riparian Habitat Conservation Area - 2.1 acres
    - Preservation and enhancement of mature riparian vegetation including large trees and native shrubs along the site's the central drainage feature.
    - Restoration and enhancement may include creation of wetlands and emergent wetland habitats within the riparian conservation area.

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

Implementation of the proposed Specific Plan 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 by 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. Grading for the project site is proposed to occur at a single time over an approximately 12-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),[5] 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% 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

[5] 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.

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.

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

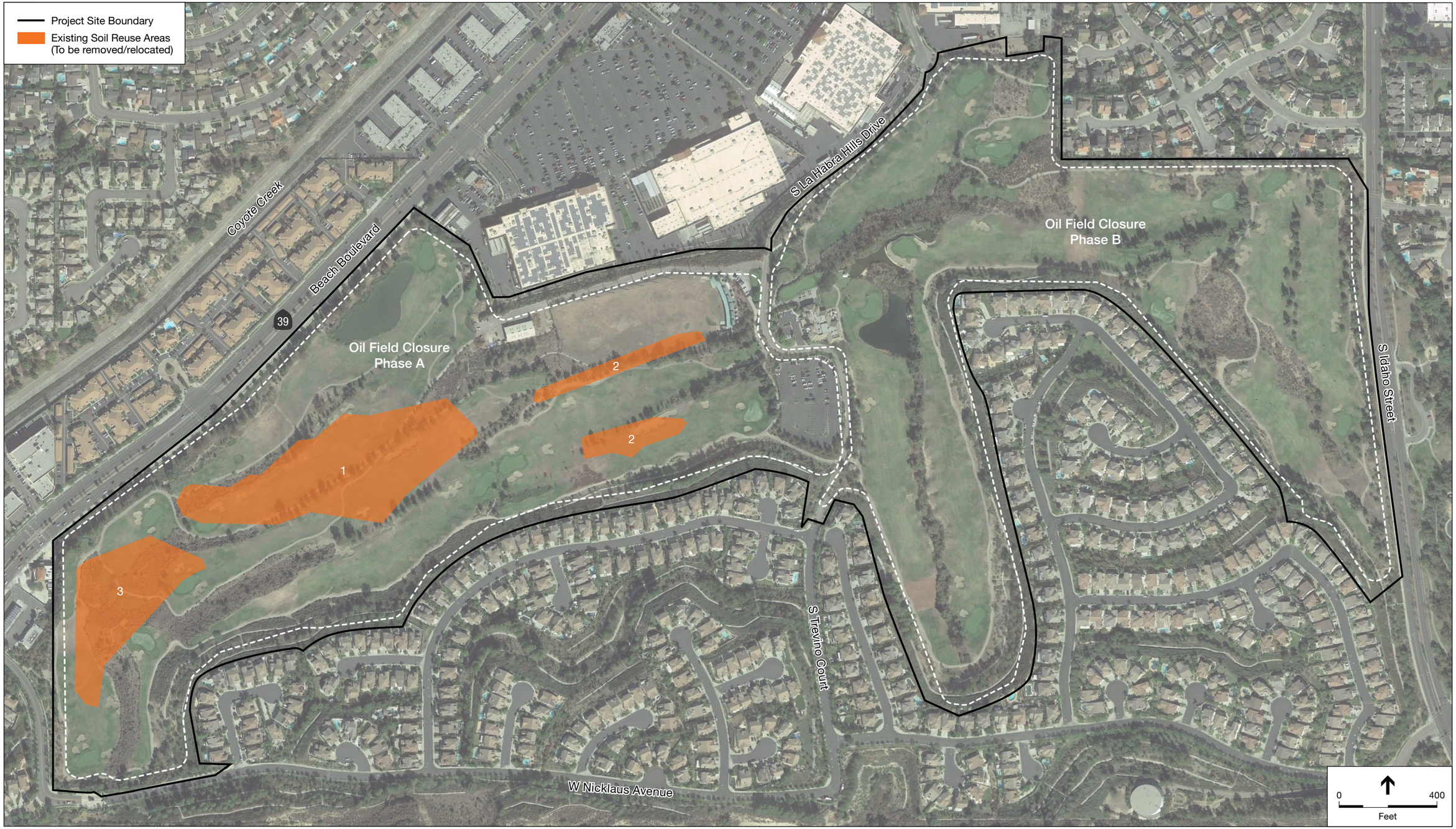


Figure 2-6: Existing Soil Reuse Areas

Source: Google Earth Pro; EEI

Figure 2-7: Proposed Soil Deep Fill Areas

Source: Google Earth Pro; EEI

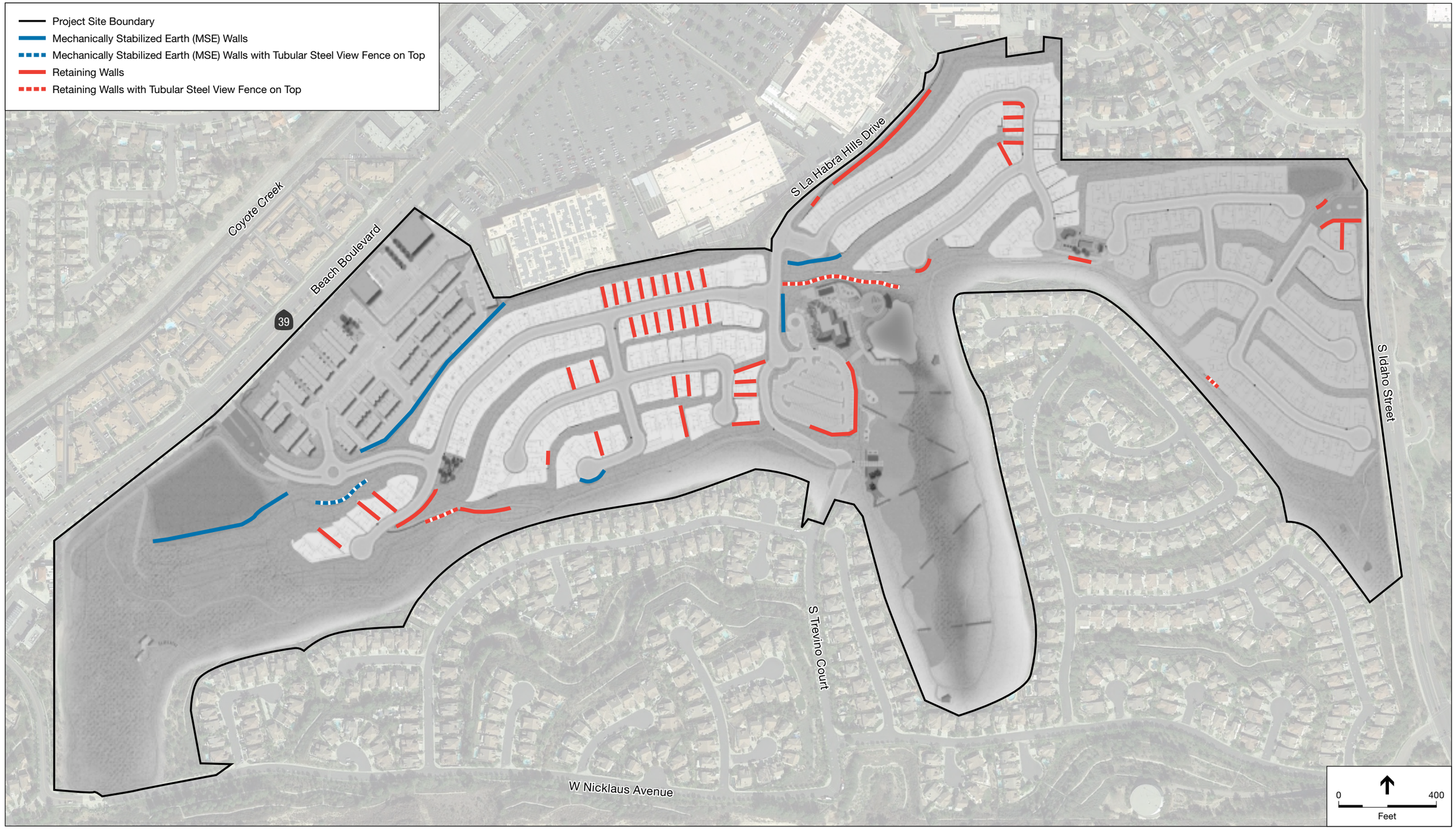


Figure 2-8: Proposed Mechanically Stabilized Earth (MSE) Walls

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

Figure 2-9 Mechanically Stabilized Earth Wall

Specific Plan in order to minimize visual impacts and enhance the aesthetic character of the walls.

h. Development Phasing

Clearing and grading of the project site, including removal of a large parking lot, golf cart paths, maintenance yard, and driving range, are proposed to occur at a single time over the entire site. Infrastructure improvements, including storm drains, water and sewer mains, and streets, would be installed over an approximately 9- to 12-month period following grading. Construction of homes in each residential Planning Area would occur in increments based on market demand. Planning Areas 2, 3, and 4 would be constructed in increments of 6 to 10 homes at a time. For residential Planning Area 1, development increments would generally consist of two multi-family buildings (approximately 10 to 12 dwelling units) being constructed at a time. **Figure 2-10** provides a graphical representation of the conceptual phasing plan. Buildout of the entire project site is anticipated to occur over six years, including demolition, grading, and construction.

2.3.7 VESTING TENTATIVE TRACT MAP 17845

Vesting Tentative Tract Map 17845 is proposed to divide the project site into 359 parcels as follows:

- Lots 1-277: Single Family Residential, 34.7 acres
- Lots 278-279: Multi-Family Residential, 8.4 acres

- Lot 280: Commercial, with option for Multi-Family Residential, 2.4 acres
- Lots 281-282: Community Recreation Facility, 0.6 acre
- Lot 283: Underground Detention Basin: 0.3 acre
- Lots 284-287: Entry Gates/Roads, 3.5 acres
- Lots 288-289: Clubhouse, 3.3 acres
- Lots A-CCC: Open Space, 83.0 acres
- Lots DDD-RRR: Streets, 14.6 acres

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

A Development Agreement between the City and the applicant is proposed 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 proposed Specific Plan under the agreed-upon terms, and commits the applicant to the provision of specified public improvements, facilities, and services. 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 approved project 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;

Figure 2-10: Conceptual Phasing Plan

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

  - 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 (Appendix E) 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 MODEL HOME COMPLEX CONDITIONAL USE PERMITS

Conditional Use Permits are being requested for three model home complexes within the Specific Plan area. One complex consisting of six model homes, including a sales office and a parking lot is proposed to be located within Planning Area 2 (single-family residential) in the northwestern portion of the Specific Plan area on "N" Street, overlooking Planning Area 1 (multi-family residential) and Planning Area 5 (commercial). A second model home complex consisting of three model homes with a sales office and a parking lot is proposed within Planning Area 4 (single-family residential) in the eastern portion of the Specific Plan area at the intersection of "A" and "C" streets. A third model home complex is located in Planning Area 1, including models for the multi-family homes, a sales office, and parking lot.

At the close of home sales within the Specific Plan area, the sales offices and parking areas would be removed and single-family dwelling units would be constructed in conformity with the Specific Plan.

2.3.11 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 Distrrict Act of 1972 (Streets and Highways Code Section 22500) or a similar mechanism to fund ongoing maintenance of certain facilities may also be considered.

2.3.12 RELEASE AND RELOCATION OF 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-8, 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 is included as part 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 release and relocate portions of the existing deed restriction in return for purchase and preservation of habitat (see **Figure 2-11**).

2.4 REFERENCES

CalAtlantic Homes, *Rancho La Habra Specific Plan*, November 28, 2017.

Figure 2-11: Deed Restriction Boundaries

Source: Google Earth Pro; Carlson SLS

CHAPTER 3 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

3.1 INTRODUCTION

This chapter focuses upon evaluating the significant environmental effects of the proposed 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, and the impacts that would result from implementation of 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 EFFECTS FOUND NOT TO BE SIGNIFICANT

The following discussion describes the analysis leading to the conclusions that environmental effects of the proposed project would not be significant in relation to agriculture/forestry resources or mineral resources and therefore did not require detailed analysis.

a. Agriculture and Forestry Resources

The project site is currently developed as the Westridge Golf Club. The site does not contain any prime agricultural land, nor does such land exist in the vicinity of the project site. In addition, no forestry resources occur on or in the vicinity of the project site. The project site and adjacent lands are designated as "Urban and Built-up Land" according to the California Department of Conservation, California Important Farmland Finder map system (2016). Urban and Built-up Land is characterized as being occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. The project site is not designated or zoned for agricultural or forestry use by the City of La Habra (City), and the site is not subject to a Williamson Act contract. Thus, implementation of the proposed project would have no impact on agricultural or forestry resources.

b. Mineral Resources

Neither the City's General Plan nor the State of California have identified the project site or its environs as a potential location for extraction or management of mineral resources of state-wide, regional, or local significance. According to the General Plan, La Habra's mineral resource extraction and oil production is inactive. Historically, the project site was part of the 915-acre West Coyote Hills oil field and was formerly used for oil production. Oil extraction activities in the West Coyote Hills oil field ceased in 1995, and all wells (23 of which are within the project site) have been abandoned in accordance with Division of Oil, Gas, and Geothermal Resources (DOGGR) regulations.

Following remediation, the project site was developed with an 18-hole golf course and it is not currently recognized as a potential mineral resource site. No portions of the project site are designated as a Mineral Resource Zone (MRZ). Therefore, no impacts on mineral resources would result from project implementation.

c. Release and Relocation of Existing Deed Restriction

Construction of the Westridge Golf Club pursuant to the 1992 La Habra Hills Specific Plan involved impacts on biological resources resulting in the need for regulatory permits and mitigation. Regulatory permits and mitigation requirements were embodied in a Streambed Alteration Agreement (February 23, 1995), which is included as EIR Appendix F-7, and resulted in recordation of a deed restriction in favor of the California Department of Fish and Game (now California Department of Fish and Wildlife [CDFW]) on November 9, 2009 to protect resources "having wildlife and habitat values of great importance to the State of California."

As noted in the Declaration of Deed Restriction, which is included as EIR Appendix F-8, the conservation area established by the deed restriction "provides mitigation in perpetuity for certain impacts associated with the development of a 300-acre abandoned oil field including pre-development activities and subsequent construction of 540 homes and an 18-hole golf course, and associated infrastructure that impacts 18 acres of highly disturbed coastal sage scrub." The recorded deed restriction established a total of 11.43 acres of area on site to be conserved in perpetuity as mitigation for loss of habitat areas identified in **Table 3.1-1**. **Figure 2-11** in Chapter 2, *Project Description*, shows the extent and distribution of the existing CDFW deed restriction within the project site.

Table 3.1-1
Habitat Areas Identified for Protection in Existing Deed Restriction

Habitat Type	Acreage
Coastal Sage Scrub	2.27
Southern Willow Scrub	3.52
Mulefat Scrub	1.40
Oak Woodland	2.00
Freshwater Marsh	0.52
Open Water	1.72
Total	**11.43**

Source: Declaration of Deed Restriction, October 28, 2009

The recorded deed restriction states that the conservation area defined in the deed restriction (see **Figure 2-11**) "shall not be utilized in any manner inconsistent with the conservation of regional wildlife using the conservation area (including sensitive species)." The deed restriction specifically prohibits the following activities within the conservation area:

- Development within the Conservation Area for residential, commercial, retail, industrial, institutional, or recreational purposes, and/or for any other land uses, other than habitat preservation-related uses (such as hiking, bird watching, etc.);
- Use of motor vehicles, except on a temporary basis as may be necessary for activities directed at benefitting regional wildlife and habitat for those species which may utilize the Conservation Area;
- Depositing of trash, garbage, refuse, ash, waste material, other offensive or toxic material not consistent with the purpose of this instrument;
- Erecting of any building;
- Excavating dredging or removing of loam, gravel, soil, rock, sand, or other material, and grading or any other land disturbing activity; and
- Agricultural cultivation or plowing for cultivation.

Since the deed restriction was established to mitigate impacts of the previously approved and constructed La Habra Hills Specific Plan build out, the proposed Ranch La Habra Specific Plan project includes a request to the California Department of Fish and Wildlife to release portions of the existing deed restriction placed on the golf course property as mitigation for development of the golf course and adjacent Westridge residential community, with the intention to relocate some areas subject to the current deed restriction to an upland conservation area to be established in the western portion of the project site.

Because the existing deed restriction within the project site was established as mitigation in perpetuity for development of the La Habra Hills Specific Plan, including the Westridge Golf Club and the Westridge residential community, no portion of the deed restriction could be released without providing equivalent mitigation for the original impacts of the La Habra Hills Specific Plan. Thus, release of any portion of the existing deed restriction would be accompanied by the provision of equivalent mitigation for the original impacts of the La Habra Hills Specific Plan.

Release of any portion of the existing deed restriction would (1) remove state-imposed restrictions that stipulate conservation of sensitive natural habitat as the only permitted use of the deed-restricted area and (2) result in loss of mitigation previously required to address impacts from development of the La Habra Hills Specific Plan. However, provision of an equivalent replacement of wildlife and habitat values with "no net loss" that would be a requirement of any agreement between the project applicant and the California Department of Fish and Wildlife, should that agency agree to remove or relocate the existing deed restrictions in the Rancho La Habra Specific Plan area, would avoid significant impacts. Thus, the impact of removal or redistribution of wildlife and habitat values protected in the existing deed restricted areas within the Rancho La Habra Specific Plan, if approved by CDFW, would be less-than-significant.

3.1.2 FORMAT OF DETAILED ENVIRONMENTAL ANALYSES

The following sections address environmental impacts for issues determined to have the potential for significant effects:

- 3.2 Land Use and Planning Policy
- 3.3 Population and Housing
- 3.4 Aesthetic Resources
- 3.5 Biological Resources
- 3.6 Cultural Resources
- 3.7 Traffic and Circulation
- 3.8 Air Quality
- 3.9 Greenhouse Gas Emissions
- 3.10 Energy Resources
- 3.11 Noise and Vibration
- 3.12 Hazards and Hazardous Materials
- 3.13 Hydrology and Water Quality
- 3.14 Geology, Soils, and Seismicity
- 3.15 Public Services
- 3.16 Recreational Resources
- 3.17 Utilities, Service Systems, and Water Supply

This environmental impact report (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., "3.4" for Section 3.4, *Aesthetic 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, cultural resources significance thresholds in Section 3.6, *Cultural Resources*, are numbered **Threshold CUL-1** through **Threshold CUL-4**.
- Impacts are numbered based on the environmental threshold they address. For example, **Impact CUL-1** provides analysis in relation to **Threshold CUL-1**.
- 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 AES-4** (light and glare) are numbered **Impact AES-4.1** and **Impact AES-4.2**.
- Similarly, each mitigation measure is numbered to correspond to the impact and threshold that it addresses. For example, **Mitigation Measure TRA-1a**, **Mitigation Measure TRA-1b**, and **Mitigation Measure TRA-1c** address traffic **Impact TRA-1**, which analyzes **Threshold TRA-1**.

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)).

3.1.3 REFERENCES

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

Declaration of Deed Restriction, October 28, 2009.

Streambed Alteration Agreement, February 23, 1995.

3.2 LAND USE AND PLANNING

3.2.1 INTRODUCTION

a. Overview

This section examines the potential for the Rancho La Habra Specific Plan to (1) physically divide an established community; (2) conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to plans and land use restrictions adopted for the purpose of avoiding or mitigating an environmental effect); or (3) conflict with a habitat conservation plan or natural community conservation plan.

In accordance with CEQA Guidelines Section 15125(d), this section provides a summary of the plans, policies, and regulations of the City of La Habra and regional and state agencies that have policy and regulatory authority over the proposed development of the Rancho La Habra Specific Plan area.

b. Definitions

- **Buffer** refers to land and/or improvements designated to protect one type of land use from another in order to eliminate or minimize land use compatibility issues.
- **Density/Intensity** of use refers to the number of dwelling units per acre of land for residential uses, or floor area ratio (FAR), which expresses the ratio of building area per acre of land for non-residential uses.
- **Existing Land Use** consists of the current use of land at the time of EIR baseline (November 2015).
- **General Plan** refers to the officially adopted plans of the City of La Habra, which represents the comprehensive, long-term general plan for the physical development of the City adopted pursuant to the requirements of California Government Code Sections 65300-65303.4. The La Habra General Plan is the core policy and land use planning document for the City.
- **Land Use Compatibility** refers to the characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre, pedestrian or vehicular traffic generated, volume of goods handled, and such environmental effects as noise, vibration, glare, air pollution, or the presence of hazardous materials.
- **Permitted Land Uses** refer to the specific uses consistent with the General Plan designations and zoning for a particular site.
- **Planned Land Use** refers to the General Plan designations and zoning for a particular site.

- **Zoning** refers to the written regulations and laws that implement the City's General Plan and define how property in specific geographic zones can be used pursuant to the planning and zoning law of the State of California, as contained in Government Code Title 7, Division 1, Chapter 4 (commencing with Section 65800). Zoning specifies the permitted uses within zones and also regulates lot size and placement, bulk, and height of structures. Within the City of La Habra, zoning regulations are set forth in Title 18 of the Municipal Code.

3.2.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan and related actions is subject to a range of state, regional, and local plans, policies, and regulations, which are described below.

a. Regional Plans, Policies, and Regulations

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS integrates transportation planning with economic development and sustainability planning, and aims to comply with state greenhouse gas (GHG) emissions reduction goals, such as Senate Bill 375. With respect to transportation infrastructure, SCAG anticipates, in the RTP/SCS, that the six-county Southern California region will have to accommodate 22 million new residents, an increase of nearly four million people by 2040 while also meeting the GHG emissions-reduction targets set by the California Air Resources Board.

SCAG is empowered by state law to assess regional housing needs and provide a specific allocation of housing needs for all economic segments of the community for each of the region's counties and cities. The determination of each city's and county's share of regional housing needs that is required by law to be reflected in municipal General Plan housing elements is based on the growth projections of the RTP/SCS.

As discussed in Section 3.3, *Population and Housing*, the RTP/SCS projects that La Habra will grow from a population of 61,100 in 2012 to 68,500 people in 2040. Between 2012 and 2040, the RTP/SCS projects that the number of households in La Habra will grow from 19,000 to 21,700, while local employment opportunities will increase from 17,300 to 19,900.

RTP/SCS goals and policies relevant to the proposed Specific Plan include the following:

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 vehicle miles traveled to employment centers.

b. Local Plans, Policies, and Regulations

La Habra General Plan

La Habra General Plan goals relevant to land use and planning include the following.

Chapter 2, Community Development

Land Use Goal LU 1, Growth and Change. Sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective provision of public services, makes efficient use of land and infrastructure, and promotes the health of the community.

Land Use Goal LU 2, Land Use Diversity and Choices for Residents. A mix of land uses that meets the diverse needs of La Habra's residents, offers a variety of employment opportunities, and allows for the capture of regional population.

Land Use Goal LU 3, Neighborhoods, Centers, and Corridors. A city of distinct, compact, and walkable mixed-use centers and corridors, surrounded by diverse and complete residential neighborhoods, and connected to a unifying network of greenways and open spaces.

Land Use Goal LU 4, A Quality Community. New development is located and designed to maintain the qualities that distinguish La Habra as a special and safe place to live, work, and play, with well-designed buildings, public places, signage, and open spaces and effective transitions among neighborhoods and districts.

Land Use Goal LU 5, City Sustained and Renewed. Land development practices that sustain natural environmental resources, the economy, and societal well-being for use by future generations, while reducing greenhouse gas emissions and impacts on climate change, are maintained.

Land Use Goal LU 7, Livable Neighborhoods. A City composed of neighborhoods with a variety of housing types that are desirable places to live, contribute to the quality of life, and well maintained.

Land Use Goal LU 8, Single-Family Neighborhoods. Distinct and quality single-family residential neighborhoods distinguished by their identity, scale, and character.

Land Use Goal LU 9, Multi-Family Neighborhoods. Multi-family residential neighborhoods that provide ownership and rental opportunities are well designed, exhibit a high quality of architecture, and incorporate amenities for their residents.

Land Use Goal 11, Diverse Districts and Corridors. Vital, active, prosperous, and well-designed commercial districts that provide a diversity of goods, services, and entertainment and contribute to a positive experience for visitors and community residents.

For discussion of relevant General Plan policies, see Section 3.2.5 below.

3.2.3 ENVIRONMENTAL SETTING

a. Project Site Background

The project site was originally part of the 915-acre West Coyote Hills oil field operated by Chevron Corporation, portions of which were 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 La Habra city limits.

The La Habra Hills Specific Plan created a development plan consisting of four residential neighborhoods totaling 700 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, club house, and driving range are open to the public. The golf course includes a clubhouse with a restaurant and pro shop. While located adjacent to the Westridge community, the golf course is not part of the Westridge community or its homeowners' association.

b. Existing Land Use on Project Site

The project site consists of the existing 151-acre Westridge Golf Club, located at 1400 South La Habra Hills Drive. The golf course clubhouse is located along La Habra Hills Drive, toward the center of the golf course. The clubhouse entry and 10 parking stalls, including five handicap parking stalls, are located on the clubhouse side of La Habra Hills Drive. The main parking lot providing 240 parking spaces is located across La Habra Hills Drive at a higher elevation.

The clubhouse consists of a 22,500-square-foot building that houses a golf pro shop, banquet rooms, restaurant/bar, and offices. A golf cart storage and maintenance area is located below the clubhouse building.

Golf play generally occurs from dawn to dusk, with summer tee times starting at 6:15 a.m. and ending at 5:15 p.m. The golf course also provides a practice facility open from 7:00 a.m. to 10:00 p.m. with a "double decker" driving range consisting of 35 tees/driving positions. The practice facility also provides putting greens, mini-pro shop, and patio where drinks and snacks are served. The driving range is lighted for night use.

Located just west of the practice facility is a maintenance yard consisting of a maintenance building and paved area for material and vehicle storage. All golf course maintenance activities and equipment are stored in and operate from this location.

c. Surrounding Land Uses

The existing Westridge community, consisting of single-family detached homes, borders the project site on the south. The existing Westridge Plaza Shopping Center, a 695,000-square-foot retail/commercial center, is located to the north of the project site at the corner of Imperial Highway and Beach Boulevard. Also to the north are single-family residential subdivisions that take access from Idaho Street from Olive Tree Drive and Rain Tree Drive. Idaho Street, Vista Del Valle Park, and homes are located to the east; and Beach Boulevard, commercial and multi-family residential development, and Coyote Creek are located to the west.

3.2.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of land use and planning impacts. Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant effect if it were to:

Threshold LUP-1 Physically divide an established community;

Threshold LUP-2 Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

Threshold LUP-3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.2.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold LUP-1: Physically divide an existing community.

Impact LUP-1: Implementation of the proposed Rancho La Habra Specific Plan would result in the temporary closure of the La Habra Hills Drive entrance to the Westridge residential community during site grading, temporarily restricting use of one of the three current entries to the community. Connectivity to and from the Westridge residential community during project site grading would be temporarily reduced due to the closure of La Habra Hills Drive, increasing travel time between housing and shopping. However, connectivity for the Westridge community would not be eliminated. Because the condition would be temporary, the community's access points to Idaho Street and Beach Boulevard would remain unaffected, and emergency access from the two closest fire stations serving the Westridge community would not be affected, the impact would *less than significant*.

Methodology

The analysis related to this threshold considers whether the proposed Rancho La Habra Specific Plan would create new physical barriers that would eliminate or reduce existing levels of connectivity between areas of an existing community or neighborhood to the extent that one portion of the community or neighborhood would be physically separated from other areas of the community or neighborhood.

Impact Assessment

In the existing condition, La Habra Hills Drive extends from Imperial Highway to the golf course clubhouse and then south to a gated access to the Westridge community. For approximately 15 months during project site grading and infrastructure installation, La Habra Hills Drive across the project site would be closed to Westridge residents. 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. However, access to the north, for example between the Westridge residential community and the Westridge Plaza Shopping Center, would not be available through the project site; traffic would be diverted to Beach Boulevard, creating a longer route between the residential community and shopping. In addition, as discussed in Section 3.11, *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-mile of the Westridge community.

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 both daily and emergency use.

Significance Conclusion for Impact LUP-1

Implementation of the proposed Rancho La Habra Specific Plan would result in the temporary closure of the La Habra Hills Drive entrance to the Westridge residential community during site grading, temporarily restricting use of one of the three current entries to the community. Connectivity to and from the Westridge residential community during project site grading would be temporarily reduced due to the closure of La Habra Hills Drive, increasing travel time between housing and shopping. However, connectivity for the Westridge community would not be eliminated. Because the condition would be temporary, the community's access points to Idaho Street and Beach Boulevard would remain unaffected, and emergency access from the two closest fire stations serving the Westridge community would not be affected, the impact would be less than significant, and no mitigation would be required.

Threshold LUP-2: Conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2.1: The proposed Specific Plan would be inconsistent with a goal and several policies of the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Since these inconsistencies are reflected in significant air quality, GHG (total annual emissions[1]), and traffic impacts, impacts related to inconsistencies with the 2016 RTP/SCS would be significant even with implementation of all feasible mitigation measures. Impacts would therefore be *significant and unavoidable*.

[1] As set forth in Section 3.9, Greenhouse Gas Emissions, the proposed project would generate a net increase of 6,037.55 $MTCO_2e$, exceeding the applicable threshold of 3,000 $MTCO_2e$ as discussed in relation to Impact GHG-1. As discussed in relation to Impact GHG-2, the proposed project would implement all applicable provisions of the City's Climate Action Plan, and would generate emissions of 4.6 $MTCO_2e$ per service population, which is below the per service population efficiency threshold recommended by the SCAQMD, and consistent with the service population efficiency standards needed to implement AB 32. See Impact LUP-2.3 and Impact GHG-2 for additional discussion.

Methodology

An inconsistency with a land use or planning policy is not necessarily an impact under CEQA; only those inconsistencies that would result in physical effects on the environment are considered "impacts" under CEQA and identified as such in this EIR. An evaluation was first undertaken to determine the proposed project's consistency with applicable policies of the SCAG RTP/SCS. A significant impact in relation to the RTP/SCS would occur if an inconsistency would result in a significant adverse physical effect as identified in the significance conclusions following mitigation in Sections 3.2 through 3.17 and summarized in Section 3.18, *Significant Unavoidable Impacts*, of this EIR.

Impact Assessment

Table 3.2-1 lists the policies from SCAG's 2016 RTP/SCS that are relevant to the proposed Specific Plan. SCAG policies focus largely on implementing transit-oriented development and increasing the use of regional transit, encouraging development patterns and densities that reduce infrastructure costs, and providing affordable and a variety of housing types.

Significance Conclusion for Impact LUP-2.1

As noted in **Table 3.2-2**, the proposed Specific Plan would be inconsistent with several goals and one policy of the 2016 RTP/SCS. Since these inconsistencies are reflected in significant air quality, GHG, and traffic impacts, impacts related to inconsistencies with the 2016 RTP/SCS would therefore be significant.

Mitigation Measures

All mitigation measures set forth in EIR Section 3.7, *Traffic and Circulation*, Section 3.8, *Air Quality*, and Section 3.9, *Greenhouse Gas Emissions* would apply to related inconsistencies with the 2016 RTP/SCS.

Significant Conclusion for Impact LUP-2.1 with Implementation of Mitigation Measures

Because significant unavoidable air quality, GHG, and traffic impacts related to inconsistencies with the 2016 RTP/SCS would result following implementation of all feasible mitigation measures, the impact would be significant and unavoidable.

Table 3.2-1
Project Consistency with Regional Land Use Goals and Policies

Existing 2016 RTP/SCS Goals and Policies	Project Consistency
Goals	
Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent**. The proposed Specific Plan would place substantial new housing adjacent to major commercial development, which would increase the competitiveness of those commercial uses.
Maximize mobility and accessibility for all people and goods in the region.	**Inconsistent**. 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.
Ensure travel safety and reliability for all people and goods in the region.	**Consistent**. The proposed Specific Plan would involve improvements to the circulation system in order to increase the safety and efficiency for a variety of users, including pedestrians and cyclists.
Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).	**Inconsistent**. The proposed Specific Plan would be inconsistent with the adopted Air Quality Management Plan, and would result in significant unavoidable air quality and greenhouse gas emissions impacts[2]. While the proposed 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.
Actively encourage and create incentives for energy efficiency, where possible.	**Consistent**. The Specific Plan includes energy-efficient design standards and guidelines along with incorporation of features that would decrease water use.
Encourage land use and growth patterns that facilitate transit and active transportation.	**Inconsistent**. The proposed Specific Plan would introduce increased housing in an area without major transit, and increase reliance on the use of automobile travel.
Policies	
Identify regional strategic areas for infill and investment.	**Not Applicable**. The policy aims to identify priority areas for infill and investment, which needs to occur before consistency of the proposed project with identification of any such areas.
Plan for additional housing and jobs near transit.	**Inconsistent**. The Specific Plan would substantially increase the number of dwelling units in an area without major transit.
Plan for changing demand in types of housing.	**Not Applicable**. The regional policy addresses long-term planning and recognizing that changes in the types of housing that is needed will occur over time. The proposed Specific Plan primarily provides single-family detached housing (277 of 402 dwelling units) along with moderate-density attached housing (125 dwelling units). Single-family housing is proposed on small lots, providing for a higher density than traditional single-family detached development, while the proposed courtyard-style multi-family dwellings

[2] As discussed in relation to Impacts LUP-2.3, GHG-1, and GHG-2, the proposed project would have a significant and unavoidable impact in relation to total GHG emissions, but would nevertheless be consistent with plans and programs to reduce GHG emissions, including the City's Climate Action Plan and AB 32 GHG emissions reduction targets.

Existing 2016 RTP/SCS Goals and Policies	Project Consistency
	represent an alternative to traditional high-density multi-family development. These types of housing are consistent with current market conditions.
Ensure adequate access to open space.	**Consistent**. While the Specific Plan proposes to convert the Westridge Golf Club to residential use, the proposed project would exceed established park requirements. The Specific Plan would also provide access to open space by improving bicycle and pedestrian access throughout the Specific Plan area.

Threshold LUP-2: Conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2.2: The proposed Rancho La Habra Specific Plan would be inconsistent with certain policies of the La Habra General Plan resulting from an increase in the allowable buildout of the General Plan. However, approval of the proposed General Plan Amendment would include the proposed project in the General Plan's buildout, thereby achieving consistency between the proposed project and the General Plan. Therefore, *no impact* would result.

Methodology

An inconsistency with a land use or planning policy is not necessarily an impact under CEQA and does not mandate a finding of significance. Therefore, while all inconsistencies with the La Habra General Plan are identified in **Table 3.2-3**, only those inconsistencies that would result in physical impacts were used in determining the significance of impacts related to General Plan consistency. These physical impacts related to land use and planning policies are considered in the evaluation of specific environmental topics in this EIR, including the following sections:

- 3.4 Aesthetic Resources
- 3.5 Biological Resources
- 3.6 Cultural Resources
- 3.7 Traffic and Circulation
- 3.8 Air Quality
- 3.9 Greenhouse Gas Emissions
- 3.10 Energy Resources
- 3.12 Hazards and Hazardous Materials
- 3.13 Hydrology and Water Quality
- 3.14 Geology, Soils, and Seismicity
- 3.15 Public Services
- 3.16 Recreational Resources
- 3.17 Utilities, Service Systems, and Water Supply

The evaluations contained in **Table 3.2-2** related to consistency with policies that do not result in physical impacts represent factors that the Lead Agency and Responsible Agencies will consider in their planning reviews of the proposed Specific Plan, along with subsequent site-

specific development. To determine whether a significant impact would result from the proposed project, inconsistencies with the General Plan were first evaluated. A significant impact would result if any identified General Plan inconsistency would lead to one of more significant physical environmental impacts.

Impact Assessment

Table 3.2-2 lists the relevant policies from the City of La Habra General Plan and evaluates the proposed Specific Plan's consistency with those policies.

Table 3.2-2
Project Consistency with Applicable La Habra General Plan Policies

La Habra General Plan Policies	Project Consistency
Chapter 2, Community Development	
LU 1.1 Redirect Growth. Redirect growth away from residential neighborhoods onto underutilized parcels along La Habra's arterial corridors, industrial districts, and in the historic civic center/downtown core.	**Consistent**. The proposed project would direct growth away from existing residential neighborhoods to the existing Westridge Golf Club. Access to the project site would be from three arterial corridors: Beach Boulevard, Imperial Highway (via La Habra Hills Drive), and Idaho Street. The proposed project would be supportive of the General Plan Use Goal LU-1 through the inclusion of a variety of sustainability features (reduced water consumption, energy conservation measures, habitat conservation, and provision of extensive bicycle and pedestrian trails within the project site. Analyses conducted for the proposed project demonstrate that public services can be effectively provided. Preparation and City review of the proposed Specific Plan and Design Review for each of the project's planning areas will ensure that site development is orderly and well-planned development.
LU 1.2 Development Capacity. Accommodate the type and density of land uses depicted on the Land Use Diagram to a cumulative (existing and new) maximum of 24,850 housing units and 12,525,000 square feet of commercial and industrial development citywide. These represent increases of 4,213 units and 4.1 million square feet respectively above January 2011 existing development.	**Consistent**. Because the General Plan recognized that the La Habra Hills Specific Plan had been built out and the General Plan did not contemplate any residential or commercial would occur within the Westridge Golf Club, the proposed project would increase General Plan build-out over that stated in the currently adopted Policy LU 1.2, which sets forth a factual statement as to amount of development that the adopted General Plan land use map and applicable allowable development intensities would permit based on the development capacity of specific properties within the City, rather than a providing a projection of the amount of development that might exist with the City during an estimated "buildout" year. Consistency between the proposed project and this General Plan policy is proposed by the applicant to be achieved through amending Land Use Policy LU 1.2 to include the proposed project.
LU 1.3 Growth Exceeding Development Capacities. Allow for increments of development exceeding these limits provided their cumulative environmental impacts do not result in impacts greater than the levels of significance or	**Consistent**. Among the purposes of this EIR is to provide the evaluation of environmental impacts called for in Policy LU-1.3. Although cumulative environmental impacts would increase in relation to air quality, GHG emissions, traffic, public services,

La Habra General Plan Policies	Project Consistency
change the findings described by the certified General Plan Program Environmental Impact Report (EIR)[1]. [1] It is anticipated that the development limits specified by Policy 1 and addressed in the General Plan 2035 Program EIR would not be exceeded prior to the next normal updating of the General Plan, for which a new EIR would be prepared in accordance with CEQA.	and utilities and service systems. Consistency between the proposed project and this policy is proposed by the applicant to be achieved by amending Land Use Policy LU 1.2 to which this policy is directed to include the proposed project.
LU 1.4 Subsequent Environmental Review. Require that a Program EIR addressing cumulative citywide impacts be prepared when increments of development exceeding these capacities result in impacts greater than the levels of significance or change the findings described by the certified General Plan Program Environmental Impact Report (EIR).	**Consistent.** This EIR analyzes city-wide cumulative impacts as well as project-specific impacts on the environment. Cumulative impacts associated with the proposed project are analyzed in Chapter 6 of this EIR. As discussed in Chapter 6, the proposed project would increase the severity of significant unavoidable Air Quality and Greenhouse Gas Emissions impacts identified in the General Plan EIR.
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.	**Consistent.** Provision of needed infrastructure would precede development of residential and commercial uses such that needed public facilities would be available at the time of occupancy.
LU 2.1 Places to Live. Provide opportunities for a full range of housing types, locations, and densities to address the community's fair share of regional housing needs and to provide market support to economically sustain commercial land uses in La Habra. The mix, density, size, and location of housing shall be determined based on the projected needs specified in the Housing Element, as amended periodically.	**Consistent.** The proposed project would provide funding for lower income housing, additional opportunities for small lot single-family detached and courtyard-style multi-family attached housing in a planned community setting, and additional market support for existing nearby and adjacent commercial uses in the City.
LU 2.6 Places that Support Healthy Lifestyles. Provide opportunities for the development of new parks of varying types and scales (including small urban infill parks and parklets), community gardens, and open spaces, prioritizing their development in locations subject to infill and intensification.	**Consistent.** The proposed project would provide new park and open spaces, include a Community Center facility, traditional neighborhood parks, trails, and wildlife viewing areas.
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.	**Consistent.** The sustainable development pattern sought by Policy LU 3.1 is reflected in the location of the project site adjacent to the existing residential neighborhoods to the south and west, along with the project's location adjacent to major commercial development to the north. The project site is also adjacent to an existing bus line along Beach Boulevard.
LU 3.2 Uses to Meet Daily Needs. Encourage uses that meet daily needs such as grocery stores, local-serving restaurants, and other businesses and activities within walking distance of residences to reduce the frequency and length of vehicle trips.	**Consistent.** The proposed project includes a 20,000-square-foot commercial center within Planning Area 5 that would provide for daily needs. Although commercial development within Planning Area is the preferred land use for the site, the Specific Plan proposes an option that would permit development of 46 multi-family dwelling units within Planning Area 5 in addition to the 125 multi-family dwelling units proposed for Planning Area 5.
LU 3.5 Complete and Livable Neighborhoods. Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and	**Consistent.** The Rancho La Habra Specific Plan would provide for internal parks, public and private recreational facilities, and community meeting facilities. The project site is located

La Habra General Plan Policies	Project Consistency
community meeting facilities that are connected with neighborhood-serving businesses and public transit.	adjacent to the Westridge Plaza Shopping Center, and proposes an option for 20,000 square feet of new commercial space.
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.	**Consistent**. The Rancho La Habra Specific Plan area is a transition zone between existing commercial uses to the north and residential uses to the south. The proposed project would replace the existing golf course buffer between these two uses with a combination of residential development and open space. Differences in elevation between the existing Westridge community and the project site provide for separation between existing and proposed future development. In addition, siting of the residential development within the Specific Plan area below the existing Westridge community would preserve views of the San Gabriel Mountains and La Habra basin from existing homes. However, proposed development within the project site would be visible from several locations, changing the visual character of the project site. Vehicular access to and from the Westridge community through the project site would be maintained except during site grading when La Habra Hills Drive would be temporarily closed.
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.	**Consistent**. The proposed project includes the following elements implementing this General Plan policy: • Promotion of neighbor interaction and community safety through forward-facing architecture and appropriate front yard setbacks; • A front yard setback of 10 feet for porches and living area to encourage "eyes on the street" by bringing the living area forward and moving the garage farther back (18-foot setback); • A street tree program that mandates the installation and on-going maintenance of street trees placed behind the sidewalk to provide substantially shaded sidewalks to encourage walking, thereby increasing casual surveillance within residential neighborhoods; and • A landscape plan attuned to minimizing hiding areas in landscaped areas near sidewalks and buildings. The proposed Specific Plan has been reviewed by the La Habra Police Department, and would meet safety requirements established by the Police Department to enhance public safety and discourage crime.
LU 4.4 Design Review. Require design review that focuses on achieving appropriate form and function for new and redeveloped projects to assure compatibility with community character, while promoting creativity, innovation, and design quality.	**Consistent**. Design Review plans for Planning Areas 1, 2, 3, 4 and 6 have been submitted, and are included as part of the review and approval of the project described in this EIR. Planning Area 5 will also be subject to Design Review at such time as site-specific development is proposed within the portion of the project site.

La Habra General Plan Policies	Project Consistency
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.	**Consistent**. Development within the project site would be subject to the California Green Building Standards Code and a further 20% reduction in energy use as established in the City's adopted Climate Action Plan.
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.	**Consistent**. All buildings within the project site would be constructed pursuant to CalGreen building standards and a further 20% reduction in energy use as established in the City's adopted Climate Action Plan.
LU 5.3 Existing Structure Reuse. Encourage the retention, adaptive reuse, and renovation of existing buildings with "green" building technologies and standards.	**Consistent**. The existing clubhouse within the golf course would be brought up to current building code standards and converted to use as a public Community Center.
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.	**Consistent**. Implementation of the proposed Rancho La Habra Specific Plan would result in a substantial reduction of potable water use compared to the existing golf course use. While the proposed project would increase total energy consumption in relation to the existing golf course, as discussed in Section 3.10, *Energy Resources*, the project would be 20 percent more efficient than current (2017) Title 24 standards, and energy would not be consumed in a wasteful manner. Other sustainability features of the proposed project include: • The proposed project is located adjacent to existing transit service along Beach Boulevard, and would provide a series of pedestrian and bicycle routes and paths through the project site. • Construction debris is proposed to be crushed and used for road base. Additional, design-oriented, sustainability features identified in Policy LU 5.4 will be reviewed and feasible measures included as conditions of approval during the project's Design Review process.
LU 7.2 New Residential Development. Attract new residential development that is well-conceived, constructed, and maintained in a variety of types and densities, housing types at scales, and locations and costs.	**Consistent**. The Rancho La Habra Specific Plan includes architectural design guidelines as well as development standards that reflect the intended consistency and compatibility with the existing development. The project would provide both single-family and multi-family housing types, with different size units and price points to attract a variety of homebuyers.
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.	**Consistent**. A comprehensive system of sidewalks and trails would be provided to facilitate pedestrian mobility throughout the project site. As part of the required design review process, the landscaping plan would be reviewed to ensure that street trees and other landscape materials and design promote walking as an enjoyable and healthy activity and alternative to automobile use.

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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.	**Consistent**. A comprehensive system of sidewalks and trails would be provided to facilitate pedestrian mobility throughout the project site. This pedestrian system, in combination with existing off-site pedestrian facilities, would provide connections to commercial centers, parks, schools, work places, and other community activity centers.
LU 7.7 Incompatible Uses. Prohibit the development of uses that are incompatible with and physically divide residential neighborhoods.	**Consistent**. The proposed project would provide for a compatible mix of residential and small-scale commercial uses. As discussed in relation to Impact LUP-1, the proposed project, when completed, would not physically divide any residential neighborhoods.
LU 7.8 Safety. Require that residential developments be designed to facilitate and enhance neighborhood surveillance for safety.	**Consistent**. The proposed Specific Plan includes the following elements implementing this General Plan policy: • Promotion of neighbor interaction and community safety through forward-facing architecture and appropriate front yard setbacks; • A front yard setback of 10 feet for porches and living area to encourage "eyes on the street" by bringing the living area forward and moving the garage farther back (18-foot setback); • A street tree program that mandates the installation and on-going maintenance of street trees placed behind the sidewalk to provide substantially shaded sidewalks to encourage walking, thereby increasing casual surveillance within residential neighborhoods; and • A landscape plan attuned to minimizing hiding areas in landscaped areas near sidewalks and buildings.
LU 8.1 Neighborhood Identity. Maintain distinguishing characteristics, such as topography, parcel size, housing scale and form, and public streetscapes that differentiate La Habra's single-family neighborhoods.	**Consistent**. The proposed project would be reviewed through the City's design review process to ensure that site grading, proposed parcel sizes, architectural design, and streetscape design would distinguish the project's single-family neighborhoods from other single-family neighborhoods in the City.
LU 9.1 Character and Design. Design new and renovated multi-family residential to achieve a high level of architectural design and quality of life for residents, in consideration of the following principles: a. Consistent architectural design treatment b. Design elevations of multi-family buildings facing public streets and pedestrian ways to exhibit a high level of visual interest and distinguish entries for separate residences as feasible for security and privacy c. Incorporate setbacks, modulate building mass, and design multifamily buildings and projects in consideration of the development patterns of the surrounding neighborhood.	**Consistent**. The proposed Specific Plan sets forth architectural and design guidelines for multi-family residential development to ensure a high level of design quality. Design Review plans for Planning Areas 1, 2, 3, 4 and 6 have been submitted and are included as part of the review and approval of the project described in this EIR. Planning Area 5 will also be subject to Design Review at such time as site-specific development is proposed within the portion of the project site.

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LU 9.3 Development Transitions. Ensure sensitive transitions in building scale between buildings in multi-family residential areas and lower-scale buildings in adjoining residential neighborhoods and commercial districts.	**Consistent**. Generally, development transitions from proposed single-family residential neighborhoods to proposed multi-family and commercial development are proposed to be accomplished through grade changes, building orientation, and landscaping. Final architectural, landscape, and development plans for proposed multi-family residential and commercial development would be subject to the City's design review process, which would ensure compliance with Specific Plan design guidelines and Policy LU 9.3.
LU 9.4 Streetscapes. Provide ample public spaces and tree-lined sidewalks or pathways furnished with appropriate pedestrian amenities that contribute to comfortable and attractive settings for pedestrian activity in multi-family neighborhoods.	**Consistent**. The proposed Specific Plan includes a trails system furnished with appropriate pedestrian amenities, including passive park areas and wildlife viewing areas.
LU 11.7 Architecture and Site Design. Require that new development and renovated or remodeled existing buildings in multi-tenant centers and corridors be located and designed to complement existing uses, as appropriate, and exhibit a high quality of architecture and site planning in consideration of the following principles: a. Seamless connections and transitions with existing buildings, in terms of building scale, elevations, and materials; b. Integration of signage with the buildings' architectural character; c. Landscaping contributing to the appearance and quality of development; d. Clearly delineated pedestrian connections between business areas, parking areas, and to adjoining neighborhoods and districts; e. Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities.	**Consistent**. Development plans for Planning Areas 1, 2, 3, 4 and 6 have been submitted and are included as part of the review and approval of the project described in this EIR. The plans will be reviewed against these standards. Planning Area 5 will also be subject to Design Review at such time as site-specific development is proposed within the portion of the project site.
LU 17.6 Parks and Open Spaces. Seek to expand the City's parklands, greenways, and open spaces as land becomes available and funding is available and coordinate with other appropriate agencies, as provided for in the Open Space, Parks, Trails, and Recreation (OS) Element.	**Consistent**. The proposed Specific Plan provides 25.1 acres of public parkland, which would increase existing citywide public park acreage per 1,000 from 2.29 acres of park per 1,000 population to 2.64 acres per 1,000 population, thereby meeting La Habra's citywide goal of 2.5 acres per 1,000 population of city-owned parkland. This occurs since the 25.1 acres of public park land to be provided by the proposed project exceeds the 3.78 acres of park land required to be dedicated per the City's Municipal Code. In addition to active and passive public parks and trails, the project would provide a public Community Center, habitat conservation areas, and wildlife viewing areas.
LU 11.8 Buffering Adjoining Residential Areas. Ensure commercial uses adjoining residential neighborhoods or in mixed residential and commercial developments be designed to be compatible with each other.	**Consistent**. Site and architectural design of the proposed commercial center would be reviewed in light of the proposed site and architectural design for adjacent single-family and multi-family residential areas.

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LU 17.9 Stormwater Facilities. Work with the Orange County Flood Control District to ensure that structures channeling or retaining water be designed and constructed of materials and colors so as to blend with the natural environment.	**Consistent**. As part of the City's review of engineering design for stormwater detention facility within the project site, basin design, including materials and colors, would be reviewed to ensure that basins would blend with the adjacent environment.
LU 17.10 Integration of Utilities. Require utilities that cannot be feasibly placed underground be located and designed to produce the least visual and environmental impact on the community.	**Consistent**. All utilities would be undergrounded.
H 1.4 Variety of Housing. Promote a variety of housing types at scales, values, and locations carefully selected to provide housing opportunities for all economic segments of the population, while emphasizing the protection and conservation of existing single-family neighborhoods.	**Consistent**. The proposed project would expand housing opportunities within the City by providing detached single-family dwelling on small lots, as well as attached multi-family dwelling in a courtyard-style setting. In addition, the proposed project will provide funding for lower income housing.
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.	**Consistent**. All housing within the project site would be constructed to CalGreen building standards. In addition, conversion of the existing golf clubhouse to a Community Center would bring the building up to current energy conservation standards.
CR 1.2 Applicable Laws and Regulations. Ensure that City, State, and Federal historic preservation laws, regulations, and codes are implemented including the California Historical Building Code and State laws pertaining to archaeological resources, to assure the adequate protection of these resources.	**Consistent**. Through the City's CEQA and development review processes, compliance with city, state, and federal historic preservation laws, regulations, and codes would be ensured, thereby providing adequate protection of resources.
CR 1.3 Consultation. Consult with the appropriate organizations and individuals to minimize potential impacts to historic and cultural resources, such as the Information Centers of the California Historical Resources Information System (CHRIS), the Native American Heritage Commission (NAHC), the Native American groups and organizations.	**Consistent**. Consultation with tribal authorities and the Native American Heritage Commission has been undertaken as part of the proposed project's CEQA review to address historic, cultural, and tribal resources pursuant to Assembly Bill 52 and Senate Bill 18.
CR 1.5 Planning. Take historical and cultural resources into consideration in the development of planning studies and documents.	**Consistent**. Appropriate mitigation measures have been prescribed and would be implemented to ensure that site development would provide appropriate consideration to historical, cultural, and paleontological resources, and that impacts on these resources would be minimized.
CR 1.8 Early Consultation. Minimize potential impacts to historic and cultural resources by consulting with property owners, land developers, and the building industry early in the development review process.	**Consistent**. Consultation with tribal authorities and the Native American Heritage Commission has been undertaken as part of the proposed project's CEQA review to address historic, cultural, and tribal resources pursuant to Assembly Bill 52 and Senate Bill 18.
CR 1.9 Compatibility with Historic Context. Review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. Pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources.	**Consistent**. The Specific Plan contains architectural and landscape guidelines, which would promote harmonious project design while providing a guide to architectural exterior form and style that would complement the surrounding residential and historical context of La Habra. Drawing on the architectural history of La Habra, the guidelines and the selected architectural styles allow for individual expression

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	while maintaining the integrity of the design aesthetic expected in the environment.
CR 1.13 Archaeological Resources. Develop or ensure compliance with protocols that protect or mitigate impacts to archaeological, historic, and cultural resources including prehistoric resources.	**Consistent**. The project site has been found to have a moderate potential for discovery of archaeological resources and a high potential for discovery of paleontological resources during earthwork within previously undisturbed soils. Mitigation Measures CUL-2 and CUL-3 described in Section 3.6, *Cultural Resources*, would ensure compliance with protocols that protect and mitigate impacts on archaeological and paleontological resources.
CI 1.1 A Community of Places. Provide for the distribution and concentration of new development to establish clusters of distinct, identifiable, and walkable mixed-use centers and corridors, differentiated from the City's automobile-oriented "strip corridors," as guided by the Land Use Plan Diagram.	**Consistent**. The Rancho La Habra Specific Plan would achieve consistency with this policy by proposing a planned community with a distinct identity, including parks and trails for both project site residents and the community at large.
CI 1.3 Identification of Place. Develop a program of well-designed signage that identifies and distinguishes La Habra's neighborhoods, districts, and streets.	**Consistent**. The Specific Plan includes a signage program to identify and distinguish the proposed residential community.
CI 1.4 Natural Setting. Maintain the City's hillsides and open spaces as elements that separate and distinguish La Habra from surrounding communities.	**Consistent**. The proposed project would maintain the hillside that currently separate the project site from the existing Westridge residential neighborhood. Although the proposed project would result in a substantial loss of open space (existing Westridge Golf Club), 58 percent of the site will be retained in open space.
CI 2.1 Unique Sense of Place. Promote quality site, architectural, and landscape design that incorporates qualities and characteristics that make La Habra desirable and memorable including varied architectural styles, tree-lined streets, distinctive parks and open spaces, and walkable blocks.	**Consistent**. As part of the City's design review process, the proposed Specific Plan's architectural and landscape guidelines, as well as the project's site, architectural, and landscape design plans, have been reviewed to ensure consistency with Policy CI 2.1.
CI 2.2 Building Scale and Design. Require that buildings and sites are designed to exhibit a high level of visual quality and are sensitive to the human scale.	**Consistent**. As part of the City's design review process, the proposed Specific Plan's architectural guidelines, as well as the project's site, architectural, and landscape design plans, has been reviewed to ensure consistency with Policy CI 2.2.
CI 2.3 Responsiveness to Context. Require building design that respects the local context in scale, massing, and materials; is responsive to La Habra's climate; and considers the historic and cultural context of its neighborhoods.	**Consistent**. As part of the City's design review process, the proposed Specific Plan's architectural guidelines, as well as the project's site, architectural, and landscape design plans, have been reviewed to ensure compatibility of proposed project development with the site's local land use, environmental, and cultural resources context.
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.	**Consistent**. As part of the City's design review process, the proposed Specific Plan's landscape plan and architectural designs would be reviewed to ensure consistency with Policy CI 2.5. The proposed project includes the following design elements to achieve attractive and walkable streets: • A street tree program that mandates the installation and on-going maintenance of street trees placed behind the sidewalk in order to provide substantially shaded sidewalks to encourage walking;

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	• Forward-facing architecture and appropriate front yard setbacks to provide a pleasant street scene; and • A landscape plan attuned to minimizing hiding areas in landscaped areas near sidewalks and buildings, thereby enhancing the safety of walking through the community.
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.	**Consistent**. The proposed project's plant palette would use drought-tolerant plantings to reduce the demand for potable water, while still achieving the desired character and atmosphere of the various neighborhoods. The visual quality of the proposed landscape palette will be review by the City as part of the required Design Review process to ensure consistency with this policy.
CI 3.1 Sense of Community. Establish a common logo and design template that will be consistently used for signage of public rights-of-way, places, and buildings.	**Consistent**. The proposed Specific Plan sets forth a design template for the project site, including streetscapes, community gathering places and signage, and architectural design. As part of the City's design review process, the proposed project's template would be reviewed in relation to the project site's setting and city-wide design goals.
CI 3.3 Private Signage. Require that signage on private buildings be designed to exhibit a high quality of interest and visual appeal; be integrated into and reflect the building's architectural design character; and sized to not overwhelm its scale and mass.	**Consistent**. Project signage used for residential neighborhoods and linking trails and open space areas is proposed to be designed to reflect the character of each neighborhood while still maintaining consistency between neighborhoods. Likewise, commercial signage is proposed to complement the neighborhood and trail signage, as well as the existing Westridge Plaza Shopping Center. All proposed signage would be reviewed as part of the City's design review process to ensure a high quality of interest and visual appeal, as well as compatibility with adjacent development.
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.	See Table 3.2-1 for discussion of the proposed project's consistency with 2016 Regional Transportation Plan/ Sustainable Communities Strategy goals and policies.
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.	**Consistent**. The proposed project would provide roadway improvements to La Habra Hills Drive to accommodate increased traffic. Access onto all three arterial roadways is provided by a fully signalized intersection to allow for convenient vehicular and pedestrian access.
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).	**Consistent**. Roadway design within the Specific Plan area would comply with all City design standards to ensure the safe movement for all users (motorists, bicyclists, transit users, pedestrians, the disabled, and commercial users). In addition, off-street trails would be provided. Street trees along all streets would be designed to provide shade for sidewalks as the trees mature.

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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.	**Consistent**. Traffic from the project site would affect intersections both within and outside of the City of La Habra. The Traffic Impact Analysis for the proposed project analyzes those intersections and provides recommendations to improve LOS. The applicant would be responsible for implementing all feasible mitigation measures in order to reach target LOS standards.
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.	**Consistent**. The applicant would be required to pay all required traffic mitigation fees as determined in the Traffic Impact Assessment and this EIR, and by the City.
AT 2.3 Bikeway Network. Maintain and extend where and when feasible the City's bikeway network to make bicycling an attractive option.	**Consistent**. The proposed Specific Plan would provide bicyclists with multiple connection points to surrounding streets, parks, and retail uses. An extensive system of on-street and off-street trails is proposed within the project site to encourage bicycle use.
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.	**Consistent**. See analysis of consistency with Policy AT 2.3.
AT 2.6 Pathway Easements. Require new development to dedicate easements for bicycle trail/pedestrian pathway connections.	**Consistent**. See analysis of consistency with Policy AT 2.3.
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.	**Consistent**. Provision of bicycle parking would be required at the Community Center and other park areas, as well as at the proposed commercial center, to encourage bicycle use.
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.	**Consistent**. In addition to traditional sidewalks, the proposed Specific Plan provides for development of a 2.6-mile linear park trail corridor that would connect the residential neighborhoods to regional trails both to the west (Coyote Creek trail) and to the east (Idaho Street). Both the sidewalks and trail system would be thoroughly landscaped with an emphasis on shade trees. The trail system would also include fitness, educational, and view amenities to further encourage pedestrian use.
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.	**Consistent**. The proposed Specific Plan provides for development of a network of trails that would provide connections from the project's residential neighborhoods to existing City and regional trails east and west of the project site, and to the Westridge Plaza Shopping Center located north of the site.
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	**Consistent**. The proposed project will be required to comply with all applicable Americans with Disabilities Act standards.

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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.	**Consistent**. In addition to traditional sidewalks, the proposed Specific Plan provides for development of a 2.6-mile linear park trail corridor that would connect the residential neighborhoods to regional trails both to the west (Coyote Creek trail) and to the east (Idaho Street). Both the sidewalks and trail system would be thoroughly landscaped with an emphasis on shade trees. The trail system would also include benches and fitness, educational, and view amenities to further encourage pedestrian use. All pedestrian crossing opportunities, median islands, pedestrian signals, lighting, and signage would be required to comply with applicable City standards.
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.	**Consistent**. The proposed Specific Plan provides for development of a network of trails that would provide connectivity throughout the project site, as well as connections from the project's residential neighborhoods to existing City and regional trails east and west of the project site, and to the Westridge Plaza Shopping Center located north of the site.
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.	**Consistent**. The design of pedestrian facilities will be reviewed by the City as part of the Design Review process to ensure consistency with this policy. All pedestrian crossing opportunities, median islands, pedestrian signals, lighting, and signage would be required to comply with City requirements of the La Habra Public Works Department.
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.	**Consistent.** Consistency between the proposed project and this policy is proposed by the applicant to be achieved by amending Land Use Policy LU 1.2 to include the proposed project, along with the certification of this EIR, which has analyzed the impacts of the increased residential capacity for the city. The EIR includes mitigation measures to ensure that project-related GHG emissions per service population would be less than the proposed South Coast Air Quality Management District (SCAQMD) efficiency threshold of 4.8 metric tons of carbon dioxide equivalents ($MTCO_2e$) per capita per year, and would thereby not impede the City of achieving the GHG reduction targets set forth in the City's Climate Action Plan. Additionally, the project will be required to implement all applicable measures from the La Habra Climate Action Plan, so that the proposed project would be consistent with city-wide efforts to achieve GHG reduction targets.
TDM 2.5 Alternative Fuel Facilities. Promote alternative fuel support facilities such as hydrogen and CNG fueling stations and electric vehicle charging stations for these emerging technologies.	**Consistent**. Electric vehicle charging stations would be provided within commercial and multi-family residential planning areas. In addition, all single-family dwelling units will be required to pre-wired for installation of home charging stations for electric vehicles.
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.	**Consistent**. An emergency access gate between the eastern and central portions of the project site would prevent high speed "cut through" traffic from Beach Boulevard to Idaho Street.

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P 1.2 Off-Street Parking. Require new developments to provide sufficient off-street parking to reduce on-street parking congestion and increase both auto and pedestrian safety.	**Consistent**. Proposed development within the Specific Plan area would be required to meet applicable standards for off-street parking.
Chapter 4, Infrastructure	
WS 1.1 Urban Water Management Plan. Implement the City's Urban Water Management Plan to ensure adequate water supply.	**Consistent**. A Water Supply Assessment prepared for the proposed Specific Plan found that the proposed project would use approximately 96 acre-feet per year less water than the existing golf course and thus concluded that adequate water is available for the proposed development.
WS 1.3 Adequate Water Infrastructure. Ensure that the City's potable water infrastructure is sized adequately for storage capacity and treatment to serve existing and future projected demands.	**Consistent**. An analysis of the City's water system concluded that existing off-site water infrastructure is adequate to serve the proposed Specific Plan. The analysis also addressed on-site water infrastructure and concluded that adequate water infrastructure was proposed by the applicant to serve projected water demands from the project site.
WS 1.7 New Water Facility Design. Ensure that water utility facilities are designed to be safe, aesthetically pleasing, and compatible with adjacent uses.	**Consistent**. Water facilities for the proposed project would be underground and not visible to the public. All facilities would be constructed to City standards.
WS 2.1 Water Conservation Standards and Programs. Implement water conservation standards and programs during non-shortage conditions that reduce water consumption through conservation, reasonable and beneficial use of water, and prevention of water waste and implement water supply shortage actions during declared water shortage, including reducing water use during times of emergency.	**Consistent**. As analyzed in the project Water Supply Assessment, the proposed project's water demand would be approximately 35 percent less than current golf course water use. Proposed landscaping would meet the state's Model Water Efficiency Ordinance with plant selection and irrigation systems. Dwelling interiors would include water-saving features such as low-flow toilets, low-flow shower heads, and on-demand hot water, as detailed in the Water Supply Assessment.
WS 2.3 Water Efficient Landscaping. Encourage the use of water efficient landscaping (e.g., drought and fire-resistant landscaping and native vegetation) in new construction and rehabilitation projects.	**Consistent**. Proposed landscaping would meet the state's Model Water Efficiency Ordinance with plant selection and irrigation systems.
WS 2.4 Water Conservation Irrigation. Require water conservation irrigation methods such as drip irrigation, soil moisture sensors, and automatic irrigation systems in new construction and rehabilitation projects.	**Consistent**. Proposed landscaping would meet the state's Model Water Efficiency Ordinance with plant selection and irrigation systems, including use of drip irrigation, soil moisture sensors, and automatic irrigation systems, where appropriate.
WS 2.5 Water Conservation Devices. Require compliance with state laws for water conservation devices such as low flush toilets, self-closing faucets, and pressure reducing valves in all new and major renovated structures.	**Consistent**. Dwelling units would be provided with water-saving features such as low-flow toilets, low-flow shower heads, and on-demand hot water, as detailed in the Water Supply Assessment.
SS 1.2 Peak Flow Service. Provide sufficient wastewater conveyance, pumping, and treatment capacity for peak sewer flows and infiltration.	**Consistent**. Analysis of sewer system design prepared for the proposed project confirmed that the project's proposed sewer system, including Orange County Sanitation District (OCSD) trunk lines and treatment facilities, would provide sufficient capacity to serve project development.
SS 1.4 Adequate Wastewater Facilities. Coordinate with the Orange County Sanitation District (OCSD) to provide adequate collection, supply, treatment, and disposal of	**Consistent**. OCSD trunk lines and treatment facilities have sufficient capacity to accommodate the proposed project.

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wastewater to meet the demands of existing and future development.	
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.	**Consistent**. Sewer facilities constructed for the proposed project would meet all applicable standards of the City of La Habra and OCSD.
SS 1.7 New Development. Ensure that new development constructs, dedicates, and/or pays its fair share contribution to the wastewater treatment and collection system necessary to serve the demands created by the development.	**Consistent**. All new sewer facilities constructed for the proposed project would be paid for by the applicant.
SD 1.1 Storm Drain Master Plan. Implement the City's Storm Drain Master Plan to ensure an adequate storm drainage system.	**Consistent**. A hydrology study (see Appendix I of this EIR) was prepared to analyze storm flows and evaluate needed storm drainage facilities to support proposed site development. As demonstrated in that study and discussed in Section 3.13, *Hydrology and Water Quality*, of this EIR, adequate drainage facilities would be constructed to accommodate post-development runoff generated by the proposed project.
SD 1.2 NPDES Permit. Require new development and rehabilitated structures to minimize stormwater runoff and pollutants consistent with the City's National Pollutant Discharge Elimination System (NPDES) permit.	**Consistent**. The proposed project would comply with current NPDES requirements to ensure that pollutants in stormwater runoff are sufficiently reduced in order to meet discharge requirements. The proposed project includes three detention and water quality basins as Best Management Practices (BMPs) designed to meet water quality objectives and reduce peak storm flows to existing levels.
SD 1.3 Adequate Storm Drainage Infrastructure. Ensure that the City's storm drainage culverts, channels, and facilities are adequately sized, maintained, and upgraded to adequately convey stormwater runoff and prevent flooding for existing and new development.	**Consistent**. Proposed drainage facilities for the proposed project would be required to be sized so as to adequately convey stormwater runoff and prevent flooding of existing and new development, including stormwater that currently drainage from the Westridge neighborhood through the project site.
SD 1.4 Facility Design. Design stormwater drainage systems to be environmentally sustainable, appear natural in character, and to be compatible with surrounding uses.	**Consistent**. The proposed project's drainage system has been designed to include drainage and water quality features that would accept and treat the post-development runoff. This drainage system includes catch basins and storm drains that would connect to the existing storm drain/flood control system. In addition, water quality features would be incorporated into the project design to ensure that pollutant loads would be reduced in accordance with current discharge requirements. Project-related storm drains would be underground and not visible to the public. Proposed water quality/detention basins would be designed so as to appear as small lakes with adjacent landscaping. All facilities would be constructed to City standards.

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SD 1.5 Best Practices. Use and update best practices for stormwater management.	**Consistent**. BMPs would be implemented during site construction as prescribed in the required Storm Water Pollution Prevention Plan (SWPPP), along with the BMPs specified in the Final Water Quality Management Plan to ensure that long-term, post-development runoff meets current discharge requirements.
SD 1.7 Drainage Channels. Maintain storm drainage channels to adequately convey stormwater.	**Consistent**. The existing storm drain channel (Coyote Creek) has adequate capacity to accommodate stormwater runoff generated by the proposed project. A parallel drainage line would be constructed under Beach Boulevard to address a current deficiency that would cause stormwater water to generated within the adjacent Westridge community and the project site to back up prior to conveyance across Beach Boulevard to Coyote Creek.
SD 1.9 No Net Increase. Require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.	**Consistent**. The proposed project includes three detention basins designed to reduce peak storm flow discharge. As a result, the proposed project would not increase stormwater runoff peak flows over existing conditions associated with a 100-year storm event.
WQ 1.1 National Pollutant Discharge Elimination System and Regional Water Quality Control Board. Implement the requirements of the Regional Water Quality Control Board (RWQCB) for compliance with the National Pollutant Discharge Elimination System permit and apply best management practices for point source discharges.	**Consistent**. The project would comply with the City's NPDES requirements. A SWPPP would be prepared pursuant to current regulatory requirements, and would include BMPs necessary to minimize potential erosion during the construction phase. In addition, a Water Quality Management Plan has been prepared that identifies long-term water quality features in order to minimize post-development water quality impacts.
WQ 1.2 Orange County Drainage Area Management Plan and Water Quality Management Plan. Continue to enforce that all new developments and redevelopments comply with the Orange County Drainage Area Management Plan (DAMP) and that all applicable new developments and redevelopments prepare a Water Quality Management Plan (WQMP).	**Consistent**. The proposed project would comply with the Orange County Drainage Area Management Plan (DAMP) and would implement a Water Quality Management Plan (WQMP).
WQ 1.3 Low Impact Development. Encourage the incorporation of Low Impact Development (LID) techniques (e.g., permeable paving, cells, bioswales, tree box filters, rain barrels, rooftop runoff for irrigating lawns) to manage stormwater and urban runoff, reduce runoff and pollution, and assist in maintaining or restoring the natural hydrology.	**Consistent**. Although soils on the project site are not conductive to infiltration, the proposed project incorporates biotreatment BMPs to address LID requirements for reducing runoff and pollution. Runoff from the site's development areas would be conveyed as surface flow toward and onto the public right-of-way. Runoff would then be concentrated in the gutter and directed into one of the proposed water quality basins via a network of underground storm drain pipes. The basins would outlet through a series of modular wetland systems by BioClean for treatment prior to discharging into the municipal storm drain system.
WQ 1.4 Protection of Water Bodies. Require new development to protect the quality of water bodies and natural drainage systems consistent with the City's NPDES permit.	**Consistent**. The proposed project would comply with current NPDES requirements to treat stormwater runoff prior to discharge into the natural drainage systems.

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WQ 1.5 New Development. Require new development to protect the quality of water resources and natural drainage systems through site design, and use of source controls, stormwater treatment, runoff reduction measures, best management practices, and LID techniques.	**Consistent**. As indicated in in discussion of Policy WQ 1.3, biotreatment BMPs would be incorporated into the project design to meet water quality and runoff requirements. As discussed in Section 3.13, *Hydrology and Water Quality*, water quality would be protected through source controls, stormwater treatment, runoff reduction measures, BMPs, and LID techniques.
WQ 1.6 Site Development. Encourage site design and development to minimize lot coverage and impervious surfaces.	**Consistent**. Although the Specific Plan would increase the total amount of impervious surfaces within the project site in comparison to the existing golf course use (see Section 3.13, *Hydrology and Water Quality*), the proposed project would be consistent with this policy in that it proposes approximately 87 acres of parks and natural areas, encompassing more than half of the project site, in addition to pervious surfaces on private lands (e.g., private parks, landscape areas such as yard areas and landscaping within multi-family and commercial uses.
E 1.1 Adequate Service and Facilities. Coordinate with energy service providers to supply adequate electricity and natural gas service and facilities are available to meet the demands of existing and future development.	**Consistent**. Southern California Edison and the Southern California Gas Company were provided with the proposed project's Notice of Preparation and copies of this EIR for review and comment. Adequate electricity and natural gas service and facilities are available to meet the demands of the proposed project.
E 1.3 New Utility Infrastructure. Require that new utility lines be constructed underground and along existing utility corridors.	**Consistent**. All new utility lines would be constructed underground.
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.	**Consistent**. Development within the project site would be required to comply with Title 24 CalGreen energy conservation standards.
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.	**Consistent**. Development within the project site would be required to comply with Title 24 CalGreen energy conservation standards.
E 2.4 California Energy Code. Continue to enforce California Energy Code practices regulating and controlling the energy efficiency of buildings in La Habra.	**Consistent**. Development within the project site would be required to comply with all applicable code requirements.
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.	**Consistent**. Included in the proposed project's landscape plan is a street tree program that mandates the installation and on-going maintenance of street trees placed behind the sidewalk to provide substantially shaded sidewalks that would encourage walking.
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.	**Consistent**. Pursuant to the La Habra Climate Action Plan, the following measures would be required: • Electrical vehicle charging stations would be provided within the proposed the commercial and multi-family residential development; • Single-family residences would be designed to accommodate the installation of solar panel systems, and

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	such solar panel systems would be offered to initial buyers as an option; • Solar panels would be installed on multi-family residential structures; and • Commercial structures would be designed with the ability to install solar panels.
E 2.9 Solar Access. Ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize solar access.	**Consistent**. As part of the City's design review process, the siting of individual structures would be reviewed for consistency with this policy.
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).	**Consistent**. The proposed project includes an extensive system of internal bicycle and pedestrian paths.
WR 1.2 AB 939 and 50 Percent Diversion. Continue to partner, plan for, and document compliance with AB 939 source reduction and recycling requirements of 50 percent diversion of solid waste from landfills.	**Consistent**. Approximately 170,000 cubic yards of buried concrete debris would be crushed on site and reused as backfill and road base instead of being hauled off-site to a landfill. Additional construction waste recycling practices would be implemented as part of project development to recycle construction debris. Residents would participate in the City's AB 939 waste reduction program through curbside recycling and normal operations of the City waste hauler.
WR 1.4 Waste Diversion. Require recycling, composting, and waste separation to reduce the volume and toxicity of solid wastes sent to landfill facilities, with the objective of diverting non-hazardous waste through source reduction, reuse, and recycling.	**Consistent**. Waste diversion would be accomplished through the normal operations of the City's waste hauler, as well as through the implementation of the Waste Management Plan described in Section 3.17, *Utilities, Service Systems, and Water Supply*.
WR 1.6 New Construction and Recycled Materials Use. Encourage the use of recycled materials in new construction through the continued enforcement of the California Green Building Standards Code.	**Consistent**. Site demolition is anticipated to generate approximately 170,000 cubic yards of concrete, asphalt, and masonry that would be crushed on-site for use as road base or in deep fills. The remaining construction materials that cannot be crushed would be recycled to the extent feasible as part of existing waste diversion programs.
WR 1.7 Adaptive Reuse of Existing Buildings. Promote the adaptive re-use and integration of existing buildings in new development projects in lieu of demolition unless they are structurally deficient, inconsistent with the spatial needs and functions of the new use, consume excessive energy and water, and/or financially infeasible.	**Consistent**. The existing golf course clubhouse would be brought up to current code and reused for a Community Center.
WR 4.1 Recycling and Reuse of Construction Waste. Continue to enforce the waste management plan for certain construction and demolition projects to reduce landfill waste by diverting a minimum of 50 percent of the construction and demolition debris (e.g., concrete, asphalt paving, asphalt roofing, lumber, gypsum board, rock, and soil).	**Consistent**. Site demolition is anticipated to generate approximately 170,000 cubic yards of concrete, asphalt, and masonry that would be crushed onsite for use as road base or in deep fills. The remaining construction materials that cannot be crushed would be recycled to the extent feasible as part of existing waste diversion programs.
Chapter 5, Community Services	
OS 1.1 Natural Resource Preservation. Preserve open spaces for the protection and maintenance of La Habra's	**Consistent**. The proposed project preserves the hillsides that separate the existing Westridge neighborhood from the

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natural resources including watersheds, hillsides, and drainage corridors.	project site. In addition, approximately 87 acres (58 percent) of the project site would remain in open space, including preservation of the existing drainage course through the middle of the site.
OS 1.4 Aesthetic Buffer. Utilize open space to serve as an aesthetic buffer between different land uses, where feasible, including the preservation of slope embankments in hillside areas.	**Consistent**. The existing Westridge Golf Club currently serves as an open space, aesthetic buffer between the Westridge residential community to the south and the Westridge commercial center to the north. Although the proposed project would convert the existing golf course to residential use, existing and new landscaped slope embankments, would remain in open space to buffer the Westridge residential community from nearby commercial uses.
OS 1.5 Open Space Provisions. Require that significant residential development projects and Specific Plans address and make provisions for adequate amounts of private and/or public passive open space and landscaping that is sensitive to retaining the character of the natural environment where applicable.	**Consistent**. Approximately 87 acres (58 percent) of the project site would remain in open space. This area would consist of traditional parks, a Community Center, a linear park, and habitat preservation and wildlife viewing areas.
OS 1.6 Open Space Linkages. Link open space areas preserved for natural resources, other open spaces, and activity centers to help define urban form and beautify the City.	**Consistent**. The Specific Plan proposes an extensive system of bicycle and pedestrian paths to connect residential neighborhoods to parks and open space areas, including wildlife viewing areas adjacent to preserved sensitive habitats.
OS 2.1 Parkland Standard. Provide, maintain, and support open space resources including parks, recreational facilities, and open space at a ratio of 2.5 acres per 1,000 residents for active and passive recreational purposes to allow residents opportunities to enjoy physical and mental health.	**Consistent**. The proposed Specific Plan provides 25.1 acres of public parkland, which would increase existing citywide public park acreage per 1,000 from 2.29 acres of park per 1,000 population to 2.64 acres per 1,000 population, thereby achieving La Habra's citywide goal of 2.5 acres per 1,000 population of city-owned park land.
OS 2.2 Incentives for Additional Parklands. Encourage developers to provide land dedications for parks and improvements exceeding minimum City requirements in exchange for incentives established by the City.	**Consistent**. The proposed project would dedicate and improve 25.1 acres of public park land, which is substantially in excess of the 3.78 acres of park land that would be required to be dedicated per the City's Municipal Code. In addition to active and passive public parks and trails, the project would provide a public Community Center, habitat conservation areas, and wildlife viewing areas.
OS 2.4 Park Types. Maintain a diverse and accessible system of parks and recreation facilities throughout La Habra, which include mini parks designed to provide passive open space, neighborhood parks generally planned for younger children and family groups, and community parks offering a wide range of indoor and outdoor recreation opportunities.	**Consistent**. The proposed project would provide a variety of park and recreation types, including a Community Center, open turf multi-use parks, linear parks, and natural resource conservation areas. In addition, the project would provide private recreation amenities, including three pool complexes and trail connections.
OS 2.8 Privately Owned Open Space Areas. Enforce compliance with conditions placed on development projects where open space has been set aside for use as a recreational amenity for La Habra's residents and visitors.	**Consistent**. The proposed project would result in the conversion of the existing Westridge Golf Club to the Rancho La Habra residential planned community. The existing golf club was approved as part of the La Habra Hills Specific Plan and included as a condition of approval. Consistency with this General Plan policy is proposed by the applicant to be achieved by amending the La Habra Hills Specific Plan to remove the golf course from that Specific Plan and its conditions of approval.

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OS 2.10 Quimby Act Park Fees and/or In Lieu Dedication. Continue to enforce local ordinances that require subdivision developments with residential land uses including large high-density residential and mixed-use projects to contribute fees or dedicate land, or combination thereof, for development or rehabilitation of parklands or recreational facilities accurately reflecting the burden of the new development on the City's recreational facilities and programs.	**Consistent**. The proposed project would dedicate and improve 25.1 acres of public parkland, which exceeds Municipal Code requirements (3.78 acres at a ratio of 3.0 acres per 1,000 residents).
OS 2.12 Compatibility. Ensure that parks, recreation, and community centers are located and designed for compatibility with adjacent uses addressing such issues as noise, lighting, and parking.	**Consistent**. The proposed project would provide a trails system connecting residential neighborhoods to recreational facilities to reduce the need for vehicular travel, and would also provide for needed parking at recreational facilities. Development standards for noise generation and night lighting would reduce impacts to less-than-significant levels and ensure compatibility of the proposed project's parks, recreational facilities, and Community Center with its residential neighborhoods.
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.	**Consistent**. The City will review the proposed design of all proposed public parks, including the design of landscaping and irrigation systems, as well as pedestrian and trail connections to ensure consistency with this policy. As documented in Section 3.10, *Energy Resources*, the project's energy consumption impacts would be less than significant. As documented in Section 3.17, the proposed project will result in a net reduction from existing water consumption.
OS 2.14 Healthy Parks. Require that new parks are designed and existing parks retrofitted over time to incorporate elements that enhance opportunities for residents to engage in vigorous recreational activities and improve their health.	**Consistent**. In addition to traditional sidewalks for pedestrians and use of streets for bicycle travel, the proposed Specific Plan provides for development of a 2.6-mile linear park trail corridor that would connect the residential neighborhoods to regional trails both to the west (Coyote Creek trail) and to the east (Idaho Street). Both the sidewalks and trail system would be thoroughly landscaped with an emphasis on shade trees to encourage walking. In addition, the trail system would include fitness, educational, and view amenities to further encourage pedestrian use.
OS 2.15 Accessible Facilities. When renovating and creating new recreational facilities, ensure accessibility standards are met as specified in state and federal laws such as the Americans with Disabilities Act (ADA).	**Consistent**. The proposed project would comply with all applicable ADA standards.
OS 3.1 Recreational Programs and Services. Continue to provide a wide range of recreational programs and services for La Habra residents of all ages and abilities including passive, active, individual, team, and other organized opportunities.	**Consistent**. The proposed project would remodel and refurbish the existing golf course clubhouse to a function as a public Community Center to accommodate meetings, regular gatherings, and special events. The facility would provide both indoor and outdoor meeting and gathering areas, as well as special amenities such as a boardwalk along the existing lake. This facility would allow the City to program a wide range of events for the public.

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OS 3.2 Youth, Adults, and Seniors. Continue to provide community services and programs that meet the social, recreational, and health needs of individuals and groups including youth, adults, and seniors.	**Consistent**. The proposed conversion of the existing golf clubhouse to a public Community Center would expand opportunities for the City to provide community services and programs that meet the social, recreational, and health needs of its residents.
OS 4.1 Connections. Connect recreational facilities, residential neighborhoods, and key commercial and activity centers, to the extent feasible, with walking paths, trails, and bikeways.	**Consistent**. In addition to traditional sidewalks along residential streets, the proposed Specific Plan provides for a 2.6-mile linear park trail corridor that would connect the proposed residential community to regional trails to the west (Coyote Creek trail) and to the east (Idaho Street). Both the sidewalks and trail system would be thoroughly landscaped with an emphasis on shade trees. The trail system would also include fitness, educational, and view amenities to further encourage pedestrian use.
S 1.1 School Capacity. Cooperate with school districts to ensure that school facilities with sufficient capacity are reserved, constructed, and phased to meet the needs of current and projected enrollment, as permitted by State law.	**Consistent**. The proposed 402 dwelling units would generate school-age children and would result in an increased demand for school services and facilities. Payment of mandatory developer fees has been deemed by the state legislature as adequate mitigation for impacts on school facilities.
S 1.2 Review of Development Proposals. Include school districts in the review of residential development proposals to ensure that projects adequately address school impacts and issues.	**Consistent**. As part of the initial project planning, the project applicant met with the school districts serving the site to discuss the proposed development. In addition, the school districts were previously provided with the Notice of Preparation and are also being provided with this EIR for their review and comment.
S 1.9 Developer Fees. Ensure that residential development fully mitigates its impact on school facilities through the payment of fees or other negotiated methods, as permitted by State law.	**Consistent**. The proposed project would be required to pay all mandatory school impact fees prior to issuance of building permits.
PS 1.7 Security and Design Features. Require that security measures are integrated into the design of new development projects, and support the incorporation of Crime Prevention through Environmental Design (CPTED) principles, or other comparable concepts.	**Consistent**. The proposed project includes the following elements implementing this General Plan policy: • Promotion of neighbor interaction and community safety through forward-facing architecture and appropriate front yard setbacks; • A front yard setback of 10 feet for porches and living area to encourage "eyes on the street" by bringing the living area forward and moving the garage farther back (18-foot setback); • A street tree program that mandates the installation and on-going maintenance of street trees placed behind the sidewalk to provide substantially shaded sidewalks to encourage walking, thereby increasing casual surveillance within residential neighborhoods; and • A landscape plan attuned to minimizing hiding areas in landscaped areas near sidewalks and buildings.
PS 1.8 Review of Development Proposals. Include the LHPD in the review of development proposals to ensure that projects adequately address crime and safety.	**Consistent**. The proposed Specific Plan and Design Review applications have been reviewed by the La Habra Police Department.

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FS 1.2 Adequate Water Supply. Maintain adequate water supply and fire flow pressure for fire suppression in La Habra.	**Consistent**. The domestic water analysis included in Section 3.17, *Utilities, Service Systems, and Water Supply*, evaluates water supply and pressure requirements for fire suppression. Adequate water supply and fire flow pressure are available to serve the proposed project.
FS 1.5 Review of Development Proposals. Include the City's fire service provider in the review of development proposals to ensure that projects adequately address safe design and on-site fire protection.	**Consistent**. The proposed project has been preliminarily reviewed by the Los Angeles County Fire Department, which provided an initial set of conditions of approval with which the proposed project would comply. Further review will occur as part of the Design Review and building permitting process.
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.	**Consistent**. With the removal of the golf course, the proposed project provides for natural resource conservation by retaining some of the existing habitat areas in place, relocating and enhancing others and providing additional habitat off-site. .
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.	**Consistent**. While the proposed project is within the overall Orange County Central and Coastal NCCP/HCP, 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.
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.	**Consistent**. The proposed Specific Plan provides for conservation of riparian habitats within the project site. Furthermore, a water quality basin would be planted with native riparian and wetland vegetation designed to treat urban flows and attract wildlife.
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.	**Consistent**. The proposed Specific Plan provides for enhanced landscape plantings along Beach Boulevard and Idaho Street.
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.	**Consistent**. EIR mitigation measures set forth in Section 3.5, *Biological Resources*, provide for protection of 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.	**Consistent**. The Specific Plan includes details on landscape design that promote the use of drought-tolerant plant material. An arborist study of all trees within the property boundaries was conducted for the EIR, and trees that qualify for boxing and relocation have been identified. Irrigation would be subject to the new standards set forth by the State of California in response to the drought and would be designed with Smart Controllers and the use of trip or micro-spray. Turf areas within the project site would be limited.

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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.	**Consistent**. The Specific Plan includes details on landscape design that promote the use of drought-tolerant plant material.
BR 1.12 Environmental Review. Ensure that the development and environmental review process is responsive to the preservation and protection of sensitive wildlife and plant species and other sensitive habitat communities.	**Consistent**. The proposed project's effects on biological resources in relation to both direct and indirect loss of sensitive habitat areas during grading, as well as the effects of the proposed residential community and its activities on protected sensitive habitat areas, were evaluated as part of EIR preparation (see Section 3.5, *Biological Resources*). The analysis contained in Section 3.5, *Biological Resources*, focuses on ensuring that sensitive habitats would be protected and that no net loss of wetlands would occur.
BR 1.13 Site Assessments. Require site assessments for developments that may adversely affect sensitive biological resources and ensure that individual projects incorporate mitigation measures, as necessary, to reduce impacts.	**Consistent**. The proposed project's effects on biological resources in relation to both direct and indirect loss of sensitive habitat areas during grading, as well as the effects of the proposed residential community and its activities on protected sensitive habitat areas, were evaluated as part of EIR preparation (see Section 3.5, *Biological Resources*). The analysis contained in Section 3.5, *Biological Resources*, focuses on ensuring that sensitive habitats would be protected and that no net loss of wetlands would occur.
W 1.1 Protection of Water Resources. Work with Orange County Public Works, private property owners, neighboring jurisdictions, and others as necessary to conserve undeveloped open space areas and natural drainage channels for the purpose of protecting water quality, groundwater recharges, and stormwater management in the City's watershed and waterbodies including Coyote Creek and La Mirada Creek.	**Consistent**. Storm runoff from the surrounding hillsides and from a portion of the Westridge community flows through the riparian corridor within the project site and collects in the lake adjacent to the existing golf course clubhouse. This riparian corridor, which supports a variety of riparian plant species, would be protected. In addition, the detention/water quality basin would be planted with native riparian and wetland vegetation designed to treat urban flows and attract wildlife.
W 1.5 New Development and Post-Development Stormwater Runoff. Require new development and post-development stormwater runoff to control sources of pollutants and improve and maintain urban runoff water quality through site design, stormwater treatment and protection measures, and best management practices (BMPs) consistent with the City's National Pollutant Discharge Elimination System (NPDES) Permit.	**Consistent**. The proposed project would comply with the City's NPDES requirements, which include the preparation of a SWPPP and a WQMP to address construction impacts (e.g., erosion), and delineate specific structural and non-structural BMPs to be undertaken as part of site development. Three detention and water quality treatment basins are included in the project design to treat surface runoff and reduce peak flows.
W 1.7 Landscaping. Encourage public and private landscaping in new and rehabilitated development projects to be designed to reduce water demand, detain runoff, decrease flooding, and recharge groundwater through activities such as the selection of plant material, soil preparation, and the installation of irrigation systems.	**Consistent**. As previously indicated, the proposed landscape plan incorporates drought-tolerant plantings designed to reduce water demand. In addition, the proposed project's drainage plan has been designed to minimize post-development runoff and detain runoff.
W 1.8 Pervious Surfaces. Encourage maximizing pervious surfaces within new or substantially renovated public, institutional, residential, commercial, and industrial development projects.	**Consistent**. Although the Specific Plan would increase the total amount of impervious surfaces within the project site in comparison to the existing golf course use (see Section 3.13, *Hydrology and Water Quality*), the proposed project would be consistent with this policy in that it proposes approximately 87 acres of parks and natural areas, encompassing more than half

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	of the project site, in addition to pervious surfaces on private lands (e.g., private parks, landscape areas such as yard areas and landscaping within multi-family and commercial uses
W 1.9 Percolation. Design landscaping and other open space areas in development projects to capture stormwater runoff and percolate into the groundwater basin, to the extent feasible.	**Consistent**. The Specific Plan proposes approximately 87 acres of parks and natural areas. Project geotechnical studies have determined that the project site is not conducive to percolation and groundwater recharge due to low infiltration rates and the presence of buried contaminated soils.
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.	**Consistent**. 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, and project-related air emissions would be mitigated to less-than-significant levels.
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.	**Consistent**. While the proposed project would increase emissions of air pollutants and GHG in comparison to the existing golf course, consistency with this policy would be achieved through implementation of substantial measures to reduce air pollutant and GHG emissions and promote energy-efficient building design, including the following: • Structures would be 20 percent more efficient than current (2017) Title 24 standards; • Electrical vehicle charging stations would be provided within the proposed commercial and multi-family residential development; • Single-family residences would be designed to accommodate the installation of solar panel systems, and such solar panel systems would be offered to initial buyers as an option; • 220-volt electrical wiring would be provided in garages suitable for installation of electrical vehicle chargers; • Solar panels would be installed on multi-family residential structures; • Commercial structures would be designed with the ability to install solar panels; • Outdoor electrical outlets would be provided on residential structures to facilitate use of electric landscape equipment; • Shading in commercial areas would be increased by 10 percent; • Heat gain in commercial and multi-family residential areas would be reduced by 50 percent; • Indoor potable water use would be reduced by 20 percent beyond the Energy Policy Act of 1992 fixture performance requirements; • Outdoor potable water use would be reduced by 50 percent from a mid-summer baseline average consumption for the uses proposed within the project site through irrigation efficiency, native plant selection, and the use of recycled water and/or captured rainwater;

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	• Overall, the proposed project would result in a substantial reduction in water consumption compared to the existing golf course, thereby reducing air pollutant and GHG emissions related to water delivery; • The project site is located adjacent to transit along Beach Boulevard; and • A system of pedestrian and bicycle trails connecting housing within the project site to parks and recreational uses.
AQ 2.3 Development-Infrastructure Concurrency. Manage growth by ensuring the timely provision of infrastructure to serve new development.	**Consistent**. Implementation of the provisions of the proposed Specific Plan would ensure the timely provision of infrastructure to serve proposed 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.	**Consistent.** The Rancho La Habra EIR includes substantial mitigation measures to reduce air pollutant emissions and to ensure that project-related GHG emissions per service population would be less than the proposed South Coast Air Quality Management District (SCAQMD) efficiency threshold of 4.8 metric tons of carbon dioxide equivalents ($MTCO_2e$) per capita per year. Additionally, the project will be required to implement all applicable measures from the La Habra Climate Action Plan, which would reduce air pollutant emissions and maintain consistency with this policy and citywide efforts to achieve GHG reduction targets.
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.	**Consistent**. Air quality impacts are evaluated in Section 3.8, *Air Quality*. As outlined in that section, all feasible mitigation measures would be implemented.
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 (NOX), and particulate matter (PM10 and PM2.5) through project design.	**Consistent**. Air quality impacts are evaluated in Section 3.8, *Air Quality*. As outlined in that section, all feasible mitigation measures would be implemented.
AQ 2.8 Emissions Reduction. Require development projects that exceed SCAQMD ROG and NOX operational thresholds to incorporate feasible measures through design and/or operational features that reduce emissions, where possible, to a less than significant level.	**Consistent**. Air quality impacts are evaluated in Section 3.8, *Air Quality*. As outlined in that section, all feasible mitigation measures would be implemented.
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.	**Consistent**. As previously noted, the proposed project would consume approximately 35 percent less water than the current golf course use and would include measures promoting the use of renewable energy.
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.	**Consistent**. As identified in Section 3.8, *Air Quality*, the project's PM_{10} emissions impacts would be mitigated to below a level of significance.

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SM 1.1 Protect Scenic Views. Protect the viewsheds of the La Habra Basin, West Coyote Hills, Puente Hills, and the San Gabriel Mountains from public parks, major transportation corridors, and public open spaces.	**Consistent**. The proposed project would not affect scenic vistas of the designated visual resources identified by the City of La Habra, including the La Habra Basin, West Coyote Hills, Puente Hills, and San Gabriel Mountains, as discussed in detail in Section 3.4, *Aesthetic Resources* (Section 3.4.5, Impact AES-1).
SM 1.2 Natural Topography. Preserve the scenic quality of La Habra's natural topography, hillsides, open space, and natural riverine areas.	**Consistent**. The project is designed in such a manner that it respects existing topography, and the hillsides separating the project site from the Westridge neighborhood to the south would be maintained. In addition, as discussed in Section 3.4, *Aesthetics*, the proposed project would not block any scenic viewsheds. While this policy speaks to preserving the visual qualities of La Habra's natural features, it should be noted that the proposed project would result in the loss of privately-owned open space within the Westridge Golf Club.
SM 1.4 Recreational Viewing Areas. Locate and design recreational areas, parks, and trails in consideration of significant visual and scenic resources and to protect viewsheds of adjoining areas.	**Consistent**. The proposed project would include a linear park located substantially below grade of existing homes but in a location that would provide views of important aesthetic resources. The design of the linear park includes benches and viewing areas that would enable future residents and visitors to enjoy distant views of the La Habra Basin, Puente Hills, and San Gabriel Mountains.
SM 1.5 Signage. Support building and site signage that is appropriate to the use and location and is not visually intrusive.	**Consistent**. The proposed Specific Plan includes design guidelines for signage and lighting that address size, materials, and related features to ensure that signage would not dominate the character of the area. Site-specific building and site signage would be reviewed for compliance with these design guidelines as part of the City's design review process to ensure compatible size and design.
SM 1.6 Lighting. Support practices that minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary including the design and siting of light fixtures.	**Consistent**. As discussed in Section 3.4, *Aesthetic Resources* (Section 3.4.5, Impact AES-4.1), implementation of the proposed Specific Plan would not create substantial new sources of nighttime lighting that would spill over onto sensitive uses (i.e., residences). The proposed Specific Plan includes design guidelines for project lighting. All proposed lighting would be reviewed as part of the City's design review process for compliance with these guidelines to ensure that lighting nighttime lighting is necessary for safety or as an important design feature, and the design of lighting standards is consistent with adjacent residential architecture. Thus, proposed lighting would not be misdirected, excessive, or unnecessary.
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.	**Consistent**. As discussed in Section 3.4, *Aesthetic Resources* (Section 3.4.5, Impact AES-4.1), implementation of the proposed Specific Plan would not create substantial new sources of nighttime lighting. The proposed Specific Plan includes design guidelines for project lighting. All proposed lighting would be reviewed as part of the City's design review process for compliance with these guidelines.

La Habra General Plan Policies	Project Consistency
SM 1.8 Glare. Support practices in new developments that avoid the creation of incompatible glare or reflection through development design features.	**Consistent**. As discussed in Section 3.4, *Aesthetic Resources* (Section 3.4.5, Impact AES-4.2), implementation of the proposed Specific Plan would not create substantial new sources of daytime glare.
Chapter 7, Community Safety	
NH 1.1 Safety Standards. Enforce state and local seismic and geologic safety laws, standards, and guidelines, including the California Building Code, for site design and construction of new and renovated structures.	**Consistent**. All construction and development within the project site would be required to comply with applicable provisions of the most recently adopted version of the California Building Code (including all related mechanical, electrical, and plumbing codes).
NH 1.2 Geotechnical Investigations. Require geotechnical investigations prior to approval of development in areas where the potential for geologic or seismic hazards exists addressing, as appropriate, groundshaking, landslides, liquefaction, expansive soils, subsidence, and erosion and incorporate recommended mitigation measures to reduce or avoid the identified hazards.	**Consistent**. A Geotechnical Report has been completed to analyze geotechnical conditions, including potential for seismic hazards such as ground shaking, landslides, liquefaction, expansive soils, subsidence, and erosion. The mitigation measures recommended in the Geotechnical Report have been incorporated into this EIR and would be implemented to ensure that geologic and/or seismic impacts are reduced to a less-than-significant level.
NH 1.4 Reduce and Control Erosion. Require that development projects involving grading in hillside areas reduce and control erosion potential by utilizing rapid developing planting techniques, slope terracing, replacement with cohesive soils not subject to erosion, and/or the construction of slope drainage improvements.	**Consistent**. The Geotechnical Report prepared for the proposed project includes recommendations for slope stability and erosion control that have been incorporated into the mitigation measures set forth in this EIR. Furthermore, the proposed project is required to implement an extensive erosion control plan, including prescribing specific BMPs to reduce potential erosion.
NH 2.1 Urban/Wildland Interface. Locate, design, and construct development within or adjacent to areas subject to high wildland fire risks, such as La Habra's hillsides, to standards that reduce exposure and potential impacts.	**Consistent**. Proposed development is adjacent to a Very High Fire Hazard Severity Zone; however, a fire management plan (see Figure 3.12-2 in Section 3.12, *Hazards and Hazardous Materials*) would be implemented as approved by the Los Angeles County Fire Department. The fuel modification component of the fire management plan restricts certain species and densities of vegetation in more fire-prone locations of the project site.
NH 2.2 Open Space Fire Suppression Access. Ensure existing access points to La Habra's open space areas are maintained for fire suppression.	**Consistent**. Adequate access points to the project site, as required by the Los Angeles County Fire Department, would be maintained at all times.
NH 2.3 Fuel Modification and Vegetation Management Review. Continue to support the City's fire service provider's review of new development to assure it complies with fuel modification requirements, creation of defensible space, and incorporates appropriate plantings and proper vegetation management, as applicable.	**Consistent**. The proposed project has been reviewed by the Los Angeles County Fire Department, which has provided conditions of approval that would be implemented as part of project development. The fuel modification component of the fire management plan restricts certain species and densities of vegetation in more fire-prone locations of the project site.
NH 3.1 Protection of People and Property. Adopt, maintain, and implement applicable federal, state, and local laws, standards, and guidelines to protect people and property from the risks of flooding.	**Consistent**. The proposed project has been designed to detain storm flows such that discharge in the post-development condition is equal to or less than the pre-development condition, thereby minimizing the risk of downstream flooding.

La Habra General Plan Policies	Project Consistency
NH 3.5 City Storm Drains. Design and construct storm drains per Orange County Public Works' standards and ensure that City-owned storm drains are operated and maintained to allow for maximum capacity of the system.	**Consistent**. All storm drainage facilities would be constructed in accordance with applicable County and City standards.
EP 1.5 Emergency Site Access. Require that roads, driveways, and other clearances around structures are located and designed to ensure emergency access.	**Consistent**. All roadways, driveways, and buildings would be designed so as to provide adequate clearances to ensure emergency access.
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 Figure 7-2 and Table 7-1 (Land Use Compatibility with Community Noise Environments), unless measures can be implemented to reduce noise to acceptable levels.	**Consistent**. As discussed in relation to 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's land use compatibility noise standard. Proposed residential uses would not be located within areas exceeding applicable noise standards expect where noise is mitigated to acceptable levels.
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).	**Consistent**. Mitigation measures have been prescribed to ensure that both interior and exterior noise levels in residential areas would comply with the City's land use compatibility guidelines and residential noise standards.
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.	**Consistent**. A noise study prepared for the proposed project provides the basis for the analysis and determinations made in Section 3.11, *Noise and Vibratio*n, of this EIR. Additional noise analyses will be required to confirm compliance with the mitigation measures set forth in Section 3.11, *Noise and Vibration*.
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.	**Consistent**. A noise study was prepared for the proposed project to define locations of needed sound walls and other building design treatments to achieve City exterior and interior noise standards.
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.	**Consistent**. Several design features have been incorporated into the Specific Plan to protect future residents from noise levels in excess of City standards. These design features include landscaped building setbacks to serve as a buffer between the noise source and residential uses, orientation of buildings to shield noise sources from outdoor living areas, and use of walls as noise barriers.

La Habra General Plan Policies	Project Consistency
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.	**Consistent**. The noise analysis prepared for the proposed project included analysis of noise between proposed residential uses and adjacent commercial 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.	**Consistent**. A vibration analysis was undertaken for the proposed project. As discussed in Impact NOI-2 in Section 3.11, *Noise and Vibration*, 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.
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.	**Consistent**. Construction noise was evaluated as part of the project noise study. Based on this analysis, all feasible mitigation measures as specified in Mitigation Measures NOI-4a through NOI-4f in Section 3.11, *Noise and Vibration*, would be implemented.
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.	**Consistent**. As discussed in Impact NOI-1.2 in Section 3.11, *Noise and Vibration*, implementation of Mitigation Measure NOI-1.2 would require implementation of adequate construction techniques to ensure that the City's interior noise standards would be achieved.
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.	**Consistent**. Any proposed noise-generating uses within the Specific Plan area would be required to comply with City noise standards.
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.	**Consistent**. Park hours would be limited to ensure compatibility with adjacent residential uses.
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.	**Consistent**. Project construction would be limited to the hours between 7:00 a.m. and 8:00 p.m. on weekdays and Saturdays.
HW 1.3 Hazardous Material Disclosure. Require that essential information is provided to emergency service personnel of the known use and dangers of hazardous materials present in La Habra, in accordance with La Habra's Hazardous Material Disclosure Ordinance.	**Consistent**. All new uses within the project site would be required to comply with the City of La Habra's Hazardous Material Disclosure Ordinance.
HW 1.4 Assessment of Known Areas of Contamination. Require new development in known contamination areas to perform comprehensive soil and groundwater contamination assessments, in accordance with applicable regulations, and if contamination exceeds regulatory levels, require new development to undertake	**Consistent**. A Soils Management Plan for handling of site soils containing petroleum hydrocarbons has been reviewed and approved by the Orange County Health Care Agency. Management of contaminated soils on-site is also addressed in Section 3.12, *Hazards and Hazardous Materials.*

La Habra General Plan Policies	Project Consistency
remediation procedures consistent with county, regional, and state regulations prior to any site disturbance or development.	
HW 1.5 Remediation of Known Sites. Require that businesses and property owners of known hazardous materials contamination and waste sites develop and implement a remediation plan to investigate, facilitate, and manage the cleanup in coordination and compliance with Orange County, state, and/or appropriate federal agency requirements including the California Department of Toxic Substances Control (DTSC).	**Consistent**. A Soils Management Plan for handling of site soils containing petroleum hydrocarbons has been reviewed and approved by the Orange County Health Care Agency. Management of contaminated soils on-site is also addressed in Section 3.12, *Hazards and Hazardous Materials.*
HW 1.6 Hazardous Materials Business Plan. Require that owners and/or operators of facilities that handle hazardous materials or a mixture containing hazardous materials having a quantity equal to or greater than 55 gallons for liquid, 500 pounds for solids, or 200 cubic feet of gas complete a Hazardous Materials Business Plan (HMBP) to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies pursuant to the California Hazardous Materials Release Response Plans and Inventory Law (Business Plan Act).	**Consistent**. The residential and small-scale commercial uses proposed for the project site would not typically meet the criteria for a business plan set forth in Policy HW 1.6.
HW 1.7 Project Review. Review all proposed development projects that manufacture, use, or transport hazardous materials and waste in coordination with appropriate state and federal agencies.	**Consistent**. Analysis of the potential for routine use and transportation of hazardous materials and waste, as well as analysis of potential risk of upset and accidents related to hazardous materials, is provided in Section 3.12, *Hazards and Hazardous Materials*.
Housing Element	
Policy A-4: Variety of Housing. Promote a variety of housing types at scales, values, and locations carefully selected to provide housing opportunities for all economic segments of the population, while emphasizing the protection and conservation of existing single family neighborhoods.	**Consistent**. The project provides both single-family and multi-family housing types, with different size units and price points to attract a variety of homebuyers. In addition, the proposed project will provide funding for lower income housing programs in the City.

Significance Conclusion for Impact LUP-2.2

As noted in **Table 3.2-2**, the proposed Specific Plan would be inconsistent with certain policies of the La Habra General Plan resulting from an increase in the allowable buildout of the General Plan. This increase in General Plan buildout is reflected in significant physical effects in relation to aesthetics, air quality, GHG, and traffic. Impacts related to this increase in General Plan buildout are evaluated in Section 3.4, *Aesthetics and Visual Resources*, Section 3.7, *Traffic and Circulation*, Section 3.8, *Air Quality*, and Section 3.9, *Greenhouse Gas Emissions*, along with all feasible mitigation measures.

However, approval of the proposed General Plan Amendment would include the proposed project in the General Plan's buildout, thereby achieving consistency between the proposed project and the General Plan. Therefore, *no impact* would result in relation to General Plan consistency.

Mitigation Measures

Because no significant impacts would result, no mitigation measures are required.

Threshold LUP-2: Conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-2.3: Although the proposed project would increase the citywide GHG emissions identified in the City's Climate Action Plan (CAP) by 5,746.61 $MTCO_2e$ annually, the proposed project would not impede achievement of the CAP's GHG emissions reduction goals, which are based on AB 32 targets. Because (1) the proposed project would implement all applicable GHG reduction measures set forth in the Climate Action Plan and (2) emissions per service population would be consistent with AB 32 goals as discussed in Section 3.9, *Greenhouse Gas Emissions*, the proposed project would be consistent with the adopted City's Climate Action Plan. Impacts would therefore be *less than significant*.

Methodology

A significant impact would occur if the proposed Specific Plan would fail to implement applicable GHG reduction measures set forth in the City's CAP.

In addition to the threshold identified above, a significant impact would occur if the proposed Specific Plan would impede achievement of the Year 2020 GHG reduction goals set forth in the City's CAP consistent with the provisions of AB 32. The proposed project would impede achievement of the CAP's Year 2020 GHG reduction goals if project-related emissions per service population[3] would exceed the SCAQMD's proposed efficiency threshold of 4.8 $MTCO_2e$ per service population per year (SCAQMD 2010).

[3] "Service population" equals the total number of residents and employees within a development.

Impact Assessment

As discussed in Section 3.9, *Greenhouse Gas Emissions* (Impact GHG-2), the proposed project would implement all applicable GHG reduction measures set forth in the City's CAP.

Although the proposed project would increase the total amount of citywide Year 2020 GHG emissions as reported in the CAP by 5,746.61 $MTCO_2e$ annually, the project would not impede the City's achievement of the GHG emissions reduction targets set forth in AB 32. As discussed in Impact GHG-2, per service population GHG emissions from the proposed project would be 4.21 $MTCO_2e$ per year (4.08 $MTCO_2e$ if Planning Area 5 were to be developed with 46 residential units rather than 20,000 s.f. of commercial use). Because these per service population GHG emissions are less than SCAQMD's recommended threshold of 4.8 $MTCO_2e$, the proposed project would not impede achieving citywide GHG emissions reductions to a sufficient degree as to meet AB 32 GHG emissions reduction targets.

Significance Conclusion for Impact LUP-3

Because all applicable GHG reduction programs set forth in the City's CAP will be implemented, and the proposed project would not impede achievement of citywide GHG emissions reduction targets set forth in AB 32, impacts would be *less than significant*.

Threshold LUP-3:	**Conflict with any applicable habitat conservation plan or natural community conservation plan.**
Impact LUP-3:	**The Specific Plan area is not located within a "sub-regional focus area" that would be protected by the Central and Coastal Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP). Therefore, *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 Central and Coastal Orange County 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 coastal sage scrub 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.

Significance Conclusion for Impact LUP-3

Because the Specific Plan area is not located within a "sub-regional focus area" that would be protected by the NCCP/HCP, the proposed project would be consistent with the NCCP/HCP, and no impact would result.

3.2.6 REFERENCES – LAND USE

California Department of Fish and Wildlife (CDFW), *Natural Community Conservation Plan & Habitat Conservation Plan County of Orange, Central/Coastal Subregions*, July 17, 1996. Accessed at: https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans/Orange-Coastal.

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.

City of La Habra, *City of La Habra General Plan Housing Element 2014-2021*, adopted January 21, 2014. Accessed June 2, 2017: http://www.lahabracity.com/DocumentCenter/Home/View/194.

SCAQMD Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15, September 28, 2010 http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf

Southern California Association of Governments (SCAG), *SCAG Proposed Final RTP/SCS*, 2016. Accessed June 2, 2017: http://scagrtpscs.net/Documents/2016/proposed/pf2016RTPSCS.pdf.

3.3 POPULATION AND HOUSING

3.3.1 INTRODUCTION

a. Overview

This section describes the existing and projected population, housing, and employment characteristics of the project site, and examines the potential for the proposed Rancho La Habra Specific Plan to (1) induce substantial unplanned population growth either directly or indirectly, or (2) displace existing housing or people.

Although evaluation of population, housing, and employment typically involves economic and social issues, rather than physical environmental issues, population, housing, and employment growth are often precursors to physical environmental impacts. Because growth in population, housing, and employment can be perceived as either positive or negative, depending on individual and collective values and viewpoints, the analysis set forth in this section reports projected changes in population, housing, and employment relative to adopted regional projections.

b. Definitions

- **Affordable Housing**, under state statutes, refers to housing that costs no more than 30 percent of gross household income. Housing costs include rent or mortgage payments, utilities, taxes, insurance, homeowner association fees, and other related costs.
- **California Department of Housing and Community Development (HCD)** is the state agency responsible for administering state-sponsored housing programs and for reviewing city and county housing elements to determine compliance with state housing law.
- **Household** refers to an occupied dwelling unit, including all persons living in the dwelling unit, whether or not they are related. Both a single person living in an apartment and a family living in a house are considered households.
- **Housing Unit or Dwelling Unit** is a room or group of rooms designed to be occupied by one or more individuals living separately from others, containing private toilet and kitchen facilities, and having direct access to the outside or to a public hallway.
- **Jobs-Housing Ratio** is a general measure of the "balance" between the number of jobs and number of housing units within a geographic area, without regard to economic constraints or individual preferences. The ratio expresses quantitatively the relationship between the number of people working and number of dwelling units housing the people living in a given area.
- **Regional Housing Needs Assessment (RHNA)** is a state-mandated process for determining how many housing units, including affordable units, each community must

plan to accommodate to provide housing for all economic segments of the community. The Southern California Association of Governments (SCAG) is responsible for working with HCD to determine the amount of housing needed within the region. SCAG allocates regional total housing needs among city and county jurisdictions within the Southern California area. Allocations are based on factors that consider existing employment, employment growth, household growth, and the availability of transit; need is determined for households in all income categories from very low to above moderate. Specific allocations are defined for very-low-, low-, moderate-, and above-moderate-income groups, which are defined as follows:

  - **Very Low Income**: Household income less than 50 percent of the county median income.
  - **Low Income**: Household income between 50.1 and 80 percent of the county median income.
  - **Moderate Income**: Household income between 80.1 and 120 percent of the County median income.
  - **Above Moderate Income**: Household income greater than 120 percent of the County median income.

- **Southern California Association of Governments (SCAG)** is the regional planning agency for the six-county Southern California area. Among other responsibilities for transportation and environmental quality planning, SCAG is responsible for preparing the RHNA and the regional Sustainable Communities Strategy.

3.3.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of state, regional, and local plans, policies, and regulations, which are described below.

a. State Plans, Policies, and Regulations

Senate Bill 375

Adopted into law in 2008, Senate Bill (SB) 375[1] links regional transportation and housing planning with state greenhouse reduction goals. The law requires the California Air Resources Board to establish, for each region of the state, greenhouse gas (GHG) reduction targets for the automobile and light truck sector, and requires the regional transportation plan for each region to include a Sustainable Communities Strategy (SCS) to achieve its GHG reduction target.

[1] SB 375 amended California Government Code Sections 65080, 654000, 65583, 65584.01, 65584.02, 65584.04, 65587, and 65588; added Government Code Sections 14522.1, 14522.2, and 65080.01; amended Public Resources Code (PRC) Section 21063; and added PRC Section 21159.28 and Chapter 4.2 (commencing with Section 21155) to Division 13 of the PRC relating to environmental quality.

The law assigns responsibility for developing the SCS for Southern California to SCAG. The SCS must identify the general location of uses, residential densities, and building intensities in the region and identify areas within the region that will house all of the region's population, including all economic segments of the population, taking into account migration into the region and population growth, over the next 8 and 25 years. SB 375 requires regional SCSs to forecast development patterns that, when integrated with the region's transportation system, achieve statewide GHG reduction targets.

State of California Housing Element Requirements

California Housing Element Law (Government Code Section 65580, et seq.) requires cities and counties to include, as part of their general plans, a housing element to address housing conditions and needs in the community. The housing element law requires HCD, in consultation with each regional council of governments, to determine each region's existing and projected housing need. The regional council of governments in turn develops a regional housing allocation plan that distributes the need for new housing for all economic segments of the region to the cities and counties within the region. Allocations are based on factors that consider existing employment, employment growth, household growth, and the availability of transit; need is determined for households in all income categories from very low to above moderate (SCAG, 2012). Cities and counties are required to plan for their allocated number of housing units within the housing elements of their general plans. Housing elements are required to be updated every eight years, following timetables adopted by the state. Each agency's housing element must identify and analyze existing and projected housing needs and "make adequate provision for the existing and projected needs of all economic segments of the community," among other requirements.

b. Regional Plans, Policies, and Regulations

Southern California Association of Governments

SCAG is the federally designated "Metropolitan Planning Organization" for the six-county Southern California region, which consists of Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial counties. SCAG is responsible for developing regional plans for transportation, growth management, and hazardous waste management, as well as for developing a regional growth forecast that is the foundation for these plans and for the regional air quality plan developed by the South Coast Air Quality Management District (SCAQMD). SCAG prepares several plans to address regional growth, including the Regional Comprehensive Plan and Guide, the Southern California Compass Growth Vision, the Regional Housing Needs Assessment, the Regional Transportation Plan (RTP), the Regional Transportation Implementation Plan (RTIP), and annual State of the Region reports to measure progress toward achieving regional planning goals and objectives.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that was adopted by SCAG on April 7, 2016 is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals by focusing new housing and employment near existing transit, so that the region can grow sustainably. The 2016 RTP/SCS Goals that are relevant to the proposed Specific Plan include the following:

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.

The 2016 RTP/SCS Land Use Policies that are relevant to the proposed Specific Plan include the following:

- **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 vehicle miles traveled to employment centers.

As part of a triennial process of updating the federally mandated RTP, SCAG is responsible for producing socioeconomic forecasts and developing, refining, and maintaining macro and small-scale forecasting models. These forecasts are developed in close consultation with a Technical Advisory Committee comprised of local government and other public agencies, the Department of Finance (DOF), County Transportation Commissions, and other major stakeholders. The forecasts are developed in five-year increments. The current SCAG projections are provided through the year 2040. The forecast is relied upon for preparation of the RTP, Air Quality Management Plan, RTIP, and RHNA. Consistency with the growth forecast, at the sub-regional level, is one criterion that SCAG uses in exercising its federal mandate to review "regionally significant" development projects for conformity with regional plans. SCAG's 2016 forecast estimates an increase in La Habra's population from 61,100 with 19,000 households in 2012 to 68,500 with 21,700 households in 2040. These household forecasts represent a growth of approximately 12.1 percent in population and 14.2 percent in households, indicating a shrinking overall household size.

Regional Housing Needs Assessment

State law requires that jurisdictions provide their fair share of regional housing needs. HCD is mandated to determine the state-wide housing need. In cooperation with HCD, local governments and councils of governments (COGs) are charged with determining existing and projected housing need as a share of the state-wide housing need of their city or region.

The RHNA is an assessment process performed periodically as part of housing element and general plan updates at the local level. The RHNA quantifies the housing need by income group[2] within each jurisdiction during specific planning periods. The RHNA identifies the existing and future housing need among income categories, for each city and county in the region. Each city and county must ensure that their current zoning regulations and inventory of

[2] "Income groups" are defined based on household income in relation to the county's median income, and include very low income (less than 50 percent of county median income), low income (50.1 to 80 percent of county median income), moderate income (80.1 to 120 percent of county median income), and above moderate income (more than 120 percent of county median income).

land available for the development of housing allow for those units to be built. The RHNA does not stipulate that the units be built, only that the land be available and the appropriate zoning regulations are in place. The fifth cycle RHNA Allocation Plan, which covers the planning period from October 2014 to October 2021, was adopted by the SCAG Regional Council on October 4, 2012. The adopted fifth cycle RHNA for La Habra indicates the following housing needs for the 2014-2021 period:

- Total Household Growth: 135 dwelling units
- New Housing Construction Needed: 4 dwelling units
    - Very Low Income: 1 dwelling unit
    - Low Income: 1 dwelling unit
    - Moderate Income: 1 dwelling unit
    - Above Moderate Income: 1 dwelling unit

In addition to the City's 2014-2021 RHNA allocation, the City was required to "roll over" 76 lower income units from the prior 2008-2014 Housing Element planning period, because the City did not amend its General Plan and Zoning Ordinance to increase the maximum residential density to a minimum of 30 dwelling units per acre in the R-4 zone and the La Habra Boulevard Specific Plan area in order to accommodate future affordable housing within the necessary timeframe.

c. Local Plans, Policies, and Regulations

La Habra General Plan, Chapter 2, Community Development

The City of La Habra's (City) General Plan anticipates and plans for future growth in the City as expressed in Policy LU 1.2:

> **LU 1.2 Development Capacity**. Accommodate the type and density of land uses depicted on the Land Use Diagram to a cumulative (existing and new) maximum of 24,850 housing units and 12,525,000 square feet of commercial and industrial development citywide. These represent increases of 4,213 units and 4.1 million square feet respectively above January 2011 existing development.

La Habra General Plan, Chapter 3, Mobility/Circulation

The City's General Plan also acknowledges the importance of the regional SCS in Policy TDM 1.1:

> **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.

La Habra General Plan Housing Element

The current La Habra General Plan Housing Element was adopted on January 28, 2014, and was certified by HCD as being in compliance with applicable requirements on February 5, 2014. The Housing Element sets forth goals, policies, and programs to address the City's existing and projected need for housing in the community in terms of affordability, availability, adequacy, and accessibility, pursuant to state law. The goal and supporting policies in the Housing Element that are relevant to the proposed Specific Plan include the following:

GOAL STATEMENT A[3]: NEW HOUSING

Adequate housing development by the private sector utilizing existing community facilities and structures; minimizing environmental hazards and incompatible land uses, and enhancing the quality of life in residential neighborhoods to meet the economic, social, health, and transportation needs of all citizens.

Policy A-1: Support State Housing Policy. Support State Housing policy by emphasizing, "…the use of those public powers which impact on housing, including, but not limited to land use controls, development controls, and regulatory concessions and incentives."

Policy A-2: Integrated Strategy for Development. Continue to implement an integrated strategy for the development of new housing, commercial activities, provisions of public facilities, and creation of employment opportunities.

Policy A-3: Support Private Sector Housing Production. Facilitate the efforts of the private sector in the production of new housing for all economic segments of the community.

Policy A-4: Variety of Housing. Promote a variety of housing types at scales, values, and locations carefully selected to provide housing opportunities for all economic segments of the population, while emphasizing the protection and conservation of existing single family neighborhoods.

[3] Goal and policy numbering reflects the numbering included in the Housing Element as it was originally adopted and reviewed by the California Department of Housing and Community Development. Numbering of goals and policies was subsequently revised when the Housing element was incorporated into the City's comprehensive General Plan.

Policy A-5: Market and Non-Market Housing Production Needs. Achieve, to the maximum extent feasible, the production of new housing in sufficient quantity to meet both market-rate and non-market rate housing needs of the community.

Policy A-6: Land Use and Housing Components for Jobs/Housing Balance. Implement, through the Community Development Element, a comprehensive set of strategies to produce job/housing balance.

Policy A-7: Inclusionary Housing. Explore the development of an inclusionary housing ordinance.

Policy A-8: Mixed Use Development. Support and encourage the development of affordable residential housing as part of the City's mixed-use land use designations.

As required by the California Government Code, Housing Elements must contain an "inventory of land suitable for residential development, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites." To that end, the La Habra 2014-2021 Housing Element compiles analysis from the City's General Plan 2035, the City's 2005-2010 Consolidated Plan, the state DOF estimates, SCAG's 2012 RHNA, and the 2010 Census. The City inventoried vacant land and potential redevelopment opportunities to meet the RHNA housing requirement.

The adopted Housing Element states that the City's housing stock "will primarily grow as a result of new infill development on residentially zoned vacant land and through the densification of residential land uses as a result of the 2035 General Plan residential land use designation appropriations." According to the Housing Element, the City's land inventory could accommodate a total of 356 new housing units on currently vacant parcels within the City. The vacant land inventory therefore could accommodate the City's 2014-2021 RHNA of 4 units in addition to the 76 lower-income units that were required to be rolled over from the previous Housing Element planning period, with a surplus capacity of 276 units. The Housing Element therefore demonstrates an adequate inventory of land for the production of housing for all economic segments of the community through 2021.

Under Government Code Section 65583(b), the City is required to establish quantified objectives for future housing growth. Government Code Section 65583(b) states: "The quantified objectives shall establish the maximum number of housing units by income category, including extremely low income, that can be constructed, rehabilitated, and conserved over a five-year time period." Housing Element Table 39 shows the quantified objectives for construction of new housing between 2014 and 2021 to be 395 dwelling units as follows:

- Extremely Low Income: 20 dwelling units
- Very Low Income: 40 dwelling units
- Low Income: 100 dwelling units
- Moderate Income: 64 dwelling units
- Above Moderate Income: 171 dwelling units

According to the Housing Element, the new housing construction objective of 395 dwelling units "refers to the number of units that potentially may be constructed over the projection period given La Habra's land resources, constraints which cannot be mitigated or removed, and proposed programs. Such housing could be constructed on existing vacant sites or on land currently developed with other uses. The current construction of new housing on the site of the former La Habra City Hall provides an example of such development. The City's new housing construction objective is estimated based on an analysis of actual construction figures between 2008 and 2012 in La Habra and the City's SCAG regional housing needs allocation. In addition, the City's estimate of new housing construction assumes the housing market will improve modestly and result in some new housing growth tied to implementation of the 2035 General Plan land use designations and economic development strategies."

3.3.3 ENVIRONMENTAL SETTING

a. Regional and Local Population and Housing, 2015

As indicated in **Table 3.3-1**, according to 2016 DOF estimates, Orange County had a population of 3,152,376 in 2015, increasing by 142,144 people (4.7 percent) from 2010. Housing in the County included 1,069,456 dwelling units in 2015, representing an increase of 23,338 units (2.2 percent) in the five years between 2010 and 2015.

Table 3.3-1
Orange County and City of La Habra Population and Housing Growth Trends, 2010 and 2015

	2010	2015	Change (2010-2015)	% Change (2010 - 2015)
County of Orange				
Population	3,010,232	3,152,376	142,144	4.72%
Housing	1,046,118	1,069,456	23,338	2.23%
City of La Habra				
Population	60,223	61,905	1,682	2.79%
Housing	19,918	20,066	148	0.74%

Source: California Department of Finance, E-5 Population and Housing Estimates 2015, May 2015.

In comparison, La Habra had a population of 61,905 in 2015, which accounts for 2.1 percent of the total County population. From 2010 to 2015, the City's population increased by 1,682 (2.8 percent). Housing in the City included 20,066 dwelling units in 2015, representing an increase of 148 units (0.7 percent) in the five years between 2010 and 2015.

As indicated in **Table 3.3-2**, the total housing stock in the City of La Habra in 2015 (20,066 dwelling units) consisted of a mix of single-family and multi-family units, along with mobile homes.

Table 3.3-2
City of La Habra Housing Stock, 2010 and 2015

	2010		2015		Change (2010-2015)
	Number	Percent	Number	Percent	
Single-Family Detached	10,500	52.7	10,667	53.16	167
Single-Family Attached	1,509	7.58	1,509	7.75	0
Multi-Family (2-4 Units)	1,553	7.80	1,553	7.74	0
Multi-Family (5+ Units)	5,467	27.45	5,447	27.14	-20
Mobile Homes	889	4.46	891	4.44	2
Total	**19,918**		**20,066**		**148**

Note: Due to rounding, numbers might not add to totals.
Source: California Department of Finance, E-5 Population and Housing Estimates 2015, May 2015.

Vacancy rates and affordability of the housing stock are also key elements in the balance between supply and demand in the housing market. High vacancy rates usually indicate low demand and/or high prices in the housing market or significant mismatches between the desired and available types of housing. Conversely, low vacancy rates usually indicate high demand and/or low prices in the housing market. Vacancy rates that indicate a "market balance" (i.e., a reasonable level of vacancy to avoid local housing shortages, and appropriate price competition and consumer choice) generally range from 1 to 3 percent for single-family units and from 3 to 5 percent for multi-family units. The vacancy rate in 2015 in Orange County was 4.9 percent. The City of La Habra's vacancy rate was similar to the County's at 4.7 percent, which generally indicates that both areas have a balanced housing market in terms of demand and supply.

b. Regional and Local Population and Housing Projections

SCAG produces socioeconomic projections for Southern California, which are used to develop planning documents, such as the RTP/SCS, Air Quality Management Plan, and Regional Housing Plan. As shown in **Table 3.3-3,** SCAG projects that Orange County's population will increase by 12.66 percent and the number of households will increase by 13.74 percent between

2012 and 2040. The City of La Habra's population is projected to increase at a similar rate. The City's population is anticipated to increase by 12.11 percent and the number of households by 14.21 percent. As shown in **Table 3.3-3**, SCAG projects population and housing growth in both Orange County and La Habra to be substantially less than for the Southern California region as a whole.

Table 3.3-3
Regional and Local Growth Projections

	2012	2040	Change (2012-2040)	% Change (2012– 2040)
Six-County SCAG Region				
Population	18,322,000	22,138,000	3,816,000	20.83%
Households	5,885,000	7,412,000	1,527,000	25.95%
Employment	7,440,000	9,872,000	2,432,000	32.69%
Employment to Households Ratio	1.26	1.33		--
County of Orange				
Population	3,072,000	3,461,000	389,000	12.66%
Households	999,000	1,135,000	136,000	13.74%
Employment	1,526,000	1,730,000	204,000	13.63%
Employment to Households Ratio	1.54	1.52		--
City of La Habra				
Population	61,100	68,500	7,400	12.11%
Households	19,000	21,700	2,700	14.21%
Employment	17,300	19,900	2,600	15.03%
Employment to Households Ratio	0.91	0.92		--

Source: SCAG 2016 Draft Growth Forecast by Jurisdiction.

SCAG's 2016 Employment Forecasts indicate a similar trend. Countywide employment is anticipated to increase by 13.61 percent between 2012 and 2040, while La Habra's employment base is anticipated to increase by 15.03 percent. Employment within the Southern California region as a whole is projected to increase by 32.69 percent over the same time period.

3.3.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of population and housing impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold POP-1 Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure); or

Threshold POP-2 Displace substantial numbers of housing units or people, necessitating the construction of replacement housing elsewhere.

3.3.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold POP-1: Induce substantial population growth.

Impact POP-1: Implementation of the proposed Rancho La Habra Specific Plan would generate population growth as the direct result of the housing proposed by the Specific Plan. While the proposed project would not necessarily increase the City's projected growth rate through 2040, it would substantially increase La Habra's inventory of land for the development of housing, and therefore result in substantial population growth. Such population growth would exceed the growth projections used for preparation of the current regional Air Quality Management Plan, would therefore be inconsistent with that plan, and a significant impact would result. This increased population growth would also result in significant and unavoidable physical environmental effects in relation to aesthetics and visual resources, traffic and circulation, and greenhouse gas emissions. The resulting population and housing impact would therefore be *significant and unavoidable*.

Methodology

CEQA Guidelines Section 15064(e) states that a social or economic change generally is not considered a significant effect on the environment unless the changes can be directly linked to a physical adverse change. CEQA Guidelines Appendix G nevertheless indicates that a project would have a significant effect if it would induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). As a result, the analysis of impacts in relation to Threshold POP-1 focuses on population growth itself, rather than on the physical manifestations of population and employment growth, which are analyzed throughout this EIR.

Population impacts are based on an analysis of the number of residents anticipated at buildout of the proposed Specific Plan. The scale of population at buildout is then compared with official population growth forecasts for the City of La Habra. Population growth is considered in the context of local (La Habra General Plan) and regional (RTP/SCS, AQMP) plans that include or

are based on population projections. If the proposed project would exceed applicable growth projections, the resulting growth would be considered "substantial," and a significant impact would result.

Impact Assessment

Direct Impacts

The Rancho La Habra Specific Plan proposes the development of 402 new dwelling units, which would result in a population increase of 1,206 persons based on the City's current household size of 3.0 persons per dwelling unit. If Planning Area 5 is developed with 46 multi-family dwelling units rather than for commercial use, the Rancho La Habra development would contain 448 dwelling units with an estimated population of 1,344.

SCAG estimates that, by 2040, La Habra would have a total population of 68,500, representing an increase of 7,400 residents over the City's estimated 2015 population of 61,100. The 1,206 people who would reside within the proposed Specific Plan at buildout (1,344 if Planning Area 5 were developed for residential use) are equivalent to 16.3 percent of the City's projected population increase (18.1 percent if Planning Area 5 is developed for residential use).

SCAG also estimates that, by 2040, La Habra would have a total of 21,700 households, representing an increase of 2,700 households from 2012. Assuming the City's 2015 vacancy rate remains at 4.7 percent, this projected increase in households corresponds to an increase of approximately 2,827 dwelling units. The 402 dwelling units proposed in the Rancho La Habra Specific Plan (448 dwelling units if Planning Area 5 were developed for residential use) represents 14.2 percent of this projected growth in needed housing (15.8 percent if Planning Area 5 is developed for residential, rather than commercial use).

The proposed project would exceed the growth intensities allowed within the current "Open Space- Parks/Flood Channels" General Plan land use designation and result in a net increase in the City's overall development capacity. La Habra General Plan Policy LU 1.2 notes that the General Plan land use diagram provides for development of an increase of 4,213 units above January 2011 existing development. The proposed Rancho La Habra Specific Plan would increase this development capacity to 4,615 new dwelling units (4,661 dwelling units if Planning Area 5 were developed for residential use).

Indirect Impacts

Water, sewer, drainage, and roadway infrastructure proposed for the Rancho La Habra Specific Plan would be sized to serve only project site development. Development of the proposed Specific Plan would not remove any impediments to development of other properties, and would not indirectly induce substantial population increases.

Construction of the Specific Plan development would include a need for construction labor. Due to the employment patterns of construction workers in Southern California, and the market for construction labor, construction workers are not likely to relocate their households as a consequence of the job opportunities presented by the project. The construction industry differs from most other industry sectors. There is no regular place of work. Construction workers commute to job sites that change many times in the course of a year. These often-lengthy daily commutes are made possible by the off-peak starting and ending times of the typical construction work day, which starts and ends earlier than a typical 8 am – 5 pm work day.

It is reasonable to assume that project-related construction workers (1) would be drawn from the existing labor force in the surrounding area, and (2) because a typical construction worker would be employed at several different construction sites during any given year, would not relocate their households' places of residence as a consequence of working at the project site.

Significance Conclusion for Impact POP-1

As noted above, the adopted La Habra General Plan provides for an increase of 4,213 units above January 2011 existing development at buildout. By comparison, SCAG projections set forth in the regional RTP/SCS indicate an increase of 2,700 households from 2012 to 2040, which would represent an increase of approximately 2,827 dwelling units assuming the City's 2015 vacancy rate remains at 4.7 percent. The City's adopted Housing Element indicates that La Habra's vacant land inventory for the development of housing would accommodate 356 new dwelling units. Thus, the General Plan anticipated that future housing development would consist of "new infill development on residentially zoned vacant land and through the densification of residential land uses."

The proposed project would increase the City's overall development capacity and provide for substantial growth beyond the General Plan's anticipated buildout. As noted in Section 3.8, *Air Quality*, this increase in overall development capacity would be above the growth projections used in preparation of the current South Coast Air Quality Management Plan (AQMP).

While the proposed project would not induce substantial growth beyond the project site, the direct population growth proposed by the Rancho La Habra Specific Plan would exceed the growth projections used for preparation of the current regional AQMP. Therefore, the proposed Specific Plan would be inconsistent with the AQMP, and a significant impact would result. This increased population growth would also result in significant and unavoidable physical environmental effects in relation to aesthetics and visual resources, traffic and circulation, and greenhouse gas emissions. Because there are no feasible mitigation measures available to achieve consistency with AQMP growth assumptions and avoid other significant and unavoidable impacts related to population growth, this impact would be *significant and unavoidable*.

Threshold POP-2: Displace housing or people, necessitating the construction of replacement housing elsewhere.

Impact POP-2: Implementation of the proposed Rancho La Habra Specific Plan would not result in displacement of existing housing or people that would necessitate the construction of replacement housing. *No impact* would result.

Methodology

Housing displacement impacts are based on an analysis of whether any dwelling units are anticipated to be demolished and would need to be replaced as part of the proposed project. As described above, social or economic changes are generally not considered a significant effect on the environment unless such changes can be directly linked to a physical adverse effect. Therefore, impacts related to housing displacement are considered significant if the displacement results in the need for construction of replacement housing that would have the potential to create a significant physical change to the environment.

Impact Assessment

Currently, there is no housing within the project site. Therefore, implementation of the proposed Rancho La Habra Specific Plan would not displace any existing housing or people, necessitating the construction of replacement housing elsewhere.

Significance Conclusion for Impact POP-2

Because no housing or people would be displaced, the construction of replacement housing elsewhere would be unnecessary. No impacts would therefore result, and no mitigation measures would be required.

3.3.6 REFERENCES – POPULATION AND HOUSING

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.

City of La Habra, *City of La Habra General Plan Housing Element 2014-2021*, adopted January 21, 2014. Accessed June 2, 2017: http://www.lahabracity.com/DocumentCenter/Home/View/194.

SCAG (Southern California Association of Governments), *SCAG Proposed Final RTP/SCS*, 2016. Accessed June 2, 2017: http://scagrtpscs.net/Documents/2016/proposed/pf2016RTPSCS.pdf.

SCAG (Southern California Association of Governments), *SCAG 2012 Regional Housing Needs Assessment*, 2012. Accessed June 2, 2017: http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx.

State of California, Department of Finance, *State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2015, May 2015.* Accessed June 2, 2017: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

3.4 AESTHETIC RESOURCES

3.4.1 INTRODUCTION

a. Overview

This section describes the existing visual setting for the proposed Rancho La Habra Specific Plan, and evaluates changes in the visual and aesthetic environment that would result from its implementation. The analysis focuses on visual changes that would be seen from public viewpoints, including scenic vistas; views of distinctive visual landmarks and scenic resources; and potential impacts of new sources of light and glare. Resources and impacts related to the character or visual quality of the site and its surroundings are also discussed in this section.

This EIR recognizes that assessing whether a proposed project's changes to existing conditions would result in comparatively better (substantially improved) or worse (substantially degraded) aesthetic quality is largely subjective. The analyses in this section, therefore, focus on the extent to which the proposed Rancho La Habra Specific Plan could change existing visual elements or features of the site and surrounding area, rather than on assessing whether such physical environmental changes are "good" or "bad."

b. Definitions

- **Aesthetic Resources** include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that impart an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include visual character, scenic resources, and scenic vistas. These factors together not only describe the intrinsic aesthetic appeal of an area, but also communicate the value placed upon a landscape or scene by its observers. These factors include the following:
    - **Scenic Resources**, which are visually significant hillsides, ridges, water bodies, and buildings that are critical in shaping the visual character and scenic identity of the project site and surrounding lands.
    - **Scenic Vistas**, which are defined as panoramic views of important visual features, as seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. In relation to the proposed Rancho La Habra Specific Plan area, scenic vistas include views of the West Coyote Hills, La Habra Basin, Puente Hills, and San Gabriel Mountains.
    - **Visual Character**, which broadly describes the unique combination of aesthetic elements and scenic resources that characterize a particular area. An area's visual character can be qualitatively assessed considering the overall visual impression or attractiveness created by the particular landscape characteristics. In urban

settings, these characteristics largely include land use type and density; urban landscaping and design; architectural design; topography; and the visual prominence of natural and developed open spaces in relation to buildings, parking areas, streets, and above-ground infrastructure.

- **Glare** is the sensation produced by a source of brightness within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss of vision.

3.4.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of state and local plans, policies, and regulations,[1] which are described below.

a. State Plans, Policies, and Regulations

The California Department of Transportation (Caltrans) Landscape Architecture Program administers the Scenic Highway Program contained in the Streets and Highways Code, Sections 260-263. The intent of this program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The project site is not within or visible from any existing designated or eligible scenic highway.

The nearest Designated Scenic Highway is the State Route 91 (SR-91) freeway between State Route 55 (SR-55) and the eastern Anaheim city limits, 10 miles southeast of the project site. The nearest Eligible Scenic Highway is State Route 57 (SR-57), which is located over 4 miles east of the project site (Caltrans 2016).

b. Local Plans, Policies, and Regulations

City of La Habra General Plan

The City of La Habra (City) General Plan addresses visual and aesthetics resources in its Conservation/Natural Resources Element. General Plan Goal SM1, Visual Resource Protection, states "Preserve significant visual and scenic resources that provide quality of life amenities and act as assets for recreation and commerce." Relevant land use, community identity, and scenic and resources policies are listed below.

[1] There are no federal regulations, plans, or policies applicable to aesthetics issues relevant to the Rancho La Habra Specific Plan.

Chapter 2, Community Development

LU 4.4 Design Review. Require design review that focuses on achieving appropriate form and function for new and redeveloped projects to assure compatibility with community character, while promoting creativity, innovation, and design quality.

LU 8.1 Neighborhood Identity. Maintain distinguishing characteristics, such as topography, parcel size, housing scale and form, and public streetscapes that differentiate La Habra's single-family neighborhoods.

LU 9.1 Character and Design. Design new and renovated multi-family residential to achieve a high level of architectural design and quality of life for residents, in consideration of the following principles:

a. Consistent architectural design treatment of all elevations, including those not visible from public places;

b. Design elevations of multi-family buildings facing public streets and pedestrian ways to exhibit a high level of visual interest and distinguish entries for separate residences as feasible for security and privacy;

c. Incorporate setbacks, modulate building mass, and design multi- family buildings and projects in consideration of the development patterns of the surrounding neighborhood.

LU 11.7 Architecture and Site Design. Require that new development and renovated or remodeled existing buildings in multi-tenant centers and corridors be located and designed to complement existing uses, as appropriate, and exhibit a high quality of architecture and site planning in consideration of the following principles:

a. Seamless connections and transitions with existing buildings, in terms of building scale, elevations, and materials;

b. Integration of signage with the buildings' architectural character;

c. Landscaping contributing to the appearance and quality of development;

d. Clearly delineated pedestrian connections between business areas, parking areas, and to adjoining neighborhoods and districts;

e. Incorporation of plazas and expanded sidewalks to accommodate pedestrian, outdoor dining, and other activities.

LU 11.8 Buffering Adjoining Residential Areas. Ensure commercial uses adjoining residential neighborhoods or in mixed residential and commercial developments be designed to be compatible with each other.

CI 1.4 Natural Setting. Maintain the City's hillsides and open spaces as elements that separate and distinguish La Habra from surrounding communities.

CI 2. Unique Sense of Place. Promote quality site, architectural, and landscape design that incorporates qualities and characteristics that make La Habra desirable and

memorable including varied architectural styles, tree-lined streets, distinctive parks and open spaces, and walkable blocks.

CI 2.2 Building Scale and Design. Require that buildings and sites are designed to exhibit a high level of visual quality and are sensitive to the human scale.

CI 2.3 Responsiveness to Context. Require building design that respects to the local context in scale, massing, and materials; is responsive to La Habra's climate; and considers the historic and cultural context of its neighborhoods.

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.

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.

CI 2.10 Utility Undergrounding. Continue existing programs and seek additional funding to complete the undergrounding of La Habra's utilities.

CI 3.1 Sense of Community. Establish a common logo and design template that will be consistently used for signage of public rights-of-way, places, and buildings.

CI 3.3 Private Signage. Require that signage on private buildings be designed to exhibit a high quality of interest and visual appeal; be integrated into and reflect the building's architectural design character; and sized to not overwhelm its scale and mass.

Chapter 6, Conservation/Natural Resources

SM 1.1 Protect Scenic Views. Protect the viewsheds of the La Habra Basin, West Coyote Hills, Puente Hills, and the San Gabriel Mountains from public parks, major transportation corridors, and public open spaces.

SM 1.2 Natural Topography. Preserve the scenic quality of La Habra's natural topography, hillsides, open space, and natural riverine areas.

SM 1.4 Recreational Viewing Areas. Locate and design recreational areas, parks, and trails in consideration of significant visual and scenic resources and to protect viewsheds of adjoining areas.

SM 1.5 Signage. Support building and site signage that is appropriate to the use and location and is not visually intrusive.

SM 1.6 Lighting. Support practices that minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary including the design and sighting of light fixtures.

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.

SM 1.8 Glare. Support practices in new developments that avoid the creation of incompatible glare or reflection through development design features.

La Habra Municipal Code

Chapter 18.68 of Municipal Code Title 18 outlines the City's design review process, which is established to ensure that buildings, structures, signs, and landscaping will be in harmony with other structures and improvements in the vicinity of the proposed development. As outlined in this chapter, before any building or structure that requires design review is erected on any lot, design plans must be submitted to and approved by the City's Planning Commission subject to the provisions of this chapter.

Chapter 18.74, Neighborhood Preservation, Code Enforcement, and Abatement, requires the maintenance of commercial, industrial, and residential property in a manner that will further the stated goals of the City, including the promotion of aesthetic considerations and the protection of its citizens and their property. The chapter outlines the parameters for declaring a private property within the city a public nuisance and the guidelines for preventing such properties from becoming a public nuisance.

Several sections of the Municipal Code address night lighting, including the following:

Section 15.60.100 Multi-family dwelling lighting:

Lighting in multi-family dwellings shall be as follows:

A. Aisles, passageways and recesses related to and within the building complex shall be illuminated with an intensity of at least twenty-five one hundredths foot-candles at the ground level during the hours of darkness. Lighting devices shall be protected by weather-resistant and vandalism-resistant covers.

B. Open parking lots and carports shall be provided with a maintained minimum of one foot-candle of light on the parking surface during the hours of darkness. Lighting devices shall be protected by weather-resistant and vandalism-resistant covers.

Section 18.26.050 Special development standards:

8. Lighting. All lighting of buildings, landscaped parking areas or similar facilities shall be arranged so as not to reflect onto adjoining properties.

Section 18.14.070 Design standards:

4. Lighting. Parking areas shall have lighting capable of providing adequate illumination for security and safety. The minimum requirement is one foot-candle,

> maintained across the surface of the parking area. Lighting standards shall be energy-efficient and in scale with the height and use of the structure. Any illumination, including security lighting, shall not spill over on to any adjacent properties. In general, lamps should not be visible from any adjoining property. Light standards may not be placed in any required landscape setback area.

La Habra Hills Specific Plan

The project site is currently within the La Habra Hills Specific Plan, which was adopted in 1992 and provides zoning standards for the project site. The La Habra Hills Specific Plan provides for a 380-acre master planned community with four residential neighborhoods approved for a maximum of 700 dwelling units, an 18-hole golf course, a 29.5-acre community park, and 2.6 acres of open space. The basic concept of the proposed community, as stated in the specific plan, was to "provide a series of residential neighborhoods that offer views of the golf course and provide a variety of housing opportunities." 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, which is the site of the proposed Rancho La Habra Specific Plan. While located adjacent to the Westridge community, the golf course is not part of the Westridge community or its homeowners' association.

Among the objectives of the La Habra Hills Specific Plan were several statements regarding the proposed golf course, including the following objectives:

- Develop a plan that incorporates contour grading and offers panoramic views of the proposed golf course and surrounding area.
- Enhance the recreational opportunities within the City by developing a private, 18-hole regulation play golf course.

The La Habra Hills Specific Plan describes the then-proposed golf course as follows:

> Golf Course: A regulation play 18-hole private golf course is to be located on approximately 145 acres in the lower elevations of the property. The course includes a clubhouse with associated facilities and a driving range. The course enhances the development character of the project by providing an open space amenity. It creates an enhanced landscaped treatment along Beach Boulevard and serves as a buffer between the existing business park (at Beach Boulevard and Imperial Highway) and existing single-family homes and the proposed development. Many of the proposed residential units benefit from views of the golf course.

The La Habra Hills Specific Plan permits the following uses within the project site:

- Permitted uses:
    - Public buildings, leased or used by any governmental jurisdiction, including parks, public easements and water works.
    - Golf course and driving range.
    - Recreation facilities.
    - Oil drilling and production.
- Accessory uses:
    - Buildings and structures necessary to the permitted uses.
- Conditionally permitted uses:
    - Restaurant facilities.
    - Commercial facilities ancillary to permitted uses.

3.4.3 ENVIRONMENTAL SETTING

a. Aesthetic Elements and Views

Project Site

The project site encompasses the approximately 151-acre Westridge Golf Club. In addition to an 18-hole golf course, on-site development includes a lighted driving range with an upper and lower deck; a clubhouse with a pro shop, bar, and banquet rooms; and a parking lot. A series of golf cart paths traverse the golf course.

The golf course varies in elevation from approximately 220 feet above mean sea level in the northwestern portion of the golf course site to approximately 470 feet above mean sea level in the southeastern corner of the site. Generally, the southern portion of the site is at a higher elevation than the northern portion. To accommodate this elevation change, the golf course fairways are generally designed at different elevations, with interceding slopes.

The project site consists primarily of irrigated turf and ornamental vegetation. In addition, the site supports lesser amounts of native vegetation communities including coastal sage scrub, coyote brush scrub, riparian wetlands, and mulefat scrub (see Section 3.5, *Biological Resources*, for a complete discussion on vegetation). The project site contains two drainage features and three ponds, none of which are visible to the general public.

Public views of the project site tend to be obscured. Motorists traveling along Beach Boulevard, South Idaho Street, and entering the property from South La Habra Hills Drive have views of gradual slopes that extend from street level to higher elevations on the project site. These slopes

are landscaped with ornamental trees and shrubs, which substantially obscure the visibility of the interior of the project site from surrounding public streets. Views from surrounding public streets generally have the project site in the foreground, with the existing Westridge community located on a ridge to the north in the West Coyote Hills. Because public views of the golf course are obstructed by landscaping, topography, and surrounding buildings, the golf course itself is not considered to be a scenic vista.

Scenic Vistas

The La Habra General Plan identifies public views of the West Coyote Hills, La Habra Basin, Puente Hills, and the San Gabriel Mountains as significant scenic vistas. The project site is located on the north side of the West Coyote Hills, which top out at approximately 604 feet above mean sea level. Views of the existing Westridge community, with the project site in the foreground of views of the West Coyote Hills ridgeline, are available from Beach Boulevard and Imperial Highway.

The La Habra Basin is located north of the project site at lower elevations. The Puente Hills, located north of the project site just beyond the La Habra Basin, are at an elevation of approximately 417 feet above mean sea level. The 10,000-foot-high San Gabriel Mountains are located beyond the La Habra Basin and Puente Hills, to the north of the project site.

b. Light and Glare

Nighttime lighting associated with the existing golf course includes the driving range which operates seven days a week until 10:00 p.m., parking lot and clubhouse lighting, street lights on La Habra Hills Drive, and illumination from vehicle headlights. Surrounding the project site are other sources of light, including the Westridge Plaza Shopping Center, other commercial and residential development, and adjacent roadways.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Specific Plan area is generated by building and vehicle windows reflecting light. However, because the clubhouse is largely constructed of non-reflective materials and not surfaced with a substantial amount of windows, it is not a major source of glare. In addition, the golf course parking lot is relatively small in relation to the size of parking lots within area shopping centers, and the amount of glare from sunlight or exterior light reflecting from car windshields would be limited.

3.4.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of aesthetics impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold AES-1 Have a substantial adverse effect on a scenic vista;

Threshold AES-2 Substantially damage scenic resources, including but not limited to trees, rock outcroppings, hillsides, and historic buildings within a state scenic highway;

Threshold AES-3 Substantially degrade the existing visual character or quality of the site and its surroundings; or

Threshold AES-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.4.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold AES-1: Adversely affect a scenic vista.

Impact AES-1: While portions of proposed Rancho La Habra Specific Plan residential and commercial development would be visible from public locations, such development would not block scenic vistas. The impact would be *less than significant*.

Methodology

Significance of impacts on scenic vistas is based on the extent to which the proposed project would either hinder views of a scenic vista or result in its visual degradation as viewed from a public location. To make this determination, visual simulations were undertaken to illustrate changes to public views of scenic vistas that would result from the proposed project. These visual simulations were prepared for eight public viewpoints representing typical public views of the project site, and compare "before" and "after" views of scenic vistas from these viewpoints. The visual simulations were created using finished floor elevations reflected on the grading plan prepared for the project. The proposed development was then simulated based on the building "footprint" established for each lot. In addition, building height, architectural character, colors, and landscaping were programmed into the computerized visual simulations to depict post-development views. An adverse effect on a scenic vista (significant impact) would occur if public views of identified scenic resources (West Coyote Hills, La Habra Basin, and the Puente Hills beyond) would be substantially or completely blocked. While the golf course on the project site provides open space, water features, and landscaping, public views of the golf course do not constitute a "scenic vista," which was defined at the outset of this section

as "panoramic views of important visual features, as seen from public viewing areas." Existing views of the golf course from public viewing locations are largely obstructed by topography and landscaping.

Impact Assessment

Project Construction

Construction activities would involve grading and landform alteration, including removal of vegetation in areas to be graded, extraction and temporary stockpiling of soils, demolition of the driving range and parking lot, crushing activities, storage of construction equipment and building materials, and construction of buildings and infrastructure. While these activities would be visible from several public viewing locations, they would be short term and would not be of a sufficient height or scale as to block or otherwise damage scenic vistas.

Project Operation

Eight publicly accessible viewpoints were analyzed. **Figure 3.4-1** maps the viewpoint locations, and **Tables 3.4-1a** through **3.4-1h** show the existing views and visual simulations of the project from these viewpoints. As demonstrated by the visual simulations, project site development would not create any substantial blockages to public views of existing scenic vistas.

Tables 3.4-1a through **3.4-1h** show that proposed project site development would not substantially block public views of scenic vistas.

Table 3.4-1h shows that beyond the foreground is an existing hillside view of the Westridge residential community (on the upper left portion of the photograph), which is located on the ridgeline of the West Coyote Hills. However, the majority of the West Coyote Hills are behind the ridgeline and not visible across the project site from Beach Boulevard. Thus, there is no opportunity for expansive views of the West Coyote Hills, and the views of the Westridge community available to the public from Beach Boulevard do not meet the definition of a "scenic vista" previously provided in this section. While proposed commercial development[2] would substantially block views of the existing Westridge community, the views being blocked would not constitute a "scenic vista."

[2] While the visual simulation of Viewpoint H was modeled with commercial uses, this area could also be developed with multi-family dwelling units. In such case, buildings in the visual simulation would look more like the proposed multi-family development in Viewpoint G. Development of multi-family dwellings in this location would not change the conclusions presented in this section or cause different impacts.

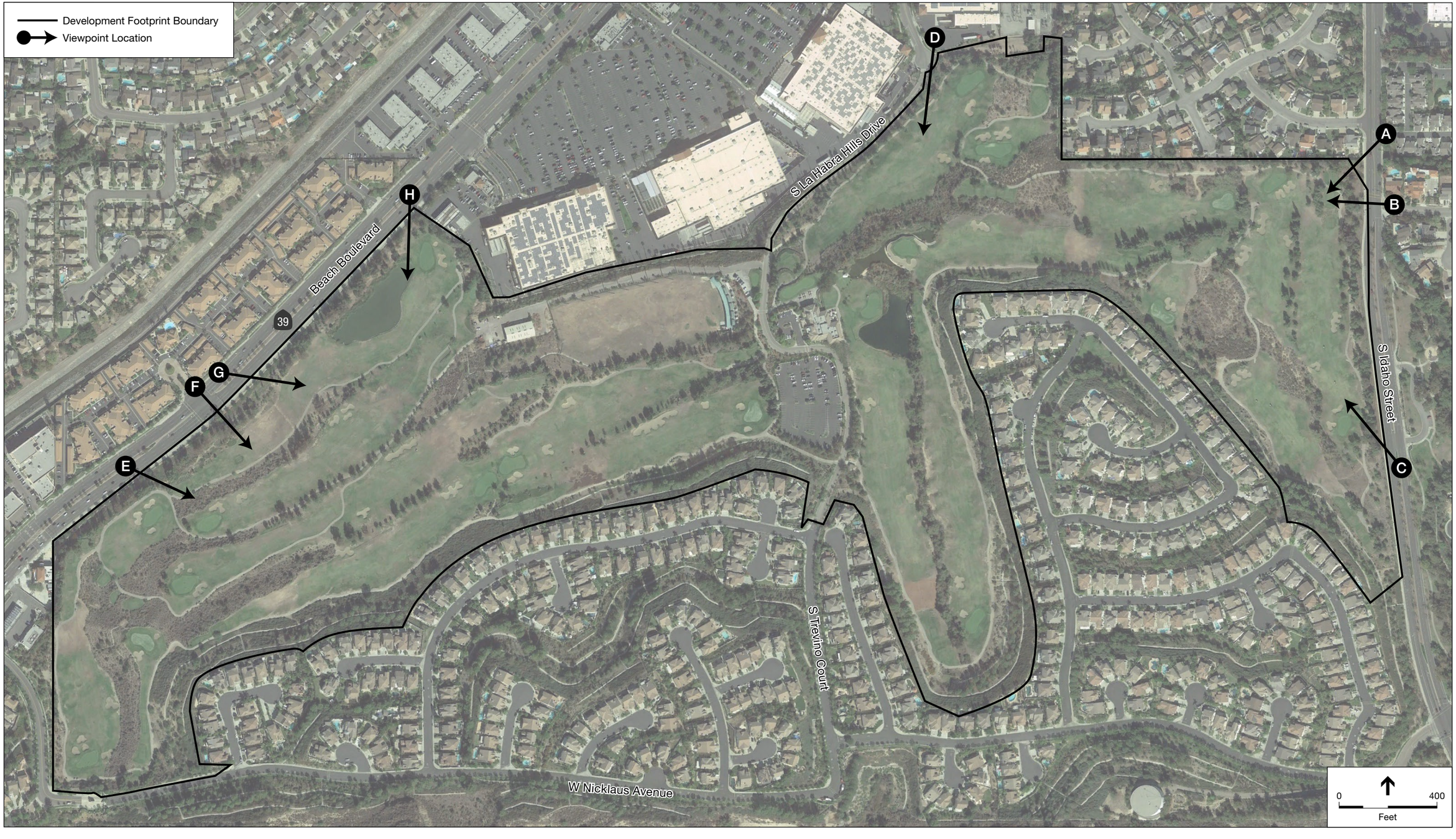

Figure 3.4-1: Visual Simulation Key Map

Source: Google Earth Pro; VisionScape Imagery

Table 3.4-1a
Viewpoints

Viewpoint A: Idaho Street Looking Southwest

Existing View

The existing Westridge Golf Club is visible to the southwest. Scenic vistas of the West Coyote Hills are obscured by landscaping.

View of Proposed Development

Landscaping along the street would be somewhat thinned, providing for views of housing within the project site. Scenic vistas of the West Coyote Hills would remain obscured by landscaping.

Source: Visionscape Imagery, 2015.

Table 3.4-1b
Viewpoints

Viewpoint B: Idaho Street Looking West

Existing View

The existing Westridge Golf Club is visible to the southwest. Scenic vistas are unavailable.

View of Proposed Development

Landscaping would be removed to create the proposed Rancho La Habra entry. Views of the existing golf course would be replaced by views of the street and housing.

Source: Visionscape Imagery, 2015.

Table 3.4-1c
Viewpoints

Viewpoint C: Idaho Street Looking Northwest

Existing View

The existing Westridge Golf Club is visible to the northwest. Long-distance views of the La Habra Basin and San Gabriel Mountains are available along the street; however, no scenic vista is available across the golf course due to existing landscaping and topography.

View of Proposed Development

The existing fence along the street right-of-way would be removed, and landscaping along Idaho Street would become more visible, providing limited views of housing. Long-distance views of the La Habra Basin and San Gabriel Mountains would remain available along the street. Views of the La Habra Basin and mountains across the golf course would remain obscured.

Source: Visionscape Imagery, 2015.

Table 3.4-1d
Viewpoints

Viewpoint D: La Habra Hills Drive Looking South

Existing View

The existing Westridge Golf Club is visible to the south at the current entry to the golf course. Scenic vistas of the West Coyote Hills are obscured by existing topography and landscaping.

View of Proposed Development

Landscaping would be added along the proposed extension of La Habra Hills Drive, as the proposed roadway extension would a more dominant visual feature. Scenic vistas of the West Coyote Hills would remain obscured by topography and landscaping.

Source: Visionscape Imagery, 2015.

Table 3.4-1e
Viewpoints

Viewpoint E: Beach Boulevard Looking Northeast

Existing View

Landscaping for the existing Westridge Golf Club is visible to the east and northeast along Beach Bouleard. Scenic vistas of the West Coyote Hills are obscured by topography and landscaping.

View of Proposed Development

Landscaping along Breach Bouleard would remain the dominant visual feature of the project site. Scenic vistas of the West Coyote Hills would remain obscured by topography and landscaping.

Source: Visionscape Imagery, 2015.

Table 3.4-1f
Viewpoints

Viewpoint F: Beach Boulevard Looking Southeast

Existing View

The existing Westridge Golf Club is visible to the southeast across Beach Boulevard at the entrance to the Hillsborough Apartments. Scenic vistas of the West Coyote Hills are obscured by topography, landscaping, and the existing Westridge community.

View of Proposed Development

Landscaping would be removed to construct the project entry road, providing for views of housing within the project site. Scenic vistas of the West Coyote Hills would remain obscured by landscaping, topography, and the existing Westridge community.

Source: Visionscape Imagery, 2015.

Table 3.4-1g
Viewpoints

Viewpoint G: Beach Boulevard Looking East

Existing View

The existing Westridge Golf Club is visible to the east.

View of Proposed Development

Landscaping along the street would be somewhat thinned, providing for views of multi-family housing within the project site.

Source: Visionscape Imagery, 2015.

Table 3.4-1h
Viewpoints

Viewpoint H: Beach Boulevard Looking South

Existing View

The existing Westridge Golf Club is visible to the south. Scenic vistas of the West Coyote Hills are obscured by landscaping and the existing Westridge community. The Westridge residential community (on the upper left portion of the photograph) is located on the West Coyote Hills ridgeline. However, the majority of the West Coyote Hills are behind the ridgeline and not visible from this viewpoint.

View of Proposed Development

Landscaping along the street would be thinned, providing for an up-close view of commercial development (with an option for multi-family development in the same location) within the project site.

Source: Visionscape Imagery, 2015.

Significance Conclusion for Impact AES-1

Because no substantial blockages of scenic vistas from public viewpoints would occur, implementation of the proposed Rancho La Habra Specific Plan would not result in adverse effects on a scenic vista, and the impact would be less than significant.

Threshold AES-2: Damage scenic resources within a state scenic highway.

Impact AES-2: The project site is not within or visible from a designated or eligible state scenic highway. Implementation of the proposed Rancho La Habra Specific Plan would not, therefore, damage scenic resources within a state scenic highway. *No impact* would result.

Methodology

The significance determination for the aesthetics analysis related to scenic resources within a state scenic highway is based on consideration of (1) whether a state scenic highway exists within or near the Specific Plan area, (2) whether the Specific Plan area can be viewed from the highway, and (3) whether implementation of the Specific Plan has the potential to damage scenic resources within the scenic highway corridor. If the project site is not within view of a state scenic highway, implementation of the proposed Specific Plan would not result in impacts.

Impact Assessment

The Rancho La Habra Specific Plan area is not within or visible from any existing designated (or eligible) scenic highway. The nearest Designated Scenic Highway is SR-91 between SR-55 and the eastern Anaheim city limits, 10 miles southeast of the project site. The nearest Eligible Scenic Highway is SR-57, which is located over 4 miles east of the project site. Due to the lack of a designated (or eligible) scenic highway within view of the project site, implementation of the proposed Specific Plan would not damage scenic resources within a state scenic highway.

Significance Conclusion for Impact AES-2

Because implementation of the proposed Rancho La Habra Specific Plan would not damage scenic resources along a state scenic highway, no impacts would occur.

Threshold AES-3: Substantially degrade the existing visual character or quality of the site and its surroundings.

Impact AES-3: Implementation of the proposed Rancho La Habra Specific Plan would result in the loss of a major open space resource. While the proposed project would be well planned and designed, the

substantial loss of open space that would result from project development would degrade the existing visual character of the site. Even with implementation of project design features and compliance with existing regulations, this impact would remain *significant and unavoidable*.

Methodology

The analysis of the potential of the proposed Rancho La Habra Specific Plan to degrade the existing visual character or quality of the site or surrounding area is based on consideration of (1) the extent of Specific Plan-related changes in land use and development intensity, (2) the degree of visual contrast and compatibility in scale and character between development pursuant to the proposed Specific Plan and the existing surroundings, (3) the effect of proposed land use changes on the visual character of the site, and (4) Specific Plan conformance with adopted policies regarding visual resources and urban design quality.

The EIR recognizes that assessment of whether changes in the visual character of development from existing conditions would be comparatively better (substantially improved) or worse (substantially degraded) is largely subjective. The following analysis, therefore, focuses in a factual manner on the extent to which the proposed Rancho La Habra Specific Plan would change the visual character of the site and the consistency of any such changes in visual character with adopted City policies regarding visual and urban design quality.

An impact would be considered significant if the project would result in development that is incompatible with existing uses in relation to type of use or scale,[3] would result in poorly designed buildings or development, visually detract from nearby existing well-designed built environments, or would be inconsistent with adopted policies regarding visual and urban design quality.

Impact Assessment

Extent of Specific Plan-Related Changes in Land Use and Development Intensity

Implementation of the proposed project would replace the existing Westridge Golf Club with a residential community consisting of 402 single-family and multi-family dwelling units, a 20,000-square-foot commercial center (or an additional 46 multi-family dwelling units), and open

[3] "Compatible" land use refers to the characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre, pedestrian or vehicular traffic generated, volume of goods handled, and such environmental effects as noise, vibration, glare, air pollution, or the presence of hazardous materials.

space/park uses. While the majority of the site (approximately 87 acres) would remain in open space use, the predominant visual feature of the project site would be its residential neighborhoods, and the land use and development intensity of the site would be substantially changed from existing conditions.

Visual Contrast and Compatibility with Surrounding Lands

The residential uses and development densities proposed for the project site would be similar to those existing within developed areas to the east, west, and south of the site. In addition, the proposed 20,000-square-foot commercial area, while of a much smaller scale, would be compatible with the adjacent Westridge Plaza Shopping Center.

Chapter 18.68 of the Municipal Code outlines the City's design review process, which is established to ensure that buildings, structures, signs, and landscaping will be in harmony with other structures and improvements in the vicinity of the proposed development and consistent with the general plan and zoning.

Approval of design review for development within the Specific Plan area will require the La Habra Planning Commission to find that the nature of the proposed land uses and the design of development within Rancho La Habra are appropriate for the proposed location and are compatible with surrounding land uses and improvements. Making such a finding will include, but not be limited to, review of whether (1) the project's scale, form, and proportion are harmonious, and the materials and colors that are used complement the project; and (2) the orientation and location of buildings, structures, open spaces, and other features integrate well with each other and maintain a compatible relationship to adjacent development.

Effect of Proposed Land Use Changes on Visual Character of Site

As noted above, replacing the existing Westridge Golf Club with the proposed Rancho La Habra residential community would substantially change the use and development intensity of the site, even though the majority of the site (approximately 87 acres) would remain in open space. **Figure 3.4-2** shows visual simulations prepared for the proposed project that illustrate this change in land use and development intensity. Both visual simulations are taken from private locations within the Westridge residential community. The first simulation is looking northeast toward Idaho Street across Rancho La Habra Planning Area 4. The second simulation is looking north across the western portion of Rancho La Habra Planning Area 4 near Planning Area 3.

Figure 3.4-2 Change in Visual Character of Project Site

Existing Westridge Golf Club

Proposed Rancho La Habra

Existing Westridge Golf Club

Proposed Rancho La Habra

The change in visual character of the project site illustrated in **Figure 3.4-2** would not, however, occur throughout the Specific Plan area. As illustrated in **Figure 3.4-3** following, portions of the project site would retain their existing open space character. The first simulation in this figure is looking west across the center drainage/open space area toward the existing clubhouse (future community center). The second simulation is looking north across center drainage/open space area.

Conformance with Adopted Policies Regarding Visual Resources and Design Quality

As discussed in **Table 3.2-1** in Section 3.2, *Land Use and Planning Policy*, conversion of the existing golf course to a residential community, along with the resulting loss of open space, would be inconsistent with two General Plan policies:

- **CI 1.4 Natural Setting.** Maintain the City's hillsides and open spaces as elements that separate and distinguish La Habra from surrounding communities.

- **SM 1.2 Natural Topography.** Preserve the scenic quality of La Habra's natural topography, hillsides, open space, and natural riverine areas.

Figure 3.4-3 Retention of Project Site Visual Character

Existing Westridge Golf Club

Proposed Rancho La Habra

Existing Westridge Golf Club

Proposed Rancho La Habra

Significance Conclusion for Impact AES-3

The substantial change in the visual character of the site that would result from replacing the existing Westridge Golf Club with the proposed Rancho La Habra residential community would constitute a significant impact due to the loss of open space, change of character as demonstrated by the visual prominence of housing within the site, and inconsistency with General Plan Policies CI 1.4 and SM 1.2.

Mitigation Measures

While no feasible mitigation measures are available to reduce Impact AES-3 to a less-than-significant level, as discussed in Chapter 7, *Alternatives*, the following project alternatives would eliminate or reduce the identified significant impact in relation to visual character:

3. Golf Course and Hotel Alternative
4. Residential/9-Hole Golf Course Alternative
5. Reduced Density Residential/9-Hole Golf Course Alternative
6. Reduced Density Single Family Residential Alternative

Significance Conclusion for Impact AES-3 with Implementation of Mitigation Measures

To reduce the identified significant visual character impact to less than significant would require substantially reducing the portion of the project site devoted to residential and commercial uses. Because no feasible mitigation measures are available to address the project's significant visual character impact, this impact would be significant and unavoidable.

Threshold AES-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impact AES-4.1: Implementation of proposed Rancho La Habra Specific Plan would not create substantial new sources of nighttime lighting that would spill over onto sensitive uses (i.e., residences) for a substantial portion of the night or would impair drivers' vision at night. Project lighting impacts would, therefore, be *less than significant*.

Methodology

The evaluation of nighttime lighting focuses on changes in illumination levels that would result from implementation of the proposed Specific Plan and the extent to which such new sources of light would increase nighttime lighting on adjacent sensitive residential uses. Lighting impacts would be considered significant if nighttime lighting would spill over onto sensitive uses (i.e., residences) for a substantial portion of the nighttime, or lighting would impair drivers' vision at night. Potential lighting impacts on biological habitat areas are addressed in Section 3.5, *Biological Resources*.

Impact Assessment

Construction Impacts

Project construction would be restricted to the City's permitted construction hours between 7:00 a.m. and 8:00 p.m. on weekdays, including Saturday. Construction would not be permitted on Sundays or federal holidays. This would limit most construction to daytime hours, particularly during summer months. However, during winter and other non-summer months,

construction activities could occur between dusk and 8:00 p.m., requiring use of temporary auxiliary lights to illuminate construction activities. Maintenance of construction vehicles, including fueling, cleaning, and minor repairs, is proposed by the applicant to occur prior to or after the completion of construction activities, which would require use of temporary auxiliary lights to illuminate maintenance work areas.

However, temporary lighting for summer construction activities and vehicle maintenance activities would not represent a new substantial source of night lighting in comparison to existing night lighting for the driving range.

Operations Impacts

New sources of exterior nighttime lighting would be associated with the proposed homes and the proposed commercial pad located on Beach Boulevard. The new sources would include:

- Street lighting with standard cobra head design
- Community Center parking lot lighting with shoe-box type design (replaces existing parking lot lighting)
- Linear Park trail lighting with 12-foot-tall decorative lighting
- Commercial building and parking lot lighting with shoe-box type design
- Typical residential lighting

The brightness of nighttime lighting from these sources would be no greater than current levels of nighttime lighting of the roadway leading to the clubhouse and its parking area. However, as the result of the proposed project, a far greater portion of the site would be lighted at night than at present. In addition, while the brightest existing source of lighting (the golf course driving range) would be discontinued, the driving range also has a substantial physical separation from sensitive residential uses to the south of the project site.

Even though nighttime lighting sources would be introduced closer to existing sensitive residential uses as the result of project site development, because of the elevation differences between the existing Westridge neighborhood and the project site, as well as the physical separation between these uses provided by existing slope areas, spillover of project-related lighting onto properties within the Westridge neighborhood is not anticipated. Other residential neighborhoods near the project site are separated from the site by existing roadways and would also not experience spillover of nighttime lighting from the project.

As part of the City's required design review and plan check functions, light emanating from new uses and roadways within the Specific Plan area would be required to be either low-scaled lighting or shielded to focus lighting and prevent lighting from spilling onto adjacent residential properties, or from streaming directly onto streets, which could impair views of drivers on streets at night.

Significance Conclusion for Impact AES-4.1

Implementation of the proposed Rancho La Habra Specific Plan would not create substantial new sources of nighttime lighting that would spill over onto sensitive uses (i.e., residences) for a substantial portion of the night or impair drivers' vision at night. Project lighting impacts would therefore be *less than significant.*

Impact AES-4.2: Implementation of the proposed Rancho La Habra Specific Plan would not create a substantial new source of glare. The impact would be *less than significant*.

Methodology

The analysis of glare focuses on the extent to which implementation of the proposed Specific Plan would increase daytime glare on sensitive uses. Glare impacts would be considered significant if Specific Plan development would create a new source of glare that would negatively affect sensitive uses (i.e., residences) or direct glare onto roadways, thereby causing a safety hazard for drivers.

Glare results from sharply reflected light caused by sunlight or artificial light reflecting from highly finished surfaces such as paving, roofing, or glass. The level of glare is measured using the "albedo concept," which calculates the relative reflectivity of surfaces. For example, soil cover has an albedo of 0.17, which indicates that approximately 17 percent of solar radiation hitting a soil-covered ground would be reflected. Grass cover has an albedo of 0.20, indicating a solar reflectivity of approximately 20 percent, or slightly more glare than soil cover. By comparison a beige-painted stucco finish on a residential structure would have an albedo rating of 0.40, while painting the same stucco surface white would have an albedo rating as high as 0.65. In general, darker or mirrored glass would have a higher solar reflectivity—or glare—than clear glass. Darker or mirrored glass could have an albedo rating of up to 0.80 or more, while clear glass could have an albedo rating as low as 0.08.

The glare emanating from high albedo materials can cause daytime interference with activities in sensitive land use areas, as well as in public roadways and air travel paths where automobile and plane operators can be temporarily blinded by glare, thus causing a safety concern. As such, analysis of the effects of daytime glare considers whether new development would result in an adverse effect by creating a new source of substantial glare.

Impact Assessment

Construction Impacts

Daytime glare associated with construction activities would occur when reflective construction materials or equipment were positioned in highly visible locations where sunlight would be

reflected. However, large, flat surfaces of reflective materials, like those needed to generate substantial glare, are typically not associated with construction activities. Moreover, any glare produced during construction activities would be highly transitory and short term, given the movement of construction equipment and materials within the construction site and the temporary nature of construction activities.

Operations Impacts

Glare during operations generally results from structures that use large expanses of glass, metal, and other reflective surfaces for building façades, as well as from direct sunlight, sunlight reflecting from cars, and bright outdoor or indoor lighting. New buildings constructed within the Specific Plan area would include sources of daytime glare, including glass windows, as well as the possible use of metal or other reflective materials for commercial buildings and parking areas. While the proposed 402 dwelling units and the either 20,000 square feet of commercial use or 46 additional multi-family units would each represent a new source of glare within the Specific Plan area, residential uses typically do not include large expanses of reflective glass. In addition, the typical landscaping provided for residential uses tends to further reduce the potential for glare. Retail uses, such as the proposed 20,000-square-foot commercial center, also tend to use clear rather than reflective glass and do not typically feature large reflective metal surfaces.

Including features such as non-reflective textured surfaces on building exteriors, avoiding the use of reflective glass, and shielding external light sources—as would be required by the City's design review process—would reduce the potential for the proposed development to generate glare.

Significance Conclusion for Impact AES-4.2

Implementation of the proposed Rancho La Habra Specific Plan would not create substantial new sources of glare, and the impact would be *less than significant*.

3.4.6 REFERENCES – AESTHETIC RESOURCES

Caltrans, California Scenic Highway Mapping System, 2016. Accessed May 26, 2017: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014.

City of La Habra, Municipal Code Chapters 18.68 and 18.74, Planning and Zoning. Accessed May 26, 2017: http://qcode.us/codes/lahabra/.

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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 buildout in the overall development footprint, as well as within the Specific Plan grading limits, 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 development footprint.

Reconnaissance surveys within the proposed development footprint were conducted in April 2017. A listing of the plants and animals observed during biological resource surveys is included in Appendix E-1 and Appendix E-2. Appendix E-3 contains the 2017 California Natural Diversity Database (CNDDB) search results. Representative photographs of existing conditions are included in Appendix E-4. Focused surveys for California gnatcatcher were conducted in 2014 and 2016 and the results of the surveys are included in Appendix E-5. Appendix E-6 includes collected air photos of the site showing development footprint conditions during different seasons of the year between 2003 and 2016.

While numerous plant and wildlife species were observed during biological surveys, some species may not have been identifiable at the time of year surveys were taken. Therefore, the likelihood for a species to occur 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 located just south of the development footprint.

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 development footprint 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.
- **Development Footprint** refers to the entirety of the project site that would be dedicated to the Specific Plan's proposed residential and commercial development, proposed Community Center and amphitheater, public parks and picnic areas, community-connected trails, riparian and wildlife viewing areas, natural habitats and ponds (see **Figure 3.5-1**).
- **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 water features 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.
- **Habitat** refers to the physical environment in which a plant or animal would 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, Regional Water Quality Control Board, and California Department of Fish and Wildlife (CDFW) over habitats and drainage features within the development footprint.
- **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.

Figure 3.5-1: Development Footprint

Source: Google Earth Pro; Carlson SLS

- **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 where 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 are called riparian vegetation.
- **Roosting Habitat** encompasses areas where individual birds or bats use trees for resting and cover during non-breeding season.
- **Specific Plan Grading Limits** are a subset of the development footprint in **Figure 3.5-1**. The Specific Plan grading limits encompass areas where earth-moving, excavation, and deposition of engineered fill for building and infrastructure development would occur, removing all existing soils and substrate, including vegetation.
- **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 or Federal Endangered Species Acts.
- **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 (FESA); species that are listed or proposed for listing as threatened or endangered and species of special concern under the California Endangered Species Act (CESA); plants designated with a California Rare Plant Ranking (CRPR) by the California Native Plant Society (CNPS) (CNPS 2014); 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.
- **V-ditch** refers to a man-made, concrete-lined drainage feature with a v-shaped channel bottom.

3.5.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan and related actions would be subject to a range of federal, state, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

Federal Endangered Species Act

Overview

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over plants, wildlife, and most freshwater fish. Section 7 of the FESA mandates that all federal agencies consult with the USFWS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. A federal agency is required to consult with the USFWS if it determines a "may affect" situation will occur in association with a proposed project. The FESA prohibits the "take" of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. "Take," as defined in Section 9 of the FESA, is broadly defined to include intentional or accidental "harassment" or "harm" to wildlife. "Harass" is further defined by the USFWS as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns that include, but are not limited to, breeding, feeding, and sheltering. "Harm" is defined as an act that actually kills or injures wildlife. This may include significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Candidate species and species that are proposed or under petition for listing receive no protection under the FESA.

Critical Habitat

Under the FESA, the federal government is required to designate "critical habitat" for any species it lists under the FESA. Section 3 of the FESA defines critical habitat as:

- The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the FESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection.
- The specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

The constituent elements of the critical habitat designation consider the physical and biological features needed for life processes and successful reproduction of the listed species. These include:

- Space for individual and population growth for normal behavior;
- Habitat cover or shelter;
- Food, water, or other nutritional or physiological requirements;
- Sites for breeding and rearing offspring; and
- Habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

Clean Water Act Section 404 Jurisdiction

The federal Clean Water Act seeks to protect waters and adjacent habitats including wetlands as jurisdictional resources regulated by both the U.S. Army Corps of Engineers and the Regional Water Quality Control Board under the Clean Water Act Section 404 and 401 regulations. The final authority regarding Clean Water Act jurisdiction remains with the United States Environmental Protection Agency (33 Code of Federal Regulations [CFR] 328.3[a][8]).

To be considered a jurisdictional resource under Section 404, features must exhibit a defined bed and bank and an ordinary highwater mark (33 CFR 328.4). The term "ordinary highwater mark" refers to a line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other means appropriate to the characteristics of the surrounding areas.

The 1972 federal Clean Water Act required the implementation federal and state regulations and boards to ensure that there would be "no net loss of wetlands." Under the federal Clean Water Act and the State of California's Porter-Cologne Water Quality Control Act, the State Water Resources Control Board (SWRCB) and its Regional Water Quality Control Boards have the duty to review proposed development or discharge projects that require Section 401 Certifications (permits) to insure "no net loss of wetlands." If a jurisdictional wetland is affected by the proposed development, the SWRCB is required to compel the developer to provide a "compensatory mitigation wetland," either on-site or at an agreed-upon off-site location.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 United States Code [USC], Section 703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

b. State Plans, Policies, and Regulations

California Endangered Species Act

Under the CESA, CDFW has the responsibility for maintaining a list of threatened and endangered species (California Fish and Game Code Section 2070). CDFW also maintains a list of "candidate species," which are species formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. In addition, CDFW maintains lists of "species of special concern," which serve as "watch lists." Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present on the project site and determine whether the proposed project could have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any proposed project that may affect a candidate species.

California Environmental Quality Act

The intent of the California Environmental Quality Act (CEQA) is to maintain "high-quality ecological systems and the general welfare of the people of the state" (CEQA Section 21000). It is the policy of the state to "prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history" (CEQA Section 21001). CEQA requires consultation with CDFW on any project an agency initiates that is not statutorily or categorically exempt from CEQA. The CEQA Guidelines (Section 15065a) indicate that impacts on state- and federal-listed rare, threatened, or endangered plants or animals are significant. Although rare, threatened, and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on federal or state protected species lists may be considered rare, threatened, or endangered if the species can be shown to meet certain criteria (e.g., it can be shown that the species' survival in the wild is in jeopardy or the species is at risk of becoming endangered in the near future). These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a "species of concern" that has not yet been listed by either the USFWS or CDFW. Thus, CEQA requires an agency to consider a project's potential impacts on species that meet the definition of endangered, rare, or threatened under CEQA but have not been officially listed under either the FESA or the CESA, but leaves it to the discretion of the lead agency to determine whether a species not formally listed meets the definition. Projects subject to CEQA review must specifically address potential impacts on

endangered, rare, or threatened species and provide mitigation measures if the impact is determined to be significant.

California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFW to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this state." The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. The CESA expanded upon the original NPPA and enhanced legal protection for plants. The CESA established threatened and endangered species categories and grandfathered all rare animals—but not rare plants—into the act as threatened species. There are three listing categories for plants in California: rare, threatened, and endangered.

California Fish and Game Code Protections

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. The California Fish and Game Code (Sections 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], and 5515 [fish]) allows the designation of a species as Fully Protected.

California Fish and Game Code Sections 1600-1616 Jurisdiction

CDFW provides comment on Section 401 permit actions under the Fish and Wildlife Coordination Act. CDFW is also authorized, under California Fish and Game Code Sections 1600–1616, to enter into a Streambed Alteration Agreement with applicants and to develop mitigation measures when a proposed project would obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams.

CDFW jurisdiction includes ephemeral, intermittent, and perennial water courses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the water course if the stream or lake is vegetated.

According to the definition used by CDFW, state wetlands are "lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water," and they exist where any one of the following conditions are present:

1) Predominantly undrained hydric soils (soils with low concentrations of oxygen in the upper layers during the growing season);

2) A predominance, at least periodically, of hydrophytic plants (plants that have adapted to the low availability of oxygen and others stresses in saturated soils); or

3) A non-soil substrate (such as a rocky shore) that is saturated with water or covered by shallow water each year at some point during the growing season.

CDFW has interpreted the term "streambed" to extend laterally to the upland edge of riparian vegetation. CDFW has adopted the USFWS Cowardin (1979) definition of wetlands as a means of determining the extent of their jurisdiction. While the federal definition of wetlands requires three wetland identification parameters to be met, the Cowardin definition can be satisfied under some circumstances with the presence of only one parameter.

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.

3.5.3 ENVIRONMENTAL SETTING

a. Golf Course and Related Activities

The proposed Specific Plan development footprint is comprised of an 18-hole golf course known as the Westridge Golf Club. The Westridge Golf Club is a public facility and includes a lighted driving range open until 10:00 p.m., access roads, parking areas, a clubhouse meeting facility with pro shop, bar and grill, and outdoor patio seating. The golf course includes grassy fairways and cart paths punctuated by groupings of landscape trees, ponds, and natural habitats, and is surrounded by a perimeter of planted ornamental landscaped areas and slopes. **Figure 3.5-1** depicts the development footprint and the grading limits proposed in the Specific Plan. **Figure 3.5-1** also shows general locations of Specific Plan components such as proposed conservation areas, a Community Center, a public park, and a fuel management area for fire safety.

The golf course is open seven days a week, and under current conditions 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 in the development footprint include consistent on-going maintenance of greens and landscaping, the traffic and noise associated with golf course events attracting large groups, and lighting and music at the driving range and clubhouse until 10:00 p.m.

The development footprint is surrounded nearly entirely 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. Approximately 500 linear feet of undeveloped vegetated area in the southwest portion of the site is the only existing functional interface between the natural habitats in the development footprint and undeveloped lands supporting similar habitat adjacent to the south in West Coyote Hills. **Figure 3.5-2** shows the location of the wildlife interface in the southwest portion of the site.

b. Habitats in the Development Footprint

The existing habitats found in the development footprint are presented in **Figure 3.5-2**, and the characteristics of each of the habitats are discussed below. Since the habitats identified in **Figure 3.5-2** have the potential to support special-status species, they are also referred to as sensitive habitats.

Coastal Sage Scrub

The coastal sage scrub habitat found within the development footprint supports a variety of plant species, but the habitat type is typically dominated by the following species: California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), California brittlebush (*Encelia californica*), and white sage (*Salvia apiana*). Coastal sage scrub within the development footprint also contains shrubs such as Laurel sumac (*Malosma laurina*), mulefat (*Baccharis salicifolia*), sugarbush (*Rhus ovata*), lemonade berry (*Rhus integrifolia*), toyon (*Heteromeles arbutifolia*), arroyo willow (*Salix lasiolepis*), coastal prickly pear (*Opuntia littoralis*), and black willow (*Salix nigra*).

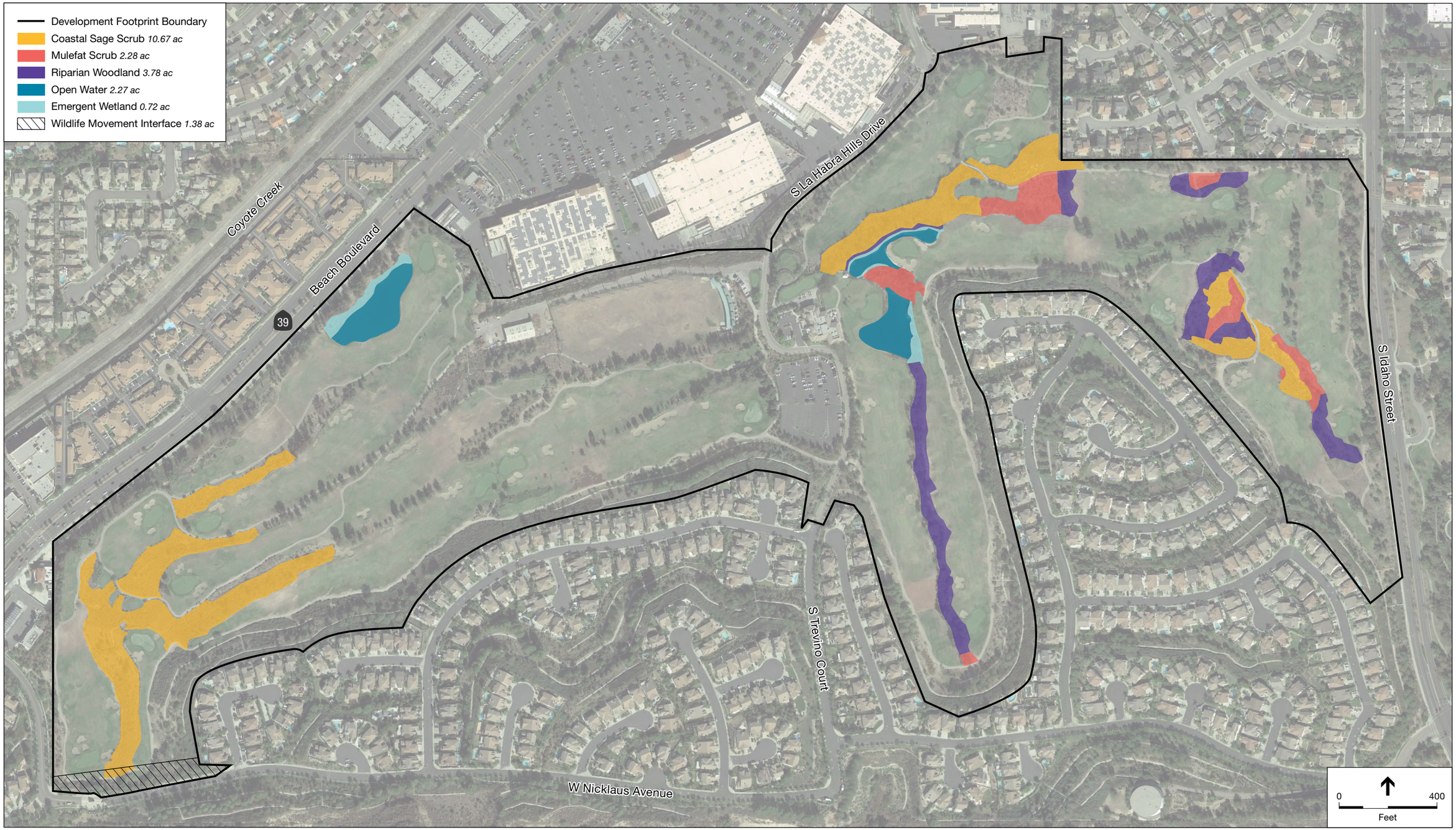

Figure 3.5-2: Existing Habitats

Source: Google Earth Pro; Carlson SLS

Particularly in the eastern portion of the project site, biologists noted the presence of dense clusters of coyote brush (*Bacarris piluaris*) interspersed in the coastal sage scrub. In the western portion of the development footprint, in the proposed conservation area, biologists noted opuntia (cactus) species in and adjacent to coastal sage scrub habitat areas. Special-status bird species including the California gnatcatcher and the western cactus wren use coastal sage scrub habitats. A total of approximately 10.67 acres of coastal scrub habitat occurs within the development footprint as shown in **Figure 3.5-2**.

Riparian Woodland

Riparian woodland in the development footprint is dominated by arroyo willow, black willow, mulefat, Peruvian pepper (*Schinus molle*), Brazilian pepper (*Schinus terebinthifolius*), western sycamore (*Platanus racemosa*), and Fremont's cottonwood (*Populus fremontii*). This habitat type also supports black sage (*Salvia mellifera*), giant wild rye (*Leymus condensatus*), western ragweed (*Ambrosia psilostachya*), California mugwort (*Artemisia douglasiana*), western poison oak (*Toxicodendron diversilobum*), cattails (*Typha sp.*), white alder (*Alnus rhombifolia*), coyote brush, pampas grass (*Cortaderia jubata*), and turf grass from the golf course, primarily Kentucky bluegrass (*Poa pratensis*).

The riparian woodlands in the development footprint support mature cottonwood trees, snags, and variously sized willows, and large landscape trees ranging from 6 to 40 feet in height. The riparian woodland habitat in the development footprint provides breeding and foraging habitat for local mammal and bird species and potentially for special-status wildlife including nesting raptors and the Fully Protected white-tailed kite. One special-status plant, the San Bernardino aster (*Symphyotrichum defoliatum*), could potentially occur in the riparian woodland habitat in the development footprint and is known to occur in the Coyote Hills. A total of 3.78 acres of riparian woodland habitat occurs within the development footprint. The distribution of this habitat type within the development footprint is indicated in **Figure 3.5-2**.

Mulefat Scrub

The mulefat scrub is dominated by mulefat (*Baccharis salicifolia*) but also includes California mugwort, black sage, western ragweed, coyote brush, arroyo willow, black willow, western sycamore, and Fremont's cottonwood. Also observed in the mulefat scrub habitats were non-native invasive species such as pampas grass, and other grasses from the golf course, primarily Kentucky bluegrass. Special-status plant species have the potential to occur in the areas of the development footprint where mulefat scrub has been mapped. The mulefat scrub provides foraging habitat and cover for local birds and mammals, special-status plants, and nesting habitat for special-status birds. The density of mulefat scrub vegetation varies annually following rainfall patterns, with more robust plants following heavy winter rains and thinly leafed plants during dry cycles. A total of 2.28 acres of mulefat scrub habitat occurs within the development footprint and is shown in **Figure 3.5-2**.

Emergent Wetland and Artificial Ponds

Emergent Wetland Habitat

Emergent wetland habitat in the development footprint appears as well-established stands of cattails (*Typha sp*) and bulrush (*Schoenoplectus acutus*) that have grown up along the outer edges of the man-made water pond features. Dense stands of cattails occur along the northern edge of Pond 1 and in the interface between Ponds 1 and 2. Emergent wetland vegetation also occurs adjacent to Pond 3, along the northern boundary of the development footprint. Freshwater emergent wetlands at the site are dominated by perennial vegetation such as cattails or bulrush and provide nesting and foraging opportunities, as well as cover, for a number of common bird species and reptiles. Species commonly associated with freshwater emergent wetland for which suitable habitat is available within the development footprint include black phoebe (*Sayornis nigricans*), marsh wren (*Cistothorus palustris*), song sparrow (*Melospiza melodia*), and red-winged blackbird (*Agelaius phoeniceus*). Emergent wetland vegetation composed of dense stands of cattails and bulrushes is found adjacent to the artificial golf course ponds and could potentially support Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*). This special-status plant species is known from the Coyote Hills to the south of the development footprint. Special-status birds such as the tri-colored blackbird use emergent wetland habitats and are known from the Coyote Hills south of the project site. Approximately 0.72-acre of emergent wetland habitat occurs within the development footprint (see **Figure 3.5-2**).

Artificial Ponds

The development footprint includes three man-made ponds which are shown as open water features in **Figure 3.5-3**. Ponds 1 and 2 are located at the northern toe of the central drainage, which is identified as "Drainage 1" in **Figure 3.5-3**. Pond 3 is located on the western side of the site, west of the driving range. The man-made ponds in the development footprint are managed as ornamental ponds within the golf course; this management includes adding supplemental water directly to the ponds to keep water levels stable year-round. A total of approximately 2.27 acres of open water in the form of artificially created golf course ponds occurs within the development footprint as shown in **Figure 3.5-3**.

Both Pacific tree frog and American bullfrog are likely residents of the golf course ponds and may forage among the emergent vegetation that surrounds the pond edges. Aquatic animals within the ponds likely include mosquito fish (*Gambusia affinis*), potentially goldfish (*Carassius auratus*) as people commonly dump unwanted pets in ponds, and possibly other mosquito control fish species. The pond habitat also provides habitat for native and non-native aquatic

Figure 3.5-3: Coastal California Gnatcatcher Critical Habitat and Nest Territories

Source: Google Earth Pro; Carlson SLS

reptiles like western pond turtle (*Actinemys marmorata*) and red-eared slider (*Trachemys scripta elegans*), either of which could persist in a perennially inundated pond feature such as found within Ponds 1, 2, or 3. Western pond turtles, which are special-status species, have the potential to occur in the pond features within the development footprint.

Landscaped Slopes

The slopes in the development footprint are planted with ornamental species including desert carpet (*Acacia redolens*), Aleppo pine (*Pinus halepensis*), eucalyptus (*Eucalyptus sp.*), Canary Island pine (*Pinus canariensis*), olive (*Olea europaea*), Peruvian pepper, Brazilian pepper, pampas grass, and grass from the golf course, primarily Kentucky bluegrass.

The numerous Canary Island pine (*Pinus canariensis*), Aleppo pine (*Pinus halepensis*), iron wood eucalyptus (*Eucalyptus sideroxylon*), California pepper tree (*Schinus molle*), Washington palm (*Washingtonia robusta*), queen palm (*Syagrus romanozoffiana*), provide potential nesting and roosting habitat for special status raptors and roosting habitat for special-status bat species. Common reptiles like the western fence lizard are expected to use the habitat on the landscaped slopes in the development footprint.

Federally Designated Critical Habitat

Critical habitat for the coastal California gnatcatcher (*Polioptila californica californica*) 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 development footprint is located along the eastern perimeter of the critical habitat boundary, and the critical habitat overlaps with approximately 11 acres of the development footprint (see **Figure 3.5-4**). The USFWS Recovery Plan for the gnatcatcher indicates that within the overall boundary of the USFWS-mapped areas, any contiguous coastal sage scrub plant communities in proximity to riparian habitats in coastal slopes and washes meet the definition of critical habitat for this species. Approximately 1.25 acres of contiguous coastal sage scrub habitat in the southwest portion of the project site supports constituent elements that meet the California gnatcatcher critical habitat definition.

c. Wildlife in Development Footprint

The most common animals detected at the project site during biological surveys were birds, which were observed throughout the development footprint including in the coastal sage scrub, mulefat scrub, riparian woodland, and emergent wetland vegetation. Adults and juvenile passerines were commonly observed during surveys. A pair of bluebirds were also observed to occupy the western side of the site during reconnaissance surveys conducted in April 2017. Bluebirds are a species with no current special status designation but are known to be experiencing population decline in California, and their presence at the site is noted here, as is their documented presence at the Coyote Hills.

The dominant bird species observed or otherwise detected when biologists surveyed the site were western scrub jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), bushtit (*Psaltriparus minimus*), red-tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), California towhee (*Pipilo crissalis*), and Say's phoebe (*Sayornis saya*). The common mammal species detected were cottontail rabbits (*Sylvilagus audubonii*), which frequented the edges of the golf course greens, and California ground squirrel (*Otospermophilus beecheyi*). The only reptile species, the western fence lizard (*Sceloporus occidentalis*,) was directly observed in the development footprint in the landscaped slope areas.

Ground squirrels, gophers, and desert cotton tail use the golf course greens and fairways for foraging and were observed in the development footprint eating the turf grass and non-native forbs that grow around the borders of the golf course. Foraging opportunities for red-tailed hawk occur on the greens of the golf course, where these birds of prey could hunt for small mammal prey such as ground squirrels or desert cottontail.

Invertebrates observed in the Coyote Hills undeveloped lands to the south, which support habitats similar to those on the project site, are considered to be potential residents in the development footprint. Common invertebrates include pale swallowtail (*Papilio eurymedon*), cabbage butterfly (*Pieris rapae*), funereal duskywing (*Erynnis funeralis*), Behr's metalmark (*Apodemia mormo virgulti*), and acmon blue (*Plebejus acmon*).

d. Special-Status Plants

Special-status plant species include plants that are (1) federally or state-listed as threatened or endangered, or (2) species considered rare or endangered in the CNPS plant inventory. **Table 3.5-1a** 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. **Table 3.5-1a** also indicates if special-status plants with the potential to occur in the development footprint are known to occur at the Coyote Hills.

Special-status plant species have the potential to occur in coastal sage scrub, mulefat scrub, riparian woodland, and emergent wetland habitats in the development footprint. Special-status plants are discussed below, grouped according to the existing habitats in the development footprint where the plants could occur.

Figure 3.5-4: Potential Section 1602 Jurisdiction

Source: Google Earth Pro; Carlson SLS

Table 3.5-1a
Special-Status Plants with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence
Abronia villosa var. *aurita*	chaparral sand verbena	CRPR: 1B.1	Chaparral, coastal scrub, desert dunes. Micro habitat sandy areas. 75 to 1,600 meters (245 to 5,300 feet) above mean sea level (MSL).	Low. Coastal sage scrub and coyote brush scrub may provide suitable habitat for growth.
Asplenium vespertinum	western spleenwort	CRPR: 4.2	Chaparral, coastal sage scrub, southern oak woodland. 180 to 1,000 meters (590 to 3,300 feet) above MSL.	None. Occurrence limited to habitat in foothills and mountains to the north of the Los Angeles Basin and limited mountainous areas to the east of the project area. No known occurrences on the valley floor.
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) above MSL. Identifiable June through October.	None. No suitable mesic alkaline habitat occurs on the project 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) above MSL. Identifiable April through October.	None. No suitable alkaline habitat occurs on the project site.
Berberis nevinii	Nevin's barberry	FE, SE CRPR: 1B.1	Chaparral, cismontane woodland, coastal scrub, and riparian scrub on steep north-facing slopes or in low grade sandy washes. 275 to 825 meters (900 to 2,700 feet) above MSL. Known to occur in Los Angeles, San Bernardino, Riverside, and San Diego counties. Blooms from March through June.	Low. Somewhat suitable habitat occurs on-site in the eastern drainage. Known to the east of the 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) above MSL. Active March through May.	None. The project site supports sandy and loamy soils, and lacks grassland habitats that would be suitable to support this species.
Calochortus plummerae	Plummer's mariposa lily	CRPR: 4.2	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) above MSL. Blooms May through July.	Low. Known locally from the northern end of the Santa Ana Mountains. California sage scrub and coyote brush scrub habitat are potentially suitable for this species occurrence.
Calochortus weedii var. *intermedius*	Intermediate mariposa lily	CRPR: 1B.2	Chaparral, coastal scrub, and valley and foothill grassland. Micro habitat is dry, rocky open slopes and rock outcrops. Known from 180 to 855 meters (590 to 2,800 feet) above MSL. Identifiable June through July.	None. Known locally from the northern end of the Santa Ana Mountains. California sage scrub and coyote brush scrub habitat are potentially suitable for this species occurrence but lack micro habitat of rocky open slopes.
Calystegia felix	lucky morning glory	CRPR: 3.1	Meadows and seeps, riparian scrub, occasionally found on alkaline, alluvial soils. Known from 30 to 215 meters (100 to 700 feet) above MSL.	Low. Known from San Bernadino County to the east. Suitable habitat occurs on-site in the coastal sage scrub.

Table 3.5-1a
Special-Status Plants with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence
Centromadia parryi ssp. *australis*	southern tarplant	CRPR: 1B.1	Grows at the edges of marshes, swamps, vernal pools, seasonal wetlands, and valley and foothill grasslands. Micro habitat is alkaline soils with salt grass. Known from below 480 meters (< 1,600 feet).	None. The site lacks wetlands that occur on alkaline soils.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's beak	FE, SE CRPR: 1B.2	Grows in saline marshes and swamps among coastal dunes. This species is limited to the higher inundation zones of salt marsh habitat. Known from below 30 meters (< 100 feet).	None. The site lacks salt marsh habitat.
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	CRPR: 2B.2	Parasitic on freshwater marsh and swamp vegetation. Known from 15 to 280 meters (50 to 920 feet) above MSL.	Low. Historic reference in California Natural Diversity Database (CNDDB). Potential within the cattail and bulrush marsh in the ponds.
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) above MSL. Blooms May through July.	None. The coyote brush scrub and coastal sage scrub habitat on the site is not on clay or granitic soils with rocky outcroppings.
Eriastrum densifolium ssp. sanctorum	Santa Ana River wollystar	FE, SE, CRPR 1B.1	Occurs in coastal scrub and chaparral in sandy soils on river floodplains or terraced fluvial deposits.	None. The site lacks river floodplain and/or terraced fluvial soils.
Horkelia cuneata ssp. *puberula*	mesa Horkelia	CRPR: 1B.1	Sandy or gravelly soils in chaparral and coastal scrub. Known from 70 to 810 meters (230 to 2,700 feet) above MSL. Identifiable February through September.	Low. Coyote brush scrub and coastal sage scrub habitats could potentially be suitable to support this species. Known to occur in the southern Santa Ana Mountains and along the coast at Costa Mesa.
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) above 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.	None. Refers to stands of mature walnut trees. Not observed on-site. Not identified during tree survey.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	CRPR: 1B.1	Found in dry washes and canyons in association with coastal sage scrub, and chaparral. This species is known to occur in disturbed areas especially after fires. Known from below 1,220 meters (< 4,000 feet). Identifiable year-round.	Low. Coastal sage scrub and coyote brush scrub on the site could provide potential habitat.

Table 3.5-1a
Special-Status Plants with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	CRPR: 4.3	Dry soils on chaparral and coastal sage scrub often around rock outcrops. Widespread throughout southern California foothills in dry, exposed locales. Known from below 885 meters (< 2,900 feet). Blooming period: January to July.	Low. Coastal sage scrub and coyote brush scrub habitats on-site are potential habitat. Many historic occurrences at northern Santa Ana Mountains and on coast.
Navarretia prostrata	prostrate vernal pool navarretia	CRPR: 1B.1	Occurs in vernal pools among coastal scrub, meadows and seeps, alkaline valley and foothill grasslands from below 1,210 meters (< 4,000 feet). 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.	None. Vernal pools are absent from the site and the required habitat is lacking.
Nemacaulis denudata var denudate	Coast wooly heads	CRPR 1.B2	Coastal dunes.	None. Dune habitat is not present 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) above MSL.	None. No suitable habitat occurs on-site. Vernal pools required for occurrence are absent from the site.
Phacelia stellaris	Brand's star phacelia	FC CRPR: 1B.1	Annual herb found within coastal sage scrub in sandy openings on benches, dunes, washes, and floodplains. Known from below 400 meters (< 1,300 feet). Blooms March through June.	Low. Coastal sage scrub and coyote brush scrub along riparian areas within the site could potentially support this species.
Pseudognaphalium leucocephalum	White rabbit-tobacco	CRPR: 2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral on micro habitat of sandy, gravelly soils.	Low. Coyote brush scrub and California sage scrub habitats have potential to support this species.
Ribes divaricatum var. *parishii*	Parish's gooseberry	CRPR: 1A	Riparian woodland, willow swales in riparian habitat. Known from 65 to 300 meters (210 to 980 feet) above MSL.	None. Riparian habitat is on-site; however, this plant is presumed extinct.
Scutellaria bolanderi ssp. *austromontan*	southern mountains skullcap	CRPR: 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Micro habitat gravelly mesic sites in oak and pine woodland. Known from 425 to 2,000 meters (1,400 to 6,600 feet) above MSL.	None. The site lacks suitable habitat.
Senecio aphanactis	chaparral ragwort	CRPR: 2B.2	Found in drying alkaline flats, washes, and canyons in association with coastal sage scrub 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) above MSL. Identifiable year-round.	None. The site lacks alkaline flats, washes or canyons. No suitable habitat is present to support this species.

Table 3.5-1a
Special-Status Plants with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence
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). Blooms March through June.	None. No suitable habitat occurs on-site. The site lacks alkaline habitat.
Suaeda esteroa	estuary seablite	CRPR: 1B.2	Marshes and swamps, coastal salt marshes in clay, silt, and sand substrates. Known from below 5 meters (< 15 feet).	None. No suitable coastal marsh habitat occurs on-site.
Symphyotrichum defoliatum	San Bernardino aster	CRPR: 1B.2	Vernally moist sites, i.e., ditches, seeps, streams, within a variety of plant communities. Known from below 2,040 meters (< 6,700 feet). Blooms July through November.	Low. Drainage and riparian areas are potential habitat for this species.

Legend

Federal Endangered Species Act (FESA) Listing Codes: Federal listing is pursuant to the Federal Endangered Species Act (FESA) 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 its 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 (CESA) 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 is in serious danger of becoming extinct throughout all or a significant portion of its 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 CDFW officially changed the name "CRPR List" or "CRPR Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CRPR and CDFW 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.

Table 3.5-1a
Special-Status Plants with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential Occurrence

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 CDFW 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, as 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), 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:
Calflora website – search for plants (Calflora 2016).
CRPR Inventory of Rare and Endangered Plants (CRPR 2016).
The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000–2004 (CDFW 2005).
The Jepson Manual: *Vascular Plants of California*, second edition (Baldwin et al. 2012).
RareFind, CDFW, California Natural Diversity Database (CNDDB) (CDFW 2016f). Nine 7.5 Minute Quadrangle search of the CNDDB includes El Monte, Baldwin Park, San Dimas, Whittier, La Habra, Yorba Linda, Los Alamitos, Anaheim, and Orange.
State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2017).

Special-Status Plants in Coastal Scrub Habitats

Special-status plants that could potentially occur in the coastal sage scrub habitat in the development footprint include Chaparral sand verbena (*Abronia villosa* var. *aurita*), Nevin's barberry (*Berberis nevinii*), Plummer's mariposa lily (*Calochortus plummerae*), mesa Horkelia (*Horkelia cuneata* ssp. *puberula*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), Brand's star phacelia (*Phacelia stellaris*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*). These species are generally known to grow on sandy soils within California's coastal scrub habitats, and some of the species are known to occur along sandy soils in riparian areas as well. The suite of special-status plant species listed above that have the potential to occur in coastal sage scrub habitats have been observed to the east and north of the site and are known historically from the project area, as indicated in **Table 3.5-1a**.

Special-Status Plants in Riparian, Mulefat Scrub, and Freshwater Emergent Habitats

San Bernardino aster (*Symphyotrichum defoliatum*) and lucky morning glory (*Calystegia felix*) are known to occur in drainage features within a variety of plant communities and could potentially occur along the drainages within the development footprint. Emergent wetland habitat found associated with Ponds 1 and 2 at the north end of Drainage 1 and adjacent to Pond 3 could potentially support Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*). This special-status plant species is known from the Coyote Hills to the south of the development footprint.

e. Special-Status Wildlife Species with Potential to Occur in Development Footprint

Special-status wildlife species include the following classifications: federally or state-listed threatened or endangered species, California species of special concern, species designated as Fully Protected in California Fish and Game Code, species named in the Migratory Bird Treaty Act, and species that are considered to be locally rare or in decline. Special-status wildlife species were considered to have a moderate potential to occur, as shown in **Table 3.5-1b**, if there are California Natural Diversity Database (CNDDB) documented occurrences within a 5-mile radius, or if suitable habitat is present. Although the CNDDB lists special-status plant and wildlife species that have historically occurred within the La Habra region, it is important to note that the inclusion of species in the database does not mean that any of the species listed would occur at the project site. Potential to occur in the development footprint is also indicated if a special-status species is known from the West Coyote Hills, the undeveloped land with similar habitat located to the south of the development footprint.

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
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. It hunts in broken woodland and habitat edges. Within the range in California, it most frequently uses dense stands of live oak, riparian deciduous or other forest habitats near water. It is also found and can breed in suburban and urban settings.	Moderate. Riparian areas along drainages provide suitable foraging and nesting habitat. Foraging is possible across the site in coastal sage scrub, coyote brush scrub and riparian habitats. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).
Accipiter striatus	Sharp-shinned hawk	WL (nesting only)	Sharp-shinned hawks hunt in a variety of riparian, woodland, and forested habitats including urban landscaping and trees. They nest in deciduous trees in riparian corridors and coniferous trees in forested habitats.	Moderate foraging. Low nesting. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).
Agelaius tricolor	Tri-colored blackbird	SE, SSC	Colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat composed of grassland, woodland, or agricultural cropland.	Moderate. Suitable nesting and foraging habitat exists on-site within cattail and bulrush habitats around the ponds. Foraging limited due to lack of grassland on-site. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	WL	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.	Present. Suitable habitat exists on-site, including coastal sage scrub and coyote bush scrub. Observed during California gnatcatcher surveys (Cadre Environmental 2014, Kidd Biological 2016). Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).
Ammodramus savannarum	Grasshopper sparrow	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Micro habitat is native grasslands with a mix of grasses, forbs, and scattered shrubs. It is loosely colonial when nesting.	None. The project site does not have grassland habitat that would support this species.

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
Antrozous pallidus	Pallid bat	SSC	Pallid bats occupy a wide variety of habitats, including deserts, grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Pallid bats roost in deep rock crevices, tree hollows, mines, caves, and man-made structures.	Moderate. Large trees on-site may provide roosting habitat.
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-site.
Aspidoscelis hyperythra beldingi	Orange throated whiptail	SSC	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 the coastal sage scrub, exists on-site. The species is not known from the West Coyote Hills after multiple years of protocol focused surveys that produced negative findings.
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-site.
Athene cunicularia hypugaea	Burrowing owl	SSC	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 grassland habitat does not occur on-site.
Arizona elegans occidentalis	California glossy snake	SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Low. Coyote brush scrub and coastal sage scrub habitat are potentially suitable for occurrence.
Artemisiospiza belli belli	Bell's sage sparrow	WL	This species prefers semi-open habitats with evenly spaced shrubs 3 to 6 feet high. Occurs in dry chaparral and coastal sage scrub.	Moderate. Sage scrub habitat on-site is potentially suitable for occurrence. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
Buteo swainsoni	Swainson's hawk	ST	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, sparse shrub lands.	None. Sufficient suitable foraging habitat does not occur on-site.
Campylorhychus brunneicapillus sandiegensis	Coastal cactus wren	SSC, FSS	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Moderate. Suitable habitat including patches of cactus dominated coastal sage scrub does not occur on-site, but in 1998 this species was reported to have occurred on-site on the CNDDB. Known to occur directly south of the site in the lands of the West Coyote Hills as reported between 1998 and 2002 (CNDDB 2017). Population to the south is presumed extant.
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 perennial stream habitat does not occur on-site. On-site drainages are intermittent and support no perennial water flow.
Choeronycteris mexicana	Mexican long-tongued bat	SSC	The Mexican long-tongued bat occurs in desert and montane riparian, desert succulent shrub, desert scrub, and pinyon-juniper habitats. Roosts in crevices, mines, and bridges.	None. Suitable habitat is not present in the development footprint.
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FT, SE	Roosts and nests in densely foliaged, deciduous trees and shrubs in extensive thickets, particularly willows.	None. The only known population of this species in the region is found along the eastern perimeter of Orange County where it shares a boundary with Riverside County.
Crotalus ruber	Red-diamond rattlesnake	SSC	Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub. They need rodent burrows, cracks in rocks, or surface cover objects.	None. Rattlesnakes are believed to be extirpated from the developed areas of the Los Angeles Basin.
Elanus leucurus	White-tailed kite	SSC	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low. Can nest in riparian areas, but site lacks sufficient foraging habitat. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003).

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
Empidonax traillii extimus	Southwestern willow flycatcher	FE, SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Low. Limited suitable habitat occurs on-site. Closest recorded occurrence was in 1906. Breeding season is May 15-July 17. Protocol Survey: www.fws.gov/pacific/ecoservices/endangered/recovery/documents/SWWFlycatcher.2000.protocol.pdf
Emys marmorata	Western pond turtle	SSC	Inhabits permanent or nearly permanent water below 1,830 meters (6,000 feet) throughout California, west of the Sierra Cascade.	Moderate. Ponds and adjacent emergent wetland vegetation at the site provide suitable habitat.
Eremophilia alpestris actia	California horned-lark	WL	Occurs in coastal regions from Sonoma to San Diego Countieswith a micro habitat of short grass prairie, bald hills, mountain meadows, open coastal plains, and fallow grain fields.	None. Grassland types to support this species are not present. Known to the south of the site in the lands of the West Coyote Hills (Dudek 2003), but on-site habitat is lacking.
Eumops perotis californicus	Western mastiff bat	SSC	Western mastiff bats roost in 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, chaparral, and grassland habitats.	Moderate. Western mastiff bats have been recorded by the CNDDB in the region around the project site. Trees on-site could provide suitable roosting habitat.
Icteria virens	Yellow-breasted chat	SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	None. No suitable habitat is on-site. Riparian habitat on-site is narrower and less dense than required for this species to occur. Not known from the Coyote Hills. Nearest observation is from Yorba Linda in 2014.
Lanius ludovicianus	Loggerhead shrike	SSC	Passerine species found in a variety of habitats including coastal sage scrub, known for catching and impaling insect prey upon barbed wire, thorns, and vegetation for later consumption.	Moderate. The site contains coastal sage scrub habitats, and the species is known from the West Coyote Hills.
Lasiurus xanthinus	Western yellow bat	SSC	Roosts 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 has also been documented roosting in cottonwood trees.	Moderate. Cottonwood trees occur along the drainage features and could potentially provide roosting habitat.

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
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. Open scrub habitat probably is preferred over dense chaparral.	Moderate. Suitable habitat, including coyote brush scrub and coastal sage scrub, occurs on-site.
Nyctinomops femorosaccus	Pocketed free-tailed bat	SSC	This bat species prefers rocky desert areas with high cliffs or rock outcrops.	None. No suitable habitat is on-site.
Nyctinomops macrotis	Big free-tailed bat	SSC	The big free-tailed bat is rare and of limited distribution in California. Records of the species are from urban areas of San Diego County.	None. No suitable habitat is on-site.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	SE	Coastal salt marshes. Nests in Salicornia and on margins of tidal flats.	None. Salt marsh habitat is absent from the site.
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 scrub.	Low to none. Somewhat suitable habitat, including coastal sage scrub, is observed on-site.
Phiynosoma blainvillei	Coast horned lizard	SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Moderate. Suitable habitat, including coastal sage scrub, and riparian woodland, is observed on-site.
Polioptila californica californica	Coastal California gnatcatcher	FT, SSC	A permanent resident of coastal sage scrub habitat and coastal sage-chaparral scrub. They also use chaparral, grassland, and riparian habitats next to coastal sage scrub for dispersal and foraging.	Present. The species was detected during the 2014 and 2016 surveys, and previous focused surveys determined that coastal California gnatcatchers were using the site at the time of the surveys. Breeding has been observed during both survey periods.
Riparia riparia	Bank swallow	ST	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 is on-site.
Setophaga petechia	Yellow warbler	SSC	Riparian plants in close proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, and alders.	Moderate. Riparian vegetation along drainage areas and emergent wetland vegetation around pond edges could provide potential habitat for this species. Not known from the West Coyote Hills. Nearest observation was in 2005 in Yorba Linda.

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence
Spea hammondii	Western spadefoot	SSC	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.	None. Vernal pools needed for breeding are absent from the site**.** No suitable breeding habitat exists on-site**.**
Vireo bellii pusillus	Least Bell's vireo	FE, SE	Least Bell's vireos primarily occupy riverine riparian habitats that typically feature dense cover within 1 to 2 meters of the ground and a dense, stratified canopy. Typically, they are 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. They use habitat that is limited to the immediate vicinity of water courses**.** This species is generally restricted to major river systems in San Diego County.	Low. Somewhat suitable habitat, including dense riparian habitat, occurs on-site. While suitable habitat is found on-site, riparian habitat is extremely dense and not suitable for the species**.** Breeding season is April 10 through July 31. Protocol Survey: https://www.fws.gov/pacific/ecoservices/endangered/recovery/documents/LBVireo.2001.protocol.pdf

Legend:
Nine 7.5-Minute Quadrangle search of the CNDDB includes El Monte, Baldwin Park, San Dimas, Whittier, La Habra, Yorba Linda, Los Alamitos, Anaheim, and Orange.

Federal Endangered Species Act (FESA) Listing Codes: Federal listing is pursuant to the Federal Endangered Species Act (FESA) 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 its 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 (CESA) Listing Codes: **S**tate 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 is in serious danger of becoming extinct throughout all or a significant portion of its 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**.**

Table 3.5-1b
Special-Status Wildlife Species with Potential to Occur in Development Footprint

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence

California Department of Fish and Wildlife (CDFW):
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.
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.
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 listed as state threatened and endangered; (2) have been removed (delisted) from either the state or federal threatened and endangered lists.

Special-status species identified in Tables 3.5-1a and 3.5-1b as having low potential to occur may have been recorded within a 5-mile radius of the development footprint, but the specific habitat type required to support the species does not occur. Similarly, those animal species that have specialized breeding habitat requirements that are not present within the project site were determined to have a low potential for occurrence. In some cases, both the lack of specific micro habitat and the notation that the CNDDB record for the species was recorded more than 20 years ago contributed to a determination of low potential for occurrence.

Special-status wildlife species with a moderate potential to occur are included in **Table 3.5-1b** and are as follows:

- Cooper's hawk – This raptor species is protected under California Fish and Game Code Section 3205 and is on the CDFW's watch list. Cooper's hawks are known to occur in the West Coyote Hills. Riparian woodland in the development footprint represents suitable foraging and nesting habitat.
- Sharp-shinned hawk – Known from the West Coyote Hills, but not observed in the development footprint, this raptor species nests in deciduous trees in riparian habitats, including urban areas. It is afforded special-status protection under the California Fish and Game Code and the Migratory Bird Treaty Act.
- Coastal California gnatcatcher – This coastal scrub-dependent bird species is listed as endangered under the CESA and FESA. Surveys for gnatcatchers in the development footprint confirmed the presence of active nests within the Specific Plan's proposed upland conservation area.
- Loggerhead shrike – A passerine species known from West Coyote Hills coastal sage scrub habitats, the loggerhead shrike is a CDFW species of special concern.
- Coastal cactus wren – Coastal sage scrub displaying concentrations of cholla or prickly pear cactus provides foraging and nesting habitat for this bird species of special concern. Although not directly observed on-site, cactus wren is known to occur in the West Coyote Hills, and suitable coastal sage scrub habitat occurs within the development footprint.
- Bell's sage sparrow – This species is included on the CDFW watch list and occurs in coastal sage scrub habitats. Known from the West Coyote Hills, this species could occur in coastal sage scrub habitats in the development footprint.
- Tri-colored blackbird – Individuals of this colony-nesting species have been observed in the West Coyote Hills, and the species is known to use emergent wetland habitats adjacent to open water, both of which occur in the development footprint. The tri-colored blackbird is a species of special concern and has been observed in the West Coyote Hills but has not been documented in the development footprint. However, suitable habitat is present, and the species could occur in the development footprint.
- Southern California rufous-crowned sparrow – Typically associated with coastal sage scrub and chaparral habitats, this species was directly observed in the development

footprint and is known from the West Coyote Hills. It is on the CDFW watch list and is afforded protection under California Fish and Game Code Section 3205.

- Yellow warbler – This small, brightly colored bird inhabits emergent wetland vegetation and is a CDFW species of special concern. It is not known from the West Coyote Hills and was not observed in the development footprint. However, emergent wetland vegetation and mulefat scrub and riparian woodland habitats in the development footprint constitute suitable habitat and could be occupied by this species.
- Western pond turtle – Open water in golf course ponds and the adjacent emergent wetland habitats in the development footprint provide suitable habitat for this CDFW-designated species of special concern.
- San Diego black-tailed jackrabbit – This species of special concern uses coastal sage scrub habitats for foraging, burrowing, and cover, and is known from the West Coyote Hills, south of the development footprint. There are no significant barriers to prevent the jackrabbit from entering the development footprint from the West Coyote Hills where is known to occur. Therefore, this species is assumed to have the potential to occur.
- Western Mastif Bat - Western mastiff bats roost in 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, chaparral, and grassland habitats. Large trees on site provide suitable roosting habitat.
- Western yellow bat -- Roosts 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 has also been documented roosting in cottonwood trees. Cottonwood trees occur along the drainage features and could potentially provide roosting habitat.
- Pallid bat – A California species of special concern, the bat species uses large trees and snags for roosting, and forages over open grasslands or water. The riparian woodland and large landscape trees in the development footprint provide suitable habitat for pallid bats.
- Coast horned lizard – Sandy substrate in coastal sage scrub and riparian woodland habitat in the development footprint represent potential habitat for this reptile species.

Wildlife species included in **Table 3.5-1b** that were identified as having a low potential to occur were presumed absent from the development footprint and are not addressed further in this EIR.

f. Wildlife Movement

Wildlife species are currently prevented from entering or leaving the project development footprint by obstructions such as the adjacent arterial roadways and residential and urban development that restrict animal movement across land surfaces. Except for avian species that have access to the site from farther away in the Puente Hills and East Coyote Hills, or during seasonal migration, the project development footprint does not provide a regional corridor or

connection between areas of undeveloped land and is not suitable to support regional wildlife movement. **Figure 3.5-5** shows the location of the development footprint relative to undeveloped lands supporting similar habitats.

Although the Specific Plan is generally isolated from any undeveloped areas supporting similar existing habitats, there remains a limited interface between the development footprint and undeveloped lands in the West Coyote Hills to the south. This interface area is identified as an existing habitat in the development footprint (**Figure 3.5-2**). Wildlife movement between the development footprint and undeveloped lands in the West Coyote Hills can occur unobstructed at this interface. Although a private access two-lane road also occurs at this interface, wildlife species including special-status bird species can move between the two sites at this location.

g. Regulatory Jurisdiction in Development Footprint

Biologists identified four linear drainages in the development footprint that exhibit the characteristics and physical features recognized by the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and CDFW as jurisdictional resources pursuant to the Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1600 (**Figure 3.5-6**). A description of the on-site drainages is presented below, followed by a discussion of the potential extent of federal or state regulatory jurisdiction within the development footprint.

Drainage 1, the central drainage feature within the development footprint, runs approximately 1,660 linear feet from south to north, conveying runoff into Ponds 1 and 2 as shown in **Figure 3.5-6**. This feature exhibits a defined bed and bank, an ordinary highwater line, and an estimated average channel width of approximately 25 feet, and supports riparian vegetation along its length. Drainage 1 historically flowed through the development footprint where golf course Ponds 1 and 2 now occur. Runoff flows in Drainage 1 through an extensive system of concrete v-ditches that traverse the site and is detained in the two golf course ponds. Runoff is conveyed to Coyote Creek downslope from the site, via subsurface drainage systems and culverts.

Drainage 2, shown in **Figure 3.5-6**, is located east of Drainage 1 and extends approximately 885 feet in length. It conveys site runoff into a large basin served by a corrugated stand pipe that functions to convey runoff to downstream receiving bodies including Coyote Creek and ultimately the Pacific Ocean. Drainage 2 supports riparian vegetation along its banks in the northern reach, shows signs of scouring, and exhibits an ordinary highwater line. Based on the ordinary highwater observed on each side of the bank in this drainage, biologists estimate the width of this channel to be an average of 10 feet. This drainage historically conveyed runoff across the site originating in the eastern portion of the West Coyote Hills watershed and exhibits physical characteristics that indicate it still provides drainage functions, including

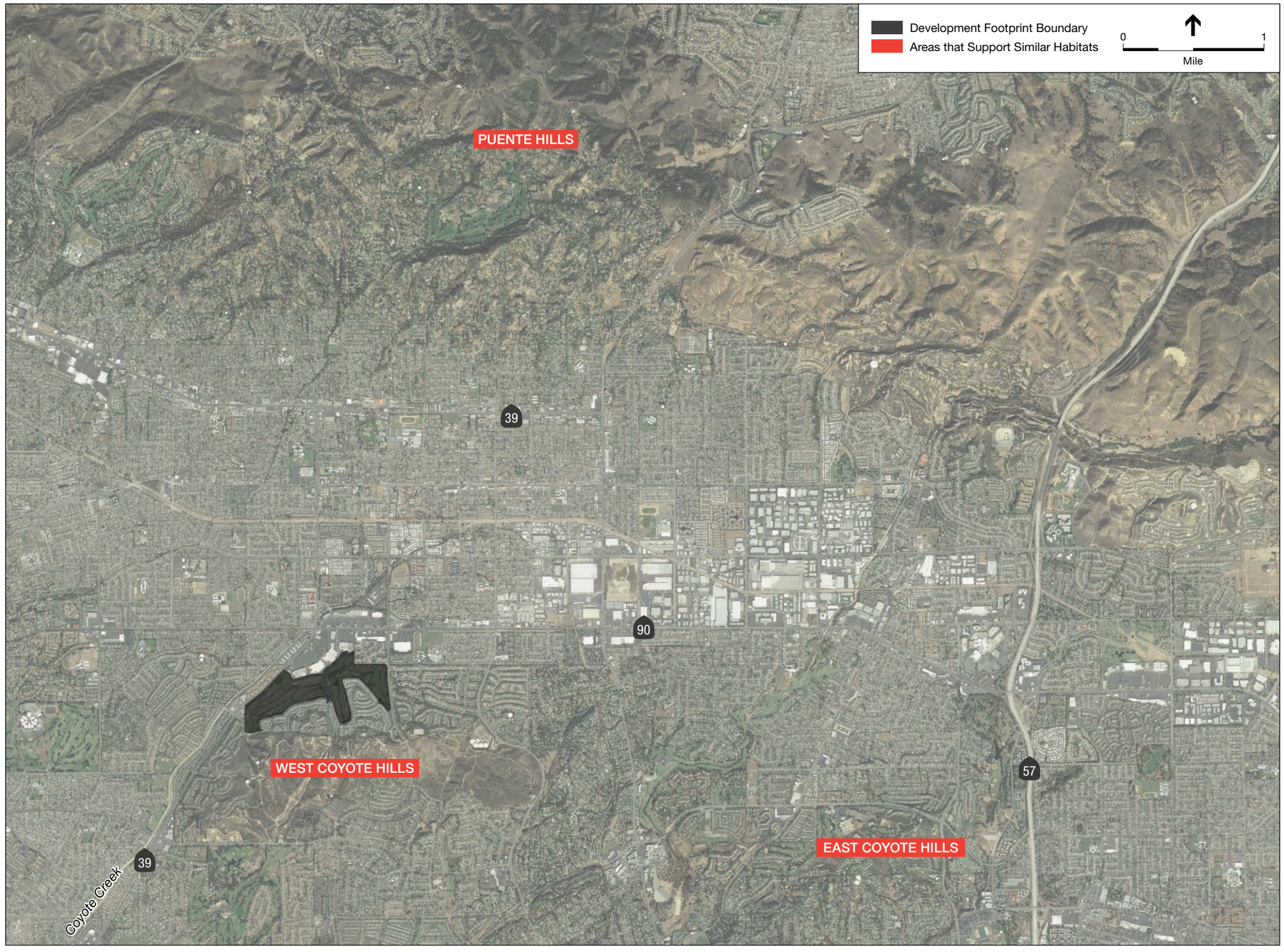

Figure 3.5-5: Areas that Support Similar Habitats

Source: Google Earth Pro

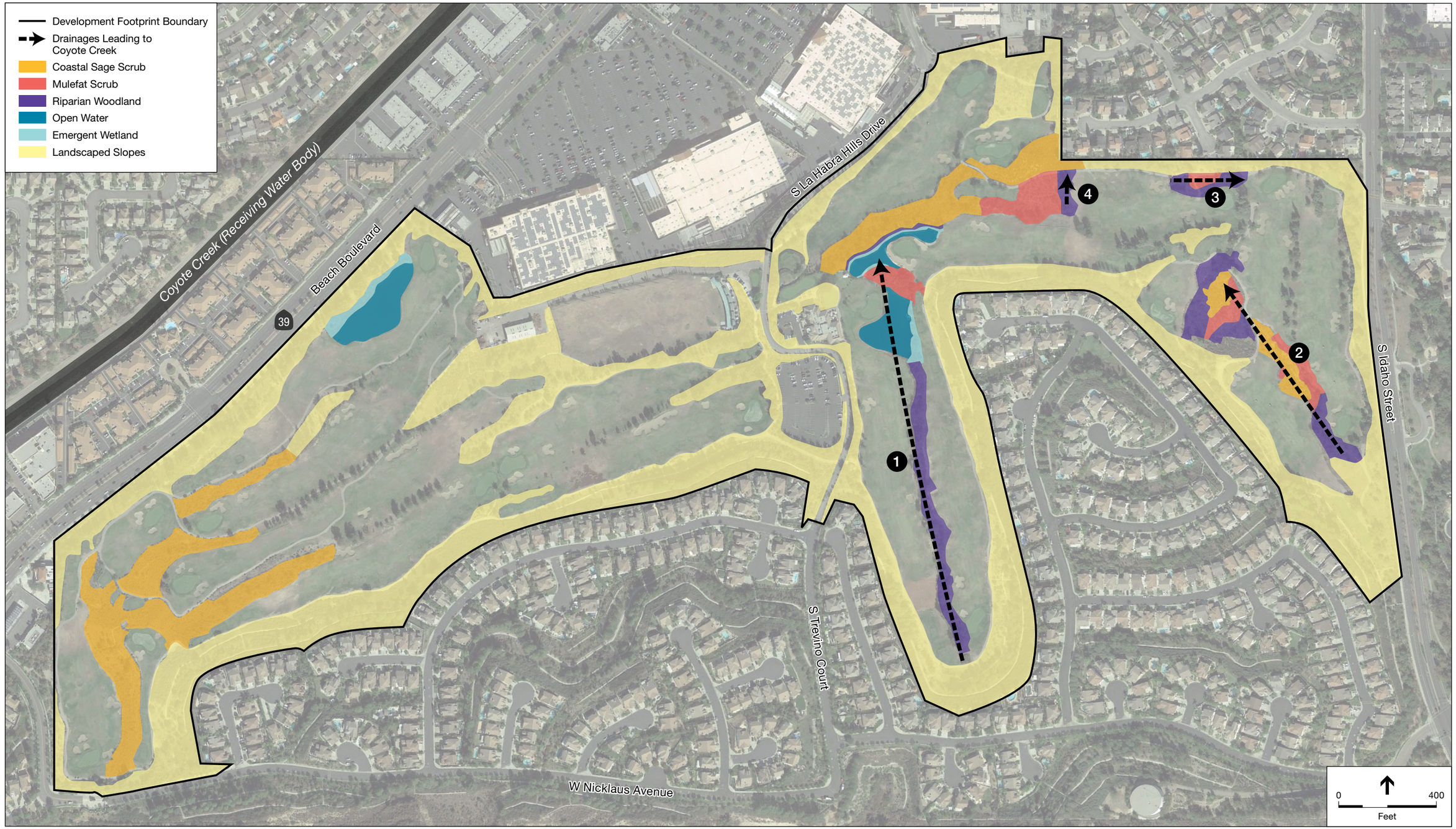

Figure 3.5-6: Drainages Leading to Coyote Creek

Source: Google Earth Pro; Carlson SLS

conveying golf course irrigation runoff. Riparian vegetation occurs along the length of the Drainage 2, but the channel loses definition upon reaching the basin served by the stand pipe referenced above.

Drainages 3 and 4 are located adjacent to the existing golf cart path that circumvents the golf course along its northern perimeter, and consist of approximately 50 linear feet and 258 linear feet of channel respectively, with defined bed and bank. These drainages convey runoff into an existing culvert pipe. Drainages 3 and 4 have formed in the development footprint in the interim since the golf course was constructed and convey site runoff into Coyote Creek. Both Drainage 3 and Drainage 4 support riparian vegetation including large cottonwood trees.

Potential California Fish and Game Code Section 1600-1602 Jurisdiction

As described in Section 3.5.2 above, CDFW has jurisdiction over streams, rivers, and lakes in California and regulates activities within these resources pursuant to Section 1600 of the California Fish and Game Code. Four drainage features were identified in the development footprint where observable physical features such as bed, bank, and riparian woodland habitats occur. Typically, CDFW uses the widest footprint of the drainage feature, capturing any areas that can be shown to be within the riparian dripline. This means that potential CDFW Section 1600 jurisdictional area in the development footprint would include the stream bed or channel, and would extend up to the top of the bank to include the adjacent riparian woodland vegetation.

Potential CDFW Section 1600 jurisdiction was identified based on direct observation of physical and vegetative features, and a comparison of air photos taken of the site over a 10-year period to confirm the maximum extent of riparian vegetation in the development footprint. The extent of CDFW Section 1600 jurisdiction depicted in the development footprint in **Figure 3.5-4** is a conservative estimate of potential jurisdiction; however, the official extent of CDFW jurisdiction can only be determined conclusively by CDFW agency staff during the regulatory process defined in the California Fish and Game Code Section 1600, which requires a Streambed Alteration Agreement to be in place prior to the start of construction of a project that could affect Section 1600 resources that are regulated by CDFW.

The area presented in **Figure 3.5-4** is a conservative estimate of the extent of potential CDFW jurisdiction in the development footprint for the purposes of CEQA review. Approximately 8.97 acres of potential CDFW jurisdictional area were identified in the development footprint and include riparian woodland habitat, emergent wetland vegetation, and the golf course ponds.

Potential Clean Water Act Section 404 Jurisdiction

Section 404 of the federal Clean Water Act directs the U.S. Army Corps of Engineers to regulate resources that occur within defined jurisdictional boundaries. The boundaries of 404 jurisdiction

within the development footprint can only be conclusively defined when the U.S. Army Corps of Engineers issues a jurisdictional determination, which includes an official stamp by that agency that establishes Clean Water Act Section 404 boundaries. For the purposes of CEQA, biologists have identified potential Section 404 jurisdictional areas within the development footprint based on the length and average width of the physical features observed, such as observable bed and bank (see **Figure 3.5-7** and **Table 3.5-2**).

Table 3.5-2
Potential Section 404 Jurisdictional Area

Drainage Feature	Length of Drainage	Average Width (Bed and Bank Only)	Estimated Section 404 Jurisdictional Area
Drainage 1	1,661 feet	20 feet	0.730 acre
Drainage 2	886 feet	10 feet	0.203 acre
Drainage 3	50 feet	10 feet	0.010 acre
Drainage 4	258 feet	10 feet	0.050 acre
Total Estimated 404 Jurisdiction			**0.993 acre**

Potential Section 404 jurisdiction was considered present within the development footprint in locations currently or previously known to convey water across the site into Coyote Creek, leading to additional creeks and waterways in the southern San Gabriel watershed, and into a receiving water body, which in this case is the Pacific Ocean. **Figure 3.5-6** shows the central drainage as potentially jurisdictional where it traverses the site and extends beneath Pond 1 and Pond 2 to create a hydrologic connection with the downstream receiving water body, Coyote Creek. A projection of Drainage 1 extending as it would have occurred in the development footprint prior to construction of artificial Ponds 1 and 2 is mapped as potentially jurisdictional. Drainage 1 historically flowed through the area where Ponds 1 and 2 currently occur, as observed on aerial photography, and the depiction of Section 404 jurisdiction in this portion of the development footprint is based on an estimated channel width of 25 feet.

Since 33 CFR Section 328(b) states that ponds that are artificially constructed to provide on-site detention are not jurisdictional, those water features, and the perimeter existing emergent wetland vegetation that has developed and persists only in association with the artificial water feature, were not considered potential Section 404 jurisdictional areas in the development footprint.

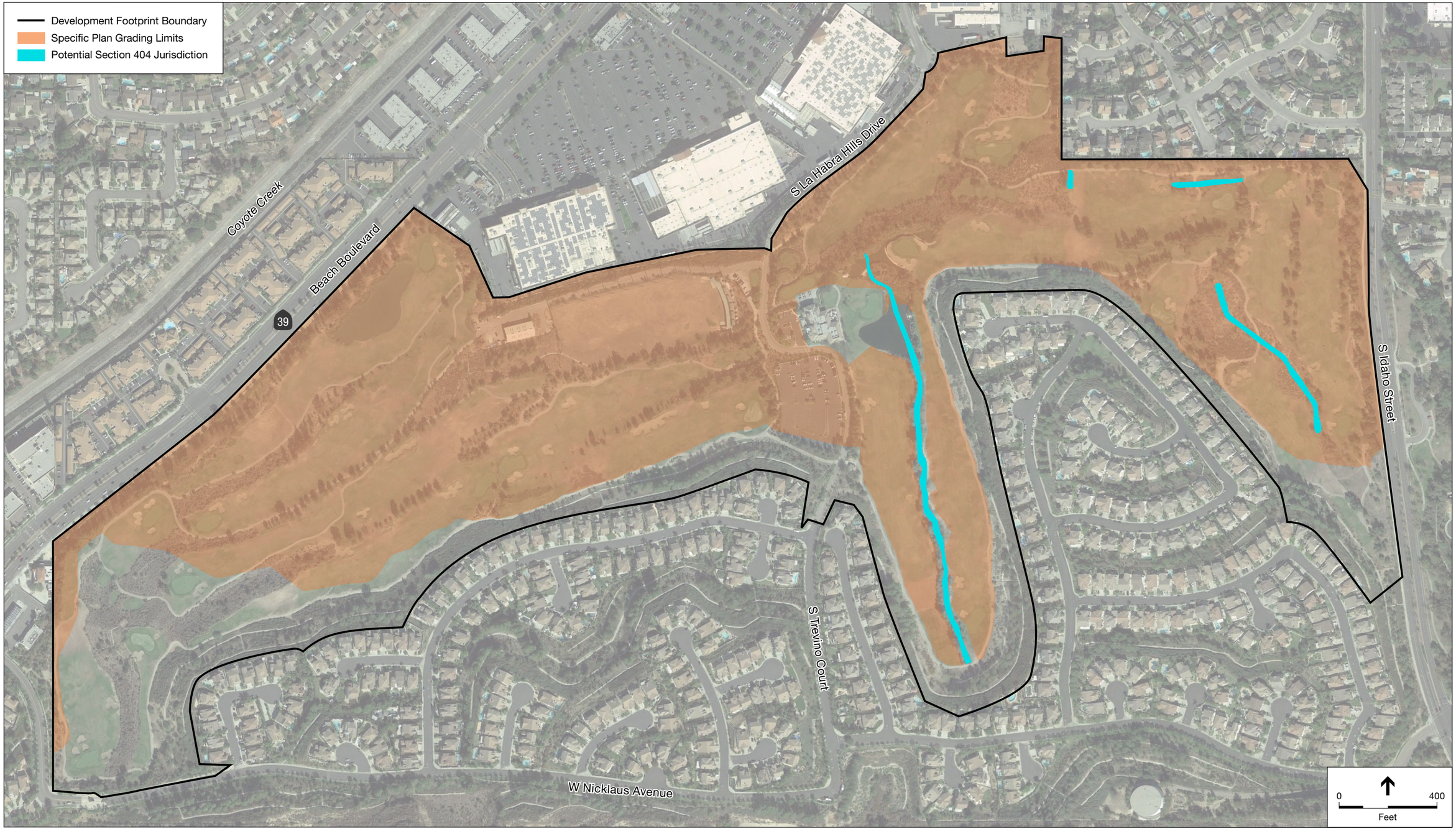

Figure 3.5-7: Potential Section 404 Jurisdiction

Source: Google Earth Pro; Carlson SLS

Potential Clean Water Act Section 401 Jurisdiction

Section 401 of the federal Clean Water Act requires the SWRCB to certify that Section 404 permitted activities would also comply with applicable state laws and regulations. The Regional Water Quality Control Boards operate under the Porter-Cologne Water Quality Control Act, which defines state jurisdiction as "any surface water or groundwater, including saline waters, within the boundaries of the state." This means that the SWRCB Section 401 jurisdiction captures drainage and water features in the development footprint that convey site runoff into receiving waters, as well as any drainages or water features consistent with Porter-Cologne definitions even if no connection to off-site receiving bodies can be shown. Approximately 1.70 acres of potential Section 401 jurisdictional area were identified in the development footprint as shown in **Figure 3.5-8**, and include the emergent vegetation along the golf club pond perimeters, but not the ponds themselves.

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 proposed 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: Site grading and construction in the development footprint would directly remove special-status plant and animal species and nesting birds. Construction activities and the use of parks, trails, and the Community Center could increase human foot traffic and direct encroachment into habitats that support special-status species, degrading the quality of the habitat compared to existing conditions. Proposed draining and re-lining and removal of golf course ponds could directly remove or damage western pond turtles. Compliance with applicable regulatory requirements of federal and state law, along with implementation of mitigation measures, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Methodology

Analysis of this threshold required first determining if habitat suitable to support special-status species, including species listed as threatened or endangered or proposed for listing under the CESA or FESA, is present within the Specific Plan development footprint (see **Figure 3.5-1**). These habitat types included coastal sage scrub, mulefat scrub, riparian woodland, and the artificial ponds with emergent wetland vegetation at the golf course (see **Figure 3.5-2**).

Biologists used the following sources of data to make this determination:

- CNDDB records covering a 5-mile, nine-quad radius around the site, which includes documented occurrences in the region;

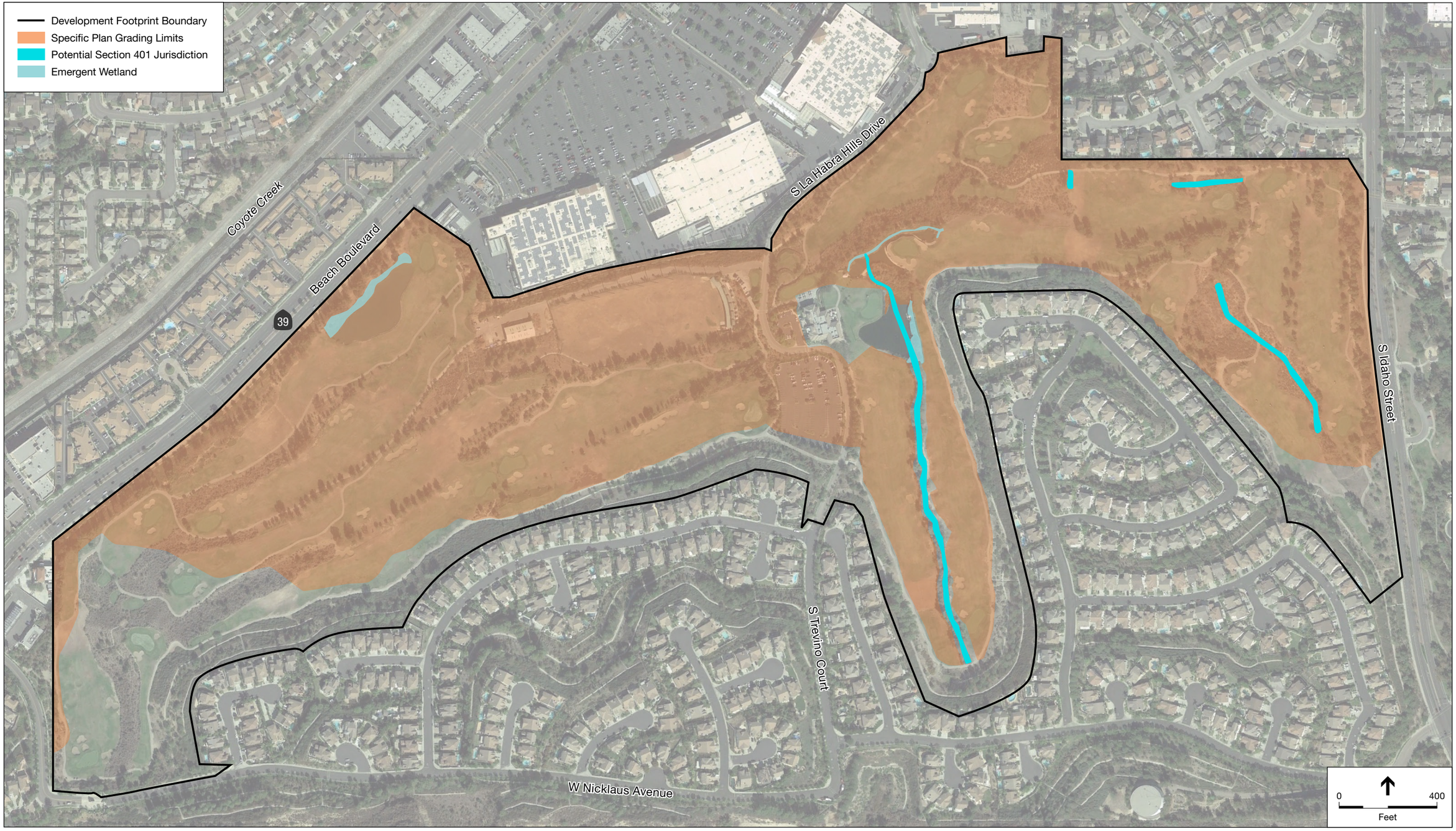

Figure 3.5-8: Potential Section 401 Jurisdiction

Source: Google Earth Pro; Carlson SLS

- Aerial photography of the site taken during different seasons over a 10-year period to provide a broader representation of the variability of habitats and site conditions over time; and
- Direct observations during biological surveys.

Focused surveys for California gnatcatcher were conducted in the coastal sage scrub habitats within the development footprint in 2014 and in 2016.

A significant impact would result if any of the following would occur:

- Habitat with the potential to support special-status species would be physically removed or substantially damaged, or a potential increase in human disturbance, including physical encroachment, 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.
- Construction of the habitat enhancements in the conservation areas, or installation of public parks, trails, viewing area kiosks, draining and re-lining of ponds, or retrofit of the golf course clubhouse to create a Community Center and amphitheater would physically disturb the soils and directly or indirectly cause the habitat to decline in total area and overall quality.
- Operation of proposed trails, parks, amphitheater, or Community Center would increase intensity or duration of human encroachment into special-status species habitats.

Impact Assessment

Direct Loss of Special-Status Species Habitat

The project development footprint is shown in **Figure 3.5-1**, which also shows the extent of the development footprint that would be subject to grading. **Figure 3.5-2** shows the existing habitats within the development footprint that have the potential to support special-status species. Within the grading limits, earth-moving and contouring of the site would require that existing vegetation be removed. Site grading would remove soil substrate to accommodate placement of engineered fill for slope stabilization and to accommodate required Specific Plan infrastructure such as roads, site drainage, utilities, and safety features, and would result in the direct loss of special-status species habitat within the development footprint as summarized in **Table 3.5-3**, below.

Table 3.5-3
Loss of Sensitive Habitat Due to Project

Vegetation Community	Existing within Project Site (Acres)	Total Removed (Acres Inside Grading Limits)	Total Avoided (Acres Outside Grading Limits)
Coastal Sage Scrub	10.67	5.92	4.75
Riparian Woodland	3.78	2.45	1.33
Mulefat Scrub	2.28	1.93	0.35
Emergent Wetland	0.72	0.53	0.19
Open Water	2.27	1.59	0.68
Total	**19.72**	**12.42**	**7.30**

Each of the habitats shown in **Figure 3.5-2** and listed in the **Table 3.5-3** have the potential to support special-status plants and wildlife species and are referred to as special-status species habitats. This direct removal of habitat would represent a substantial decrease in the total amount of special-status species habitat in the development footprint compared to existing conditions.

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

Construction and subsequent use of the proposed Community Center, amphitheater, public park facilities, trails, viewing areas, and environmental education kiosks, and construction of proposed enhancements to riparian 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 1, and grading and removal of Pond 3 (see **Figure 3.5-2**), would remove emergent wetland vegetation that has developed adjacent to the artificial ponds and could harm western pond turtles and special-status birds such as tri-colored blackbirds should they be present.
- Construction of a series of drop structures and wetland habitats proposed in the riparian conservation area would result in vegetation clearing and removal, soil excavation to create wetlands and drop structures, and a substantial increase in noise and human encroachment. These physical changes could remove or destroy special-status plants or cause harm to special-status nesting birds or special-status bats that could be roosting in large tree species in the riparian woodland habitat.
- 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. This 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 in the development footprint.

- Surface water runoff from construction areas could cause erosion and sedimentation, and introduce contaminants or debris into special-status species habitats within the development footprint. 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.
- Construction and subsequent use of trails, signage, viewing areas, the Community Center, and the amphitheater would change the degree, intensity, duration, and focus of human activity within the development footprint. The parks, trails, Community Center, and amphitheater could introduce large groups, including children, focused on more diverse and wide-ranging outdoor activity, compared to existing conditions that include few children and single-focus recreation at the golf course, and the occasional use of the clubhouse and outdoor patios for group events. Increased intensity and duration of use, and change in the focus of human activity, could degrade the quality of sensitive habitat by disturbing or displacing active nests.
- Proposed lighting features, trail signs, and educational kiosks installed along Specific Plan trails or in parks would increase the number and availability of perches and create increased predatory pressure compared to existing conditions. Birds of prey would be able to use perches as a base for hunting activities, and signs or poles to support lighting would afford additional opportunities for birds of prey to focus on nesting birds in the development footprint as a source of food. This could degrade the quality of nesting habitat overall or could result in reduction in the population of special-status birds in the development footprint.
- Management of the proposed fuel modification zone would include removing existing vegetation and trees and re-planting to meet fire safety guidelines. Tree trimming, tree cutting, and the associated noise and human activity in the proposed fuel modification zone could cause nesting birds and special-status bats within the landscaped slopes to abandon nests or roosts and could result in the loss of individual animals.

Significance Conclusion for Impact BIO-1

Significant impacts for which mitigation is required would result from the following:

- Site grading, which would directly remove special-status species habitat in the development footprint;
- Construction of the proposed parks, trails, and Community Center, and habitat enhancement in upland and riparian conservation areas, which would create physical changes to soils and drainage and increase the degree of potential human encroachment into special-status species habitat, resulting in a decline in quality or quantity of existing habitat;
- Use of the public trails, parks, Community Center, amphitheater, and wildlife viewing kiosks, which could cause soil compaction or increased erosion, due to increased intensity and duration of human encroachment into special-status species habitats, and thereby cause a decrease in habitat quality or total area of habitat;

- Buildout of the Specific Plan and on-going management of the fuel modification zone, which could result in damage to or destruction of active bird nests and special-status bat species roosting in large trees in the development footprint.

Mitigation Measures

Mitigation Measure BIO-1a: **In-Kind Replacement of Special-Status Species Habitat**. Any special-status species habitat that cannot be avoided during site development shall be replaced in-kind. The applicant shall purchase credits at a U.S. Fish and Wildlife Service (USFWS)/California Department of Fish and Wildlife (CDFW) approved mitigation bank or fund the creation and preservation of habitat at an off-site location such as the West Coyote Hills to demonstrate a minimum replacement ratio of at least 1:1 and meets the state regulatory agency's performance standard of "no net loss" for direct loss of special-status species habitat within the development footprint. Compensation shall be detailed on an acreage-specific basis and shall include a habitat mitigation and monitoring plan, which shall be developed in coordination and compliance with state and federal regulatory agency performance standards of "no net loss." Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet stated "no net loss" standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, such plans shall include:

- Baseline information, including the findings and conclusions of the Biological Assessment prepared by the applicant and submitted to the USFWS and CDFW as part of the regulatory permitting process;
- Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration or off-site habitat creation); and
- Measurable performance standards and criteria including but not limited to the overall amount of percent cover and species diversity for restoration or enhancement in the Specific Plan development footprint must meet state and federal regulatory resources agency approval, and must be provided for City review at the end of the 5-year monitoring period. Should the restoration or enhancement

fail to meet success criteria as defined in the mitigation and monitoring plan required as part of the state and federal agency permitting process, the City would implement remedial restoration or enhancement efforts at the cost to the applicant. Contingency funds will be established and deposited in an escrow account with the City, to be refunded to the applicant at the time the resource agency performance criteria that is established as "no net loss" is met.

Mitigation Measure BIO-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 and Landscaped Slopes. Proposed enhancements to the riparian conservation area (i.e., removal of non-native invasive species, draining and re-lining of Ponds 1 and 2) and any tree trimming or tree removal in the landscaped slopes associated with fuel management activities 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 tree trimming or removal, or proposed riparian enhancement activities, are 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 pre-construction 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-1c: **Avoidance and Replacement of Special-Status Plants.** Pre-construction botanical surveys for special-status plants shall be conducted within coastal sage scrub, mulefat scrub, and riparian woodland habitats in the development footprint during the appropriate flowering periods as identified in **Table 3.5-1a** of this EIR, which summarizes special-status plants with the potential to occur in the development footprint. Pre-construction botanical surveys of coastal sage scrub, mulefat scrub, and riparian woodland habitats shall be conducted in the spring season prior to initiation of grading. Compliance with survey dates and protocol survey methods included in **Table 3.5-1a**, or protocol current at the time of development, shall be demonstrated.

If special-status plant species are found during pre-construction botanical surveys conducted during the appropriate survey period by a City-approved qualified botanist familiar with the species, **Mitigation Measure BIO-1a** will apply, including in-kind replacement and development of a mitigation and monitoring plan that would be provided, (along with monitoring reports prepared to meet rigorous regulatory standards applied by state and federal resources agencies), to the City as evidence that the mitigation measure has been successfully implemented.

Mitigation Measure BIO-1d **Avoidance of Special-Status Bats in Coastal Sage Scrub and Riparian Woodland Habitats**. Prior to direct removal of coastal sage and riparian woodland within the grading limits, and prior to tree trimming or tree removal activities for habitat enhancement proposed in the conservation areas and in the landscaped slopes subject to fuel management treatment, surveys shall be conducted for special-status bat species. At least 10 days before surveys begin, the applicant shall confer with CDFW to confirm current bat survey methodology. Surveys shall be conducted by a bat biologist familiar with the local bat species, and results of the surveys shall be summarized in a report to be provided to the City for review and approval. If individual roosting bats are detected, direct

removal of habitat and proposed tree removal and tree trimming shall occur only after it has been confirmed that roosting bats have departed. If a confirmed bat roosting tree is lost, installation of bat roosting boxes in the vicinity of the cut tree shall be required.

Mitigation Measure BIO-1e: **Finding and Relocating Western Pond Turtles.** Pre-construction surveys to find western pond turtles that may occur in open water habitat in Ponds 1 through 3 within the development footprint shall be conducted 14 days prior to proposed fill and removal of Pond 3 and proposed draining and re-lining of Ponds 1 and 2. If the species is present in work areas, City-approved biologists shall capture turtles prior to construction activities and relocate them to nearby suitable habitat (the closest water body) out of harm's way (e.g., upstream or downstream from the work area). The applicant shall provide notification to CDFW regarding any relocation of western pond turtles in the development footprint.

Mitigation Measure BIO-1f: **Setbacks and Erosion Protection for Coastal Sage Scrub and Riparian Woodland.** All viewing areas, signage, benches, the amphitheater, or other park features shall be located at least 50 feet from the edge of coastal sage scrub and 50 feet from the edge of riparian woodland habitat conservation areas. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub or riparian woodland 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 or riparian woodland 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 Chief Building Official prior to issuance of grading

permit (see Impact HWQ-1.1 in Section 3.13, *Hydrology and Water Quality*). Posted park rules shall identify riparian woodland and coastal sage scrub habitats in the conservation areas, and shall state that encroachment onto riparian woodland or coastal sage scrub areas is prohibited. Educational signage and other signs proposed in the upland or riparian conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting.

Public-access within upland and riparian conservation areas shall be restricted to approved trails, begin no earlier than 7:00 a.m., and conclude no later than 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.

Significance Conclusion for Impact BIO-1 with Implementation of Mitigation Measures

With implementation of **Mitigation Measures BIO-1a** through **BIO-1f**, the impact on special-status species with the potential to occur in the development footprint would be reduced to a less-than-significant level.

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 sensitive natural habitats within the development footprint. Sensitive natural habitats proposed to be avoided by the project could be damaged or reduced in quality during construction and use of the Specific Plan trails, parks, and Community Center and as a result of proposed habitat enhancement. Compliance with applicable regulatory requirements of federal and state law,**

along with implementation of mitigation measures, would reduce the impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Methodology

Each of the existing habitat types identified in the development footprint and shown in **Figure 3.5-2** support special-status species. Therefore, the existing habitats identified in the development footprint are considered to be sensitive natural habitats.

Special-status species that have the potential to occur in existing habitats in the development footprint are discussed in Section 3.5.3, and the regulatory status and habitat requirements of these species are summarized in **Table 3.5-1a** and **Table 3.5-1b**.

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, which are described in more detail in Section 3.5.2.

Impact Assessment

Sensitive natural communities would be directly removed during grading, excavation, and earth-moving within the Specific Plan grading limits.

Sensitive habitats in the development footprint include potential jurisdictional areas presented in **Figures 3.5-4**, **3.5-7**, and **3.6-8**. The extent of potential regulatory jurisdiction in the development footprint is presented in this EIR using a habitat-based analysis to produce a conservative estimate of area. Since jurisdictional authority can only be determined and confirmed by the regulatory agency with oversight during the regulatory permitting process, jurisdictional confirmation could result in a regulatory finding of a smaller overall area of jurisdictional authority compared to what is presented in this EIR. However, the habitat-based conservative estimate of jurisdictional area in the development footprint as presented in **Figures 3.5-4**, **3.5-7**, and **3.5-8** would not be exceeded. **Table 3.5-3** lists estimated acreages of sensitive natural habitats within the proposed development footprint, and **Table 3.5-4** lists estimated acreages within potential jurisdictional areas.

Table 3.5-4
Project Effect on Potential Jurisdictional Areas

Potential Jurisdiction in Development Footprint	Existing (Acres)	Total Area to be Removed (Acres)	Total Area to be Avoided (Acres)
Clean Water Act Section 404	0.99	0.21	0.78
Clean Water Act Section 401 and Porter-Cologne Water Quality Control Act	1.70	0.74	0.96
California Fish and Game Code Section 1602	8.63	6.15	2.48

Sensitive habitats in the development footprint include critical habitat for the coastal California gnatcatcher as defined and mapped in the USFWS recovery plan for that species. Coastal California gnatcatcher critical habitat in the development footprint is shown in **Figure 3.5-3**.

Sensitive natural communities in the development footprint that occur outside grading limits would be avoided by Specific Plan development. However, build-out of the Specific Plan would create physical changes that could degrade the quality or result in a reduction in the overall quantity of sensitive natural communities adjacent to proposed public parks, the Community Center, the amphitheater, educational kiosks, and trails.

Significance Conclusion for Impact BIO-2

Direct removal of sensitive natural communities in the Specific Plan grading limits would be considered a significant impact based on Threshold BIO-2.

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

Mitigation Measures

Mitigation Measure BIO-2a: **Preventing Degradation of Natural Communities in Development Footprint.** The applicant shall avoid or minimize adverse effects on sensitive natural communities in the Specific Plan development footprint. 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 Section 3.13, *Hydrology and Water Quality*, of this EIR 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.
- Phase grading operations to reduce disturbed areas and time of exposure.
- Avoid excavation and grading during wet weather.
- 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.
- Whenever practicable, provide native vegetation buffer areas to prevent pollutants from entering on-site and off-

site water bodies, and substitute vegetation for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.

- 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.

The applicant shall prepare and implement a maintenance program as approved by the Chief Building Official 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 riparian and upland conservation areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Installing silt fencing or vegetative plantings between sensitive natural communities and project parks, trails, kiosks, the Community Center, and the amphitheater.
- Locating fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features, and otherwise isolating construction work areas from any identified jurisdictional features including California Fish and Game Code Section 1602 jurisdictional areas.
- Ensure on-going maintenance and management in perpetuity at no expense to the City for the upland and riparian conservation areas within 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 and riparian 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: **In-Kind Replacement of Sensitive Natural Communities.** Where grading or removal of sensitive natural habitats cannot be avoided, compensation shall be provided to demonstrate that no net loss of sensitive natural communities would occur as a result of build-out of the Specific Plan.

Mitigation Measure BIO-2c: **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 and riparian conservation areas 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 and riparian conservation area habitats within the project development footprint, the following shall apply to any proposed lighting adjacent within 150 feet of the upland or riparian conservation areas:
    - Low-intensity street lamps 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.
  - 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 red fox, raccoon, or opossums. Such restrictions shall be monitored by a property owners' association that shall

have the right to impose fines for violation of this requirement.

- An education program for residents and Community Center and trail users shall be developed, including posted interpretive signs and informational materials regarding the sensitive habitats and the dangers of unleashed domestic animals in this area. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of the pet policy. Such information shall be provided in the vicinity of proposed kiosks and wildlife viewing areas where public access is provided.

Mitigation Measure BIO-2d: **In-Kind Replacement of Jurisdictional Resources in Sensitive Habitats.** Where direct removal of vegetation within Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1602 jurisdictional areas would occur, suitable habitat replacement shall be provided to meet the required performance standard of no net loss of sensitive habitats, including regulatory jurisdictional areas.

Significance Conclusion for Impact BIO-2 with Implementation of Mitigation Measures

With implementation of **Mitigation Measures BIO-2a** through **BIO-2d** as described above, as well as **Mitigation Measure BIO-1b** pertaining to pre-construction surveys for coastal California gnatcatcher that would also apply to critical habitat, the impact on sensitive habitats 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, site grading, and habitat enhancement proposed in the Specific Plan would directly remove, and could damage or degrade during construction, protected Section 404 wetland areas in the development footprint. 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

Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to regulate waters and wetland resources that occur within defined jurisdictional boundaries. The boundaries of Section 404 jurisdiction are conclusively determined based on a three-point test to identify Section 404 waters and wetlands, the findings of which are confirmed when the U.S. Army Corps of Engineers issues a jurisdictional determination. For the purposes of this EIR analysis, biologists have identified the extent to which all or portions of existing drainages in the development footprint exhibit physical features and characteristics that could meet criteria the U.S. Army Corps of Engineers uses to determine the extent of jurisdiction (see **Figure 3.5-7**). The extent of potential Section 404 protected area was estimated based on the observed length and average width of the observable drainage features, including bed and bank.

Section 401 of the Clean Water Act requires the SWRCB to certify that proposed Section 404 permitted actions meeting federal standards would also comply with, or would not conflict with, applicable state laws and regulations. The Regional Water Quality Control Boards, which operate under the Porter-Cologne authorities, define state jurisdiction as "any surface water or groundwater, including saline waters, within the boundaries of the state" and do not exclude isolated waters as the Section 404 definition does. This means that Regional Water Quality Control Board jurisdiction captures isolated wetlands as well as any drainage features in the development footprint that meet Section 404 definitions by conveying runoff and water from the development footprint into Coyote Creek.

As an additional sub-set of the Clean Water Act, the potential Section 401 protected wetlands in the development footprint have been estimated to include potential Section 404 protected wetlands in addition to the emergent wetland vegetation adjacent to artificial ponds, which are considered to be isolated since they have no hydrologic connectivity to receiving waters such as Coyote Creek. Therefore, wetland and water resources protected under Section 401 are shown to be broader in scope than Clean Water Act federal authority and exceed the amount of Section 404 jurisdictional area in the development footprint by approximately 0.71 acre.

The extent to which potential Section 404 protected wetland resources occur within the development footprint is depicted in **Figure 3.5-7**. Acreage estimates shown in **Table 4.5-4** above and areas shown in the graphics are approximate and subject to change pending issuance of a jurisdictional determination for the Specific Plan from the U.S. Army Corps of Engineers.

Impact Assessment

Earth-moving, grading and site development preparation within the Specific Plan grading limits would physically remove Clean Water Act Section 404 and 401 jurisdictional resources, resulting in the direct loss of these resources within the development footprint. **Table 3.5-4** summarizes the amount of potential Section 404 and 401 jurisdictional area estimated in the

development footprint, and indicates the total amount of each jurisdictional area that would be removed by Specific Plan development.

Construction and subsequent use of the proposed Community Center, park facilities, and trails, and activities associated with construction and implementation of proposed enhancement of the riparian conservation area, would affect potential Sections 401 and 404 protected wetland areas in the following ways:

- Construction activities associated with draining and re-lining of non-jurisdictional golf course Ponds 1 and 2 could result in crews and equipment encroaching upon or damaging emergent wetland or mulefat scrub that has developed adjacent to the artificial ponds and is now a potential Section 401 jurisdictional resource.
- Draining and re-lining of Ponds 1 and 2 would potentially create physical change to potential Section 404 jurisdictional resources in the footprint of the historic central channel that occurs between Ponds 1 and 2 shown in **Figure 3.5-7**. Construction crews and equipment could encroach onto and damage or destroy potential Section 404 jurisdictional resources found adjacent to the man-made ponds.
- Construction of a series of drop structures and creation of wetlands proposed as enhancements of the riparian conservation area would create physical changes to potential Sections 404 and 401 jurisdictions. Construction and implementation of proposed enhancement activities would create physical changes such as construction excavation, placement of permanent and temporary fill, and temporary de-watering within bed and bank that would be considered a significant impact on Sections 404 and 401 jurisdictional resources.
- Trails, viewing areas, and park features such as picnic areas would introduce additional foot traffic in the form of larger groups of people spending greater amounts of time and potentially creating increased noise from amplified speakers or group activity compared to existing conditions, in which groups of two to four golfers traverse the site for a limited duration for a single focused activity not usually associated with loud talking. In addition, the project would include trail lighting and use of the development footprint for a longer period of time each day compared to existing conditions, in which only the driving range is lighted.. This could potentially degrade the quality of protected Section 404 wetland resources by promoting erosion or soil compaction, physically damaging plants, or leaving litter and debris, all of which could alter growing conditions so that Section 404 protected resources decline in quality or overall area over time compared to existing conditions.
- Fugitive dust created by grading and site preparation for construction of the proposed Community Center and amphitheater could settle on plant surfaces in potential Section 404 jurisdictional areas and indirectly inhibit metabolic processes such as photosynthesis and respiration. This could cause a decline in the health and vigor of plants or the area and distribution of plants in Section 404 and 401 jurisdictional areas compared to existing conditions.
- Surface water runoff from construction areas within the development footprint and adjacent to potential Sections 404 and 401 jurisdiction areas could cause erosion and

sedimentation and could introduce contaminants or fill materials into potential Section 404 and 401 jurisdiction areas, resulting in a reduction in the functions and values of the resources compared to existing conditions.

Significance Conclusion for Impact BIO-3

Direct removal of protected Section 404 wetland resources found in the development footprint would be considered a significant impact. Physical changes to jurisdictional resources during proposed habitat enhancement and construction of a series of drop structures and wetlands in potential Sections 404 and 401 jurisdictional areas would be considered a significant impact.

Increased human activity and potential physical encroachment into protected Section 404 wetland areas compared to existing conditions, could result in a decrease in quality or the total area of such resources within the development footprint and would be considered a significant impact.

Mitigation Measures

Mitigation Measure BIO-3: Implement Mitigation Measures BIO-2a through BIO-2d.

Significance Conclusion for Impact BIO-3 with Implementation of Mitigation Measures

With implementation of **Mitigation Measures BIO-2a through BIO-2c** pertaining to avoidance and protection of jurisdictional resources, and **Mitigation Measure BIO-2d** which establishes the performance standard of no net loss of potential jurisdictional resources, impacts on federally protected wetlands in the development footprint would be reduced to a less-than-significant level.

Because performance standards for Specific Plan development, as set forth in **Mitigation Measure BIO-2d,** include ensuring that the total area and/or overall functions and values of sensitive habitats including jurisdictional resources would apply to site development, impacts associated with removal and potential degradation of protected Section 404 wetland resources would be less than significant.

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: Construction of the Specific Plan's proposed trails, enhancement of upland and riparian conservation areas, and vegetation removal and re-planting in fuel management areas could impede

seasonal and localized movement of wildlife between habitats in the project development footprint and the West Coyote Hills. However, compliance with applicable regulatory requirements of federal and state law, along with implementation of mitigation measures, would reduce impacts to less than significant levels. The impact would therefore be *significant but mitigable*.

Methodology

Seasonal and local wildlife movement is a critical mechanism of exchange between population centers that is needed to maintain sufficient genetic diversity to sustain viable populations. Isolated populations of wildlife whose young have no avenue 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.

A wildlife movement corridor provides a link or conduit between two or more large areas of similar habitat (Beier and Loe 1998). Biologists reviewed aerial photography to identify potential wildlife corridors that would provide a connection between the project development footprint and any large area of similar habitat within a 5-mile radius. The 5-mile radius was scanned to determine the presence of unvegetated or undeveloped lands that could function to facilitate movement between two or more large areas of similar habitat.

Physical changes that could impede movement and exchange between two viable wildlife populations would be considered a significant impact. Such changes may include removal of vegetation that provides cover for wildlife movement, or construction and use of park structures, lighting, or kiosks. Such changes may occur in the existing vegetated interface between the development footprint and the West Coyote Hills.

Impact Assessment

The three nearest locations of large-area similar habitat are the East Coyote Hills located 2 miles east of the project site, the Puente Hills 3 miles north of the project site, and the West Coyote Hills directly adjacent to the south of the development footprint. The area between the development footprint and the East Coyote Hills and Puente Hills is 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 development footprint and those two large habitat areas.

Large areas of similar habitat in the West Coyote Hills support avian species, including the endangered California gnatcatcher and additional special-status species such as the cactus wren, in similar habitat conditions compared to what is found in the development footprint. An interface of approximately 500 linear feet along the southern boundary of the development footprint allows for unobstructed movement between existing similar habitats directly adjacent

that are present in West Coyote Hills. The movement of wildlife between the undeveloped lands in the West Coyote Hills and similar habitats in the project development footprint 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 development footprint.

Nest territories for the California gnatcatcher have been documented in the development footprint (see **Figure 3.5-3**). Dispersal of young and movement of California gnatcatcher and the other wildlife species in the development footprint are currently unimpeded along the southern site boundary. Additional wildlife species present in the development footprint that may use the existing interface between West Coyote Hills are identified and addressed in **Table 3.5-1a** and **Table 3.5-1b**.

There are no proposed buildings or structures, and no grading is proposed, in the existing interface between the project development footprint and the West Coyote Hills that would impede wildlife movement.

Minor physical changes to the interface would result from fuel management and habitat enhancement that would include removal of pepper trees to increase functions and values of existing coastal sage scrub 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 development footprint 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 wildlife movement between the development footprint and adjacent undeveloped land in the West Coyote Hills.

Significance Conclusion for Impact BIO-4

Because wildlife viewing areas, kiosks, passive recreation structures, or lighting associated with proposed Specific Plan trail systems within the vegetated wildlife movement interface could obstruct wildlife movement between the development footprint and adjacent undeveloped land in the West Coyote Hills, a significant impact would 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 3.5-2** of this EIR. 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.** Vegetation management in the fuel modification zone shall not reduce the overall amount of vegetative cover available for wildlife using the interface to move between the West Coyote Hills and the Specific Plan development footprint habitats.

Significance Conclusion for Impact BIO-4 with Implementation of Mitigation Measures

Mitigation Measures BIO-4a and **BIO-4b** would ensure avoidance of impacts on wildlife movement, reducing the impact to a level that is 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 Specific Plan would result in removal of trees and landscaping that provide avian nesting and roosting habitat, conflicting with La Habra General Plan Policy BR.1-8, which encourages preservation of such resources in the City. The impact would 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 coastal sage scrub, and in the trees and shrubs in the landscaped slopes of the exiting golf course, a review was undertaken to determine whether the proposed project would result in the loss of any trees that are suitable nesting and roosting habitat for resident and migratory bird species. 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.

Impact Assessment

The proposed project would remove all trees within the Specific Plan grading limits, and would remove individual trees that provide nesting and roosting habitat for resident and migratory birds within the landscaped slopes of the development footprint, including in the southwest portions of the site where fuel management zones are proposed.

Significance Conclusion for Impact BIO-5

Proposed removal of nesting and roosting habitat in the development 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.

Mitigation Measures

Mitigation Measure BIO-5: **Replacement of Bird Nesting and Roosting Habitat.** The Specific Plan landscape plan shall provide for replacement of bird nesting and roosting habitat lost during site development. Such replacement shall be in the form of landscaped slopes, street trees and plantings, enhancement of conservation areas, and vegetation in parks and adjacent to environmental education kiosks, the Community Center, and proposed trails. To replace nesting and roosting habitat for resident and migratory birds, the Specific Plan planting plan shall include native tree and shrub species. The landscape design and Specific Plan plant palette shall be prepared in coordination with a qualified biologist and shall be subject to approval by the City of La Habra Director of Community and Economic Development.

Significance Conclusion for Impact BIO-5 with Implementation of Mitigation Measures

With implementation of **Mitigation Measure BIO-5,** proposed physical changes to biological resources would be consistent with General Plan policies and goals, and the impact 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 (1) 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 proposed project would be consistent with the Orange County Central and Coastal 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 Central and Coastal Orange County 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 coastal sage scrub 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 EIR require that the proposed Specific Plan result in no net loss of sensitive habitats, which is consistent with the intent of the NCCP/HCP.

Significance Conclusion for Impact BIO-6

Because (1) the Specific Plan area is not located within a "sub-regional focus area" that would be protected by Orange County Central and Coastal NCCP/HCP, no impact would result.

3.5.6 REFERENCES – BIOLOGICAL RESOURCES

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors, The Jepson Manual: Vascular Plants of California, second edition, 2012. University California Press, Berkeley.

Beier, P., and R.F. Noss, Do Habitat Corridors Provide Connectivity?, Conservation Biology 12:6, pp. 1241-1252, 1998.

Bowers, N., R. Bowers, and K. Kaufman, Mammals of North America, 2004. Houghton Mifflin Company, New York.

Calflora, Calflora website - search for plants, 2016. Accessed at: http://www.calflora.org/species/index.html.

CaliforniaHerps.com, California Herps. A Guide to the Reptiles and Amphibians of California, 2016. Accessed at: http://www.californiaherps.com/.

California Invasive Plant Council (Cal-IPC), California Invasive Plant Inventory, Cal-IPC Publication 2006-02, 2006. California Invasive Plant Council: Berkeley, CA. Accessed at: http://www.cal-ipc.org/ip/inventory/index.php.

California Department of Fish and Wildlife (CDFW), Natural Community Conservation Plan & Habitat Conservation Plan County of Orange, Central/Coastal Subregions, July 17, 1996. Accessed at: https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans/Orange-Coastal.

California Department of Fish and Wildlife (CDFW), Natural Communities List, January 2016a. Biographic Data Branch. The Vegetation Classification and Mapping Program. Accessed at: https://map.dfg.ca.gov/bios.

California Department of Fish and Wildlife (CDFW), California Endangered Species Act (CESA), 2016b. Accessed at: https://www.wildlife.ca.gov/Conservation/CESA.

California Department of Fish and Wildlife (CDFW), California Environmental Quality Act (CEQA), 2016c. Accessed at: https://www.wildlife.ca.gov/Conservation/CEQA.

California Department of Fish and Wildlife (CDFW), Fish and Game Code Section 1600-1616, 2016d. Accessed at: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=fgc&group=01001-02000&file=1600-1616.

California Department of Fish and Wildlife (CDFW), Lake and Streambed Alteration Program, 2016e. Accessed at: http://www.dfg.ca.gov/habcon/1600/.

California Department of Fish and Wildlife (CDFW), Life History Accounts and Range Maps – California Wildlife Habitat Relationship System, 2016f. Accessed at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.

California Department of Fish and Wildlife (CDFW), Natural Diversity Database, Special Animals List, 2016g. Periodic publication. 52 pp. Accessed at: https://www.wildlife.ca.gov/Data/CNDDB/pdfs/spanimals.pdf.

California Department of Fish and Wildlife (CDFW), State and Federally Listed Endangered, Threatened, and Rare Plants of California. State of California, 2017. The Resources Agency, Department of Fish and Wildlife, Resource Management and Planning Division, Biogeographic Data Branch, California Natural Diversity Database, Sacramento, CA.

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014.

Clark, W.S. and B.K. Wheeler, A Field Guide to Hawks of North America, Second Edition, 2001. Houghton Mifflin Company, Boston and New York.

California Native Plant Society (CNPS), Rare Plant Program, Inventory of Rare and Endangered Plants (online edition, v8-02), 2014. California Native Plant Society, Sacramento, CA. Accessed January 2016: http://www.rareplants.cnps.org.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, *Classification of Wetlands and Deepwater Habitats of the United States,* United States Fish and Wildlife Service, Office of Biological Services, Washington, D.C., Publ. No. FWS/OBS-79/31, 1979.

Dudek, 2003. Biological Resources Report and Impact Assessment for Pacific Coast Homes West Coyote Hills Project.

Eder, Tamara, Mammals of California, 2005. Lone Pine Publishing International Inc., Auburn, WA.

United States Environmental Protection Agency (EPA), Laws and Regulations, Summary of the Endangered Species Act, 2016. Accessed at: http://www.epa.gov/lawsregs/laws/esa.html.

Fahrig, L., and G. Merriam, Habitat patch connectivity and population survival, 1985. Ecology 66:1762-1768.

Fish and Game Commission (FGC), California Law, California Fish and Game Code, 2016. Accessed at: http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc&codebody=&hits=20.

Gallagher, Sylvia, Atlas of Breeding Birds, Orange County, California, 1997. Sea and Sage Audubon Press, Irvine, CA.

Hanes, Ted, and Weintraub Joel, University of Fullerton, Biological Survey of the West Coyote Hills, La Habra Sphere of Influence, January 1989.

Harris, L.D. and Gallagher, P.B., New initiatives for wildlife conservation: The need for movement corridors, 1989. In defense of wildlife: Preserving communities and corridors. pp. 11-34. Edited by G. Mackintosh. Defenders of Wildlife, Washington, DC.

Holland, R.F., Preliminary Descriptions of the Terrestrial Natural Communities of California, 1986. State of California, The Resources Agency, Nongame Heritage Program, California Department of Fish & Game, Sacramento, Calif. 156 pp.

Jennings, M.R. and M.P. Hayes, Amphibian and Reptile Species of Special Concern in California, 1994. Submitted to the California Department of Fish and Game Inland Fisheries Division. Rancho Cordova, CA.

National Geographic Society, edited by Jonathan Alderfer, Complete Birds of North America, 2006. National Geographic Society. Washington D.C.

Sibley, David Allen, National Audubon Society, The Sibley Guide to Birds, 2000. Alfred A. Knopf, New York.

State Water Resources Control Board (SWRCB), Porter-Cologne Water Quality Control Act with Additions and Amendments Effective January 2016, 2016. Compiled by the Office of Chief Counsel. Accessed at: http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf.

United States Fish and Wildlife Service (USFWS), 2016a. FWS Critical Habitat for Threatened and Endangered Species. Accessed at: https://ecos.fws.gov/ecp/report/table/critical-habitat.html https://www.fws.gov/endangered/esa-library/pdf/critical_habitat.pdf.

United States Fish and Wildlife Service (USFWS), 2016b. Migratory Birds & Habitat Programs, Migratory Bird Treaty Act. Accessed at: https://www.fws.gov/pacific/migratorybirds/library.html .

United States Fish and Wildlife Service (USFWS), 2016c. FWS Critical Habitat for Threatened and Endangered Species. Accessed at: https://www.fws.gov/endangered/

what-we-do/critical-habitats.html and https://www.fws.gov/endangered/esa-library/pdf/critical_habitat.pdf.

United States Fish and Wildlife Service (USFWS), 2016d. FWS Frequently Asked Questions About the New Proposed Designation of Critical Habitat for the coastal California Gnatcatcher. Accessed at: https://www.fws.gov/carlsbad/TEspecies/Documents/GnatCatcher_Documents/PDF/gnatcatcherFAQ.pdf.

U.S. Government Publishing Office (GPO), Title 33: Navigation and Navigable Waters, Part 328, 2016. Accessed at: http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=0d027a7d11dc7aa3a0329d3002838e0d&r=PART&n=33y3.0.1.1.34.

VCS Environmental, Jurisdictional Delineation for Westridge Development Project located within the City of La Habra, Orange County, California, July 31, 2015.

3.6 CULTURAL RESOURCES

3.6.1 INTRODUCTION

a. Overview

This section describes existing cultural (historic architectural, as well as prehistoric- and historic-period archaeological) resources and paleontological resources, and analyzes impacts on these resources that would result from implementation of the proposed Rancho La Habra Specific Plan and related actions. This section also addresses the results of consultation with Native American tribes and the potential for encountering human remains outside of formal cemeteries.

b. Definitions

- **Archaeological Resources** include any material remains of human life or activities that are at least 100 years of age and that are of scientific interest. A unique or significant archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; and (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Before Present (BP)** is a time scale used to specify when events in the past occurred. BP, when placed after a number (as in 2,500 BP), means "years before the present." This terminology is used to refer to dates that were obtained through the radiocarbon dating method.
- **Cultural Resources** are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance, according to CEQA.
- **Historic Building** or **Historic Site** is one that is noteworthy for its significance in local, state, or national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.
- **Historic Context** refers to the broad patterns of historical development in a community or its region that are represented by cultural resources. A historic context statement is organized by themes such as economic, residential, and commercial development.
- **Historic District** means a geographical area or neighborhood containing a collection of residential and/or commercial historical buildings that generally represents a significant aspect of the community's architectural and/or development history.
- **Historic Integrity** is defined as "the ability of a property to convey its significance."

- **Historical Resources** are defined as "a resource listed or eligible for listing on the California Register of Historical Resources" (CRHR) (Public Resources Code, Section 5024.1; 14 Code of California Regulations [CCR] 15064.5). Under CEQA Guidelines Section 15064.5(a), the term "historical resources" includes the following:

  (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1).

  (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

  (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1) including the following:

    (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

    (B) Is associated with the lives of persons important in California's past;

    (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

    (D) Has yielded, or may be likely to yield, information important in prehistory or history.

  (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

- **Paleontological Resources** include any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include any materials associated with an archaeological resource or any cultural item defined as Native American human remains. Significant paleontological resources are defined as fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or

important to define a particular time frame or geologic strata, or that add to an existing body of knowledge in specific areas, in local formations, or regionally.

3.6.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan and related actions is subject to a range of federal and state plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

The National Historic Preservation Act of 1966 (NHPA) established the National Register of Historic Places (National Register), which is the official register of designated historic places. The National Register is administered by the National Park Service, and includes listings of buildings, structures, sites, objects, and districts that possess historical, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

To be eligible for the National Register, a property must be significant under one or more of the following criteria pursuant to 36 Code of Federal Regulations Part 60:

A. Properties that are associated with events that have made a significant contribution to the broad patterns of our history;

B. Properties that are associated with the lives of persons significant in our past;

C. Properties that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the aforementioned criteria, an eligible property must also possess historic "integrity," which is "the ability of a property to convey its significance." The National Register criteria recognize seven qualities that define integrity: location, design, setting, materials, workmanship, feeling, and association.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the National Register as significant historical resources. Properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the National Register. Properties listed in or eligible for listing in the National Register are also eligible for listing in the California Register of Historic Resources (described below), and as such, are considered historical resources for CEQA purposes.

b. State Plans, Policies, and Regulations

California Public Resources Code

Archaeological, paleontological, and historical sites are protected pursuant to a variety of state policies and regulations enumerated under the California Public Resources Code. In addition, cultural and paleontological resources are recognized as non-renewable and therefore receive protection under the California Public Resources Code and CEQA. The following California Public Resources Code sections apply to activities related to this project:

- **California Public Resources Code Sections 5079–5079.65** define the functions and duties of the Office of Historic Preservation (OHP). The OHP is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.
- **California Public Resources Code Section 5097** provides procedures to be followed in the event of the unexpected discovery of human remains on non-federal land.
    - **Section 5097.5** of the code states as follows: "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, 'public lands' means lands owned by, or under the jurisdiction of, the state or any city, county, district, authority or public corporation, or agency thereof." Consequently, the City of La Habra is required to comply with Public Resources Code Section 5097.5 because the project site is within the City's jurisdiction.
    - **Sections 5097.9–5097.991** provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

California Senate Bill 18

Senate Bill 18 (SB 18) (California Government Code Section 65352.3) sets forth requirements for local governments to consult with Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning for the purpose of protecting, or mitigating impacts on, cultural places. The Tribal Consultation Guidelines: Supplement to General Plan Guidelines (OPR 2005) identifies the following contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Because the proposed project requires a General Plan Amendment and a Specific Plan Amendment, it is subject to the statutory requirements of SB 18 Tribal Consultation Guidelines. The City contacted the NAHC with the Notice of Preparation for this EIR and informational letters were sent to each tribe identified on the NAHC's list.

California Assembly Bill 52

Assembly Bill 52 (AB 52), which became effective in January 2016 as Public Resources Code Section 21080.3.1, established a new requirement under CEQA to consider "tribal cultural values, as well as scientific and archaeological values when determining impacts and mitigation." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or local registers of historical resources.

In addition, AB 52 implemented a new consultation process, in which lead agencies are required to offer Native American tribes that have submitted written requests the opportunity to participate in consultations to protect tribal cultural resources, and that Native American tribes have the opportunity to consult on CEQA documents prior to public circulation of an EIR. Pursuant to AB 52, lead agencies are required to provide formal notice to the tribes requesting to participate within 14-days of the lead agency's determination that an application package is complete. Tribes have 30-days to respond to request consultation on the project.

In compliance with AB 52, the City has provided formal notification to California Native American tribal representatives identified by the NAHC to offer consultation with interested

tribes regarding the proposed Specific Plan. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in Public Resources Code Section 21074. In addition, the City of La Habra began the public outreach process concurrent with its review of the proposed Specific Plan. Only two Tribes provided written correspondence or contacted the City in response to its formal notification. Joseph Ontiveros of the Soboba Band of Luiseño Indians noted on December 21, 2015 that the Tribe had assessed the project information provided by the City, and did "not have specific concerns regarding known cultural resources." The Tribe also requested that a Native American Monitor be present during any future ground disturbing activities. The letter also stated that the Tribe "wished to defer to Gabrieleño Tribal Consultants who are in closer proximity to the project." The Gabrieleño Band of Mission Indians-Kizh Nation also provided written correspondence in response to the City's formal notification pursuant to AB 52. Mr. Andy Salas stated that the Gabrieleño Band recognized that the project site had been previously developed, but also cautioned that "there is still a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities." The Gabrieleño Band therefore requested two mitigation measures: (1) presence of Native American Monitors during construction-related ground disturbing activities and (2) Tribal review of any native vegetation that might be removed, along with making all plants preferred by the Tribe available to the Tribe prior to their removal.

Health and Safety Code Section 7050.5(b)

California Health and Safety Code Section 7050.5(b) specifies protocols when human remains are discovered. Specifically, burials or human remains found inside or outside of a known cemetery are not to be disturbed or removed unless by authority of law, and the area of a discovery of human remains should remain undisturbed until a County coroner is notified and has examined the remains prior to determining the appropriate course of action.

Health and Safety Code Section 7052

Section 7052 of the California Health and Safety Code makes the willful mutilation, dis-internment, or removal of human remains a felony. Section 7052.5 requires that any construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.

c. Local Plans, Policies, and Regulations

City of La Habra General Plan policies relevant to cultural resources include the following.

> **CR 1.2 Applicable Laws and Regulations.** Ensure that City, State, and Federal historic preservation laws, regulations, and codes are implemented including the California

Historical Building Code and State laws pertaining to archaeological resources, to assure the adequate protection of these resources.

CR 1.3 Consultation. Consult with the appropriate organizations and individuals to minimize potential impacts to historic and cultural resources, such as the Information Centers of the California Historical Resources Information System (CHRIS), the Native American Heritage Commission (NAHC), the Native American groups and organizations.

CR 1.5 Planning. Take historical and cultural resources into consideration in the development of planning studies and documents.

CR 1.8 Early Consultation. Minimize potential impacts to historic and cultural resources by consulting with property owners, land developers, and the building industry early in the development review process.

CR 1.9 Compatibility with Historic Context. Review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. Pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources.

CR 1.13 Archaeological Resources. Develop or ensure compliance with protocols that protect or mitigate impacts to archaeological, historic, and cultural resources including prehistoric resources.

3.6.3 ENVIRONMENTAL SETTING

a. Historic and Archaeological Resources

A records search encompassing a 0.5-mile radius surrounding the project site was conducted at the South Central Coastal Information Center (SCCIC) on April 2, 2015. The 2015 records search indicated that 23 previous studies have been conducted within a 0.5-mile radius of the project site. These studies resulted in one cultural resource discovery (P-30-001512) within the project site boundaries. The resource was described as a portion of a red brick and mortar foundation of an oil retention basin related to past oil field development in the area dating back to 1909. In addition, the studies also revealed 10 previously recorded off-site cultural resources discoveries and one previously unrecorded resource within a 0.5-mile radius of the project site (see **Table 3.6-1**).

Table 3.6-1
Cultural Resources within One-Half Mile of Project Site

Resource No.	Description	Report
P-19-100280	Prehistoric chert debitage scatter	Bissell, Robert. No date. California Department of Parks and Recreation Form 523A. RMW Paleo Associates, Inc.
P-19-100279	Prehistoric shell fragment	Bissell, Robert. No date. California Department of Parks and Recreation Form 523A. RMW Paleo Associates, Inc.
P-19-100278	Prehistoric granite mano fragment	Bissell, Robert. No date. California Department of Parks and Recreation Form 523A. RMW Paleo Associates, Inc.
P-19-100450	Two fragments of historic period china	Sikes, Nancy E. 2003. Cultural Resources Monitoring for the Emery Ranch / Hawks Pointe Project, La Mirada and Fullerton, Los Angeles And Orange Counties, California. SWCA, Inc.
P-19-100448	Two fragments of historic period brick	Sikes, Nancy E. 2003. Cultural Resources Monitoring for the Emery Ranch / Hawks Pointe Project, La Mirada and Fullerton, Los Angeles And Orange Counties, California. SWCA, Inc.
N/A	Two Chevron derricks, one wooden retaining wall, and a 1940s tank structure	Scientific Resource Surveys, Inc. 1989. Cultural Resource Survey Report on the West Coyote Hills Property. Submitted to Environmental Perspectives, Santa Ana, CA.
P-19-100449	One nearly complete dark brown ceramic insulator, and one fragment of a dark brown ceramic insulator	Sikes, Nancy E. 2003. Cultural Resources Monitoring for the Emery Ranch / Hawks Pointe Project, La Mirada and Fullerton, Los Angeles And Orange Counties, California. SWCA, Inc.
P-19-100338	One *Coca-Cola* bottle and a partial glass insulator	Sikes, Nancy E. 2003. Cultural Resources Monitoring for the Emery Ranch / Hawks Pointe Project, La Mirada and Fullerton, Los Angeles And Orange Counties, California. SWCA, Inc.
P-30-100208	Prehistoric granitic mono fragment	R. Ramirez, J. Covert, G. King, and S. Murray. 2009. California Department of Parks and Recreation Form 523A. SWCA, Inc.
P-30-10003	Prehistoric felsite flake	Shinn, Juanita. 1992. Cultural Resources Assessment for the West Coyote Hills Specific Plan. RMW Paleo Associates, Inc.
P-30-001334	One possible prehistoric hearth with two manos, a hammerstone, and a metate fragment	Shinn, Juanita. 1992. Cultural Resources Assessment for the West Coyote Hills Specific Plan. RMW Paleo Associates, Inc.

Source: Archeological Resource Survey – Rancho La Habra – La Habra Project, September 2016.

Discoveries from this and previous archaeological studies have indicated moderate potential for the discovery of prehistoric and historic period cultural resources in the vicinity of the project site, mostly within areas comprised of undisturbed native soils. Previous disturbance of the soil within the project site has resulted from the construction of the existing golf course. However, there are areas within the golf course and elsewhere on the project site that remain largely undisturbed.

Paleo Solutions Incorporated conducted an archaeological resource survey of the project site in April 2015. The intensive pedestrian survey involved the visual inspection of ground surfaces in

areas within the project site that had not been previously graded or extensively disturbed for golf course construction. The archaeological resource survey resulted in the discoveries of two small *Cardiidae* fragments in different undeveloped parts of the project site. However, these are believed to be paleontological rather than archaeological in nature, as the fossil record includes the presence of bivalves in the San Pedro Formation in this region.

b. Paleontological Resources

A paleontological records search was conducted at the Natural History Museum of Los Angeles County (LACM), and searches of the University of California Museum of Paleontology (UCMP) online database and PaleoBiology Database (PBDB) and literature were also conducted. The records and literature reviews indicate that there is one recorded locality (LACM 3861) that produced a specimen of fossil diving duck, *Chendytes milleri*, within or immediately adjacent to the project site. This locality is within the San Pedro Formation geologic unit, which occurs in the southeastern portion of the project site, as well as to the southeast of the site.

Discoveries from previous paleontological studies have indicated high potential for the discovery of paleontological resources in the vicinity of the project site. Recovered vertebrate fossils from the San Pedro Formation include extinct species of horse, bison, mammoth, dire wolf, saber-tooth cat, American lion, camel, ground sloth, pronghorn, diving duck, and birds. Extant species of gray whale, dolphin, sea lion, deer, rodents, rabbits, birds, snakes, turtles, amphibians, sharks, and fish, as well as abundant invertebrate fossils, have also been collected from the San Pedro Formation.

The La Habra Formation, which is present in the southwestern portion of the project site, has produced a diverse Ice Age fossil assemblage. Within the City of La Habra, fossil specimens of sloth, mammoth, mastodon, horse, camel, deer, pronghorn, and California turkey have been recovered from along Imperial Highway. In the nearby cities of Fullerton and La Mirada, La Habra Formation fossils include sloth, coyote, fox, bear, bison, dire wolf, mastodon, mammoth, horse, camel, tapir, peccary, cat, deer, and pronghorn, as well as microvertebrates such as rodents, rabbits, amphibians, reptiles, birds, and fish.

3.6.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of cultural resources impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold CUL-1 Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;

Threshold CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

Threshold CUL-3 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe;

Threshold CUL-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as defined in CEQA Guidelines Section 15064.5 (3); or

Threshold CUL-5 Disturb any human remains, including those interred outside of formal cemeteries.

3.6.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold CUL -1: Cause a substantial adverse change in the significance of a historic resource.

Impact CUL-1: Because no significant historic resources are present within the project site, implementation of the proposed Rancho La Habra Specific Plan would not result in a substantial adverse change in the significance of a historic resource. *No impact* would result.

Methodology

Historic resources are usually 50 years old or older and must meet at least one of the criteria for listing in the California Register (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient degree of physical integrity (CEQA Guidelines Section 15064.5(a)(3)).

Additionally, CEQA Guidelines Section 15064.5(b) states that a project that may cause a substantial adverse change in the significance of a historical resource would have a significant

effect on the environment. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historical resource is materially impaired when a project:

(A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

(B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Generally, should a historic resource be located within the project site, following the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings would result in a less-than-significant impact.

Analysis of this threshold involved first determining whether any historic resources are located within the project site. Should one or more such resources exist, then the analysis would address ways in which the proposed project might affect the integrity or setting of the historic resource.

Impact Assessment

The project site does not contain any buildings or other above-ground structures that are more than 50 years old or would be considered to be historical. The above-ground structures associated with the golf course, such as the clubhouse, driving range, and bathrooms, were all constructed when the golf course was built in the early 1990s. None of those structures was designed by notable architects or have any other qualities that would qualify them as a historical resource.

In addition, as noted in Section 3.6.3.a, a portion of a red brick and mortar foundation of an oil retention basin related to past oil field development was identified within the project site. This partial foundation was determined not to be eligible for the National Register, California

Register, or local registers because it does not meet the appropriate criteria. While the resource is associated with Southern California's once-extensive oil industry (Historic Register Criterion 3/A), the resource has been damaged over time, does not retain structural integrity, and does not therefore exhibit or retain distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (Historic Register Criterion 3/C). Given the extensive historic research that has been conducted into Southern California's oil industry, the fact that the original oil retention basin built upon the foundation no longer exists, and the fact that the foundation itself does not possess integrity, it is not likely that the resource would yield any information important in prehistory or history (Historic Register Criterion 3/D). Therefore, the partial red brick and mortar foundation within the project site does not meet the definition of "historically significant."

Significance Conclusion for Impact CUL-1

As noted above, there are no significant historic resources located within the project site, and implementation of proposed Rancho La Habra Specific Plan would therefore not result in a substantial adverse change in the significance of a historic resource. *No impact* would result.

Threshold CUL-2:	**Cause a substantial adverse change in the significance of an archaeological resource.**
Impact CUL-2:	**Implementation of the proposed Rancho La Habra Plan could result in a substantial adverse change in the significance of a previously unknown subsurface archaeological resource during site grading activities within areas previously undisturbed by golf course construction. However, compliance with existing regulations and implementation of mitigation measures would reduce this potential impact to a less- than-significant level. The impact would therefore be *significant but mitigable*.**

Methodology

Archaeology is the recovery and study of material evidence of human life and culture of past ages. Because, over time, this material evidence becomes buried, fragmented, or scattered or otherwise hidden from view, it is not always evident from a field survey of a project site. Thus, the possible presence of archaeological materials is often determined by the presence of geographic, vegetative, and rock features that are known or thought to be associated with early human life and culture, as well as knowledge of events or material evidence in the area.

Pursuant to Public Resource Code Section 21080.3.1 (AB 52), the City of La Habra contacted the California Native American Tribes identified by the NAHC to offer consultation with the City

regarding the potential effect of the proposed Specific Plan. No areas containing sensitive resources within the Specific Plan area were identified as the result of consultation with Native American Tribes.

The analysis of impacts related to archaeology is based on a review of existing literature and previous studies within La Habra and nearby areas, and the likelihood of discovering previously unknown subsurface archaeological resources within the Specific Plan area. The analysis considers the risk of loss of resources that could result from construction and development activities pursuant to implementation of the proposed Specific Plan. In determining whether a significant impact could result from the proposed project, the analysis includes consideration of the potential of the Specific Plan area to contain unknown subsurface archaeological resources. The proposed Specific Plan would have a significant impact on archaeological resources if project activities would disturb, damage, or degrade an archaeological resource or an archaeological historic resource defined as being "significant," or by disturbing the contextual setting of such a resource.

Impact Assessment

Previous archaeological studies conducted in the vicinity of the project site have indicated a moderate potential for the discovery of prehistoric cultural resources. A reconnaissance survey of the project site did not identify any cultural resources.

Previous disturbance of the soil within the majority of the project site has resulted from construction of the existing golf course; grading and construction activities within those previously disturbed areas would not disturb, damage, or degrade any archaeological resource or disturb the setting of such a resource. However, there remain areas within the project site that are largely undisturbed and retain features of the natural landscape. Such previously undisturbed areas have a moderate potential to contain previously unknown prehistoric cultural resources. Proposed development activities in these previously undisturbed areas could disturb, damage, or degrade previously undiscovered archaeological resources or disturb their setting.

Significance Conclusion for Impact CUL-2

Because archaeological studies conducted in the vicinity of the project site have indicated a moderate potential for the discovery of prehistoric cultural resources, and proposed development activities within previously undisturbed areas could disturb, damage, or degrade previously undiscovered archaeological resources or disturb their setting, a significant impact on cultural resources would result.

Mitigation Measures

Mitigation Measure CUL-2a: A qualified archaeologist shall be retained to conduct spot-checking of site grading activities and to respond on an as-needed basis to address unanticipated archaeological discoveries. In addition, a qualified Native American Monitor shall be present onsite during construction-related ground disturbance activities, including but not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, trenching, and vegetation removal.

In the event that archaeological materials, including stone tools, shells, bones, glass shards, ceramics, or other materials older than 50 years in age, are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist approved by the City's Chief Building Official and a qualified Native American Monitor have assessed the discovery and appropriate treatment pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15064.5 is determined and implemented.

If archaeological resources are found to be significant, the archaeologist and Native American Monitor shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Pursuant to CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts on archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.

Mitigation Measure CUL-2b: Prior to removal of any native vegetation from the project site, Native American monitors or representatives of the Gabrieleño Band of Mission Indians-Kizh Nation shall be invited to the project site to document and distinguish native vegetation that is preferred by the Tribe. All plants preferred by the Tribe that are proposed to be removed as part of site development shall be made available to the Tribe prior to their removal.

Significance Conclusion for Impact CUL-2 with Implementation of Mitigation Measures

With implementation of **Mitigation Measure CUL-2a** and **Mitigation Measure CUL-2b**, impacts related to a substantial adverse change in the significance of an archaeological resource would be less than significant.

Threshold CUL-3	**Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:** **(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or** **(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**
Impact CUL-3	**No tribal cultural resources meeting the definition set forth in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe is known to exist within the project site. However, there is still a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities. With**

implementation of Mitigation Measure CUL-2a and Mitigation Measure CUL-2b impacts will be *less than significant*.

Methodology

The proposed Specific Plan would have a significant impact on a tribal cultural resource, as that term is defined in Public Resources Code Section 21074, would constitute a significant impact if project activities would disturb, damage, or degrade the tribal cultural resource or its contextual setting resulting in substantial loss of its cultural value.

Impact Assessment

As noted above, the City provided formal notification to California Native American tribal representatives identified by the NAHC to offer consultation with interested tribes regarding the proposed Specific Plan. In addition, the City of La Habra began the public outreach process concurrent with its review of the proposed Specific Plan. Two Tribes responded to this formal notification. Both Tribes requested the presence of Native American Monitor during project site ground disturbing activities. No specific information on the presence of Tribal Cultural Resources was provided.

Joseph Ontiveros of the Soboba Band of Luiseño Indians noted that the Tribe had assessed the project information provided by the City, and did "not have specific concerns regarding known cultural resources." The Tribe also requested that a Native American Monitor be present during any future ground disturbing activities. The Gabrieleño Band of Mission Indians-Kizh Nation stated that the Gabrieleño Band recognized that the project site had been previously developed, but also cautioned that "there is still a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities." The Gabrieleño Band therefore requested two mitigation measures: (1) presence of Native American Monitors during construction-related ground disturbing activities and (2) Tribal review of any native vegetation that might be removed, along with making all plants preferred by the Tribe available to the Tribe prior to their removal.

Significance Conclusion for Impact CUL-3

With implementation of **Mitigation Measure CUL-2a** and **Mitigation Measure CUL-2b**, impacts related to a substantial adverse change in the significance of an archaeological resource would be less than significant.

Threshold CUL-4: Directly or indirectly destroy a unique paleontological resource or unique geologic feature.

Impact CUL-4: Implementation of the proposed Rancho La Habra Specific Plan could destroy a unique paleontological resource or unique

geologic feature as the result of future site grading within areas previously undisturbed by golf course construction. However, compliance with existing regulations and implementation of EIR mitigation measures would reduce this potential impact to a less-than-significant level. The impact would therefore be *significant but mitigable*.

Methodology

A formation or rock unit is determined to have paleontological sensitivity based on previous studies of sediment types in the region that contain vertebrate, invertebrate, or plant fossils. All sedimentary rocks and certain volcanic and mildly metamorphosed rocks are considered to have sensitivity for paleontological resources. Hence, a determination of the potential of paleontological resources to exist is based on the types of soils and rock that underlie a site and the potential for fossils suspected to occur in that unit, because generally the actual existence of fossils cannot be known until excavation for a development project is underway.

The potential of the proposed Rancho La Habra Specific Plan to result in impacts on paleontological resources is based on identification of the rock and soils in the Specific Plan area. Ground disturbance in geologic units and geographic areas known to contain scientifically significant fossils would be considered to have a significant impact on non-renewable paleontological resources (CEQA Guidelines Sections 15064.5 and 15023, and CEQA Guidelines Appendix G, Section V, Part C).

A consulting firm, Paleo Solutions, reviewed geologic mapping and literature including published and unpublished scientific papers. A paleontological records search was conducted at the Natural History Museum of Los Angeles County (LACM) for fossil localities occurring within the project site and a 1-mile radius. Additional searches of available online databases, including the PaleoBiology Database (PBDB) and University of California Museum of Paleontology (UCMP) database, were conducted by Paleo Solutions staff.

In April 2015, Paleo Solutions conducted a paleontological reconnaissance survey to identify any fossil localities within the project site and to determine the paleontological sensitivity of the geologic deposits that might be affected during project construction. The results of the paleontological geologic map review, literature and museum records searches, and reconnaissance survey were used to complete a paleontological sensitivity analysis using the Society of Vertebrate Paleontology (SVP) (2010) standard procedural guidelines.

Impact Assessment

Three localities (fossil shell fragments) were observed within the San Pedro Formation portion of the project site during the onsite paleontological reconnaissance survey:

- Locality 20150415BJW.01 was observed as float (not in-situ) in sediments of the San Pedro Formation on the surface of a drainage adjacent to a golf cart track in the northeast portion of the site. The locality consists of a single bivalve shell fragment.
- A second bivalve shell fragment (Locality 20150415BJW.02) was recorded from the San Pedro Formation along the southern boundary of the site. It was discovered as float in moderately sorted, silty sediments on a steep hillside covered by dense brush.
- The final locality, 20150415BJW.03, was observed in boulder of San Pedro Formation used in the construction of a man-made dam on a drainage adjacent to a golf cart track. The original source of the boulder is unknown, but was likely found locally. The locality consists of a bivalve shell deposit (25+ shells) embedded in a well-indurated, very fine- to fine-grained sandy siltstone matrix.

Based on the SVP procedural guidelines applied to the findings of the literature review, records search, and reconnaissance survey, bedrock of both the La Habra and San Pedro formations has high potential for paleontological resources in the vicinity of the project site. Previously disturbed areas and areas mapped as Quaternary alluvium have no and moderate/unknown potential, respectively, for discovery of paleontological resources at the surface, but may overlie paleontologically sensitive bedrock.

Previous disturbance of the soil within the majority of the project site has resulted from construction of the existing golf course; grading and construction activities within those previously disturbed areas would not disturb, damage, or degrade any paleontological resource or disturb the setting of such a resource. However, there remain areas within the project site that are largely undisturbed and retain features of the natural landscape. Such previously undisturbed areas have a moderate potential to contain previously unknown paleontological resources. Proposed development activities in these previously undisturbed areas and in areas where excavation may occur to greater depths than were previously undertaken could disturb, damage, or degrade previously undiscovered paleontological resources.

Significance Conclusion for Impact CUL-4

Because the La Habra and San Pedro formations present within the project site have high potential for paleontological resources, and on-site Quaternary alluvium has a moderate/ unknown potential to contain such resources, project grading and other earth-moving activities within previously undisturbed portions of the project site could disturb paleontological resources and have a significant impact.

Mitigation Measures

Mitigation Measure CUL-4: The applicant/developer shall retain a County-certified paleontologist approved by the City's Chief Building Official to conduct full-time monitoring during all earth-moving activities

involving previously undisturbed sediments of the La Habra and San Pedro Formations along with periodic paleontological spot checks within excavation areas mapped as Quaternary alluvium exceeding depths of 5 feet to determine if older, paleontologically sensitive sediments are present. If such older, paleontologically sensitive sediments are present, full-time monitoring shall be implemented.

If paleontological resources are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a County-certified paleontologist has assessed the discovery and appropriate treatment is determined and implemented.

Significance Conclusion for Impact CUL-4 with Implementation of Mitigation Measure

With implementation of **Mitigation Measure CUL-4**, impacts related to destruction of a unique paleontological resource would be less than significant.

Threshold CUL-5:	**Disturb any human remains, including those interred outside of formal cemeteries.**
Impact CUL-5:	**Implementation of the proposed Rancho La Habra Specific Plan could disturb previously unknown human remains interred outside of formal cemeteries. However, compliance with existing regulations would ensure that this potential impact would be *less than significant*.**

Methodology

The assessment of potential impacts related to human remains consists of a qualitative review of the existing cultural resource conditions and previous land uses within the Specific Plan area, the potential for human remains to be located within the project site, and a determination of whether there are adequate provisions to ensure protection of human remains, if found during project construction activities. An impact would be considered significant if human remains are disturbed outside of the guidelines of the California Health and Safety Code and the Public Resources Code.

Impact Assessment

As described previously, almost all of the project site has been previously disturbed and developed as a golf course; however, Specific Plan implementation could involve grading in previously undisturbed areas.

In the event of an inadvertent discovery or recognition of any human remains during ground disturbance activities, regulations pursuant to California Health and Safety Code Section 7050.5 would be implemented. These regulations require that if human remains are unearthed during construction, then no further disturbance shall occur until the County Coroner has made the necessary findings regarding the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98, which outlines the NAHC notification process and the appropriate procedures if the Coroner determines the human remains to be Native American.

Significance Conclusion for Impact CUL-5

The Specific Plan would be implemented in compliance with Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Compliance with these regulations would protect any previously unidentified human remains, and impacts would be less than significant.

3.6.6 REFERENCES – CULTURAL RESOURCES

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014.

Paleo Solutions, Archaeological Resource Survey – Rancho La Habra – La Habra Project, September 2016.

Paleo Solutions, Paleontological Technical Study – Rancho La Habra – La Habra Project, September 2016.

State of California, Governor's Office of Planning and Research (OPR), State of California Tribal Consultation Guidelines: Supplement to General Plan Guidelines 2005. Accessed May 7, 2017: http://www.parks.ca.gov/pages/22491/files/tribal_consultation_guidelines_vol-4.pdf.

3.7 TRAFFIC AND CIRCULATION

3.7.1 INTRODUCTION

a. Overview

This section analyzes impacts on existing and future transportation and circulation systems that would result from implementation of the proposed Rancho La Habra Specific Plan. 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 "Traffic Impact Analysis Rancho La Habra" (TIA) prepared by Linscott Law & Greenspan (LLG), which can be found in 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 their 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 Plans (CMP)** are state-mandated programs (Government Code §65089a) that requires each county to prepare a plan to relieve congestion and reduce air pollution. Unless otherwise specified, references to the Congestion Management Plan 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* below for discussion of how ICU is used throughout this section.
- **Level of Service (LOS)** represents the quality of an intersection or freeway mainline segment based on volume to capacity 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 passenger car trips. PCE volumes were computed using a PCE factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with 4 or more axles. PCE volumes for freeway segments were computed using a PCE factor of 1.5 for all trucks because the impact of trucks on freeway operations is less compared to intersection operations. For more information on the methodologies used to derive PCE for freeway segments, please refer to the Traffic Impact Analysis in Appendix H.
- **Peak Hour** represents the one-hour period between 7:00 and 9:00 AM and 4:00 and 6:00 PM 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 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 level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	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**. Represents the most vehicles intersection approaches can accommodate; 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, 2017.

- **Right-of-Way** refers to any place, which 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.

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, 2017.

- **Trip** refers to a one-way journey that proceeds from an origin to a destination via a single mode of transportation, and 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

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 (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 element 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 State 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 travelled 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 being considered by the Natural Resources Agency were not adopted either at the time of the Notice of Preparation for this Specific Plan EIR or at the

start of the EIR's public review period, and their effective date is not likely to be prior to certification of the Final EIR, the analysis contained in this EIR follows existing CEQA Guidelines as they exist in November 2015 at the time of the NOP for the proposed Specific Plan.

c. Regional Plan, Policies, and Regulations

SCAG 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016 SCAG's Regional Council adopted the 2016 - 2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) and the goals and policies relevant to the proposed Specific Plan have been listed below:

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 level of service 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 an 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 the 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 countywide 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

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

Section 10.48 of the La Habra Municipal Code, 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 development traffic mitigation measure, future developments are required to incorporate fair share participation to the cost of maintaining level of service standards throughout the City, and to develop future transportation systems.

Traffic Phasing Plan

Section 10.52 of the La Habra Municipal Code (Traffic Phasing Plan) is intended to ensure that major development be 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 be mitigated in conjunction with the development; other trip generation reduction measures are adopted which will alleviate traffic impacts; and/or the project 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 also 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 segment 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 3.7-3** identifies LOS standards for La Habra roadway segments.

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 3.7-4** identifies LOS standards for La Mirada roadway segments.

Table 3.7-3
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, 2017.

Table 3.7-4
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, 2017.

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 Congestion Management Plan intersections, which include Beach Boulevard, Imperial Highway, and Whittier Boulevard west of Beach Boulevard. **Table 3.7-5** identifies LOS standards for La Habra intersections.

Table 3.7-5
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 Blvd 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, 2017.

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 3.7-6** identifies LOS standards for La Mirada intersections.

Table 3.7-6
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 Ave 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, 2017.

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 nineteen (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. The use of La Habra's LOS standards on Caltrans facilities within the City is based on a longstanding agreement the City has with Caltrans.

3.7.3 ENVIRONMENTAL SETTING

a. Existing Roadway and Highway Network

The principal local network of streets serving the proposed project 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 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 proposed Project. 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 (State Route 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 located 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 proposed project. 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 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 proposed project. 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 proposed project. 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

Existing traffic volumes along the key study roadway segments range from 1,140 vehicles per day on Sandlewood Avenue between Idaho Street and Euclid Street in La Habra to 66,990 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 3.7-7**. Locations of the roadway segments analyzed for this EIR are shown in **Figure 3.7-1**.

As indicated in **Table 3.7-7**, six of the 37 key roadway segments analyzed in the project's traffic study, including five in La Habra and one in Buena Park, currently operate at an unacceptable level of service:

City of La Habra

A Lambert Road between Beach Boulevard and Idaho Street (LOS F)

B Lambert Road between Idaho Street and Euclid Street (LOS E)

C Lambert Road between Euclid Street and Harbor Boulevard (LOS E)

S Beach Boulevard between Hillsborough Apt and Hillsborough Drive (LOS F)

HH Whittier Boulevard between Beach Boulevard and Hacienda Road (LOS F)

City of Buena Park

BB Beach Boulevard between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard (LOS F)

c. Existing Intersection Levels of Service

Table 3.7-8 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**.

As indicated in **Table 3.7-8**, two of the three intersections currently operating at unacceptable levels of service are in La Habra; the remaining intersection that is operating at an unacceptable level of service is in La Mirada as reflected below.

La Habra Intersections

7. Euclid Street/Sandalwood Avenue (LOS F during the AM Peak Hour)

30. Walnut Street/Imperial Highway (LOS F during the AM Peak Hour)

La Mirada Intersection

1. Beach Boulevard/Rosecrans Avenue (LOS F during the PM Peak Hour)

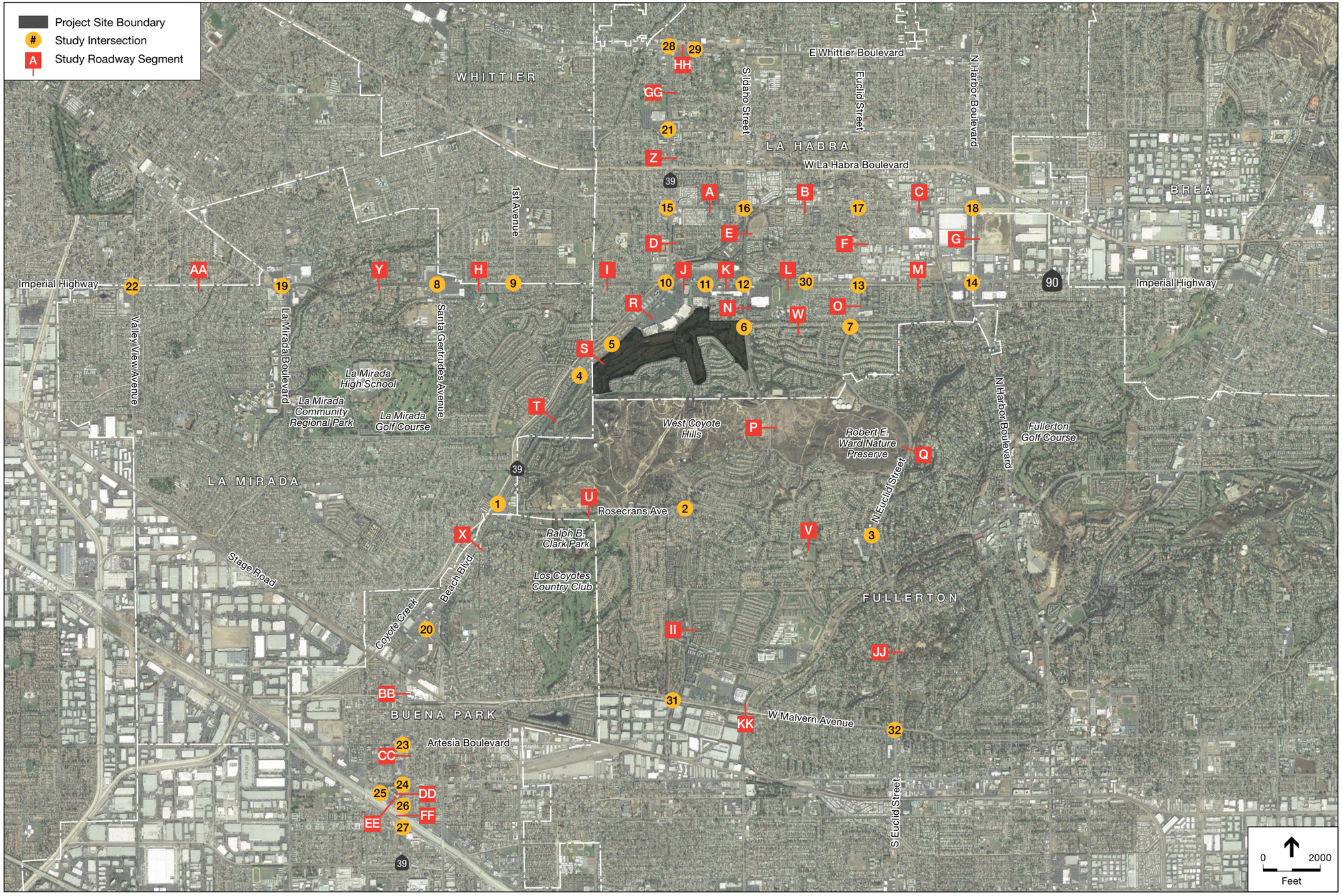

Figure 3.7-1 Traffic Impact Analysis
Intersections and Roadway Segments

Source: Google Earth Pro; Linscott, Law & Greenspan

Table 3.7-7
Existing Key Roadway Segment Operating Conditions

	Roadway Segment	Location	Daily Volume	V/C[a] Ratio	Level of Service (LOS)	LOS Criteria
A	Lambert Rd. between Beach Blvd. and Idaho St.	La Habra	**40,685**	**1.085**	**F**	D
B	Lambert Rd. between Idaho St. and Euclid St.	La Habra	**35,464**	**0.946**	**E**	D
C	Lambert Rd. between Euclid St. and Harbor Blvd.	La Habra	**35,325**	**0.942**	**E**	D
D	Beach Blvd. between Lambert Rd. and Imperial Hwy.	La Habra	45,468	0.808	D	D
E	Idaho St. between Lambert Rd. and Imperial Hwy.	La Habra	23,282	0.621	B	E
F	Euclid St. between Lambert Rd. and Imperial Hwy.	La Habra	16,025	0.427	A	D
G	Harbor Blvd. between Lambert Rd. and Imperial Hwy.	La Habra	35,899	0.638	B	D
H	Imperial Hwy. between Santa Gertrudes Ave. and 1st Ave.	La Habra	34,097	0.631	B	D
I	Imperial Hwy. between 1st Avenue and Beach Blvd.	La Habra	35,887	0.637	B	E
J	Imperial Hwy. between Beach Blvd. and La Habra Hills Dr.	La Habra	51,197	0.850	D	E
K	Imperial Hwy. between La Habra Hills Dr. and Idaho St.	La Habra	53,584	0.890	D	E
L	Imperial Hwy. between Idaho St. and Euclid St.	La Habra	58,953	0.979	E	E
M	Imperial Hwy. between Euclid St. and Harbor Blvd.	La Habra	54,797	0.910	E	E
N	Idaho St. between Imperial Hwy. and Sandlewood Ave.	La Habra	19,515	0.520	A	D
O	Euclid St. between Sandlewood Ave. and Imperial Hwy.	La Habra	19,366	0.516	A	D
P	Gilbert St. between Sandlewood Ave. and Rosecrans Ave.	Fullerton	17,755	0.473	A	D
Q	Euclid St. between Sandlewood Ave. and Rosecrans Ave.	Fullerton	17,277	0.461	A	D
R	Beach Blvd. between Imperial Hwy. and Hillsborough Apts.	La Habra	60,158	0.999	E	E
S	Beach Blvd. between Hillsborough Apts. and Hillsborough Dr.	La Habra	**63,790**	**1.060**	**F**	D
T	Beach Blvd. between Hillsborough Drive and Rosecrans Ave.	La Mirada	53,603	0.928	E	E
U	Rosecrans Ave. between Beach Boulevard and Gilbert St.	Fullerton	19,382	0.517	A	D
V	Rosecrans Ave. between Gilbert St. and Euclid St.	Fullerton	15,329	0.613	B	D
W	Sandlewood Ave. between Idaho St. and Euclid St.	La Habra	1,140	0.091	A	D
X	Beach Blvd. between Rosecrans Ave. and La Mirada Blvd./Malvern Ave.	Buena Park	50,567	0.840	D	D
Y	Imperial Hwy. between La Mirada Blvd. and Santa Gertrudes Ave.	La Mirada	35,840	0.664	B	E
Z	Beach Blvd. between Lambert Rd. and La Habra Blvd.	La Habra	31,130	0.553	A	E
AA	Imperial Hwy. between Valley View Ave. and La Mirada Blvd.	La Mirada	28,546	0.529	A	E

	Roadway Segment	Location	Daily Volume	V/C[a] Ratio	Level of Service (LOS)	LOS Criteria
BB	Beach Blvd. between La Mirada Blvd. /Malvern Ave. and Artesia Blvd.	Buena Park	**66,990**	**1.113**	**F**	D
CC	Beach Blvd. between Artesia Blvd. and Commonwealth Ave.	Buena Park	52,216	0.867	D	D
DD	Beach Blvd. between Commonwealth Ave. and Auto Center Dr.	Buena Park	50,950	0.846	D	D
EE	Auto Center Dr. between Beach Blvd. and I-5 NB Ramps	Buena Park	11,807	0.315	A	D
FF	Beach Blvd. between Auto Center Drive and I-5 SB Ramps	Buena Park	49,325	0.819	D	D
GG	Beach Blvd. between La Habra Blvd. and Whittier Blvd.	La Habra	30,903	0.549	A	E
HH	Whittier Blvd. between Beach Blvd. and Hacienda Rd.	La Habra	**41,142**	**1.097**	**F**	D
II	Gilbert St. between Rosecrans Ave. and Malvern Ave.	Fullerton	21,366	0.570	A	D
JJ	Euclid St. between Rosecrans Ave. and Malvern Ave.	Fullerton	28,685	0.765	C	D
KK	Malvern Ave. between Gilbert St. and Euclid St.	Fullerton	19,224	0.513	A	D

Note: **Bold type** indicates roadway segments currently exceed the applicable LOS standard.
[a] v/c = volume-to-capacity ratio
Source: Rancho La Habra Traffic Impact Analysis, 2017.

d. Existing Public Transit

Public transit bus service is provided in the project area by the Orange County Transportation Authority (OCTA), Foothill Transit and Norwalk Transit. As shown in **Figure 3.7-2**, 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:

- 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 7 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 7 days a week with an average headway of 40 minutes.

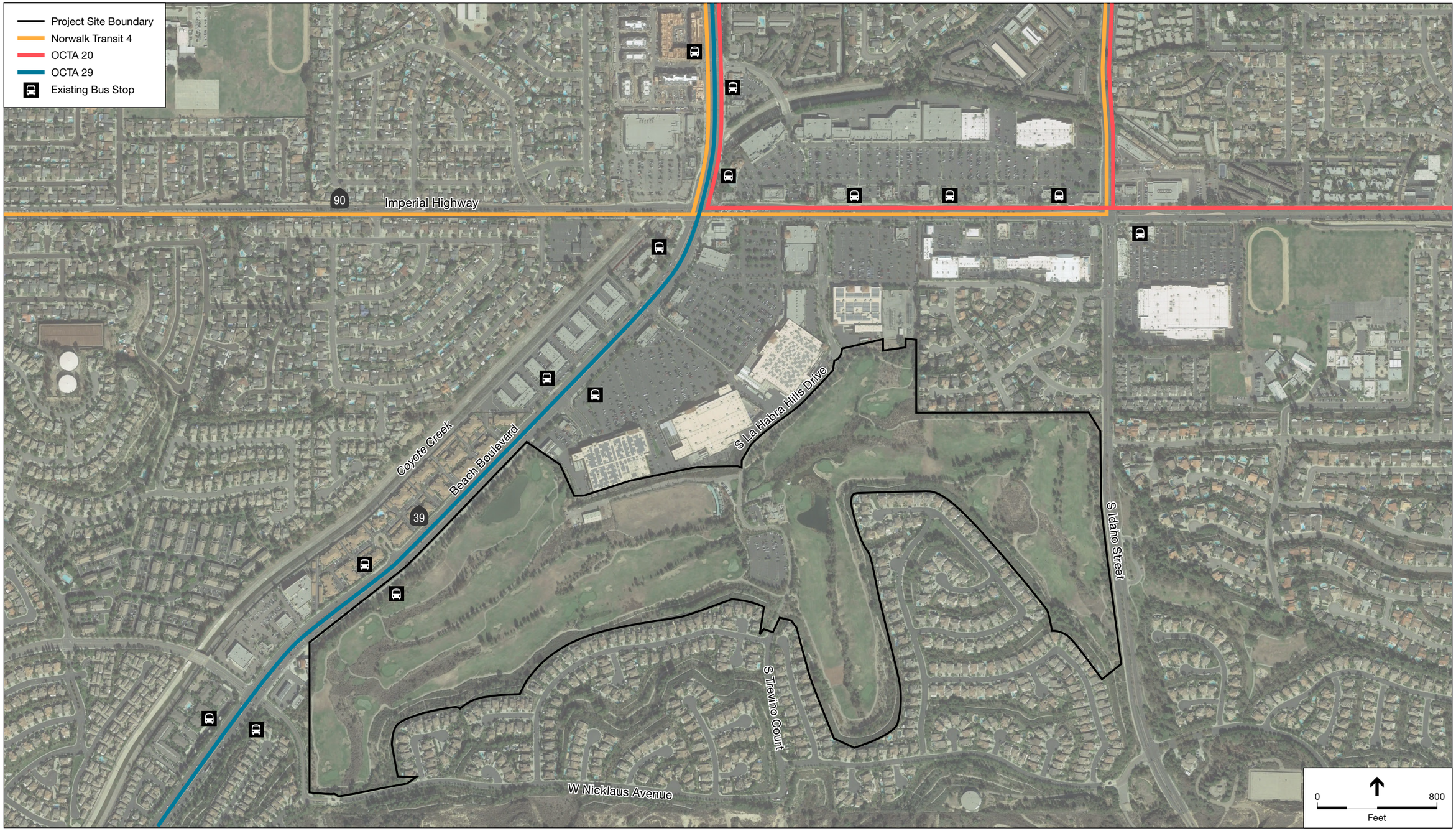

Figure 3.7-2:: Transit Routes

Source: Google Earth Pro; Linscott, Law & Greenspan

Table 3.7-8
Existing Intersection Peak Hour Operating Conditions

	Key Intersections	LOS Criteria	Jurisdiction	Time Period	Control Type	ICU/ HCM[a,b]	LOS
1.	Beach Boulevard at Rosecrans Avenue	E	La Mirada/ Caltrans	AM	8∅[c] Traffic	0.926	E
				PM	Signal	**1.002**	**F**
2.	Gilbert Street at Rosecrans Avenue	D	Fullerton	AM	8∅ Traffic	36.6 s/v	D
				PM	Signal	36.3 s/v	D
3.	Euclid Street at Rosecrans Avenue	D	Fullerton	AM	3∅ Traffic	32.6 s/v	C
				PM	Signal	20.5 s/v	C
4.	Beach Boulevard at Hillsborough Drive	E	La Mirada/ Caltrans	AM	5∅ Traffic	0.757	C
				PM	Signal	0.793	C
5.	Beach Boulevard at Hillsborough Park Apartments.	E	La Habra/ Caltrans	AM	3∅ Traffic	0.494	A
				PM	Signal	0.511	A
6.	Idaho Street at Sandlewood Avenue	D	La Habra	AM	3∅ Traffic	0.504	A
				PM	Signal	0.462	A
7.	Euclid Street at Sandlewood Avenue	D	La Habra	AM	Two-Way	**80.8 s/v**	**F**
				PM	Stop	31.2 s/v	D
8.	Santa Gertrudes Avenue at Imperial Highway	E	La Mirada	AM	8∅ Traffic	0.807	D
				PM	Signal	0.859	D
9.	1st Avenue at Imperial Highway	D	La Mirada	AM	5∅ Traffic	0.607	B
				PM	Signal	0.585	A
10.	Beach Boulevard at Imperial Highway	E	La Habra/ Caltrans	AM	8∅ Traffic	0.775	C
				PM	Signal	0.883	D
11.	La Habra Hills Drive at Imperial Highway	E	La Habra/ Caltrans	AM	6∅ Traffic	0.522	A
				PM	Signal	0.775	C
12.	Idaho Street at Imperial Highway	E	La Habra/ Caltrans	AM	8∅ Traffic	0.686	B
				PM	Signal	0.731	C
13.	Euclid Street at Imperial Highway	E	La Habra/ Caltrans	AM	8∅ Traffic	0.796	C
				PM	Signal	0.729	C
14.	Harbor Boulevard at Imperial Highway	E	La Habra/ Fullerton	AM	8∅ Traffic Signal	0.830	D
				PM		0.755	C
			Caltrans	AM		49.7 s/v	D
				PM		51.4 s/v	D
15.	Beach Boulevard at Lambert Road	E	La Habra/ Caltrans	AM	8∅ Traffic	0.868	D
				PM	Signal	0.890	D
16.	Idaho Street at Lambert Road	D	La Habra	AM	8∅ Traffic	0.761	C
				PM	Signal	0.775	C
17.	Euclid Street at Lambert Road	D	La Habra	AM	5∅ Traffic	0.704	C
				PM	Signal	0.781	C
18.	Harbor Boulevard at Lambert Road	D	La Habra	AM	8∅ Traffic	0.641	B
				PM	Signal	0.666	B

Key Intersections	LOS Criteria	Jurisdiction	Time Period	Control Type	ICU/ HCM[a,b]	LOS
19. La Mirada Boulevard at Imperial Highway	E	La Mirada	AM PM	8∅ Traffic Signal	0.849 0.850	D D
20. Beach Boulevard at La Mirada Blvd/Malvern Ave	D	Buena Park/ Caltrans	AM PM	8∅ Traffic Signal	0.848 0.724	D C
21. Beach Boulevard at La Habra Boulevard	E	La Habra/ Caltrans	AM PM	8∅ Traffic Signal	0.706 0.825	C D
22. Valley View Avenue at Imperial Highway	E	La Mirada	AM PM	8∅ Traffic Signal	0.940 0.970	E E
23. Beach Boulevard at Artesia Boulevard	D	Buena Park/ Caltrans	AM PM	8∅ Traffic Signal	0.813 0.854	D D
24. Beach Boulevard at Commonwealth Avenue	D	Buena Park/Caltrans	AM PM	8∅ Traffic Signal	0.591 0.644	A B
25. I-5 NB Ramps at Auto Center Drive	D	Buena Park/Caltrans	AM PM	6∅ Traffic Signal	0.282 0.414	A A
26. Beach Boulevard at Auto Center Drive	D	Buena Park/Caltrans	AM PM	8∅ Traffic Signal	0.556 0.661	A B
27. Beach Boulevard at I-5 SB Ramps	D	Buena Park/ Caltrans	AM PM	3∅ Traffic Signal	0.646 0.721	B C
28. Beach Boulevard at Whittier Boulevard	E	La Habra/ Caltrans	AM PM	6∅ Traffic Signal	0.597 0.663	A B
29. Hacienda Road at Whittier Boulevard	E	La Habra/ Caltrans	AM PM	5∅ Traffic Signal	0.801 0.748	D C
30. Walnut Street at Imperial Highway	E	La Habra/ Caltrans	AM PM	One-Way Stop	**281.2 s/v** 43.2 s/v	**F** E
31. Gilbert Street at Malvern Avenue	D	Fullerton	AM PM	8∅ Traffic Signal	44.8 s/v 43.6 s/v	D D
32. Euclid Street at Malvern Avenue	D	Fullerton	AM PM	8∅ Traffic Signal	36.9 s/v 40.8 s/v	D D

[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, 2017.

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. Residents of the proposed project would be within walking distance of existing bus stops, which currently serve and would continue to serve the project site.

3.7.4 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed project, a multi-step process was utilized for each of the scenarios analyzed herein. This process is detailed in the Traffic Impact Analysis prepared for Rancho La Habra (Appendix H). In the first step, trip generation, the total arriving and departing traffic to and from the proposed 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/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 study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project was isolated by comparing operational (LOS) conditions at the selected key intersections and along area roadway segments[1] 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.

3.7.5 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

[1] Thirty-two (32) key study intersections and thirty-seven (37) key roadway segments 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, are in La Mirada, 7 are in Fullerton and 6 are within Buena Park.

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.

3.7.6 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. Implementation of 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 traffic management plan (Mitigation Measure TRA-1.1a), 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 proposed project 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 utilized to evaluate construction traffic characteristics.

Demolition/Crushing

- Six-day work week (Monday through Saturday from 7:00 am to 5:00 pm).
- Approximately 60 days of demolition/crushing activities.
- Maximum of 12 trucks entering and exiting the site daily for export of any unusable material.
- A total of 25 workers on-site.

Grading/Excavation

- Six-day work week (Monday through Saturday from 7:00 am to 5:00 pm).
- Approximately 220 days of grading/excavation activities.
- Approximately 15,000 cubic yards of imported fill will require 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

- Six-day work week (Monday through Saturday from 7:00 am to 5:00 pm).
- Approximately 120 days of preparation/installation activities.
- A total of 25 workers on-site.

Building Construction

- Six-day work week (Monday through Saturday from 7:00 am to 5:00 pm).
- Approximately four years of building construction activities.

- A total of 200 workers on-site.

In addition, the following assumptions were utilized for truck trips and employee trips.

- Each truck load requires 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% entering and 50% exiting).
- All truck trips were converted to passenger car equivalents (PCE) 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 2 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 3.7-9 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/construction activities are anticipated for approximately 220 days. Building construction, which will be ongoing for approximately four years, will 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.

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 is installed. While delivery of construction equipment (e.g., excavators,

Table 3.7-9
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	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Truck Traffic (PCE)	72	6	3	9	3	6	9
Employees (25 Workers)	50	25	0	25	0	25	25
Total	**125**	**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, 2017.

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, address the following:

- Proposed construction phasing plan.
- 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 utilize for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e., lumber, tiles, piping, windows, etc.) to access the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive)[2].
- Identify proposed construction related traffic controls and detours.
- 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 to adjacent streets.
- 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 which may have been spilled, tracked, or blown onto adjacent streets or areas.
- Hauling or transport of oversize loads will be allowed between the hours of 9:00 am and 3:00 pm only, Monday through Friday, unless otherwise approved in writing by the City Engineer.

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

- No hauling or transport shall be allowed during nighttime hours, weekends or Federal holidays.
- Use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway for construction-related traffic shall be prohibited.
- Haul trucks entering or exiting public streets shall at all times yield to public traffic.
- 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.
- All construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur on-site.

This Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Device* as well as City of La Habra requirements.

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 Device* as well as City of La Habra requirements will reduce temporary traffic impacts of the proposed project to less than significant.

Impact TRA-1.2: **Local Intersections, Existing Plus Project Condition. Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system. Project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at two of the 32 intersections analyzed in the project traffic study under existing plus project conditions. Although implementation of improvements at these intersections would reduce LOS to acceptable levels, because one of these intersections is outside of the City of La Habra, the City cannot require implementation of such mitigation measures. Therefore, this impact would remain *significant and unavoidable*.**

Methodology

Project Traffic Generation

Table 3.7-10 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 proposed project will generate a total of 6,928 daily 2-way trips. Because the existing Westridge Golf Club generates 2,530 daily trips, the net increase in trips for the proposed project would be 4,398 trips per day.

The project-related trip generation identified in **Table 3.7-10** does not reflect any adjustments for internal capture (e.g., trips solely within the project site such as a resident driving to the proposed community center) and pass-by (e.g., a Westridge resident during through the project site stopping at the community center on their way home). Therefore, the trip generation forecast presented in **Table 3.7-10** provides for a "worst case" analysis.

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 rather than commercial use, the proposed project's net increase in traffic would be 2,439 daily trips, with 299 AM peak hour trips and 239 more PM peak hour trips. Thus, the proposed 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.

Table 3.7-10
Project Trip Generation Forecasts – Proposed Project

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[3] DU)	842	10	54	64	51	25	76
PA#2 - Single-Family Homes – 50 x 80 Lots (118 DU)	1,123	23	66	89	74	44	118
PA#3 - Single-Family Homes – 47 x 70 Lots (77 DU)	733	15	43	58	49	28	77
PA#4 - Single-Family Homes – 55 x 90 Lots (82 DU)	781	16	46	62	52	30	82
Subtotal	***3,479***	***64***	***209***	***273***	***226***	***127***	***353***
Retail Components							
PA#5 – Specialty Grocery Store (12,000 SF)	1,227	25	16	41	58	56	114
PA#5 – High-Turnover Restaurant (8,000 SF)	1,017	47	39	86	47	32	79
Subtotal	**2,244**	**72**	**55**	**127**	**105**	**88**	**193**
Recreation Components							
PA#6 – High-Turnover Restaurant (2,500 SF)	318	15	12	27	15	10	25
PA#6 – Recreation Community Center (20,000 SF)	676	27	14	41	27	28	55
PA#6 – Passive Park (42.1 ± Acres)	211	13	14	27	10	9	19
Subtotal	**1,205**	**55**	**40**	**95**	**52**	**47**	**99**
Total Project Trip Generation	**6,928**	**191**	**304**	**495**	**383**	**262**	**645**
Existing Golf Course Traffic Generation							
Westridge Golf Club Driveway Counts[4]	2,530	58	33	91	104	134	238
Net Traffic Increase	**4,398**	**133**	**271**	**404**	**279**	**128**	**407**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Project-Related Roadway Improvements

The following improvements will be constructed by the proposed 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

[3] Subsequent to preparation of the Traffic Impact Analysis, the proposed project was reduced from 145 multi-family units to 125 units. The project traffic analysis therefore presents a worst-case analysis.

[4] Traffic counts conducted at the site by TSI in November 2014 and March/April 2015. The values shown in Table 3.7-10 are an average of the weekday data collected on six days (twice each on a Tuesday, Wednesday and Thursday).

on Beach Boulevard to provide one 150-foot southbound left-turn lane with a 90-foot 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 northbound left-turn lane with a 90-foot 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 southbound left-turn lane with a 90-foot 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. Construction is anticipated to begin in mid-2018, and be completed by early 2019. These improvements are funded by OCTA and the City of La Habra.

Intersection Level of Level of Service Thresholds

The intersections studied in the project 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 utilized for each of the scenarios analyzed in Section 3.7, *Traffic and Circulation*, 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 Level of Service (LOS) would occur at a signalized intersection as the result of the proposed project.
- The project would increase LOS at an intersection by 0.010 or greater, where the future LOS is unacceptable.

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 Level of Service (LOS) would occur as the result of the proposed project.
- The project increases 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.
- The proposed 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).
- *HCM Analysis*. An unacceptable peak hour LOS would occur and the proposed project would increase the delay by at least 2.0 seconds.

Impact Assessment

Table 3.7-11 summarizes the peak hour level of service results at the thirty-two (32) intersections analyzed for Existing plus Project traffic conditions. The first column (1) of ICU/LOS and HCM/LOS values in **Table 3.7-11** presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in **Table 3.7-8**). 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 project trips, and indicates whether project-related traffic would exceed identified thresholds.

Table 3.7-11
Existing Plus Project Intersection Analysis

		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
1.	Beach Boulevard at Rosecrans Avenue	E	La Mirada/ Caltrans	AM	0.926	E	0.950	E	0.024	No
				PM	**1.002**	**F**	**1.052**	**F**	**0.050**	**Yes**
2.	Gilbert Street at Rosecrans Avenue	D	Fullerton	AM	36.6 s/v	D	36.8 s/v	D	--	No
				PM	36.3 s/v	D	37.2 s/v	D	--	No
3.	Euclid Street at Rosecrans Avenue	D	Fullerton	AM	32.6 s/v	C	32.8 s/v	C	--	No
				PM	20.5 s/v	C	20.5 s/v	C	--	No
4.	Beach Boulevard at Hillsborough Drive	E	La Mirada/ Caltrans	AM	0.757	C	0.778	C	0.021	No
				PM	0.793	C	0.813	D	0.020	No
5.	Beach Boulevard at Hillsborough Park Apts	E	La Habra/ Caltrans	AM	0.494	A	0.539	A	0.045	No
				PM	0.511	A	0.575	A	0.064	No
6.	Idaho Street at Sandlewood Avenue	D	La Habra	AM	0.504	A	0.526	A	0.022	No
				PM	0.462	A	0.483	A	0.021	No
7.	Euclid Street at Sandlewood Avenue	D	La Habra	AM	**80.8 s/v**	**F**	**70.2 s/v**	**F**	--	No[a]
				PM	31.2 s/v	D	31.9 s/v	D	--	No
8.	Santa Gertrudes Ave at Imperial Highway	E	La Mirada	AM	0.807	D	0.816	D	0.009	No
				PM	0.859	D	0.871	D	0.012	No
9.	1st Avenue at Imperial Highway	D	La Mirada	AM	0.607	B	0.617	B	0.010	No
				PM	0.585	A	0.592	A	0.007	No
10.	Beach Boulevard at Imperial Highway	E	La Habra/ Caltrans	AM	0.775	C	0.802	D	0.027	No
				PM	0.883	D	0.916	E	0.033	No
11.	La Habra Hills Drive at Imperial Highway	E	La Habra/ Caltrans	AM	0.522	A	0.545	A	0.023	No
				PM	0.775	C	0.740	C	-0.035	No
12.	Idaho Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.686	B	0.694	B	0.008	No
				PM	0.731	C	0.730	C	-0.001	No
13.	Euclid Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.796	C	0.805	D	0.009	No
				PM	0.729	C	0.731	C	0.002	No
14.	Harbor Boulevard at Imperial Highway	E	La Habra/ Fullerton/	AM	0.830	D	0.832	D	0.002	No
				PM	0.755	C	0.749	C	-0.006	No
			Caltrans	AM	49.7 s/v	D	50.8 s/v	D	--	No
				PM	51.4 s/v	D	50.0 s/v	D	--	No
15.	Beach Boulevard at Lambert Road	E	La Habra/ Caltrans	AM	0.868	D	0.874	D	0.006	No
				PM	0.890	D	0.895	D	0.005	No
16.	Idaho Street at Lambert Road	D	La Habra	AM	0.761	C	0.762	C	0.001	No
				PM	0.775	C	0.775	C	0.000	No
17.	Euclid Street at Lambert Road	D	La Habra	AM	0.704	C	0.704	C	0.000	No
				PM	0.781	C	0.780	C	-0.001	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
18.	Harbor Boulevard at Lambert Road	D	La Habra	AM	0.641	B	0.642	B	0.001	No
				PM	0.666	B	0.669	B	0.003	No
19.	La Mirada Boulevard at Imperial Highway	E	La Mirada	AM	0.849	D	0.857	D	0.008	No
				PM	0.850	D	0.857	D	0.007	No
20.	Beach Boulevard at La Mirada Bl/Malvern Av	D	Buena Park/ Caltrans	AM	0.848	D	0.860	D	0.012	No
				PM	0.724	C	0.734	C	0.010	No
21.	Beach Boulevard at La Habra Boulevard	E	La Habra/ Caltrans	AM	0.706	C	0.711	C	0.005	No
				PM	0.825	D	0.829	D	0.004	No
22.	Valley View Avenue at Imperial Highway	E	La Mirada	AM	0.940	E	0.942	E	0.002	No
				PM	0.970	E	0.976	E	0.006	No
23.	Beach Boulevard at Artesia Boulevard	D	Buena Park/ Caltrans	AM	0.813	D	0.826	D	0.013	No
				PM	0.854	D	0.865	D	0.011	No
24.	Beach Boulevard at Commonwealth Ave	D	Buena Park/ Caltrans	AM	0.591	A	0.600	A	0.009	No
				PM	0.644	B	0.654	B	0.010	No
25.	I-5 NB Ramps at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.282	A	0.284	A	0.002	No
				PM	0.414	A	0.421	A	0.007	No
26.	Beach Boulevard at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.556	A	0.565	A	0.009	No
				PM	0.661	B	0.674	B	0.013	No
27.	Beach Boulevard at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.646	B	0.654	B	0.008	No
				PM	0.721	C	0.728	C	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.597	A	0.603	B	0.006	No
				PM	0.663	B	0.669	B	0.006	No
29.	Hacienda Road at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.801	D	0.806	D	0.005	No
				PM	0.748	C	0.751	C	0.003	No
30.	Walnut Street at Imperial Highway	E	La Habra/ Caltrans	AM	**281.2 s/v**	**F**	**292.9 s/v**	**F**	--	**Yes**
				PM	43.2 s/v	E	44.0 s/v	E	--	No
31.	Gilbert Street at Malvern Avenue	D	Fullerton	AM	44.8 s/v	D	45.2 s/v	D	--	No
				PM	43.6 s/v	D	44.1 s/v	D	--	No
32.	Euclid Street at Malvern Avenue	D	Fullerton	AM	36.9 s/v	D	37.8 s/v	D	--	No
				PM	40.8 s/v	D	42.3 s/v	D	--	No

Notes: s/v = seconds per vehicle delay
Bold text indicates unacceptable level of service.
[a] Although this intersection is forecast to operate at an unacceptable level of service, the increase in project-related traffic does not exceed the applicable threshold.

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 3.7-11**, project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at the intersections of Beach Boulevard at Rosecrans Avenue and 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, traffic at this intersection would not exceed identified thresholds since the peak hour traffic signal warrant would not be not satisfied. The remaining twenty-nine (29) 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 requiring mitigation at the following two intersections:

- Beach Boulevard at Rosecrans Avenue (City of La Mirada)
- Walnut Street at Imperial Highway (City of La Habra)

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 two intersections at which the proposed project would have a significant impact:

- **Beach Boulevard at Rosecrans Avenue**: 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. The installation of these improvements is subject to the approval of Caltrans and the City of La Mirada.
- **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). The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.

Mitigation Measure TRA-1.2a. The Applicant shall pay citywide traffic improvement fees as well as fair share impact fees for the intersection of Beach Boulevard at Imperial Highway.

Mitigation Measure TRA-1.2b. 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

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 Beach Boulevard at Rosecrans Avenue would reduce LOS to acceptable levels, because this intersection is within La Mirada, 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: **Caltrans Intersections, Existing Plus Project Condition Project-generated increases at Caltrans intersections will exceed applicable thresholds at three of the 19 state-controlled intersections analyzed in the project traffic report under existing plus project conditions. The remaining 16 state-controlled study intersections are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic to existing traffic. The implementation of improvements at the intersection of Beach Boulevard/Artesia Boulevard would offset the impact of increased project traffic; however, this location would still operate at unacceptable LOS E during the PM peak hour. The implementation of improvements at the intersections of Hacienda Road/Whittier Boulevard and Walnut Street/Imperial Highway would fully mitigate the impact of project traffic. With the recommended improvements set forth in the Traffic Impact Analysis, these intersections would operate at an acceptable LOS during the AM and PM peak hours. However, because these 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 Highway Capacity Manual 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. City of La Habra standards were utilized to determine the significance of impacts at this intersection because this intersection is along a state highway and La Habra has a longstanding agreement to use its local standards at Caltrans intersections.

Impact Assessment

Table 3.7-12 summarizes the peak hour HCM level of service results at the 19 state-controlled study intersections within the study area for Existing plus Project traffic conditions.

Table 3.7-12
Existing Plus Project Intersection Analysis – Caltrans Methodology

		LOS Standard	Peak Hour	(1) Existing Conditions		(2) Existing Plus Project Conditions		(3) Threshold Exceeded?
				HCM	LOS	HCM	LOS	Yes/No
1.	Beach Boulevard at Rosecrans Avenue	E	AM	51.8 s/v	D	56.1 s/v	E	No
			PM	59.6 s/v	E	66 s/v	E	No
4.	Beach Boulevard at Hillsborough Drive	E	AM	14.6 s/v	B	14.7 s/v	B	No
			PM	19.8 s/v	B	20.7 s/v	C	No
5.	Beach Boulevard at Hillsborough Park Apts	E	AM	13.0 s/v	B	15.5 s/v	B	No
			PM	10.6 s/v	B	13.3 s/v	B	No
10.	Beach Boulevard at Imperial Highway	E	AM	59.2 s/v	E	64.5 s/v	E	No
			PM	60.5 s/v	E	69.1 s/v	E	No
11.	La Habra Hills Drive at Imperial Highway	E	AM	37.9 s/v	D	38.6 s/v	D	No
			PM	59.4	E	59.9 s/v	E	No
12.	Idaho Street at Imperial Highway	E	AM	50.8 s/v	D	51.0 s/v	D	No
			PM	55.5 s/v	E	56.7 s/v	E	No
13.	Euclid Street at Imperial Highway	E	AM	40.1 s/v	D	40.2 s/v	D	No
			PM	48.0 s/v	E	48.7 s/v	D	No
14.	Harbor Boulevard at Imperial Highway	E	AM	49.7 s/v	D	50.8 s/v	D	No
			PM	51.4 s/v	D	50.0 s/v	D	No
15.	Beach Boulevard at Lambert Road	E	AM	56.4 s/v	E	54.4 s/v	D	No
			PM	52.0 s/v	D	52.7 s/v	D	No
20.	Beach Boulevard at La Mirada Bl/Malvern Av	D	AM	46.0 s/v	D	48.8 s/v	D	No
			PM	42.1 s/v	D	43.3 s/v	D	No
21.	Beach Boulevard at La Habra Boulevard	E	AM	49.8 s/v	D	50.4 s/v	D	No
			PM	58.0 s/v	E	58.8 s/v	E	No

		LOS Standard	Peak Hour	(1) Existing Conditions		(2) Existing Plus Project Conditions		(3) Threshold Exceeded?
				HCM	LOS	HCM	LOS	Yes/No
23.	Beach Boulevard at Artesia Boulevard	D	AM	**71.5 s/v**	**E**	**76.8 s/v**	**E**	**Yes**
			PM	**61.8 s/v**	**E**	**66.0 s/v**	**E**	**Yes**
24.	Beach Boulevard at Commonwealth Ave	D	AM	35.6 s/v	D	36.1 s/v	D	No
			PM	38.4 s/v	D	39.0 s/v	D	No
25.	I-5 NB Ramps at Auto Center Drive	D	AM	32.9 s/v	C	33.0 s/v	C	No
			PM	41.9 s/v	D	42.1 s/v	D	No
26.	Beach Boulevard at Auto Center Drive	D	AM	24.4 s/v	C	24.5 s/v	C	No
			PM	33.1 s/v	C	33.4 s/v	C	No
27.	Beach Boulevard at I-5 SB Ramps	D	AM	16.6 s/v	B	16.2 s/v	B	No
			PM	23.0 s/v	C	23.4 s/v	C	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	40.1 s/v	D	40.7 s/v	D	No
			PM	47.3 s/v	D	48.4 s/v	D	No
29.	Hacienda Road at Whittier Boulevard	E	AM	**269.8 s/v**	**F**	**270.9 s/v**	**F**	**Yes**
			PM	**127.5 s/v**	**F**	**129.2 s/v**	**F**	**Yes**
30.	Walnut Street at Imperial Highway	E	AM	**281.2 s/v**	**F**	**292.9 s/v**	**F**	**Yes**
			PM	43.2 s/v	E	44.0 s/v	E	No

Notes:
s/v = seconds per vehicle delay
Bold text indicates unacceptable level of service.
Source: Rancho La Habra Traffic Impact Analysis, 2017.

Significance Conclusion for Impact TRA-1.3

Project-generated increases at Caltrans intersections will exceed applicable thresholds at three of the 19 state-controlled intersections analyzed in the project traffic report under Existing plus Project conditions. This constitutes a significant impact for which mitigation is required at the following intersections:

- Beach Boulevard at Artesia Boulevard
- Hacienda Road at Whittier Boulevard
- Walnut Street at Imperial Highway

Mitigation Measures

The Rancho La Habra Traffic Impact Analysis recommended the following improvements to the three intersections at which the proposed 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). The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.

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
- Hacienda Road at Whittier Boulevard (within La Habra)
- Walnut Street at Imperial Highway (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-1.3a, 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. Of the 7 locations 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 traffic delay. Therefore, impacts to area roadway links would be *less than significant*.

Methodology

The roadway segments studied in the project 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. For those study intersections within the jurisdiction of the City of La Habra, impacts are considered significant if:

- An undesirable peak hour Level of Service (LOS) would occur at a signalized intersection as the result of the proposed project.
- The project would increase LOS at an intersection by 0.010 or greater, where the future LOS is unacceptable.

A significant impact along a roadway segment would occur if a roadway segment would operate at an unacceptable LOS during the AM and/or PM peak hour, and the project-related traffic increase would be 0.010 or greater.

City of La Mirada. For intersections within the jurisdiction of the City of La Mirada, impacts are considered significant if:

- An unacceptable peak hour Level of Service (LOS) would occur as the result of the proposed project.
- The project increases traffic demand at the intersection by 2 percent or more of capacity (ICU increase ≥ 0.020) at a location operating at an unacceptable LOS.

A significant impact along a roadway segment would occur if a roadway segment would operate at an unacceptable LOS during the AM and/or PM peak hours and the project-related traffic increase would be 0.020 or greater.

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.
- The proposed 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.

For those roadway segments within the jurisdiction of the City of Fullerton, impacts are considered significant if the project causes a roadway segment operating at LOS D or better to degrade to LOS E or F.

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).
- *HCM Analysis*. An unacceptable peak hour LOS would occur and the proposed project would increase the delay by at least 2.0 seconds.

A significant impact along a roadway segment would occur if a roadway segment would operate at an unacceptable LOS during the AM and/or PM peak hours and the project-related traffic increase would be 0.020 or greater.

Impact Assessment

Table 3.7-13 summarizes the results of the Existing Plus Project daily analysis for the 37 roadway segments analyzed in the project traffic impact analysis. As indicated in this table, seven of the 37 key roadway segments are forecast to operate at an unacceptable level of service on a daily basis with the proposed project. The seven locations that are forecast to operate at unacceptable levels of service when traffic generated by the proposed project is added to existing traffic volumes include:

Table 3.7-13
Existing Plus Project Roadway Segment Level of Service

		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)
A.	Lambert Road between Beach Blvd and Idaho Street	D	La Habra	4	Primary	37,500	**40,685**	**1.085**	**F**	**40,685**	**1.085**	**F**	0.000	No
B.	Lambert Road between Idaho Street and Euclid Street	D	La Habra	4	Primary	37,500	**35,464**	**0.946**	**E**	**35,464**	**0.946**	**E**	0.000	No
C.	Lambert Road between Euclid Street and Harbor Blvd	D	La Habra	4	Primary	37,500	**35,325**	**0.942**	**E**	**35,325**	**0.942**	**E**	0.000	No
D.	Beach Boulevard between Lambert Road and Imperial Hwy	E	La Habra	6	Major	56,300	45,468	0.808	D	46,212	0.821	D	0.013	No
E.	Idaho Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	23,282	0.621	B	23,310	0.622	B	0.001	No
F.	Euclid Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	16,025	0.427	A	15,993	0.426	A	-0.001	No
G.	Harbor Boulevard between Lambert Road and Imperial Hwy	D	La Habra	6	Major	56,300	35,899	0.638	B	35,970	0.639	B	0.001	No
H.	Imperial Highway between Santa Gertrudes Ave and 1st Ave	D	La Mirada	6	Major	54,000	34,097	0.631	B	34,940	0.647	B	0.016	No
I.	Imperial Highway between 1st Avenue and Beach Boulevard	E	La Habra	6	Major	56,300	35,887	0.637	B	36,782	0.653	B	0.016	No
J.	Imperial Highway between Beach Blvd and La Habra Hills Dr	E	La Habra	6	Smart Street	60,200	51,197	0.850	D	52,799	0.877	D	0.027	No
K.	Imperial Highway between La Habra Hills Drive and Idaho St	E	La Habra	6	Smart Street	60,200	53,584	0.890	D	53,731	0.893	D	0.003	No
L.	Imperial Highway between Idaho Street and Euclid Street	E	La Habra	6	Smart Street	60,200	58,953	0.979	E	58,784	0.976	E	-0.003	No
M.	Imperial Highway between Euclid Street and Harbor Boulevard	E	La Habra	6	Smart Street	60,200	54,797	0.910	E	54,639	0.908	E	-0.002	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)
N.	Idaho Street between Imperial Hwy and Sandlewood Avenue	D	La Habra	4	Primary	37,500	19,515	0.520	A	20,116	0.536	A	0.016	No
O.	Euclid St between Sandlewood Ave and Imperial Hwy	D	La Habra	4	Primary	37,500	19,366	0.516	A	19,389	0.517	A	0.001	No
P.	Gilbert St between Sandlewood Ave and Rosecrans Ave	D	Fullerton	4	Primary	37,500	17,755	0.473	A	18,217	0.486	A	0.013	No
Q.	Euclid St between Sandlewood Ave and Rosecrans Ave	D	Fullerton	4	Primary	37,500	17,277	0.461	A	17,294	0.461	A	0.000	No
R.	Beach Blvd between Imperial Hwy and Hillsborough Apt.	E	La Habra	6	Smart Street	60,200	60,158	0.999	E	**63,189**	**1.050**	**F**	**0.051**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	*1,683*	*0.559*	*A*	*1,755*	*0.583*	*A*	*0.024*	*No*
					SB	*3,010*	*2,164*	*0.719*	*C*	*2,215*	*0.736*	*C*	*0.017*	*No*
				PM	*NB*	*3,010*	*2,323*	*0.772*	*C*	*2,398*	*0.797*	*C*	*0.025*	*No*
					SB	*3,010*	*2,112*	*0.702*	*C*	*2,184*	*0.726*	C	*0.024*	*No*
S.	Beach Boulevard between Hillsborough Apt. and Hillsborough Dr	E	La Habra	6	Smart Street	60,200	**63,790**	**1.060**	**F**	**65,964**	**1.096**	**F**	**0.036**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	*1,652*	*0.549*	*A*	*1,712*	*0.569*	*A*	*0.020*	*No*
					SB	*3,010*	*2,182*	*0.725*	*C*	*2,288*	*0.760*	*C*	*0.035*	*No*
				PM	*NB*	*3,010*	*2,332*	*0.775*	*C*	*2,457*	*0.816*	*D*	*0.041*	*No*
					SB	3,010	*2,100*	*0.698*	*B*	*2,177*	*0.723*	*C*	*0.025*	*No*
T.	Beach Blvd between Hillsborough Dr and Rosecrans Ave	E	La Mirada	6	Smart Street	57,780	53,603	0.928	E	55,603	0.962	E	0.034	No
U.	Rosecrans Avenue between Beach Blvd and Gilbert Street	D	Fullerton	4	Primary	37,500	19,382	0.517	A	20,244	0.540	A	0.023	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)
V.	Rosecrans Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Secondary	25,000	15,329	0.613	B	15,594	0.624	B	0.011	No
W.	Sandlewood Avenue between Idaho Street and Euclid Street	D	La Habra	2	Commuter	12,500	1,140	0.091	A	1,358	0.109	A	0.018	No
X	Beach Blvd between Rosecrans Ave and La Mirada Blvd	D	Buena Park	6	Smart Street	60,200	50,567	0.840	D	51,832	0.861	D	0.021	No
Y.	Imperial Highway between Santa Gertrudes and La Mirada Blvd	E	La Mirada	6	Major	54,000	35,840	0.664	B	36,588	0.678	B	0.014	No
Z.	Beach Blvd between Lambert Road and La Habra Boulevard	E	La Habra	6	Major	56,300	31,130	0.553	A	31,812	0.565	A	0.012	No
AA.	Imperial Highway between Valley View Ave and La Mirada Blvd	E	La Mirada	6	Major	54,000	28,546	0.529	A	29,093	0.539	A	0.010	No
BB.	Beach Blvd between La Mirada Blvd/Malvern Ave and Artesia Blvd	D	Buena Park	6	Smart Street	60,200	**66,990**	**1.113**	**F**	**67,945**	**1.129**	**F**	0.016	No
CC.	Beach Blvd between Artesia Blvd and Commonwealth Ave	D	Buena Park	6	Smart Street	60,200	52,216	0.867	D	52,895	0.879	D	0.012	No
DD.	Beach Blvd between Common-wealth and Auto Center Dr	D	Buena Park	6	Smart Street	60,200	50,950	0.846	D	51,575	0.857	D	0.011	No
EE.	Auto Center Drive between Beach Blvd and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	11,807	0.315	A	11,881	0.317	A	0.002	No
FF.	Beach Blvd between Auto Center Drive and I-5 SB Ramps	D	Buena Park	6	Smart Street	60,200	49,325	0.819	D	49,839	0.828	D	0.009	No
GG	Beach Boulevard between La Habra Blvd and Whittier Blvd	E	La Habra	6	Major	56,300	30,903	0.549	A	31,504	0.560	A	0.011	No
HH.	Whittier Boulevard between Beach Blvd and Hacienda Rd	D	La Habra	4	Primary	37,500	**41,142**	**1.097**	**F**	**41,428**	**1.105**	**F**	0.008	No
II.	Gilbert Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	21,366	0.570	A	21,957	0.586	A	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)
JJ.	Euclid Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	28,685	0.765	C	28,872	0.770	C	0.005	No
KK.	Malvern Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Primary	37,500	19,224	0.513	A	19,588	0.522	A	0.009	No

Notes: **BOLD text** indicates unacceptable service level.
Source: Rancho La Habra Traffic Impact Analysis, September 2017.

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 Imperial Highway and Hillsborough Apartments
- Beach Boulevard between Hillsborough Apt and Hillsborough Drive
- Whittier Boulevard between Beach Boulevard and Hacienda Road

Buena Park

- Beach Blvd between La Mirada Blvd/Malvern Ave and Artesia Blvd

Significance Conclusion for Impact TRA-1.4

As stated in the Traffic Impact Analysis, of these intersections, only Beach Boulevard between Imperial Highway and Hillsborough Apartments and Beach Boulevard between Hillsborough Apartments and Hillsborough Drive require a peak hour link assessment to determine if they will be impacted by the proposed project. The other five locations 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 intersections would be less than significant under Existing plus Project Traffic Conditions.

As shown in **Table 3.7-13**, Beach Boulevard between Imperial Highway and Hillsborough Apartments and Beach Boulevard between Hillsborough Apartments and Hillsborough Drive currently operate at acceptable LOS C or better during the critical weekday AM and PM peak hours. Further, these two roadway segments are 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 at these two roadway segments. The remaining 30 key roadway segments are forecast to continue to operate at an acceptable service level on a daily basis with the addition of Project generated traffic to existing traffic. Impacts would therefore be *less than significant*.

Mitigation Measures

Because impacts are less than significant, no mitigation measures are required.

Impact TRA-1.5: **Local Intersections, Year 2023 Cumulative Plus Project Condition. Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system. Project-related increases in ICU and/or delay would exceed applicable thresholds for increased delay at three of the 32 intersections analyzed in the project traffic impact analysis under Year 2023 plus project conditions. Implementation of improvements at three of the four impacted intersections (Beach Boulevard at Imperial Highway, Walnut Street at Imperial Highway, Euclid Street at Sandlewood Avenue) mitigates the effects of project-related traffic on ICU and/or delay, and the intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours. Implementation of improvements at one of these intersections (Beach Boulevard at Rosecrans Avenue) would reduce project-related increases in ICU and/or delay; however, the intersection would continue to operate at an unacceptable LOS F during the PM peak hour. Because two affected intersections are outside of the City of La Habra, the City cannot require implementation of such improvements. Thus, the proposed project's impact would be *significant and unavoidable* (Beach Boulevard at Rosecrans Avenue).**

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 51 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 3.7-14 summarizes the peak hour level of service results at the thirty-two (32) key study intersections analyzed in the project traffic impact analysis for the Year 2023. The first column (1) of ICU/LOS and HCM/LOS values in **Table 3.7-14** presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in **Table 3.7-8**). The second column (2) lists forecast 2023 cumulative conditions (existing traffic plus ambient growth traffic

Table 3.7-14
Year 2023 Peak Hour Intersection Analysis

		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 Boulevard at Rosecrans Avenue	E	La Mirada/ Caltrans	AM	0.926	E	**1.058**	**F**	**1.082**	**F**	**0.024**	**Yes**
				PM	**1.002**	**F**	**1.129**	**F**	**1.179**	**F**	**0.050**	**Yes**
2.	Gilbert Street at Rosecrans Avenue	D	Fullerton	AM	36.6 s/v	D	38.5 s/v	D	39.0 s/v	D	--	No
				PM	36.3 s/v	D	38.2 s/v	D	39.3 s/v	D	--	No
3.	Euclid Street at Rosecrans Avenue	D	Fullerton	AM	32.6 s/v	C	36.2 s/v	D	36.3 s/v	D	--	No
				PM	20.5 s/v	C	21.2 s/v	C	21.2 s/v	C	--	No
4.	Beach Boulevard at Hillsborough Drive	E	La Mirada/ Caltrans	AM	0.757	C	0.840	D	0.861	D	0.021	No
				PM	0.793	C	0.884	D	0.904	E	0.020	No
5.	Beach Boulevard at Hillsborough Park Apt.	E	La Habra/ Caltrans	AM	0.494	A	0.558	A	0.604	B	0.046	No
				PM	0.511	A	0.585	A	0.648	B	0.063	No
6.	Idaho Street at Sandlewood Avenue	D	La Habra	AM	0.504	A	0.577	A	0.599	A	0.022	No
				PM	0.462	A	0.528	A	0.549	A	0.021	No
7.	Euclid Street at Sandlewood Avenue	D	La Habra	AM	**80.8 s/v**	**F**	**187.4 s/v**	**F**	**207.6 s/v**	**F**	--	**Yes**
				PM	31.2 s/v	D	**46.3 s/v**	**E**	**49.7 s/v**	**E**	--	**Yes**
8.	Santa Gertrudes Ave at Imperial Highway	E	La Mirada	AM	0.807	D	0.905	E	0.914	E	0.009	No
				PM	0.859	D	0.974	E	0.986	E	0.012	No
9.	1st Avenue at Imperial Highway	D	La Mirada	AM	0.607	B	0.698	B	0.707	C	0.009	No
				PM	0.585	A	0.683	B	0.690	B	0.007	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
10.	Beach Boulevard at Imperial Highway	E	La Habra/ Caltrans	AM	0.775	C	0.895	D	0.922	E	0.027	No
				PM	0.883	D	**1.023**	**F**	**1.055**	**F**	**0.032**	**Yes**
11.	La Habra Hills Drive at Imperial Highway	E	La Habra/ Caltrans	AM	0.522	A	0.590	A	0.613	B	0.023	No
				PM	0.775	C	0.872	D	0.837	D	-0.035	No
12.	Idaho Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.686	B	0.774	C	0.782	C	0.008	No
				PM	0.731	C	0.834	D	0.841	D	0.007	No
13.	Euclid Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.796	C	0.922	E	0.930	E	0.008	No
				PM	0.729	C	0.865	D	0.867	D	0.002	No
14.	Harbor Boulevard at Imperial Highway	E	La Habra/ Fullerton/	AM	0.830	D	0.947	E	0.950	E	0.003	No
				PM	0.755	C	**1.002**	**F**	**1.006**	**F**	0.004	No
			Caltrans	AM	49.7 s/v	D	**80.8 s/v**	**F**	**82.0 s/v**	**F**	--	No
				PM	51.4 s/v	D	**101.6 s/v**	**F**	**100.3 s/v**	**F**	--	No
15.	Beach Boulevard at Lambert Road	E	La Habra/ Caltrans	AM	0.868	D	0.981	E	0.986	E	0.005	No
				PM	0.890	D	**1.008**	**F**	**1.013**	**F**	0.005	No
16.	Idaho Street at Lambert Road	D	La Habra	AM	0.761	C	0.850	D	0.851	D	0.001	No
				PM	0.775	C	0.856	D	0.857	D	0.001	No
17.	Euclid Street at Lambert Road	D	La Habra	AM	0.704	C	0.844	D	0.844	D	0.000	No
				PM	0.781	C	0.896	D	0.895	D	-0.001	No
18.	Harbor Boulevard at Lambert Road	D	La Habra	AM	0.641	B	0.728	C	0.728	C	0.000	No
				PM	0.666	B	0.816	D	0.817	D	0.001	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
19.	La Mirada Boulevard at Imperial Highway	E	La Mirada	AM	0.849	D	0.969	E	0.977	E	0.008	No
				PM	0.850	D	0.956	E	0.963	E	0.007	No
20.	Beach Boulevard at La Mirada Blvd/Malvern	D	Buena Park/ Caltrans	AM	0.848	D	**0.984**	**E**	**0.996**	**E**	0.012	No
				PM	0.724	C	0.858	D	0.868	D	0.010	No
21.	Beach Boulevard at La Habra Boulevard	E	La Habra/ Caltrans	AM	0.706	C	0.780	C	0.785	C	0.005	No
				PM	0.825	D	0.918	E	0.922	E	0.004	No
22.	Valley View Avenue at Imperial Highway	E	La Mirada	AM	0.940	E	**1.044**	**F**	**1.047**	**F**	0.003	No
				PM	0.970	E	**1.081**	**F**	**1.087**	**F**	0.006	No
23.	Beach Boulevard at Artesia Boulevard	D	Buena Park/ Caltrans	AM	0.813	D	**0.936**	**E**	**0.949**	**E**	0.013	No
				PM	0.854	D	**0.994**	**E**	**1.005**	**F**	0.011	No
24.	Beach Boulevard at Commonwealth Avenue	D	Buena Park/ Caltrans	AM	0.591	A	0.647	B	0.656	B	0.009	No
				PM	0.644	B	0.719	C	0.729	C	0.010	No
25.	I-5 NB Ramps at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.282	A	0.336	A	0.338	A	0.002	No
				PM	0.414	A	0.502	A	0.509	A	0.007	No
26.	Beach Boulevard at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.556	A	0.662	B	0.672	B	0.010	No
				PM	0.661	B	0.811	D	0.824	D	0.013	No
27.	Beach Boulevard at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.646	B	0.772	C	0.779	C	0.007	No
				PM	0.721	C	0.872	D	0.879	D	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.597	A	0.680	B	0.686	B	0.006	No
				PM	0.663	B	0.757	C	0.763	C	0.006	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
29.	Hacienda Road at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.801	D	0.886	D	0.891	D	0.005	No
				PM	0.748	C	0.849	D	0.851	D	0.002	No
30.	Walnut Street at Imperial Highway	E	La Habra/ Caltrans	AM	**281.2 s/v**	**F**	**916.0 s/v**	**F**	**964.0 s/v**	**F**	--	**Yes**
				PM	43.2 s/v	E	**83.1 s/v**	**F**	**84.5 s/v**	**F**	--	**Yes**
31.	Gilbert Street at Malvern Avenue	D	Fullerton	AM	44.8 s/v	D	53.4 s/v	D	54.5 s/v	D	--	No
				PM	43.6 s/v	D	51.3 s/v	D	52.8 s/v	D	--	No
32.	Euclid Street at Malvern Avenue	D	Fullerton	AM	36.9 s/v	D	44.9 s/v	D	46.0 s/v	D	--	No
				PM	40.8 s/v	D	52.5 s/v	D	54.0 s/v	D	--	No

Notes: s/v = seconds per vehicle (delay)
BOLD text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2017.

plus cumulative project traffic) based on existing intersection geometry, but without any traffic generated from the proposed project. The third column (3) presents future forecast traffic conditions with the addition of traffic generated by the proposed 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 will have a significant effect based on applicable LOS standards and significance criteria.

An analysis of future (Year 2023) cumulative traffic conditions indicates that the addition of ambient traffic growth and cumulative projects traffic will adversely affect nine of the 32 intersections analyzed in the project traffic impact analysis, even without development of the proposed Rancho La Habra Specific Plan. The remaining 23 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 locations projected to operate at an adverse LOS in 2023 without development of the proposed project include:

- Beach Boulevard at Rosecrans Avenue (La Mirada)
- Euclid Street at Sandlewood Avenue (La Habra)
- Beach Boulevard at Imperial Highway (La Habra)
- Harbor Boulevard at Imperial Highway (La Habra/Fullerton)
- Beach Boulevard at Lambert Road (La Habra)
- 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)
- Walnut Street at Imperial Highway (La Habra)

Significance Conclusion for Impact TRA-1.5

Table 3.7-14 indicates that traffic associated with the proposed project will significantly affect three of the 32 intersections analyzed in the project traffic impact analysis. Although the intersections of Harbor Boulevard at Imperial Highway, Beach Boulevard at Lambert Road, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, Valley View Avenue at Imperial Highway and Beach Boulevard at Artesia Boulevard are forecast to operate at unacceptable LOS E or LOS F during the AM and/or PM peak hour with the addition of project traffic, the amount of traffic contributed by the proposed project would be less than the applicable significance threshold for the ICU and/or Delay value. Also, although the intersection of Euclid Street at Sandlewood Avenue is forecast to operate at unacceptable LOS E or F during the AM and/or PM peak hours, intersection operations do not exceed applicable significance thresholds since the peak hour traffic signal warrant is not satisfied. The remaining 23 intersections analyzed in the project 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 three locations where project-related traffic would exceed applicable significance criteria in the Year 2023 are:

- Beach Boulevard at Rosecrans Avenue (La Mirada)
- Euclid Street at Sandlewood Avenue (La Habra)
- Beach Boulevard at Imperial Highway (La Habra)
- Walnut Street at Imperial Highway (La Habra)

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 proposed 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 4th northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12-feet to provide a 4th 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.
- **Euclid Street at Sandlewood Avenue:** Install a two-phase traffic signal. The installation of this improvement is subject to the approval of the City of La Habra. 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).
- **Beach Boulevard at Imperial Highway**: Widen and/or restripe the northbound approach of Beach Boulevard by up to 12-feet to provide a 4th 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 4th 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.
- **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). The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.

See **Mitigation Measure TRA-1.2a** for mitigation of impacts to the intersections of Beach Boulevard at Imperial Highway, Euclid Street at Sandlewood Avenue**,** and Walnut Street at Imperial Highway.

Mitigation Measure TRA-1.5: 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

Significance Conclusion for Impact TRA-1.5 with Implementation of Mitigation Measures

Implementation of improvements at the intersections of Beach Boulevard at Imperial Highway and Walnut Street at Imperial Highway offsets the impact of project-related traffic increases, and the intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours.

Although implementation of recommended improvements at the intersection of Beach Boulevard at Rosecrans Avenue offsets the impact of project-related traffic increases, this location is still forecast to operate at unacceptable LOS F during the PM peak hour. In addition, because these intersections are within La Mirada, the City of La Habra cannot ensure implementation of Mitigation Measure TRA-1.5a. Therefore, this impact would *remain significant and unavoidable.*

Impact TRA-1.6: Caltrans Intersections, Year 2023 Cumulative Plus Project Condition. Cumulative Project-generated increases at State of California intersections will exceed applicable thresholds at seven of the 19 state-controlled intersections analyzed in the project traffic report. The remaining 12 state-controlled intersections are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2023. With the implementation of improvements, the state-controlled intersections of La Habra Hills Drive at Imperial Highway, Beach Boulevard at La Mirada Boulevard/Malvern 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. The implementation of proposed improvements at the intersections of Beach Boulevard at Imperial Highway, Harbor Boulevard at Imperial Highway and Beach Boulevard at Artesia Boulevard would offset the impact of project traffic; however, these locations would still 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 51 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**.

Impact Assessment

Table 3.7-15 summarizes the peak hour HCM level of service results at the nineteen state-controlled study intersections analyzed in the project traffic impact analysis for 2023. The first column (1) of HCM/LOS values in **Table 3.7-15** presents Year 2023 cumulative traffic conditions based on existing intersection geometry, but without any project-generated traffic.

Table 3.7-15
Year 2023 Peak Hour Intersection Analysis – Caltrans Intersections

		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 Boulevard at Rosecrans Avenue	E	AM	72.8 s/v	E	79.9 s/v	E	No
			PM	70.7 s/v	E	78.4 s/v	E	No
4.	Beach Boulevard at Hillsborough Drive	E	AM	15.4 s/v	B	15.6 s/v	C	No
			PM	22.2 s/v	C	30.8 s/v	C	No
5.	Beach Boulevard at Hillsborough Park Apts.	E	AM	14.8 s/v	B	17.7 s/v	B	No
			PM	12.2 s/v	B	15.4 s/v	B	No
10.	Beach Boulevard at Imperial Highway	E	AM	79.0 s/v	E	**84.3 s/v**	**F**	**Yes**
			PM	**86.5 s/v**	**F**	**90.5 s/v**	**F**	**Yes**
11.	La Habra Hills Drive at Imperial Highway	E	AM	42.8 s/v	D	45.7 s/v	D	No
			PM	**83.6 s/v**	**F**	**88.4 s/v**	**F**	**Yes**
12.	Idaho Street at Imperial Highway	E	AM	57.5 s/v	E	56.7 s/v	E	No
			PM	76.0 s/v	E	74.8 s/v	E	No

		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
13.	Euclid Street at Imperial Highway	E	AM	60.8 s/v	E	63.2 s/v	E	No
			PM	76.8 s/v	E	76.5 s/v	E	No
14.	Harbor Boulevard at Imperial Highway	E	AM	**80.8 s/v**	**F**	**82.0 s/v**	**F**	**Yes**
			PM	**101.6 s/v**	**F**	**100.3 s/v**	**F**	No
15.	Beach Boulevard at Lambert Road	E	AM	58.5 s/v	E	59.0 s/v	E	No
			PM	77.2 s/v	E	78.9 s/v	E	No
20.	Beach Boulevard at La Mirada Blvd/Malvern Ave	D	AM	**71.8 s/v**	**E**	**75.2 s/v**	**E**	**Yes**
			PM	**62.6 s/v**	**E**	**67.1 s/v**	**E**	**Yes**
21.	Beach Boulevard at La Habra Boulevard	E	AM	53.3 s/v	D	54.3 s/v	D	No
			PM	74.5 s/v	E	76.0 s/v	E	No
23.	Beach Boulevard at Artesia Boulevard	D	AM	**83.2 s/v**	**F**	**88.4 s/v**	**F**	**Yes**
			PM	**117.8 s/v**	**F**	**124.4 s/v**	**F**	**Yes**
24.	Beach Boulevard at Commonwealth Avenue	D	AM	36.7 s/v	D	38.0 s/v	D	No
			PM	43.0 s/v	D	44.3 s/v	D	No
25.	I-5 NB Ramps at Auto Center Drive	D	AM	34.6 s/v	C	34.7 s/v	C	No
			PM	45.3 s/v	D	46.5 s/v	D	No
26.	Beach Boulevard at Auto Center Drive	D	AM	30.5 s/v	C	30.6 s/v	C	No
			PM	41.3 s/v	D	42.3 s/v	D	No
27.	Beach Boulevard at I-5 SB Ramps	D	AM	27.9 s/v	C	27.6 s/v	C	No
			PM	46.6 s/v	D	46.5 s/v	D	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	45.6 s/v	D	46.4 s/v	D	No
			PM	61.8 s/v	E	63.2 s/v	E	No
29.	Hacienda Road at Whittier Boulevard	E	AM	**396.9 s/v**	**F**	**400.9 s/v**	**F**	**Yes**
			PM	**192.7 s/v**	**F**	**199.6 s/v**	**F**	**Yes**
30.	Walnut Street at Imperial Highway	E	AM	**916.0 s/v**	**F**	**964.0 s/v**	**F**	**Yes**
			PM	**83.1 s/v**	**F**	**84.5 s/v**	**F**	**Yes**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

An analysis of future Year 2023 cumulative traffic conditions indicates that the addition of ambient traffic growth and cumulative projects traffic will adversely affect seven of the 19 state-controlled intersections analyzed in the project traffic impact analysis. The remaining 12 state-controlled intersections that were analyzed are forecast to continue operating at an acceptable level of service during the AM and PM peak hours with the addition of ambient traffic growth and traffic from cumulative projects. The locations projected to operate at an adverse LOS are:

- Beach Boulevard at Imperial Highway
- La Habra Hills Drive at Imperial Highway
- Harbor Boulevard at Imperial Highway

- Beach Boulevard at La Mirada/Malvern Avenue
- Beach Boulevard at Artesia Boulevard
- Hacienda Road at Whittier Boulevard
- Walnut Street at Imperial Highway

Significance Conclusion for Impact TRA-1.6

Table 3.7-15 indicates that traffic associated with the proposed project would exceed applicable significance thresholds at the same seven state-controlled intersections identified above that would be adversely affected by cumulative traffic. The remaining 12 state-controlled study intersections are forecast to continue operating at an acceptable LOS with the addition of project-generated traffic in the Year 2023.

This constitutes a significant impact for which mitigation is required.

Mitigation Measures

The following improvements listed below were identified in the project traffic impact analysis to mitigate the Year 2023 plus project traffic impacts (Caltrans methodology) at the following intersections:

- **Beach Boulevard at Imperial Highway:** Widen and/or restripe the northbound approach of Beach Boulevard by up to 12-feet to provide a 4th 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 4th 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.
- **La Habra Hills Drive at Imperial Highway:** Modify the existing traffic signal to provide a pedestrian share overlap for the existing crosswalk on the west leg. The minimum pedestrian crossing time dedicated to the southbound approach will be split between the southbound and northbound approaches. Install appropriate signage (R10-15 traffic sign) on the north leg signal arm which states "Turning Traffic Must Yield to Pedestrians." The installation of these improvements is subject to the approval of Caltrans and the City of La Habra.
- **Harbor Boulevard at Imperial Highway:** Modify the existing traffic signal and install a southbound right-turn overlap phase. The installation of this improvement is subject to the approval of Caltrans, the City of La Habra and the City of Fullerton.
- **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 4th 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). 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).* The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.

Mitigation Measure TRA-1.6a. The Applicant shall construct the recommended improvements set forth in the project traffic study (identified above) for the intersection of La Habra Hills Drive and Imperial Highway.

Mitigation Measure TRA-1.6b. 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
- Harbor Boulevard at Imperial Highway
- Beach Boulevard at Artesia Boulevard

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

- Beach Boulevard at Imperial Highway

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

- Walnut Street at Imperial Highway (within La Habra)

Significance Conclusion for Impact TRA-1.6 with Implementation of Mitigation Measures

With implementation of the improvements recommended in the project traffic impact analysis, the intersections of La Habra Hills Drive at Imperial Highway, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, 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. The implementation of improvements at the intersections of Beach Boulevard at Imperial Highway, Harbor Boulevard at Imperial Highway and Beach Boulevard at Artesia Boulevard offsets the impact of project traffic; however, these locations are still forecast to operate at unacceptable LOS F during the PM peak hour. Because each of these intersections as state-controlled, the City of La Habra cannot guarantee that the recommended improvements will be implemented. As a result, this impact would remain significant and unavoidable.

Impact TRA-1.7: **Roadway Segments, Year 2023 Cumulative Plus Project Condition. Sixteen of the 37 roadway segments analyzed in the project traffic study are forecast to operate at an unacceptable level of service on a daily basis in the Year 2023 with the proposed project. Of the sixteen locations operating at an unacceptable level of service, project-related traffic would increase delays exceeding applicable thresholds at one location: (Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard), which will operate in the Year 2023 at unacceptable LOS E in the northbound direction during the weekday PM peak hour both without and with the proposed project. With implementation of recommended improvements, this roadway segment is forecast to operate at acceptable LOS D or better with the addition of project-generated traffic in the Year 2023 cumulative plus project condition. However, because Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard is outside of the City of La Habra, the City cannot require implementation of such 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-1.4 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 51 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**.

Impact Assessment

Table 3.7-16 summarizes the results of the Year 2023 Plus Project daily analysis for the 37 roadway segments analyzed in the project traffic impact analysis.

As indicated in this table, 15 of the 37 roadway segments are forecast to operate at an unacceptable level of service on a daily basis in 2023 even without the proposed project. When project traffic is added to Year 2023 cumulative traffic, one additional roadway segment -- Imperial Highway between Beach Boulevard and La Habra Hills Drive – would operate at an unacceptable level of service on a daily basis in 2023. The 16 locations that are forecast to operate at unacceptable levels of service when traffic generated by the proposed project is added to existing traffic volumes include:

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
- Imperial Highway between Beach Boulevard and La Habra Hills Drive (operates at an acceptable level of service without project traffic)
- 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
- Whittier Boulevard between Beach Boulevard and Hacienda Road

Table 3.7-16
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 Road between Beach Blvd and Idaho Street	D	La Habra	4	Primary	37,500	**45,755**	**1.220**	**F**	**45,755**	**1.220**	**F**	0.000	No
B.	Lambert Road between Idaho Street and Euclid Street	D	La Habra	4	Primary	37,500	**40,066**	**1.068**	**F**	**40,066**	**1.068**	**F**	0.000	No
C.	Lambert Road between Euclid Street and Harbor Blvd	D	La Habra	4	Primary	37,500	**39,732**	**1.060**	**F**	**39,732**	**1.060**	**F**	0.000	No
D.	Beach Boulevard between Lambert Road and Imperial Hwy	E	La Habra	6	Major	56,300	53,759	0.955	E	54,503	0.968	E	0.013	No
E.	Idaho Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	26,024	0.694	B	26,052	0.695	B	0.001	No
F.	Euclid Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	19,352	0.516	A	19,320	0.515	A	-0.001	No
G.	Harbor Boulevard between Lambert Road and Imperial Hwy	D	La Habra	6	Major	56,300	43,131	0.766	C	43,202	0.767	C	0.001	No
H.	Imperial Highway between Santa Gertrudes Ave and 1st Ave	D	La Mirada	6	Major	54,000	40,643	0.753	C	41,486	0.768	C	0.015	No
I.	Imperial Highway between 1st Avenue and Beach Boulevard	E	La Habra	6	Major	56,300	42,546	0.756	C	43,441	0.772	C	0.016	No
J.	Imperial Highway between Beach Blvd and La Habra Hills Dr	E	La Habra	6	Smart Street	60,200	59,672	0.991	E	**61,274**	**1.018**	**F**	**0.027**	
	Peak Hour Assessment			*AM*	*EB*	*3,010*	*1,987*	*0.660*	*B*	*2,044*	*0.679*	*B*	*0.019*	*No*
					WB	*3,010*	*2,303*	*0.765*	*C*	*2,386*	*0.793*	*C*	*0.028*	*No*
				PM	*EB*	*3,010*	*2,291*	*0.761*	*C*	*2,375*	*0.789*	*C*	*0.028*	*No*
					WB	*3,010*	*2,292*	*0.761*	*C*	*2,353*	*0.782*	*C*	*0.021*	*No*
K.	Imperial Highway between La Habra Hills Dr and Idaho Street	E	La Habra	6	Smart Street	60,200	**62,250**	**1.034**	**F**	**62,397**	**1.036**	**F**	0.002	No
L.	Imperial Highway between Idaho Street and Euclid Street	E	La Habra	6	Smart Street	60,200	**68,549**	**1.139**	**F**	**68,380**	**1.136**	**F**	-0.003	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 Highway between Euclid Street and Harbor Boulevard	E	La Habra	6	Smart Street	60,200	**67,629**	**1.123**	**F**	**67,471**	**1.121**	**F**	-0.002	No
N.	Idaho Street between Imperial Hwy and Sandlewood Ave	D	La Habra	4	Primary	37,500	23,838	0.636	B	24,439	0.652	B	0.016	No
O.	Euclid Street between Sandlewood Ave and Imperial Hwy	D	La Habra	4	Primary	37,500	22,106	0.589	A	22,129	0.590	A	0.001	No
P	Gilbert Street between Sandlewood Ave & Rosecrans Ave	D	Fullerton	4	Primary	37,500	21,100	0.563	A	21,562	0.575	A	0.012	No
Q.	Euclid Street between Sandlewood Ave and Rosecrans Ave	D	Fullerton	4	Primary	37,500	19,430	0.518	A	19,447	0.519	A	0.001	No
R.	Beach Boulevard between Imperial Hwy and Hillsborough Apt.	E	La Habra	6	Smart Street	60,200	**68,807**	**1.143**	**F**	**71,838**	**1.193**	**F**	**0.050**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	*1,949*	*0.648*	*B*	*2,021*	*0.671*	*B*	*0.023*	*No*
					SB	*3,010*	*2,485*	*0.826*	*D*	*2,536*	*0.843*	*D*	*0.017*	*No*
				PM	*NB*	*3,010*	*2,695*	*0.895*	*D*	*2,770*	*0.920*	*E*	*0.025*	*No*
					SB	*3,010*	*2,447*	*0.813*	*D*	*2,519*	*0.837*	*D*	*0.024*	*No*
S.	Beach Blvd between Hillsborough Apt. and Hillsborough Dr	E	La Habra	6	Smart Street	60,200	**72,729**	**1.208**	**F**	**74,903**	**1.244**	**F**	**0.036**	
	Peak Hour Assessment			*AM*	*NB*	*3,010*	*1,915*	*0.636*	*B*	*1,975*	*0.656*	*B*	*0.020*	*No*
					SB	*3,010*	*2,505*	*0.832*	*D*	*2,611*	*0.867*	*D*	*0.035*	*No*
				PM	*NB*	*3,010*	*2,705*	*0.899*	*D*	*2,830*	*0.940*	*E*	*0.041*	*No*
					SB	*3,010*	*2,434*	*0.809*	*D*	*2,511*	*0.834*	*D*	*0.025*	*No*
T.	Beach Boulevard between Hillsborough Dr and Rosecrans Ave	E	La Mirada	6	Smart Street	57,780	**61,824**	**1.070**	**F**	**63,824**	**1.105**	**F**	**0.035**	
	Peak Hour Assessment			*AM*	*NB*	*3,210*	*1,829*	*0.570*	*A*	*1,882*	*0.586*	*A*	*0.016*	*No*
					SB	*3,210*	*2,631*	*0.820*	*D*	*2,732*	*0.851*	*D*	*0.031*	*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.	
				PM	*NB*	*3,210*	*2,690*	*0.838*	*D*	*2,807*	*0.874*	*D*	*0.036*	*No*
					SB	*3,210*	*2,168*	*0.675*	*B*	*2,238*	*0.697*	*B*	*0.022*	*No*
U.	Rosecrans Avenue between Beach Boulevard and Gilbert Street	D	Fullerton	4	Primary	37,500	24,557	0.655	B	25,419	0.678	B	0.023	No
V.	Rosecrans Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Secondary	25,000	16,936	0.677	B	17,201	0.688	B	0.011	No
W.	Sandlewood Avenue between Idaho Street and Euclid Street	D	La Habra	2	Commuter	12,500	1,261	0.101	A	1,479	0.118	A	0.017	No
X	Beach Boulevard between Rosecrans Ave and La Mirada Blvd	D	Buena Park	6	Smart Street	60,200	**60,115**	**0.999**	**E**	**61,380**	**1.020**	**F**	**0.021**	
Peak Hour Assessment				*AM*	*NB*	*3,010*	*1,866*	*0.620*	*B*	*1,898*	*0.631*	*B*	*0.011*	*No*
					SB	*3,010*	*2,503*	*0.832*	*D*	*2,575*	*0.855*	*D*	*0.023*	*No*
				PM	*NB*	*3,010*	***2,777***	***0.923***	***E***	***2,855***	***0.949***	***E***	***0.026***	***Yes***
					SB	*3,010*	*2,155*	*0.716*	*C*	*2,198*	*0.730*	*C*	*0.014*	*No*
Y.	Imperial Highway between Santa Gertrudes and La Mirada Blvd	E	La Mirada	6	Major	54,000	42,363	0.785	C	43,111	0.798	C	0.013	No
Z.	Beach Boulevard between Lambert Rd and La Habra Blvd	E	La Habra	6	Major	56,300	36,648	0.651	B	37,330	0.663	B	0.012	No
AA.	Imperial Highway between Valley View Ave and La Mirada Blvd	E	La Mirada	6	Major	54,000	33,912	0.628	B	34,459	0.638	B	0.010	No
BB.	Beach Blvd between La Mirada Blvd/Malvern Ave and Artesia Blvd	D	Buena Park	6	Smart Street	60,200	**79,617**	**1.323**	**F**	**80,572**	**1.338**	**F**	0.015	No
CC.	Beach Boulevard between Artesia Blvd and Commonwealth Ave	D	Buena Park	6	Smart Street	60,200	**63,217**	**1.050**	**F**	**63,896**	**1.061**	**F**	0.011	No
DD.	Beach Blvd bet. Commonwealth Ave and Auto Center Dr	D	Buena Park	6	Smart Street	60,200	**61,798**	**1.027**	**F**	**62,423**	**1.037**	**F**	0.010	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 between Beach Boulevard and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	14,382	0.384	A	14,456	0.385	A	0.001	No
FF.	Beach Boulevard between Auto Center Drive and I-5 SB Ramps	D	Buena Park	6	Smart Street	60,200	**60,167**	**0.999**	**E**	**60,681**	**1.008**	**F**	0.009	No
GG	Beach Boulevard between La Habra Blvd and Whittier Blvd	E	La Habra	6	Major	56,300	35,961	0.639	B	36,562	0.649	B	0.010	No
HH.	Whittier Boulevard between Beach Blvd and Hacienda Rd	D	La Habra	4	Primary	37,500	**47,687**	**1.272**	**F**	**47,973**	**1.279**	**F**	0.007	No
II.	Gilbert Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	25,905	0.691	B	26,496	0.707	C	0.016	No
JJ.	Euclid Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	31,750	0.847	D	31,937	0.852	D	0.005	No
KK.	Malvern Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Primary	37,500	22,714	0.606	B	23,078	0.615	B	0.009	No

Notes:
BOLD text = unacceptable level of service
Source: Rancho La Habra Traffic Impact Analysis, 2017.

City of La Mirada

- Beach Boulevard between Hillsborough Drive and Rosecrans Avenue

Buena Park

- 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 SB ramps

Significance Conclusion for Impact TRA-1.7

Of the sixteen locations operating at an unacceptable level of service, only 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, and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard required a peak hour link assessment to determine whether or not they would be impacted by the proposed project under Year 2023 cumulative conditions. The other eleven locations do not exceed applicable thresholds defined for a peak hour link assessment, and the proposed project would not therefore have a significant impact under Year 2023 plus Project Traffic Conditions.

As shown in **Table 3.7-15**, the proposed project will have a significant impact along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard, as this location is forecast to operate at unacceptable LOS E in the northbound direction during the critical weekday PM peak hour without and with the proposed project and he project-related increase in traffic exceeds applicable thresholds. The remaining four key roadway segments (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) will not be significantly impacted by the proposed Project as these four locations are forecast to operate in the Year 2023 at an acceptable LOS without and with the proposed project during the weekday AM and PM peak commute hours.

Mitigation Measures

The following are improvements recommended in the project traffic impact analysis to mitigate the Year 2023 plus project traffic impacts:

Beach Blvd between Rosecrans Ave and La Mirada Blvd: Widen and restripe Beach Boulevard to provide a 4th northbound through lane. The installation of this improvement will require additional right-of-way and is subject to the approval of Caltrans and the City of Buena Park.

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

Significance Conclusion for Impact TRA-1.7 with Implementation of Mitigation Measures

With implementation of recommended improvements, Beach Boulevard Blvd between Rosecrans Avenue and La Mirada Boulevard is forecast to operate at acceptable LOS D or better with the addition of project generated traffic in the Year 2023 traffic condition. However, because Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard is a state highway and outside of the City of La Habra, the City cannot require implementation of Mitigation Measure TRA-1.7. Therefore, this impact would be *significant and unavoidable*.

Impact TRA-1.8: Local Intersections, Year 2035 Cumulative Plus Project Condition. Implementation of the proposed Specific Plan would increase traffic at intersections on the surrounding roadway system, resulting in increased ICU and/or delay at area intersections. Project-related increases in ICU and/or delay will exceed applicable thresholds at three of the 32 intersections analyzed in the project traffic report. Although an additional 15 of the 32 intersections analyzed in the traffic report 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 to cumulative traffic in 2035, project-generated increases in ICU and/or delay would not exceed the applicable significance threshold. The remaining 13 intersections analyzed in the project traffic report are forecast to continue to operate at an acceptable LOS with the addition of project generated traffic in the Year 2035. The implementation of improvements at the impacted intersections of Beach Boulevard at Rosecrans Avenue and Beach Boulevard at Imperial Highway, which are within the City of La Habra, offsets the impact of project traffic; however, these locations are still forecast to operate at unacceptable LOS F during the PM peak hour. The implementation of improvements

at the impacted intersection of Walnut Street at Imperial Highway offsets the impact of project traffic and the intersection is forecast to operate at an acceptable LOS during the AM and PM peak hours. However, because this intersection is outside of La Habra and on a state highway, improvements would require Caltrans and City of La Mirada approval. As a result, the City of La Habra cannot guarantee implementation of needed improvements, and impacts of the proposed 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.

Year 2035 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 2035 background traffic includes development of the 51 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 3.7-17 summarizes the peak hour Level of Service results at the 32 intersections analyzed in the project traffic impact analysis for the Year 2035. Review of column 2 of **Table 3.7-17** shows that projected Year 2035 cumulative without project traffic will adversely affect nineteen of the 32 intersections that were analyzed. The remaining thirteen key study intersections are forecast to operate at an acceptable LOS under Year 2035 cumulative without project traffic conditions.

Table 3.7-17
Year 2035 Peak Hour Intersection Capacity Analysis

		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 Boulevard at Rosecrans Avenue	E	La Mirada/ Caltrans	AM	0.926	E	**1.115**	**F**	**1.140**	**F**	**0.025**	**Yes**
				PM	**1.002**	**F**	**1.206**	**F**	**1.256**	**F**	**0.050**	**Yes**
2.	Gilbert Street at Rosecrans Avenue	D	Fullerton	AM	36.6 s/v	D	39.7 s/v	D	40.1 s/v	D	--	No
				PM	36.3 s/v	D	39.8 s/v	D	40.7 s/v	D	--	No
3.	Euclid Street at Rosecrans Avenue	D	Fullerton	AM	32.6 s/v	C	53.7 s/v	D	54.0 s/v	D	--	No
				PM	20.5 s/v	C	21.2 s/v	C	21.2 s/v	C	--	No
4.	Beach Boulevard at Hillsborough Drive	E	La Mirada/ Caltrans	AM	0.757	C	0.885	D	0.906	E	0.021	No
				PM	0.793	C	0.932	E	0.951	E	0.019	No
5.	Beach Boulevard at Hillsborough Park Apts.	E	La Habra/ Caltrans	AM	0.494	A	0.589	A	0.634	B	0.045	No
				PM	0.511	A	0.617	B	0.681	B	0.064	No
6.	Idaho Street at Sandlewood Avenue	D	La Habra	AM	0.504	A	0.601	B	0.622	B	0.021	No
				PM	0.462	A	0.580	A	0.601	B	0.021	No
7.	Euclid Street at Sandlewood Avenue	D	La Habra	AM	**80.8 s/v**	**F**	**305.2 s/v**	**F**	**331.5 s/v**	**F**	--	No[a]
				PM	31.2 s/v	D	**76.5 s/v**	**F**	**86.7 s/v**	**F**	--	No[a]
8.	Santa Gertrudes Avenue at Imperial Highway	E	La Mirada	AM	0.807	D	0.981	E	0.985	E	0.004	No
				PM	0.859	D	**1.163**	**F**	**1.175**	**F**	0.012	No
9.	1st Avenue at Imperial Highway	D	La Mirada	AM	0.607	B	0.754	C	0.764	C	0.010	No
				PM	0.585	A	0.729	C	0.736	C	0.007	No
10.	Beach Boulevard at Imperial Highway	E	La Habra/ Caltrans	AM	0.775	C	**1.029**	**F**	**1.056**	**F**	**0.027**	**Yes**
				PM	0.883	D	**1.126**	**F**	**1.158**	**F**	**0.032**	**Yes**

		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
11.	La Habra Hills Drive at Imperial Highway	E	La Habra/ Caltrans	AM	0.522	A	0.675	B	0.691	B	0.016	No
				PM	0.775	C	0.911	E	0.876	D	-0.035	No
12.	Idaho Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.686	B	0.823	D	0.838	D	0.015	No
				PM	0.731	C	0.904	E	0.904	E	0.000	No
13.	Euclid Street at Imperial Highway	E	La Habra/ Caltrans	AM	0.796	C	**1.099**	**F**	**1.107**	**F**	0.008	No
				PM	0.729	C	0.934	E	0.935	E	0.001	No
14.	Harbor Boulevard at Imperial Highway	E	La Habra/ Fullerton	AM	0.830	D	**1.282**	**F**	**1.280**	**F**	-0.002	No
				PM	0.755	C	**1.088**	**F**	**1.093**	**F**	0.005	No
			Caltrans	AM	49.7 s/v	D	**177.0 s/v**	**F**	**179.0 s/v**	**F**	--	No
				PM	51.4 s/v	D	**117.9 s/v**	**F**	**117.1 s/v**	**F**	--	No
15.	Beach Boulevard at Lambert Road	E	La Habra/ Caltrans	AM	0.868	D	0.999	E	**1.004**	**F**	0.005	No
				PM	0.890	D	**1.228**	**F**	**1.234**	**F**	0.006	No
16.	Idaho Street at Lambert Road	D	La Habra	AM	0.761	C	0.866	D	0.867	D	0.001	No
				PM	0.775	C	**1.076**	**F**	**1.076**	**F**	0.000	No
17.	Euclid Street at Lambert Road	D	La Habra	AM	0.704	C	**1.255**	**F**	**1.255**	**F**	0.000	No
				PM	0.781	C	**1.247**	**F**	**1.246**	**F**	-0.001	No
18.	Harbor Boulevard at Lambert Road	D	La Habra	AM	0.641	B	0.769	C	0.769	C	0.000	No
				PM	0.666	B	**1.144**	**F**	**1.145**	**F**	0.001	No
19.	La Mirada Boulevard at Imperial Highway	E	La Mirada	AM	0.849	D	**1.217**	**F**	**1.225**	**F**	0.008	No
				PM	0.850	D	**1.027**	**F**	**1.032**	**F**	0.005	No
20.	Beach Boulevard at La Mirada/Malvern Ave	D	Buena Park/ Caltrans	AM	0.848	D	**1.142**	**F**	**1.154**	**F**	0.012	No
				PM	0.724	C	**0.905**	**E**	**0.914**	**E**	0.009	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
21.	Beach Boulevard at La Habra Boulevard	E	La Habra/ Caltrans	AM	0.706	C	0.824	D	0.829	D	0.005	No
				PM	0.825	D	0.982	E	0.986	E	0.004	No
22.	Valley View Avenue at Imperial Highway	E	La Mirada	AM	0.940	E	**1.101**	**F**	**1.104**	**F**	0.003	No
				PM	0.970	E	**1.136**	**F**	**1.142**	**F**	0.006	No
23.	Beach Boulevard at Artesia Boulevard	D	Buena Park/ Caltrans	AM	0.813	D	**0.995**	**E**	**1.008**	**F**	0.013	No
				PM	0.854	D	**1.069**	**F**	**1.081**	**F**	0.012	No
24.	Beach Boulevard at Commonwealth Avenue	D	Buena Park/ Caltrans	AM	0.591	A	0.671	B	0.679	B	0.008	No
				PM	0.644	B	0.749	C	0.760	C	0.011	No
25.	I-5 NB Ramps at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.282	A	0.353	A	0.355	A	0.002	No
				PM	0.414	A	0.531	A	0.538	A	0.007	No
26.	Beach Boulevard at Auto Center Drive	D	Buena Park/ Caltrans	AM	0.556	A	0.710	C	0.720	C	0.010	No
				PM	0.661	B	0.885	D	0.898	D	0.013	No
27.	Beach Boulevard at I-5 SB Ramps	D	Buena Park/ Caltrans	AM	0.646	B	0.847	D	0.855	D	0.008	No
				PM	0.721	C	**0.950**	**E**	**0.957**	**E**	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.597	A	0.760	C	0.766	C	0.006	No
				PM	0.663	B	0.798	C	0.804	D	0.006	No
29.	Hacienda Road at Whittier Boulevard	E	La Habra/ Caltrans	AM	0.801	D	**1.016**	**F**	**1.020**	**F**	0.004	No
				PM	0.748	C	**1.256**	**F**	**1.259**	**F**	0.003	No
30.	Walnut Street at Imperial Highway	E	La Habra/ Caltrans	AM	**281.2 s/v**	**F**	**6,914.5 s/v**	**F**	**6,914.5 s/v**	**F**	--	**Yes**
				PM	43.2 s/v	E	**118.4 s/v**	**F**	**120.9 s/v**	**F**	--	**Yes**
31.	Gilbert Street at Malvern Avenue	D	Fullerton	AM	44.8 s/v	D	**58.7 s/v**	**E**	**60.5 s/v**	**E**	--	No
				PM	43.6 s/v	D	**58.1 s/v**	**E**	**59.7 s/v**	**E**	--	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
32.	Euclid Street at Malvern Avenue	D	Fullerton	AM	36.9 s/v	D	52.8 s/v	D	53.8 s/v	D	--	No
				PM	40.8 s/v	D	**64.0 s/v**	**E**	**66.0 s/v**	**E**	--	No

Notes: s/v = seconds per vehicle (delay)
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, 2017.

The locations 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 Blvd at La Mirada Blvd/Malvern Avenue (Buena Park)
- Valley View Avenue at Imperial Highway (La Mirada)
- Beach Boulevard at Artesia Boulevard (Buena Park)
- Beach Boulevard at I-5 SB Ramps (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 3.7-17 indicates that project-generated traffic will exceed applicable thresholds at three intersections. Although the intersections of Santa Gertrudes Avenue at Imperial Highway, Euclid Street at Imperial Highway, Harbor Boulevard at Imperial Highway, Beach Boulevard at Lambert Road, Idaho Street at Lambert Road, Euclid Street at Lambert Road, Harbor Boulevard at Lambert Road, La Mirada Boulevard at Imperial Highway, Beach Boulevard at La Mirada Boulevard/Malvern Avenue, Valley View Avenue at Imperial Highway, Beach Boulevard at Artesia Boulevard, Beach Boulevard at I-5 SB Ramps, Hacienda Road at Whittier Boulevard, Gilbert Street at Malvern Avenue, and Euclid Street at 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 project-generated 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 under HCM methodology, a significant impact would not occur at this intersection since the peak hour traffic signal warrant is not satisfied. The remaining 13 intersections analyzed in the project traffic impact analysis are forecast to continue operating at an acceptable LOS with the addition of project generated traffic in the Year 2035. The 3 locations where project-generated traffic would exceed applicable thresholds in the Year 2035 are:

- Beach Boulevard at Rosecrans Avenue
- Beach Boulevard at Imperial Highway
- Walnut Street at Imperial Highway

This constitutes a significant impact for which mitigation is required.

Mitigation Measures

The following are improvements recommended in the project 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 4th northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12-feet to provide a 4th 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 4th northbound through lane. Widen and/or restripe the southbound approach of Beach Boulevard by up to 12-feet to provide a 4th 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.
- **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).* The installation of this improvement is subject to the approval of Caltrans and the City of La Habra.

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

- Beach Boulevard at Imperial Highway
- Walnut Street at Imperial Highway

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

- Beach Boulevard at Rosecrans Avenue

Significance Conclusion for Impact TRA-1.8 with Implementation of Mitigation Measures

Implementation of improvements at the impacted key study intersections of Beach Boulevard at Rosecrans Avenue and Beach Boulevard at Imperial Highway offsets the impact of project-generated traffic; however, these locations are still forecast to operate at unacceptable LOS F during the PM peak hour. Implementation of improvements at the Walnut Street/Imperial Highway intersection offsets the impact of project traffic and the key study intersection is forecast to operate at an acceptable LOS during the AM and PM peak hours. Because these three intersections are along a state highway and improvements require Caltrans approval (City of La Mirada approval is also needed for improvements at the intersection of Beach Boulevard at Rosecrans Avenue), the City of La Habra cannot guarantee implementation of applicable mitigation measures. This impact is, therefore, significant and unavoidable.

Impact TRA-1.9: **Caltrans Intersections, Year 2035 Cumulative Plus Project Condition. Of the 19 Caltrans intersections analyzed in the traffic report, 8 state-controlled study intersections would continue to operate at an acceptable LOS with the addition of project traffic in the Year 2035. Project-generated increases at the remaining 11 state-controlled intersections analyzed in the project traffic report will exceed applicable thresholds. With the implementation of improvements, the intersections of Beach Boulevard at Rosecrans Avenue, La Habra Hills Drive at Imperial Highway, Beach Boulevard at La Habra Boulevard, Hacienda Road at Whittier Boulevard, and Walnut Street at Imperial Highway would operate at an acceptable LOS during the AM and PM peak hours. Implementation of improvements 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 would offset the impact of project-generated traffic; however, these locations are still forecast to operate at unacceptable LOS E or F during the AM and/or PM peak hours. Because these intersections are state-controlled, the City of La Habra cannot guarantee implementation of recommended improvements and related 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 2035 cumulative conditions at Caltrans-controlled intersections.

Year 2035 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 2035 background traffic includes development of the 51 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 peak hour Level of Service results at the 19 state-controlled intersections that were analyzed in the project 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 3.7-18 shows that projected long-term (Year 2035) cumulative background (without project) traffic will adversely affect 11 of the state-controlled study intersections. The remaining seven state-controlled intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours. The locations projected to operate at an adverse LOS are:

- Beach Boulevard at Rosecrans Avenue
- Beach Boulevard at Imperial Highway
- La Habra Hills Drive at Imperial Hwy
- Euclid Street at Imperial Highway
- Harbor Boulevard at Imperial Hwy
- Beach Boulevard at Lambert Road
- Beach Blvd at La Mirada/Malvern Ave

Table 3.7-18
Year 2035 Peak Intersection Analysis – Caltrans

		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 Boulevard at Rosecrans Avenue	E	AM	**89.5 s/v**	**F**	**100.3 s/v**	**F**	**Yes**
			PM	69.5 s/v	E	73.4 s/v	E	No
4.	Beach Boulevard at Hillsborough Drive	E	AM	15.8 s/v	B	16.3 s/v	B	No
			PM	29.5 s/v	C	33.6 s/v	C	No
5.	Beach Boulevard at Hillsborough Park Apts.	E	AM	16.3 s/v	B	19.5 s/v	B	No
			PM	13.3 s/v	B	16.7 s/v	B	No
10.	Beach Boulevard at Imperial Highway	E	AM	**105.4 s/v**	**F**	**115.4 s/v**	**F**	**Yes**
			PM	**113.5 s/v**	**F**	**117.2 s/v**	**F**	**Yes**
11.	La Habra Hills Drive at Imperial Highway	E	AM	66.5 s/v	E	68.8 s/v	E	No
			PM	**106.7 s/v**	**F**	**112.2 s/v**	**F**	**Yes**
12.	Idaho Street at Imperial Highway	E	AM	63.6 s/v	E	66.0 s/v	E	No
			PM	79.5 s/v	E	78.1 s/v	E	No
13.	Euclid Street at Imperial Highway	E	AM	**152.6 s/v**	**F**	**184.8 s/v**	**F**	**Yes**
			PM	**105.9 s/v**	**F**	**105.6 s/v**	**F**	No
14.	Harbor Boulevard at Imperial Highway	E	AM	**177.0 s/v**	**F**	**179.0 s/v**	**F**	**Yes**
			PM	**117.9 s/v**	**F**	**117.1 s/v**	**F**	No
15.	Beach Boulevard at Lambert Road	E	AM	**91.4 s/v**	**F**	**91.9 s/v**	**F**	**Yes**
			PM	**144.0 s/v**	**F**	**145.2 s/v**	**F**	**Yes**
20.	Beach Boulevard at La Mirada Blvd/Malvern Ave	D	AM	**79.3 s/v**	**E**	**106.0 s/v**	**F**	**Yes**
			PM	**79.0 s/v**	**E**	**83.9 s/v**	**F**	**Yes**
21.	Beach Boulevard at La Habra Boulevard	E	AM	64.9 s/v	E	62.6 s/v	E	No
			PM	**94.1 s/v**	**F**	**95.9 s/v**	**F**	**Yes**
23.	Beach Boulevard at Artesia Boulevard	D	AM	**106.9 s/v**	**F**	**112.2 s/v**	**F**	**Yes**
			PM	**157.3 s/v**	**F**	**165.2 s/v**	**F**	**Yes**
24.	Beach Boulevard at Commonwealth Avenue	D	AM	39.0 s/v	D	40.4 s/v	D	No
			PM	45.7 s/v	D	47.3 s/v	D	No
25.	I-5 NB Ramps at Auto Center Drive	D	AM	35.0 s/v	D	35.2 s/v	D	No
			PM	47.4 s/v	D	49.1 s/v	D	No
26.	Beach Boulevard at Auto Center Drive	D	AM	37.2 s/v	D	37.8 s/v	D	No
			PM	47.8 s/v	D	48.2 s/v	D	No

		LOS Std.	Time Period	(1) Year 2035 Traffic Conditions		(2) Year 2035 Plus Project Traffic Conditions		(3) Impact
				HCM	LOS	HCM	LOS	Yes/No
27.	Beach Boulevard at I-5 SB Ramps	D	AM	33.2 s/v	C	33.0 s/v	C	No
			PM	42.4 s/v	D	42.4 s/v	D	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	63.3 s/v	E	65.5 s/v	E	No
			PM	75.1 s/v	E	77.3 s/v	E	No
29.	Hacienda Road at Whittier Boulevard	E	AM	**704.0 s/v**	**F**	**704.7 s/v**	**F**	**Yes**
			PM	**599.4 s/v**	**F**	**601.8 s/v**	**F**	**Yes**
30.	Walnut Street at Imperial Highway	E	AM	**6,914.5 s/v**	**F**	**6,914.5 s/v**	**F**	No
			PM	**118.4 s/v**	**F**	**120.9 s/v**	**F**	**Yes**

Notes: s/v = seconds per vehicle (delay)
BOLD text indicates unacceptable service level
Source: Rancho La Habra Traffic Impact Analysis, 2017.

- Beach Boulevard at La Habra Blvd
- Beach Blvd at Artesia Blvd
- Hacienda Road at Whittier Blvd
- Walnut Street at Imperial

Significance Conclusion for Impact TRA-1.9

Table 3.7-18 indicates that project-generated traffic would exceed applicable significance thresholds at 11 of the 19 state-controlled intersections analyzed in the project traffic impact analysis. The remaining eight state-controlled intersections are forecast to continue operating at an acceptable LOS with the addition of project-generated traffic in the Year 2035. The locations projected to operate at an adverse LOS are:

- Beach Boulevard at Rosecrans Avenue
- Beach Boulevard at Imperial Highway
- La Habra Hills Drive 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 La Habra Boulevard
- Beach Boulevard at Artesia Boulevard

- Hacienda Road at Whittier Boulevard
- Walnut Street at Imperial Highway

Mitigation Measures

See **Mitigation Measure TRA-1.2a** 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
- Walnut Street and Imperial Highway
- Beach Boulevard and Artesia Boulevard

See **Mitigation Measure TRA-1.6a** for mitigation of impacts at the intersection of:

- La Habra Hills Drive and Imperial Highway

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

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

Significance Conclusion for Impact TRA-1.9 with Implementation of Mitigation Measures

With implementation of the improvements recommended in the project traffic impact analysis and described above, the intersections of Beach Boulevard at Rosecrans Avenue, La Habra Hills Drive at Imperial Highway, Beach Boulevard at La Habra 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. Implementation of recommended improvements 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 would offset the impacts of project-generated traffic; however, these locations would

still operate at unacceptable LOS E or F during the AM and/or PM peak hours. In addition, because these intersections are along state highways, and improvements would require Caltrans approval, the City of La Habra cannot guarantee that such improvements would, in fact, be implemented. Therefore, impacts would be significant and unavoidable.

Impact TRA-1.10: **Roadway Segments, Year 2035 Cumulative Plus Project Condition. Eighteen of the 37 roadway segments analyzed in the project traffic study are forecast to operate at an unacceptable level of service on a daily basis in the Year 2035 with the proposed Project. The proposed project will have a cumulative impact along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard, as this location is forecast to operate in the Year 2035 at unacceptable LOS E in the southbound direction during the weekday AM peak hour and at unacceptable LOS F in the northbound direction during the weekday PM peak hour with the proposed project. With implementation of recommended improvements, Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard would operate at acceptable LOS D or better with the addition of project-generated traffic in the Year 2035 traffic condition. Because this roadway segment is located outside of the City of La Habra and is subject to City of Buena Park and Caltrans approval, La Habra cannot guarantee implementation of the applicable mitigation measure. 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.

Year 2035 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 2035 background traffic includes development of the 51 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 results of the Year 2035 Cumulative plus Project daily analysis for the thirty-seven (37) key roadway segments.

An analysis of future Year 2035 cumulative traffic conditions indicates that 18 of the 37 roadway segments analyzed in the project traffic impact analysis would operate at an adverse level of service even without project-generated traffic. The 18 locations that are forecast to operate at an adverse LOS in the Year 2035 are:

- 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 Blvd between La Mirada Boulevard /Malvern Avenue and Artesia Boulevard

Table 3.7-19
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?
A.	Lambert Road between Beach Boulevard and Idaho Street	D	La Habra	4	Primary	37,500	**48,500**	**1.293**	**F**	**48,500**	**1.293**	**F**	0.000	No
B.	Lambert Road between Idaho Street and Euclid Street	D	La Habra	4	Primary	37,500	**42,470**	**1.133**	**F**	**42,470**	**1.133**	**F**	0.000	No
C.	Lambert Road between Euclid Street and Harbor Blvd	D	La Habra	4	Primary	37,500	**42,116**	**1.123**	**F**	**42,116**	**1.123**	**F**	0.000	No
D.	Beach Blvd between Lambert Road and Imperial Hwy	E	La Habra	6	Major	56,300	**56,985**	**1.012**	**F**	**57,729**	**1.025**	**F**	**0.013**	
	Peak Hour Assessment			AM	NB	2,815	1,485	0.528	A	1,518	0.539	A	0.011	No
					SB	2,815	2,393	0.850	D	2,416	0.858	D	0.008	No
				PM	NB	2,815	2,446	0.869	D	2,474	0.879	D	0.010	No
					SB	2,815	2,559	0.909	E	2,602	0.924	E	0.015	No
E.	Idaho Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	26,471	0.706	C	26,499	0.707	C	0.001	No
F.	Euclid Street between Lambert Road and Imperial Hwy	D	La Habra	4	Primary	37,500	20,513	0.547	A	20,481	0.546	A	-0.001	No
G.	Harbor Boulevard between Lambert Road and Imperial Hwy	D	La Habra	6	Major	56,300	45,719	0.812	D	45,790	0.813	D	0.001	No
H.	Imperial Highway between Santa Gertrudes Ave and 1st Ave	D	La Mirada	6	Major	54,000	43,082	0.798	C	43,925	0.813	D	0.015	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?
I.	Imperial Highway between 1st Avenue and Beach Boulevard	E	La Habra	6	Major	56,300	45,099	0.801	D	45,994	0.817	D	0.016	No
J.	Imperial Highway between Beach Blvd and La Habra Hills Dr	E	La Habra	6	Smart Street	60,200	**65,053**	**1.081**	**F**	**66,655**	**1.107**	**F**	**0.026**	
	Peak Hour Assessment			AM	EB	3,010	2,722	0.904	E	2,779	0.923	E	0.019	No
					WB	3,010	2,404	0.799	C	2,487	0.826	D	0.027	No
				PM	EB	3,010	2,377	0.790	C	2,461	0.818	D	0.028	No
					WB	3,010	2,429	0.807	D	2,490	0.827	D	0.020	No
K.	Imperial Highway between La Habra Hills Drive and Idaho Street	E	La Habra	6	Smart Street	60,200	**67,404**	**1.120**	**F**	**67,551**	**1.122**	**F**	**0.002**	No
L.	Imperial Highway between Idaho Street and Euclid Street	E	La Habra	6	Smart Street	60,200	**72,640**	**1.207**	**F**	**72,471**	**1.204**	**F**	**-0.003**	No
M.	Imperial Highway between Euclid Street and Harbor Boulevard	E	La Habra	6	Smart Street	60,200	**71,687**	**1.191**	**F**	**71,529**	**1.188**	**F**	**-0.003**	No
N.	Idaho Street between Imperial Hwy and Sandlewood Ave	D	La Habra	4	Primary	37,500	24,025	0.641	B	24,626	0.657	B	0.016	No
O.	Euclid Street between Sandlewood Ave and Imperial Hwy	D	La Habra	4	Primary	37,500	23,432	0.625	B	23,455	0.625	B	0.000	No
P.	Gilbert Street between Sandlewood Ave & Rosecrans Ave	D	Fullerton	4	Primary	37,500	23,141	0.617	B	23,603	0.629	B	0.012	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?
Q.	Euclid Street between Sandlewood Ave and Rosecrans Ave	D	Fullerton	4	Primary	37,500	20,596	0.549	A	20,613	0.550	A	0.001	No
R.	Beach Blvd between Imperial Hwy and Hillsborough Apts.	E	La Habra	6	Smart Street	60,200	**72,935**	**1.212**	**F**	**75,966**	**1.262**	**F**	**0.050**	
	Peak Hour Assessment			AM	NB	3,010	2,066	0.686	B	2,138	0.710	C	0.024	No
					SB	3,010	2,634	0.875	D	2,685	0.892	D	0.017	No
				PM	NB	3,010	2,857	0.949	E	2,932	0.974	E	0.025	No
					SB	3,010	2,594	0.862	D	2,666	0.886	D	0.024	No
S.	Beach Boulevard between Hillsborough Apt. & Hillsborough Dr	E	La Habra	6	Smart Street	60,200	**77,093**	**1.281**	**F**	**79,267**	**1.317**	**F**	**0.036**	
	Peak Hour Assessment			AM	NB	3,010	2,030	0.674	B	2,090	0.694	B	0.020	No
					SB	3,010	2,655	0.882	D	2,761	0.917	E	0.035	No
				PM	NB	3,010	2,867	0.952	E	2,992	0.994	E	0.042	No
					SB	3,010	2,580	0.857	D	2,657	0.883	D	0.026	No
T.	Beach Boulevard between Hillsborough Dr and Rosecrans Ave	E	La Mirada	6	Smart Street	57,780	**65,533**	**1.134**	**F**	**67,533**	**1.169**	**F**	**0.035**	
	Peak Hour Assessment			AM	NB	3,210	1,937	0.603	B	1,990	0.620	B	0.017	No
					SB	3,210	2,789	0.869	D	2,890	0.900	E	0.031	No
				PM	NB	3,210	2,852	0.888	D	2,969	0.925	E	0.037	No
					SB	3,210	2,298	0.716	C	2,368	0.738	C	0.022	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?
U.	Rosecrans Avenue between Beach Boulevard and Gilbert Street	D	Fullerton	4	Primary	37,500	26,030	0.694	B	26,892	0.717	C	0.023	No
V.	Rosecrans Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Secondary	25,000	17,366	0.695	B	17,631	0.705	C	0.010	No
W.	Sandlewood Avenue between Idaho Street and Euclid Street	D	La Habra	2	Commuter	12,500	1,298	0.104	A	1,516	0.121	A	0.017	No
X.	Beach Boulevard between Rosecrans Ave and La Mirada Blvd	D	Buena Park	6	Smart Street	60,200	**63,722**	**1.059**	**F**	**64,987**	**1.080**	**F**	**0.021**	
Peak Hour Assessment				AM	NB	3,010	1,978	0.657	B	2,010	0.668	B	0.011	No
					SB	3,010	2,653	0.881	D	**2,725**	**0.905**	**E**	**0.024**	**Yes**
				PM	NB	3,010	**2,944**	**0.978**	**E**	**3,022**	**1.004**	**F**	**0.026**	**Yes**
					SB	3,010	2,284	0.759	C	2,327	0.773	C	0.014	No
Y.	Imperial Highway between Santa Gertrudes and La Mirada Blvd	E	La Mirada	6	Major	54,000	44,905	0.832	D	45,653	0.845	D	0.013	No
Z.	Beach Boulevard between Lambert Rd and La Habra Boulevard.	E	La Habra	6	Major	56,300	38,847	0.690	B	39,529	0.702	C	0.012	No
AA.	Imperial Highway between Valley View Ave and La Mirada Blvd	E	La Mirada	6	Major	54,000	35,947	0.666	B	36,494	0.676	B	0.010	No
BB.	Beach Boulevard between La Mirada Blvd/Malvern Ave and Artesia Blvd	D	Buena Park	6	Smart Street	60,200	**84,394**	**1.402**	**F**	**85,349**	**1.418**	**F**	0.016	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?
CC.	Beach Blvd between Artesia Blvd and Commonwealth Ave	D	Buena Park	6	Smart Street	60,200	**67,010**	**1.113**	**F**	**67,689**	**1.124**	**F**	0.011	No
DD.	Beach Blvd bet. Commonwealth Ave and Auto Center Dr	D	Buena Park	6	Smart Street	60,200	**65,506**	**1.088**	**F**	**66,131**	**1.099**	**F**	0.011	No
EE.	Auto Center Drive between Beach Boulevard and I-5 NB Ramps	D	Buena Park	4	Primary	37,500	15,245	0.407	A	15,319	0.409	A	0.002	No
FF.	Beach Boulevard between Auto Center Drive and I-5 SB Ramps	D	Buena Park	6	Smart Street	60,200	**63,777**	**1.059**	**F**	**64,291**	**1.068**	**F**	0.009	No
GG	Beach Boulevard between La Habra Blvd and Whittier Blvd	E	La Habra	6	Major	56,300	38,119	0.677	B	38,720	0.688	B	0.011	No
HH.	Whittier Boulevard between Beach Blvd and Hacienda Rd	D	La Habra	4	Primary	37,500	**50,548**	**1.348**	**F**	**50,834**	**1.356**	**F**	0.008	No
II.	Gilbert Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	27,459	0.732	C	28,050	0.748	C	0.016	No
JJ.	Euclid Street between Rosecrans Ave and Malvern Ave	D	Fullerton	4	Primary	37,500	**33,842**	**0.902**	**E**	**34,029**	**0.907**	**E**	0.005	No
KK.	Malvern Avenue between Gilbert Street and Euclid Street	D	Fullerton	4	Primary	37,500	24,077	0.642	B	24,441	0.652	B	0.010	No

Notes: **BOLD text** indicates unacceptable service level.
Source: Rancho La Habra Traffic Impact Analysis, 2017.

- Beach Blvd between Artesia Blvd and Commonwealth Avenue
- Beach Blvd between Commonwealth Avenue and Auto Center Drive
- Beach Blvd between Auto Center Drive and I-5 SB Ramps
- Whittier Boulevard between Beach Boulevard and Hacienda Road
- Euclid Street between Rosecrans Avenue and Malvern Avenue

Significance Conclusion for Impact TRA-1.10

Table 3.7-19 indicates that 18 of the 37 roadway segments analyzed in the project traffic impact analysis would operate at an unacceptable level of service on a daily basis in the Year 2035 with traffic from the proposed project. The 18 locations that are forecast to operate at an adverse LOS in the Year 2035 with project traffic are:

- 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 Blvd 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 Blvd between La Mirada Boulevard/Malvern Avenue and Artesia Boulevard
- Beach Blvd between Artesia Boulevard and Commonwealth Avenue
- Beach Blvd between Commonwealth Avenue and Auto Center Drive
- Beach Blvd between Auto Center Drive and I-5 SB Ramps
- Whittier Boulevard between Beach Boulevard and Hacienda Road
- Euclid Street between Rosecrans Avenue and Malvern Avenue

Of the 18 locations operating at an unacceptable level of service, Beach Boulevard between Lambert Road and Imperial Highway, 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, and Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard require a peak hour link assessment to determine whether they would be impacted by the proposed Project in the Year 2035. Traffic at the other 12 locations would not exceed applicable thresholds for requiring a peak hour link assessment, and the proposed project would have a less than significant impact at those locations and impacts would be less than significant.

As shown in **Table 3.7-19**, the proposed project would have a significant impact along Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard since this location would operate at unacceptable LOS E in the southbound direction during the critical weekday AM peak hour and at unacceptable LOS F in the northbound direction during the critical weekday PM peak hour with the traffic from the proposed project in the Year 2035. The proposed project would have less than significant impacts on the remaining five roadway segments (Beach Boulevard between Lambert Road and Imperial Highway, 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, and Beach Boulevard between Hillsborough Drive and Rosecrans Avenue) since these five locations would operate at an acceptable LOS in the Year 2035 with proposed project-generated traffic during the weekday AM and PM peak commute hours.

The remaining nineteen (19) key roadway segments are forecast to continue to operate at an acceptable service level on a daily basis with the addition of project generated traffic in the Year 2035 traffic condition.

Mitigation Measures

The following improvements were recommended in the project traffic impact analysis to mitigate the Year 2035 plus project traffic impacts:

- **Beach Blvd between Rosecrans Ave and La Mirada Blvd:** Widen and restripe Beach Boulevard to provide a 4th northbound through lane and a 4th southbound through lane. The installation of these improvements will require additional right-of-way and is subject to the approval of Caltrans and the City of Buena Park.

See **Mitigation Measure 1.7** for mitigation of impacts at:

- Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard

Significance Conclusion for Impact TRA-1.10 with Implementation of Mitigation Measures

With implementation of the improvements recommended in the project traffic impact analysis, Beach Boulevard between Rosecrans Avenue and La Mirada Boulevard) would operate at acceptable LOS D or better with in the Year 2035 Cumulative Plus Project traffic condition. However, because this location is on a state highway within Buena Park and the recommended improvements require Caltrans and City of Buena Park approval, the City of La Habra cannot guarantee implementation of these improvements. Therefore, impacts are significant and unavoidable.

Impact TRA-1.11: Freeway Mainline Segments. Development of the proposed project in combination with cumulative development and ambient traffic growth would cumulatively impact one of two SR-57 mainline freeway segments (southbound south of Imperial Highway). However, because the SR-57 Freeway is controlled exclusively by the State and there is no mechanism by which the City of La Habra can construct or guarantee construction of any freeway improvements, proposed project's impact is *significant and unavoidable*.

Methodology

Caltrans methodology has been used to analyze project-related impacts on freeway mainlines. Caltrans requires the use of analysis methods provided in the Highway Capacity Manual (*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. Caltrans acknowledges that this 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 utilized 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 density on a facility that is operating at an unacceptable level.

Per Caltrans guidelines, the following is stated in the *Caltrans Guide for the Preparation of Traffic Impact Studies*, December 2002:

"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 does 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 the 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 and Year 2035 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. In addition, Year 2023 and Year 2035 background traffic includes development of the 51 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

Existing Plus Project Freeway Mainline Conditions

Table 3.7-20 indicates that with the addition of project traffic, the two freeway segments located along the SR-57 freeway would continue operating at an unacceptable level of service during the AM and/or PM peak hours based on applicable thresholds. Although addition of project trips would not result in any new deficient service levels, project traffic would increase traffic density along the SR-57 southbound lanes south of Imperial Highway.

Cumulative Year 2023 Plus Project Freeway Mainline Conditions

Table 3.7-21 summarizes the peak hour level of service results at the two freeway segments located along the SR-57 Freeway for Year 2023 cumulative traffic conditions. This table indicates that the two freeway segments located along the SR-57 Freeway would operate at an unacceptable level of service during the AM and PM peak hours based on applicable thresholds, with or without the addition of project-generated traffic. Although the addition of

Table 3.7-20
Existing Plus Project Freeway Mainline Analysis

	Time Period	Existing Conditions			Existing Plus Project Conditions			Significant?
		Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Yes/No
SR-57 southbound south of Imperial Hwy	AM	2,035	34.3	D	2,034	34.3	D	No
	PM	**2,165**	**38.2**	**E**	**2,163**	**38.1**	**E**	No
SR-57 southbound south of Imperial Hwy	**AM**	**2,495**	**52.0**	**F**	**2,499**	**52.2**	**F**	**Yes**
	PM	**2,715**	**67.1**	**F**	**2,714**	**67.0**	**F**	No

Notes:
Pc/hr/lane Passenger cars per hour per lane
pc/mi/ln = Passenger cars per mile per lane
Bold text indicates adverse service levels based on the Caltrans LOS Criteria
Source: Rancho La Habra Traffic Impact Analysis, 2017.

Table 3.7-21
Year 2023 Cumulative Plus Project Freeway Mainline Analysis

	Time Period	Existing Conditions			Existing Plus Project Conditions			Significant?
		Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Yes/No
SR-57 southbound south of Imperial Hwy	AM	**2,199**	**39.3**	**E**	**2,198**	**39.3**	**E**	No
	PM	**2,286**	**42.4**	**E**	**2,283**	**42.3**	**E**	No
SR-57 southbound south of Imperial Hwy	**AM**	**2,703**	**52.0**	**F**	**2,707**	**66.4**	**F**	**Yes**
	PM	**2,883**	**85.3**	**F**	**2,882**	**85.1**	**F**	No

Notes:
Pc/hr/lane Passenger cars per hour per lane
pc/mi/ln = Passenger cars per mile per lane
Bold text indicates adverse service levels based on the Caltrans LOS Criteria
Source: Rancho La Habra Traffic Impact Analysis, 2017.

project-generated trips would not result in any new deficient service levels, project traffic would increase traffic density along the SR-57 southbound lanes south of Imperial Highway.

Year 2035 Plus Project Freeway Mainline Conditions

Table 3.7-22 summarizes the peak hour level of service results at the two freeway segments located along the SR-57 Freeway for Year 2035 cumulative traffic conditions. This table indicates that the two freeway segments located along the SR-57 Freeway would operate at an unacceptable level of service during the AM and PM peak hours based on applicable thresholds, with or without the addition of project-generated traffic. Although the addition of project-generated trips would not result in any new deficient service levels, project traffic would increase traffic density along the SR-57 southbound lanes south of Imperial Highway.

Table 3.7-22
Year 2035 Cumulative Plus Project Freeway Mainline Analysis

	Time Period	Existing Conditions			Existing Plus Project Conditions			Significant?
		Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Peak Hour Volume (pc/hr/lane)	Density (pc/mi/lane)	LOS	Yes/No
SR-57 southbound south of Imperial Hwy	AM	**2,415**	**47.9**	**F**	**2,414**	**47.9**	**F**	No
	PM	**2,346**	**44.8**	**E**	**2,344**	**44.8**	**E**	No
SR-57 southbound south of Imperial Hwy	**AM**	**2,888**	**85.9**	**F**	**2,892**	**86.5**	**F**	**Yes**
	PM	**2,894**	**86.8**	**F**	**2,893**	**86.6**	**F**	No

Notes:
Pc/hr/lane Passenger cars per hour per lane
pc/mi/ln = Passenger cars per mile per lane
Bold text indicates adverse service levels based on the Caltrans LOS Criteria
Source: Rancho La Habra Traffic Impact Analysis, 2017.

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 Plus Project, or Year Plus Project conditions, project traffic would increase traffic density along the SR-57 southbound south of Imperial Highway in all three scenarios. Because this freeway mainline segment operates an at unacceptable level, the project-related increase in traffic density constitutes a significant impact for which mitigation is required.

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 south 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, and there is no mechanism by which the City of La Habra can construct or guarantee the construction of any freeway improvements. Therefore, the proposed project's impact on the SR-57 freeway southbound south of Imperial Highway is significant and unavoidable.

Impact TRA-1.12: Caltrans Ramp Junction Merge and Diverge Analysis. Development of the proposed project in combination with cumulative development and ambient traffic growth would result in a significant impact one of the three freeway ramp junctions assessed in the project traffic report. Because the SR-57 Freeway is controlled exclusively by the State 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 proposed project's impact is *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 *Highway Capacity Manual (HCM).*

Impact Assessment

Existing Plus Project Conditions

Table 3.7-23 summarizes the peak hour Level of Service results at three freeway ramp junctions for Existing Plus Project traffic conditions. This table indicates that two of the three freeway ramps analyzed in the project traffic impact analysis currently operate at an unacceptable level of service during the AM or PM peak hours with or without project-generated traffic. Although the proposed project would not cause a change in level of service, it would increase the density of traffic merging onto the southbound SR-57 freeway and Imperial Highway.

Year 2023 with Project Conditions

Table 3.7-24 summarizes the peak hour Level of Service results at the three freeway ramp junctions for Year 2023 Cumulative traffic conditions. This table indicates that two of the three freeway ramps would operate at an unacceptable level of service in the Year 2023 during the AM and/or PM peak hours with or without project-generated traffic. Although the proposed project would not cause a change in level of service, it would increase the density of traffic merging onto the southbound SR-57 freeway and Imperial Highway.

Year 2035 with Project Conditions

Table 3.7-25 summarizes the peak hour Level of Service results for the three freeway ramps for Year 2035 cumulative traffic conditions. This indicates that all three freeway ramps would operate at an unacceptable level of service under Year 2035 Buildout conditions during the AM

Table 3.7-23
Existing Plus Project Merge-Diverge Analysis

				Existing Traffic Conditions				Existing Plus Project Traffic Conditions				Significant?
			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	Yes/No
1.	SR-57 southbound off-ramp to Imperial Hwy	Diverge Analysis	AM	9,572	1,023	0.0[a]	A	9,566	1,017	0.0[a]	A	No
			PM	10,184	1,339	0.0[a]	A	10,174	1,329	0.0[a]	A	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy	Merge Analysis	AM	**8,549**	**259**	30.8	D	8,549	259	30.8	D	No
			PM	**8,845**	**446**	**34.7**	**F**	**8,845**	**446**	**34.7**	**F**	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy	Merge Analysis	AM	**8,808**	**580**	**36.3**	**F**	**8,808**	**594**	**36.5**	**F**	**Yes**
			PM	**9,291**	**922**	**43.0**	**F**	**9,291**	**920**	**43.0**	**F**	No

Notes:
pc/mi/lane = passenger cars per mile per lane
Bold text indicates adverse service level
[a] A theoretical negative density value can result from the freeway ramp junction calculations. A negative value indicates that the ramp is operating optimally under peak hour conditions because as the length of the deceleration lane increases, there is more physical space in the ramp influence area and operating speeds of merging vehicles are expected to increase, which will reduce the overall density. However, since a negative density value is unrealistic a theoretical value of 0.0 was reported.
Source: Rancho La Habra Traffic Impact Analysis, 2017.

Table 3.7-24
Year 2023 Cumulative Plus Project Merge-Diverge Analysis

			Time Period	Year 2023 Without Project Traffic Conditions				Year 2023 With Project Traffic Conditions				Significant?
				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	Yes/No
1.	SR-57 southbound off-ramp to Imperial Hwy	Diverge Analysis	AM	10,343	1,108	0.0[a]	A	10,337	1,102	0.0[a]	A	No
			PM	10,749	1,434	0.0[a]	A	10,739	1,424	0.0[a]	A	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy	Merge Analysis	AM	**9,235**	**272**	**36.5**	**F**	**9,235**	**272**	**36.5**	**F**	No
			PM	**9,315**	**469**	**38.7**	**F**	**9,315**	**469**	**38.7**	**F**	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy	Merge Analysis	AM	**9,507**	**664**	**42.8**	**F**	**9,507**	**678**	**42.9**	**F**	**Yes**
			PM	**9,784**	**1,062**	**48.2**	**F**	**9,784**	**1,060**	**48.2**	**F**	No

Notes:
pc/mi/lane = passenger cars per mile per lane
Bold text indicates adverse service level
Source: Rancho La Habra Traffic Impact Analysis, 2017.

Table 3.7-25
Year 2035 Cumulative Plus Project Merge-Diverge Analysis

			Time Period	Year 2035 Without Project Traffic Conditions				Year 2035 With Project Traffic Conditions				Significant? Yes/No
				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	
1.	SR-57 southbound off-ramp to Imperial Hwy	Diverge Analysis	AM	**11,359**	**1,451**	**4.2**	**F[a]**	**11,353**	**1,445**	**4.1**	**F[a]**	No
			PM	11,034	1,731	1.8	A	11,024	1,721	1.7	A	No
2.	SR-57 southbound on-ramp (WB) from Imperial Hwy	Merge Analysis	AM	**9,908**	**284**	**42.2**	**F**	**9,908**	**284**	**42.2**	**F**	No
			PM	**9,303**	**489**	**38.8**	**F**	**9,303**	**489**	**38.8**	**F**	No
3.	SR-57 southbound on-ramp (EB) from Imperial Hwy	Merge Analysis	AM	**10,192**	**674**	**48.6**	**F**	**10,192**	**688**	**48.7**	**F**	**Yes**
			PM	**9,792**	**1,096**	**48.5**	**F**	**9,792**	**1,094**	**48.5**	**F**	No

Notes:
pc/mi/lane = passenger cars per mile per lane
Bold text indicates adverse service level
a Level of Service F is reported due to high mainline congestion.
Source: Rancho La Habra Traffic Impact Analysis, 2017.

and/or PM peak hours with or without traffic from the proposed project. Although the proposed project would not cause a change in level of service, it would increase the density of traffic merging onto the southbound SR-57 freeway and Imperial Highway.

Significance Conclusion for Impact TRA-1.12

Although the proposed project would not cause a change in level of service, it would increase the density of traffic merging onto the southbound SR-57 freeway and Imperial Highway under Existing Plus Project, Year 2023 Cumulative Plus Project, and Year 2035 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 south 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, and there is no mechanism by which the City of La Habra can construct or guarantee the construction of any freeway improvements. Therefore, the proposed project's impact on the SR-57 freeway southbound south of Imperial Highway is significant and unavoidable.

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:	**Implementation of the proposed Specific Plan would increase traffic on the surrounding roadway system, resulting in increased ICU and/or delay at area intersections. These increases will not exceed applicable thresholds at any congestion management program location. Therefore, this impact would be *less than significant*.**

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 that directly access the CMP Highway System. The proposed Project has access driveways to Imperial Highway and Beach Boulevard, which are part of the CMP Highway System. The proposed project is forecast to generate approximately 4,398 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 CMP TIA, CMP intersections to be analyzed when a proposed project would generate 3 percent, or more, of a CMP system link's daily LOS E capacity.

Three roadway segments on the CMP Highway System meet this 3 percent threshold:

- 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 proposed project would cause a CMP facility to operate worse than LOS E, or increases the ICU value by more than 0.10 if the CMP facility operates at LOS F without the project.

Impact Assessment

Tables 3.7-26, **3.7-27**, and **3.7-28** reflect the analysis of Existing plus Project, Year 2023 plus Project and Year 2035 plus Project level of service results, respectively, based on the CMP methodology and thresholds. Based on the results of the analysis presented in the tables, the proposed project will not exceed applicable thresholds on any CMP location under Existing plus Project, Year 2023 plus Project, or Year 2035 plus Project traffic conditions.

Table 3.7-26
Existing Plus Project Peak Hour Intersection Capacity Analysis – CMP

		LOS Standard	Time Period	Existing Traffic Conditions		Existing Plus Project Traffic Conditions		CMP Impact	
				ICU	LOS	ICU	LOS	ICU Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	0.775	C	0.802	D	0.027	No
			PM	0.883	D	0.916	E	0.033	No
14.	Harbor Boulevard at Imperial Highway	E	AM	0.830	D	0.832	D	0.002	No
			PM	0.755	C	0.749	C	-0.006	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.646	B	0.654	B	0.008	No
			PM	0.721	C	0.728	C	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.597	A	0.603	B	0.006	No
			PM	0.663	B	0.669	B	0.006	No

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Table 3.7-27
Year 2023 Peak Hour Intersection Capacity Analysis – CMP

		LOS Standard	Time Period	Year 2023 Cumulative Traffic Conditions		Year 2023 Cumulative Plus Project Traffic Conditions		CMP Impact	
				ICU	LOS	ICU	LOS	Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	0.895	D	0.922	E	0.027	No
			PM	**1.023**	**F**	**1.055**	**F**	0.032	No
14.	Harbor Boulevard at Imperial Highway	E	AM	0.947	E	0.950	E	0.003	No
			PM	**1.002**	**F**	**1.006**	**F**	0.004	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.772	C	0.779	C	0.007	No
			PM	0.872	D	0.879	D	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.680	B	0.686	B	0.006	No
			PM	0.757	C	0.763	C	0.006	No

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Table 3.7-28
Year 2035 Peak Hour Intersection Capacity Analysis – CMP

		LOS Standard	Time Period	Year 2035 Cumulative Traffic Conditions		Year 2035 Cumulative Plus Project Traffic Conditions		CMP Impact	
				ICU	LOS	ICU	LOS	ICU Increase	Significant? Yes/No
10.	Beach Boulevard at Imperial Highway	E	AM	**1.029**	**F**	**1.056**	**F**	0.027	No
			PM	**1.126**	**F**	**1.158**	**F**	0.032	No
14.	Harbor Boulevard at Imperial Highway	E	AM	**1.282**	**F**	**1.280**	**F**	-0.002	No
			PM	**1.088**	**F**	**1.093**	**F**	0.005	No
27.	I-5 SB Ramps at Beach Boulevard	E	AM	0.847	D	0.855	D	0.008	No
			PM	0.950	E	0.957	E	0.007	No
28.	Beach Boulevard at Whittier Boulevard	E	AM	0.760	C	0.766	C	0.006	No
			PM	0.798	C	0.804	D	0.006	No

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Significance Conclusion for Impact TRA-2

Because the proposed project will not exceed applicable thresholds on any CMP location under Existing plus Project, Year 2023 plus Project, or Year 2035 plus Project traffic conditions, impacts will be less than significant.

Mitigation Measures

Because impacts will be less than significant, mitigation measures are not required.

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: Implementation of the proposed project would not result in any changes to air traffic patterns, there would be *no impact*.

Methodology

To determine the significance, a screening analysis was first undertaken to determine whether the proposed Specific Plan 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 Specific Plan was outside of any airport land use plan, the location of the nearest public airport or private airstrip was determined. Because the Specific Plan area 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 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, 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 the County of Orange. The project site and 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. Development of the proposed Specific Plan would, therefore not conflict with an airport land use plan, nor would its development cause other adverse effects to 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:	**Implementation of the proposed Specific Plan would be subject to City review of proposed roadway improvements, which would ensure that roadway design hazards are not created.** ***No impact*** **would result.**

Methodology

Because the design of proposed roadway improvements would be subject to City standards and approval of the City's Public Works Department, no impacts would result. 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

Because 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, nor would the proposed project generate vehicles whose use would be incompatible on the surrounding roadway system, 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: Implementation of the proposed Specific Plan would provide adequate emergency access to 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. Implementation of Mitigation Measure TRA-1.1a, requiring implementation of a traffic management plan would ensure adequate emergency access during construction. The resulting impact would 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 Street – 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 Section 3.11, *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 mile 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 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 site during and after site grading and construction. In addition, per the requirements of Mitigation Measure TRA-1.1a, a construction management plan will be implemented to ensure adequate emergency access during site construction. Thus, impacts during construction would be less than significant. Once La Habra Hills Drive is reopened 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 1.1a), as well as City of La Habra requirements, will reduce traffic impacts of the proposed 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:	**Implementation of the proposed project would provide enhanced bicycle and pedestrian facilities within the project site, and implement applicable requirements for transit, bicycle, and pedestrian facilities. The resulting impact would 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 is provided in the project area 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 Street. The proposed 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/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 proposed project has been designed with approximately 2.6 miles of trails and that are consistent with adopted policies in the General Plan Mobility/Circulation Element. The trails 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 also connect to Idaho Street, providing connections to Las Positas Elementary School, Imperial Middle School, and Vista del Valle Park. Rancho La Habra also provides 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 proposed project would provide enhanced bicycle and pedestrian facilities within the project site, and implement applicable requirements for transit, bicycle, and pedestrian facilities. The resulting impact would be less than significant.

Mitigation Measures

Because impacts are less than significant, no mitigation measures are required.

3.7.7 REFERENCES – TRAFFIC AND CIRCULATION

Linscott Law & Greenspan Engineers, *Traffic Impact Analysis, Rancho La Habra*, September 11, 2017.

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 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 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} 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

[1] A micron is one-millionth of a meter. The width of a single human hair ranges from approximately 10 to 200 microns.

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 (NOx, 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; km = kilometer
Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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.

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.

The most recent AQMP was adopted by the SCAQMD Governing Board on December 12, 2012. The purpose of the 2012 AQMP for the South Coast Air Basin is to set forth a comprehensive and integrated program to obtain regional compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the South Coast Air Basin's commitment toward meeting the federal 8-hour ozone standards. The AQMP would also serve to satisfy recent USEPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles traveled (VMT) emissions offset demonstration. In addition, the AQMP updates specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone SIP. The 2012 AQMP sets forth programs that require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal. A Supplement to the 2012 AQMP was prepared

to demonstrate attainment of the 24-hour $PM_{2.5}$ standard by 2015. On February 5, 2015, the SCAQMD Governing Board approved the Supplement, which was also approved by CARB and USEPA as part of the California SIP.

In December 2016, the AQMD released the draft Final 2016 AQMP for public review. The 2016 draft Final 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 using 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.

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 application of 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, cessation of construction activity when winds exceed 25 miles per hour, and establishing a permanent ground cover on finished sites.
- Rule 403 requires project applicants to control fugitive dust using the best available control measures 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 District. 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 South Coast Air Quality Management District.
- **Rule 1303 – Major Emission Sources.** This rule governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures 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, which 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). 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 degrees Fahrenheit (°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.

Table 3.8-3
Project Area Air Quality Monitoring Summary, 2013-2015

Pollutant	Standard	Year		
		2013	2014	2015
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.104	0.119	0.103
Maximum 8-Hour Concentration (ppm)		0.078	0.088	0.082
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	2	5	4
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	2	6	8
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	1	2	2
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		--	4.0	--
Maximum 8-Hour Concentration (ppm)		2.2	2.1	--
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	--
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	--
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	--
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.085	0.084	0.058
Annual Arithmetic Mean Concentration (ppm)		0.015	0.015	--
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m^3)		77	85	59
Number of Samples		59	61	--
Number of Samples Exceeding State Standard	> 50 µg/m^3	1	2	2
Number of Samples Exceeding Federal Standard	> 150 µg/m^3	0	0	--
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m^3)		37.8	45	45.8
Annual Arithmetic Mean (µg/m^3)		10.09	16.1	14.8
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m^3	1	1	--

Notes: ppm = parts per million; µg/m^3 = micrograms per cubic meter
Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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 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 neurobehavioral 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. 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	3.96	3.90
NO_X	10.22	10.46
CO	36.42	35.14
SO_X	0.18	0.17
PM_{10}	13.17	13.17
$PM_{2.5}$	3.58	3.58

Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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 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. The resulting impact would 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 No. 1 refers to violations of NAAQS and California Ambient Air Quality Standards. Violations to these standards would occur if the localized significance thresholds analyzed in **Impact AQ-2.2** were exceeded.

Consistency Criterion No. 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 proposed 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 proposed 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 reduce in a greater amount of population growth than was assumed in the regional AQMP.

Significance Conclusion for Impact AQ-1

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*.

While no feasible mitigation measures are available to reduce Impact AES-3 to a less than significant level, as discussed in Chapter 7, *Alternatives*, the following Project Alternatives would eliminate or reduce the identified significant impact:

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, contribute substantially to an existing or projected air quality violation.**

Impact AQ-2.1: **Implementation of 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	15
CO	550	550
Lead	3	3

Source: Rancho La Habra Air Quality Impact Analysis, 2016.

Emissions Modeling

The latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.1 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 greenhouse gas (GHG) emissions from direct and indirect sources; and 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 October 2017, 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.

Demolition of the existing Westridge Golf Club would generate approximately 170,000 cubic feet of debris, which would be crushed and reused on-site. Fugitive dust emissions will be generated through the crushing of rock on-site. USEPA's AP-42 compilation of emission factors available in Chapter 11.19.2-2 were used to estimate fugitive dust from crushing activities. Based on State of California Department of Resources Recycling and Recovery (CalRecycle) construction debris factors, it is estimated that approximately 1,511.11 tons per day would be processed during crushing activities for an approximate duration of five working days concurrent with demolition activity. The emissions associated with the on-site movement of material are thus adequately captured within the analysis due to the fact that the dozers and loaders necessary to move crushed material within the project site are included in CalEEMod™ and their associated fugitive dust emissions are included in the analysis.

Equipment anticipated to be used in proposed 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.

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 proposed 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.

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, 2016.

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 off-site 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.

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. Weekend trip generation rates from the Institute of Transportation Engineers Trip Generation Handbook, 9th Edition, were also used in the analysis. 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 on **Table 3.8-7**. Under the assumed scenarios, emissions resulting from project construction would exceed the applicable SCAQMD threshold for emissions of NOx.

Table 3.8-7
Daily Project Construction Emissions (Without Mitigation)

	Emissions (pounds per day)					
Year	**VOC**	**NOx**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2017	3.82	51.49	21.09	0.08	16.08	3.91
2018	13.57	135.80	65.98	0.18	18.09	8.31
2019	12.76	58.11	57.38	0.15	8.97	4.10
2020	12.14	53.17	55.20	0.15	8.66	3.80
2021	11.57	48.28	53.42	0.14	8.34	3.50
2022	11.06	43.50	51.98	0.14	8.05	3.23
2023	10.65	37.87	50.67	0.14	7.85	3.04
Maximum Daily Emissions	**13.57**	**135.80**	**65.98**	**0.18**	**19.34**	**8.31**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Rancho La Habra Air Quality Impact Analysis, 2016.

Operations Emissions

Estimated peak summer and winter operational emissions are summarized in **Table 3.8-8**. As shown in that table, emissions resulting from project operations would not exceed applicable SCAQMD thresholds for any criteria pollutant.

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	25.80	6.35	37.36	0.04	0.67	0.67
Energy Source	0.37	3.18	1.72	0.02	0.25	0.25
Mobile Source	9.90	32.84	115.44	0.44	41.44	11.28
Subtotal	36.07	42.37	154.52	0.50	42.36	12.20
Existing Golf Course Use	3.96	10.22	36.42	0.18	13.17	3.58
Net Emissions Increase	**32.11**	**32.15**	**118.10**	**0.32**	**29.19**	**8.62**
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	25.80	6.35	37.36	0.04	0.67	0.67
Energy Source	0.37	2.78	1.53	0.02	0.22	0.22
Mobile Source	9.71	33.59	111.56	0.42	41.44	11.28
Subtotal	35.83	42.72	150.45	0.48	42.33	12.18
Existing Golf Course Use	3.90	10.46	35.14	0.17	13.17	3.58
Net Emissions Increase	**31.93**	**32.26**	**115.31**	**0.31**	**29.16**	**8.6**
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Rancho La Habra Air Quality Impact Analysis, 2016.

Significance Conclusion for Impact AQ-2.1

Air pollutant emissions would not exceed applicable thresholds for criteria pollutants; however, because the proposed Project would exceed the applicable threshold for NO_X during construction, a significant impact would result. Mitigation is required.

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 NOx 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}	$PM_{2.5}$
2017	1.08	24.68	23.40	0.08	5.37	1.11
2018	7.25	49.99	62.42	0.15	6.97	2.84
2019	7.01	21.44	60.35	0.15	6.68	1.96
2020	6.78	19.93	58.54	0.15	6.65	1.92
2021	6.58	18.29	57.08	0.14	6.60	1.88
2022	6.44	17.45	55.95	0.14	6.59	1.87
2023	6.26	14.22	54.77	0.14	6.58	1.86
Maximum Daily Emissions	**7.25**	**49.99**	**62.42**	**0.15**	**6.97**	**2.84**
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, 2016.

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

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 methods 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

The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (Methodology). The SCAQMD has established that impacts on air quality are significant if there is a potential to contribute 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.

In order to determine the appropriate methodology for determining 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 recommends that dispersion modeling be conducted to determine the actual pollutant concentrations for applicable LSTs in the air. In other words, the maximum daily on-site emissions as calculated in CalEEMod™ are modeled via air dispersion modeling to calculate the actual concentration in the air (e.g., parts per million or micrograms per cubic meter) in order to determine if any applicable thresholds are exceeded.

SCAQMD's Methodology clearly 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 proposed project could actively disturb approximately 6.0 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	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	4	1.0	8	4.0
			Total Acres Graded Per Day		**6.0**

Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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 6.0 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 6.0 acres was 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 was spread over an area of approximately 6.0 acres. The nearest sensitive receptor land use is the Westridge residential community located immediately adjacent south of the project site.

To account for meteorological conditions at the project site, data from the North Orange County monitoring station was used, as this is the nearest station to the project site for which meteorological data are available.

Impact Assessment

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 best available control methods (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 Methods 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	0.25	0.10	0.21	26.98	10.36
Background Concentration[1]	4.00	2.10	0.058	--	--
Total Concentration	**4.25**	**2.20**	**0.27**	**26.98**	**10.36**
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 µg/m3. All others are expressed in ppm.
[1] Highest concentration from the last three years of available data.
Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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 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.

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 3.8-12**. Impacts would therefore be less than significant following implementation of applicable BACMs and mitigation measures.

Table 3.8-12
Localized Emissions from Peak Project Construction Activity – With Best Available Control Methods 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	0.26	0.10	0.10	7.59	3.24
Background Concentration[1]	4.00	2.10	0.058	--	--
Total Concentration	**4.26**	**2.20**	**0.16**	**7.59**	**3.24**
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 µg/m³. All others are expressed in ppm.
[1] Highest concentration from the last three years of available data.
Source: Rancho La Habra Air Quality Impact Analysis, 2016.

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

Impact AQ-2.3: The proposed project would not generate sufficient traffic to create a carbon monoxide (CO) "hot spot." 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 ppm or the 8-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, 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 potential for Specific Plan-related traffic to contribute to a CO hot spot.

Traffic volumes generating the CO concentrations for the "hot spot" analysis in the 2003 AQMP are shown on **Table 3.8-13**. 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).[2]

Table 3.8-13
Carbon Monoxide Modeling Results at High-Volume Los Angeles Intersections

Intersection	Peak Hour Traffic		Carbon Monoxide Concentrations (ppm)		
	Morning	Afternoon	AM 1-Hour	PM 1-Hour	8-Hour
Wilshire/Veteran	8,062	7,719	4.6	3.5	4.2
Sunset/Highland	6,614	5,374	4.0	4.5	3.9
La Cienaga/Century	6,634	8,674	3.8	3.1	5.8
Long Beach/Imperial	4,212	5,514	3.0	3.1	9.3

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.

[2] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

Impact Assessment

At buildout of the proposed Rancho La Habra Specific Plan, the highest average daily trips on a road segment would be 80,572 daily trips on Beach Boulevard, north of 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.

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	**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})[3] 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 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.

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

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*. 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 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**, the proposed project would result in significant NO_X emissions during construction 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 BACMs and LST-related mitigation measures. The impacts would therefore be *less than significant*.**

Methodology

Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care 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

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 proposed project would not result in a CO "hot spot."

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, and no mitigation measures would be required.

Threshold AQ-5:	**Create objectionable odors affecting a substantial number of people.**
Impact AQ-5:	**The proposed 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 not be likely to**

violate applicable South Coast Air Quality Management District (SCAQMD) regulations and would be temporary in nature. 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 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 the City 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), odor impacts from project operation would not increase. Accordingly, project operation is 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

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*, December 2016.

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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, for which modeling results are 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 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.
- **Climate Change** refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in

temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

- **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 enacted 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 EPA Administrator signed the following two findings regarding greenhouse gases 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**: 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.

- **USEPA and National Highway Traffic Safety Administration Standards to Cut Greenhouse Gas Emissions and Fuel Use for New Motor Vehicles**: Coordinated steps enable the production of a new generation of clean vehicles.

- **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.

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 SB 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.

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: 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, SCAG provides a recommended threshold that is applicable to mixed-use and plan-level projects that is based on a performance standard of 4.1 $MMTCO_2e$ per service population annually[1]. The SCAQMD has

[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. SCAQMD's proposed efficiency threshold of 4.8 metric tons of CO2e per service population annually

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.
>
> **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.

correlates to achieving consistency with AB 32 and California Climate Change Scoping Plan GHG emissions reduction targets, and would therefore indicate consistency with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of both small-scale and large-scale projects.

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 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% 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.

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. 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

[2] Following the AB 32 Scoping Plan recommendation, 1990 levels of GHG emissions are approximated at 15 percent below baseline year 2010 GHG emissions.

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 as 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 (10-12 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 proposed 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.

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 2,656.39 $MTCO_2e$ annually from stationary and mobile sources.

3.9.4 SIGNIFICANCE CRITERIA

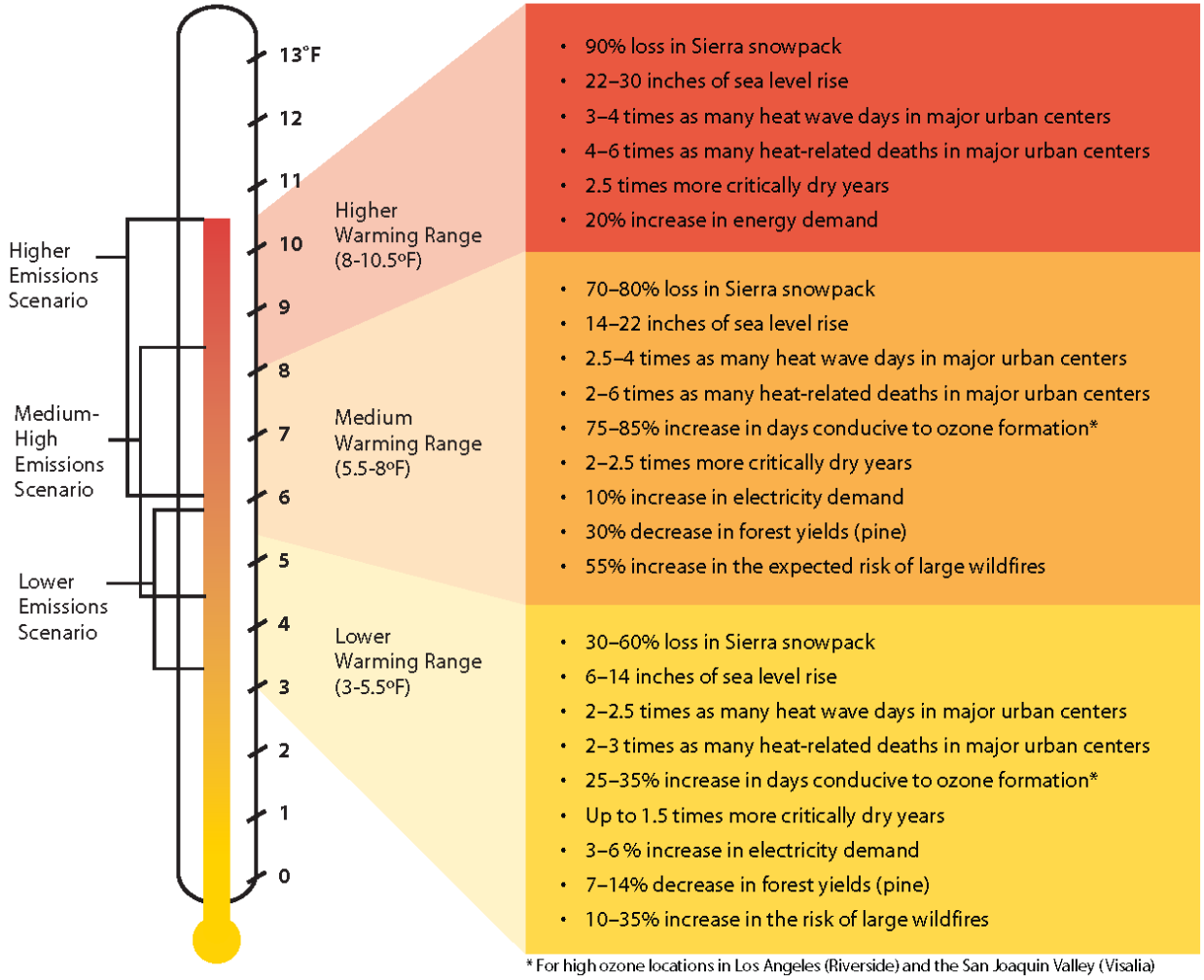
Criteria outlined in the CEQA Guidelines were used to determine the level of significance of GHG emission impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

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.

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.

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

Impact GHG-1: Implementation of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 6,037.55 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 $MTCO_2e$ per year. 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.

The City has not adopted its own numeric threshold of significance for determining the significance of impacts with respect to GHG emissions. To determine whether the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, this EIR relies on guidance provided by the South Coast Air Quality Management District. As described previously, the SCAQMD has issued proposed GHG standards and guidelines. 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[3]. 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 screening threshold of 3,000 $MTCO_2e$ per year suggested by the SCAQMD, as described the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold") was based on SCAQD's policy objective for its interim GHG significance threshold to "achieve an emission capture rate of 90 percent of all new or modified stationary source projects." 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 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."

Use of the 3,000 $MTCO_2e$ per year of GHG emissions screening threshold as a significance criteria would thus subject 90 percent of all new or modified stationary source projects representing over 99 percent of future 2050 statewide GHG emissions target to mitigation

[3] 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.

requirements. Thus, based on guidance from the SCAQMD, if a non-industrial project would emit less than 3,000 $MTCO_2e$ per year of GHG, the project is not considered a substantial GHG emitter and the GHG impact would be less than significant, requiring no additional analysis and no mitigation. On the other hand, if a non-industrial project would emit GHGs in excess of 3,000 $MTCO_{2e}$ per year, then the project could be considered a substantial GHG emitter, requiring detailed analysis and mitigation.

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™) v2016.3.1, 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

Construction activities associated with the Rancho La Habra Specific Plan would result in emissions of CO_2 and CH_4. A total of 1,997 $MTCO_2e$ would be generated during construction. Amortized over 30 years, annual construction emissions would be 66.57 $MTCO_2e$.

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 6,037.55 $MTCO_2e$ per year.

Significance Conclusion for Impact GHG-1

The total increase in annual GHG emissions (6,037.55 $MTCO_2e$), including construction and operational emissions, would exceed the SCAQMD's suggested screening threshold of 3,000 $MTCO_2e$. Therefore, the net increase in GHG emissions resulting from implementation of the proposed Specific Plan would be significant, and mitigation measures would be required.

Table 3.9-1
Net Total Project Greenhouse Gas Emissions (Annual)

	Emissions (Metric Tons Per Year)			
Emission Source	**CO_2**	**CH_4**	**N_2O**	**Total CO_2e**
Annual construction-related emissions amortized over 30 years	66.36	8.60E-03	0.00	66.57
Area	93.25	8.49E-03	0.00	93.93
Energy	1,441.71	6.00E-02	2.00E-02	1,449.79
Mobile Source	6,414.85	2.60E-01	0	6,421.42
Stationary	9.52	1.33E-03	0	9.55
Waste	142.43	8.42	0.00	352.87

Emission Source	Emissions (Metric Tons Per Year) CO_2	CH_4	N_2O	Total CO_2e
Water Usage	263.64	1.10	3.00E-02	299.81
Project Total CO2e (All Sources)	**8,693.94**			
Existing Total CO2e (All Sources)	**2,656.39**			
Net Total Increase CO2e (All Sources)	**6,037.55**			
SCAQMD Threshold	**3,000**			
Significant?	**YES**			

Source: Rancho La Habra Greenhouse Gas Analysis, 2016.

Mitigation Measures

Mitigation Measure GHG-1a: All structures shall be designed to be 20 percent more efficient than current (2017) Title 24 Standards, consistent with La Habra Climate Action Plan (CAP) Energy Reduction Measure R2-E1, New Construction Residential Energy Efficiency Requirements. Compliance with this requirement shall be achieved through incorporation of technologies listed in CAP Energy Reduction Measure R2-E1, such as installation of energy efficient appliances and lighting, as well as readily available light-colored pavements, natural shading, and other technologies.

Mitigation Measure GHG-1b: Electrical vehicle charging stations shall be provided within the proposed commercial and multi-family development areas (CAP Measure R2-T3). The number and location of these stations shall be approved by the City.

Mitigation Measure GHG-1c: Single-family detached residential dwelling units shall be designed and constructed to accommodate the installation of solar panel systems, and solar panel systems shall be offered to initial buyers as an option (CAP Measure R2-E2).

Mitigation Measure GHG-1d: All enclosed residential garages shall be provided with 220-volt electrical wiring suitable for installation of electrical vehicle chargers.

Mitigation Measure GHG-1e: Multi-family detached residential structures shall have solar panel systems installed (CAP Measure R2-E2).

Mitigation Measure GHG-1f: Commercial structures shall be designed and constructed to accommodate the installation of solar panel systems (CAP Measure R2-E6).

Mitigation Measure GHG-1g: Outdoor electric outlets shall be provided in all residential and commercial development to facilitate use of electric landscape equipment (CAP Measure R2-A1).

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

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

Mitigation Measure GHG-1j: Project development shall comply with the California Green Building Standards Code, including but not limited to requirements 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 (CAP Measure R3-W1).

Significance Conclusion for Impact GHG-1 with Implementation of Mitigation Measures

In order to reduce the project's GHG impacts, **Mitigation Measures GHG-1a** through **GHG-1j** would require the project to design structures to be 20 percent more efficient than current (2017) Title 24 Standards, consistent with the City CAP Energy Reduction Measure R2-E1, New Construction Residential Energy Efficiency Requirements; provide electrical vehicle charging stations within the proposed the commercial and multi-family development; and design single-family residences to accommodate the installation of solar panel systems, offer solar panel systems to initial buyers as an option, and provide 220-volt electrical wiring in garages suitable for installation of electrical vehicle chargers. These measures would also require installation of solar panels on multi-family residential structures and provide for the ability to install solar panels on commercial structures; provide outdoor electrical outlets to facilitate use of electric landscape equipment; increase shading in commercial areas by 10 percent; reduce heat gain in commercial and multi-family areas by 50 percent; reduce indoor potable water use by 20 percent beyond the Energy Policy Act of 1992 fixture performance requirements; and 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,

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, the mobile source emissions alone would represent a 3,765.03 $MTCO_2e$ net increase in GHG emissions. Available feasible mitigation measures for mobile emissions, such as providing electrical charging stations, would result in only marginal further reductions in GHG emissions, and these reduced emissions would still exceed the 3,000 $MTCO_2e$ per year threshold. 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: Because the proposed project would implement all applicable measures from the City's Climate Action Plan, and resulting GHG emissions per service population would be less than the SCAQMD's proposed 4.8 $MTCO_2e$ per year efficiency threshold, the impact would be *less than significant*.

Methodology

A significant impact would occur if the proposed Specific Plan would fail to implement applicable GHG reduction measures set forth in the City's CAP.

In addition to the threshold identified above, a significant impact would occur if the proposed Specific Plan would result in per service population[4] GHG emissions exceeding the SCAQMD's proposed efficiency threshold of 4.6 $MTCO_2e$ per service population per year.

At its September 28, 2010 Meeting #15, SCAQMD's Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group, Dr. Elaine Chang, Deputy Executive Officer of SCAQMD's Planning Rule Development and Area Sources Division, presented information on proposed Tier IV performance standards, incorporating the concept of efficiency-based thresholds. Relative to the 2020 target date set forth in AB 32, SCAQMD noted its concurrence with the Bay Area AQMD's methodology for establishing the efficiency threshold value of 6.6 MTCO2/year for plans because this number is based on statewide service population in 2020. With regard to the project level efficiency threshold, SCAQMD staff took a slightly different approach than the Bay Area AQMD. To derive the project level efficiency threshold of 4.6, it

[4] "Service population" equals the total number of residents and employees within a development.

appears that Bay Area AQMD took the 2020 statewide GHG reduction target for land use only (295,530,000 $MTCO_2e$ / year) and divided it by the total 2020 statewide service population (44,135,923 + 20,194,661), i.e., (295,530,000 $MTCO_2e$ / year) /(44,135,923 + 20,194,661) = 4.6 $MTCO_2e$ /year. SCAQMD staff recommended that instead of using total 2020 statewide employment for all sectors, this approach should have used total 2020 statewide employment for the land use sectors only (17,064,489). By using total 2020 statewide employment for land use sectors instead of total 2020 statewide employment for all sectors as the Bay Area AQMD did, the local project efficiency threshold becomes: (295,530,000 $MTCO_2e$ /year) / (44,135,923 + 17,064,489) = 4.8 $MTCO_2e$/year.

This draft threshold of 4.8 $MTCO_2e$ per service population per year has not been formally adopted by SCAQMD as of the public review period of this EIR.

The threshold recommended by the SCAQMD of 4.8 $MTCO_2e$ per service population annually ("efficiency threshold") is consistent with California Climate Change Scoping Plan GHG emissions reduction targets. Thus, a project could not exceed the efficiency threshold of 4.8 $MTCO_2e$ per service population annually without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (i.e., the California Climate Change Scoping Plan).

Therefore, in addition to analysis of the project's consistency with the City's CAP, project-related GHG emissions were analyzed to determine annual GHG emissions per service population.

Impact Assessment

Implementation of La Habra Climate Action Plan GHG Reduction Measures

Table 3.9-2 identifies GHG reduction measures set forth in the City's CAP, and evaluates the extent to which the proposed project implements those measures.

Table 3.9-2
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.	**N/A**. While the proposed project would include a commercial component, the Rancho La Habra Specific Plan would also provide the potential for the commercial area to be developed for multi-family residential use. The project site is also not identified in the General Plan or CAP as an opportunity area for mixed-use development. The proposed project is, however, located adjacent to major commercial development and provides on-site open space uses.

Table 3.9-2
Project Implementation of Applicable Greenhouse Gas Reduction Measures in La Habra Climate Action Plan

	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 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 multi-family residential, mixed-use, and high-density centers and corridors to accommodate these vehicles.	**Implemented.** The project would encourage the use of zero-emission vehicles and low-emission vehicles by providing electric vehicle charging stations within commercial and multi-family residential areas (see Mitigation Measure GHG-1b).
	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 is addressed in Mitigation Measure GHG-1a.
R2-E2	**New Construction Residential Renewable Energy**. This measure facilitates the voluntary incorporation of renewable energy (such as photovoltaic panels) into new residential developments.	**Voluntary Program, Implemented**. Single-family dwelling units would be designed and constructed to accommodate the installation of solar panel systems, and solar panel systems shall be offered to initial buyers as an option. This measure is addressed in Mitigation Measure GHG-1c.
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**. The project would incorporate applicable energy efficient measures for commercial buildings to demonstrate a minimum 20 percent improvement over current Title 24 Standards. This measure is addressed in Mitigation Measure GHG-1a.
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.	**Voluntary Program, Implemented**. Commercial structures would be designed and constructed to accommodate the installation of solar panel systems. This measure is addressed in Mitigation Measure GHG-1f.
	Area Source Reduction Measures	
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	**Implemented**. Information regarding the City's control measures and the SCAQMD's electric lawn equipment program would be provided to the homeowners' association (HOA). This measure would also be feasible in the large turf areas (park, open space) owned and maintained by the City. This measure is addressed in Mitigation Measure GHG-1g.

Table 3.9-2
Project Implementation of Applicable Greenhouse Gas Reduction Measures in La Habra Climate Action Plan

	Applicable Climate Action Plan Measures	Measure Implemented?
	commercial development to use electric landscape equipment.	
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. This measure is addressed in Mitigation Measure GHG-1h.
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 development would be required to implement sufficient measures to reduce heat gain by 50 percent. This measure is addressed in Mitigation Measure GHG-1i.
	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 the California Green Building Standards Code requirements regarding indoor and outdoor water conservation. This measure is addressed in Mitigation Measure GHG-1j.
	Solid Waste Reduction Measures	
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 the Municipal Code Section 15.78.040 by implementing a Waste Management Plan for project construction and demolition activities.

GHG Emissions per Service Population

As indicated under Impact GHG-1 above, implementation of required mitigation measures, which would achieve consistency with the City's CAP, would reduce GHG emissions to 5,746.61 $MTCO_2e$ per year. The estimated service population for the Rancho La Habra Specific Plan is 1,366 (1,266 residents and 100 commercial employees) if Planning Area 5 is developed for commercial use and 1,404 if Planning Area 5 is developed for residential use. Thus, annual GHG emissions per service population would be as shown in **Table 3.9-3**. As indicated in the

table, these emissions would be less than the SCAQMD's proposed efficiency threshold of 4.8 $MTCO_2e$ per service population per year.

Table 3.9-3
Project Greenhouse Gas Emissions per Service Population

Project Option	Service Population	GHG Emissions ($MTCO_2e$/year)	Emissions per Service Population ($MTCO_2e$/year)
402 dwelling units[5], 20,000 square feet commercial	1,306	5,746.61	4.40
448 dwelling units	1,364	5,746.61	4.21

Source: Metis Environmental Group, 2017.

Significance Conclusion for Impact GHG-2

Because the proposed project would implement all applicable measures from the City CAP, and resulting GHG emissions per service population would be less than the SCAQMD's proposed 4.8 $MTCO_2e$ per year efficiency threshold, impacts related to consistency with applicable GHG reduction plans and programs would be less than significant.

3.9.5 REFERENCES

Brown, California Legislative Information. *SB-350 Clean Energy and Pollution Reduction Act of 2015*, 2015. Accessed at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

CARB, *Climate Change Proposed Scoping Plan: A Framework for Change*, December 2008. Accessed at: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

CARB, *Proposed SB 375 Greenhouse Gas Targets: Documentation of the Resulting Emission Reductions based on MPO Data*, August 9, 2010. Accessed at: http://arb.ca.gov/cc/sb375/mpo.co2.reduction.calc.pdf.

CARB, Proposed First Update to the Climate Change Scoping Plan: Building on the Framework. May 2014. Accessed at: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm.

CARB, California Greenhouse Gas Inventory for 2000-2012 — by Category as Defined in the 2008 Scoping Plan, 2014. Accessed at:

[5] Subsequent to completion of the Greenhouse Gas emissions analysis for Rancho La Habra, the proposed project was reduced in size from 422 to 402 dwelling units. The Greenhouse Gas emissions analysis thus represents a worst case analysis for GHG emissions.

http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-12_2014-03-24.pdf.

CARB, AB 32 Scoping Plan, 2016. Accessed at: http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

City of La Habra, City of La Habra Climate Action Plan, January 21, 2014. Accessed at: http://www.lahabracity.com/documentcenter/view/192 .

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014.

Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2001: Working Group I: The Scientific Basis*, last revised: 2001. Accessed at: http://www.grida.no/climate/ipcc%5Ftar/wg1/032.htm#f5.

President Barack Obama, Climate Change and President Obama's Action Plan, September 2015. Accessed at: https://www.whitehouse.gov/climate-change.

SCAQMD Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15, September 28, 2010 http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf

Urban Crossroads, Rancho La Habra Greenhouse Gas Analysis, December 2016.

USEPA Transportation and climate CAFÉ regulations and standards. https://www3.epa.gov/otaq/climate/regulations.htm https://www3.epa.gov/otaq/climate/regs-light-duty.htm

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 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 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

[1] Following the AB 32 Scoping Plan recommendation, 1990 levels of GHG emissions are approximated at 15 percent below baseline year 2010 GHG emissions.

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 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. Estimated existing annual energy use is identified in **Table 3.10-1**.

Table 3.10-1
Estimated Annual Existing Golf Course Energy Use

Source	Energy Consumption (Per Year)
Electricity (kilowatt hours)	815,105
Natural Gas (million cubic feet)	4,172
On-Site Equipment and Vehicles	
Gasoline (gallons)	5,190
Diesel (gallons)	3,465
Vehicular Travel	
Gasoline (gallons)	204,275

Source: Rancho La Habra Energy Analysis, 2016.

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: Implementation of the proposed Rancho La Habra Specific Plan would require energy during construction of proposed 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™ v2016.3.1 outputs for the Rancho La Habra Air Quality Impact Analysis (Urban Crossroads 2016) 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 GHG emissions analyses.

Impact Analysis

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 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: 2,281,756 kilowatt-hours (kWh)
- Construction equipment fuel use (diesel): 499,587 gallons
- Construction worker fuel use (gasoline): 342,907 gallons
- Construction vendor/materials hauling fuel use: 546,976 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 proposed 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.

Threshold EN-1:	**Use large amounts of energy or fuel in a wasteful manner.**
Impact EN-1.2:	**Implementation of the proposed Rancho La Habra Specific Plan would require energy during operations of proposed 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 the 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™ v2016.3.1 outputs for the Rancho La Habra Air Quality Impact Analysis (Urban Crossroads 2016) was used in this analysis to evaluate project-operational energy demands.

Impact Analysis

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. New development that would be permitted by the proposed Specific Plan would be required to meet 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 project's Air Quality Impact Analysis, the project would generate an estimated 9,773,719 annual VMT along area roadways for all passenger cars at full buildout of the project. As generated by EMFAC 2014, automobiles ranging from model year 1974 to model year 2023 are estimated to have an average fuel efficiency of 31.5 mpg. Thus, project-related automobile travel would consume an average of 310,277 gallons of gasoline annually.

Air quality modeling for the proposed Specific Plan also identified VMT from a variety of other vehicle types associated with project operations. As shown in **Table 3.10-2**, a total of 17,347,039 VMT would result in the consumption of 742,120 gallons of fuel per year for all vehicles (light duty autos, trucks, buses, motor homes, motorcycles, etc.), representing an annual increase of 11,184,998 vehicle miles and 537,845 gallons of fuel compared to the existing golf course use.

Table 3.10-2
Estimated Energy Use from Project-Generated Traffic

Source	Annual Vehicle Miles Traveled (VMT)	Estimated Fuel Consumption (Gallons)
Light Duty Autos (LDAs)	9,773,719	310,277
Light Duty Trucks (LDT1)	747,159	27,910
Light Duty Trucks (LDT2)	3,630,809	152,171
Medium Duty Trucks (MDV)	1,907,503	109,627
Light Heavy Duty Trucks (LHD1)	260,474	17,365
Light Heavy Duty Trucks (LHD2)	100,338	6,680
Medium Heavy Duty Trucks (MHD)	454,194	52,508
Heavy Heavy Duty Trucks (HHD)	304,380	50,730
Other Buses (OBUS)	30,792	4,150
Urban Buses (UBUS)	26,438	5,124
Motorcycles (MCY)	85,177	2,362
School Buses (SBUS)	10,374	1,251
Motor Homes (MH)	15,682	1,965
Total All Vehicles	**17,347,039**	**742,120**
Existing Golf Course	6,162,041	204,275
Net Increase	**11,184,998**	**537,845**

Source: Rancho La Habra Energy Analysis, 2016 .

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 proposed project would be typical for the proposed land uses, and no aspect

of the proposed 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 proposed 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

California Gas and Electric Utilities, 2014 California Gas Report, 2016. Accessed June 12, 2017: https://www.socalgas.com/regulatory/documents/cgr/2016-cgr.pdf

City of La Habra, City of La Habra Climate Action Plan, January 21, 2014. Accessed June 9, 2017: http://www.lahabracity.com/documentcenter/view/192

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, December 2016.

Urban Crossroads, Rancho La Habra Energy Analysis, December 2016.

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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), 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's source.

In addition, sound is characterized by both its amplitude and frequency (or pitch). 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 frequency 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] and follows 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 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.

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 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.

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, 2017.

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.

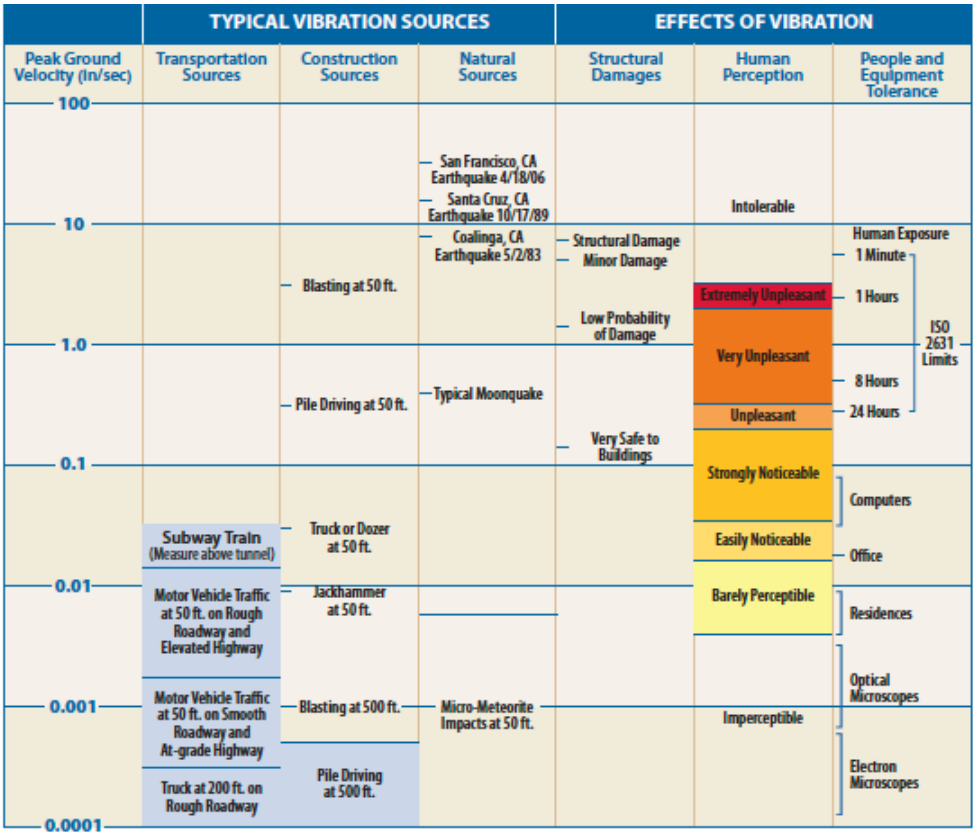
There are several different methods used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts on buildings. Although peak particle velocity is appropriate for evaluating 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.

Figure 3.11-1

Typical Vibration Sources and Sensitivities



Source: Nugent & Amick, 1992.

The California Department of Transportation (Caltrans) measure of the threshold of architectural damage for conventional sensitive structures is 0.5-inch 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" (Caltrans 2004).

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. It is also the approximate dividing line

between barely perceptible and distinctly perceptible levels 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

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 operation. 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."

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[1]	Occasional Events[2]	Infrequent Events[3]
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

[1] More than 70 vibration events of the same source per day.
[2] Between 30 and 70 vibration events of the same source per day.
[3] Fewer than 30 vibration events of the same kind per day.
Source: Federal Transit Administration, 2006.

b. State Plans, Policies, and Regulations

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[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
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	---

[1] **Normally Acceptable:** Use is satisfactory for buildings of normal conventional construction without special noise insulation requirements.

[2] **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.

[3] **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.

[4] **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.

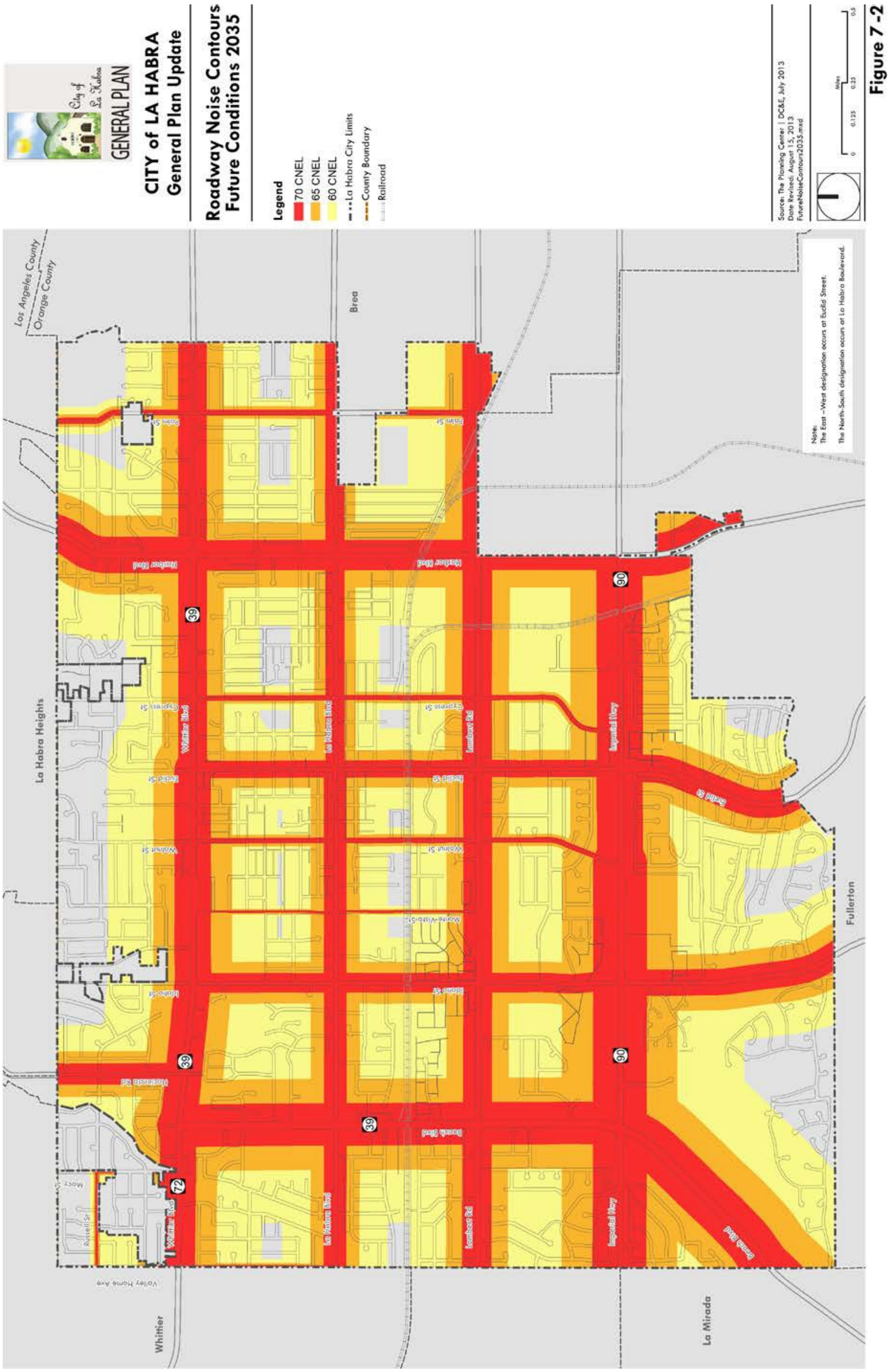

CITY of LA HABRA
General Plan Update
Roadway Noise Contours
Future Conditions 2035
Legend
70 CNEL
65 CNEL
60 CNEL
La Habra City Limits
County Boundary
Railroad
Source: The Planning Center | DC&E, July 2013
Date Revised: August 15, 2013
FutureNoiseContours2035.mxd
Figure 7-2
Note:
The East-West designation occurs at Euclid Street.
The North-South designation occurs at La Habra Boulevard.
Los Angeles County
Orange County
Brea
La Habra Heights
Fullerton
La Mirada
Whittier

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 noise control 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 five 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, 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 (20-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).

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

Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

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	44.8	59.7	43.0	41.0	39.0
ST-10	7/22/15	1:35 p.m.	15	46.0	46.0	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, 2016.

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**. As noted in the Noise and Vibration Analysis Report (see Appendix L), the CNEL within interior portions of the project site ranges from 52 to 55 dBA.

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, 85 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, 125 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, 260 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, 2016.

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 , 2016.

Figure 3.11-2: Noise Monitoring Locations

Source: Google Earth Pro; Carlson SLS

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'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, stationary operational noise levels associated with the proposed Specific Plan were compared to the City noise standards set forth in Section 3.11.2, *Applicable Plans, Policies, and Regulations*. A significant impact would result if proposed 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, *City of La Habra Plans, Policies, and Regulations*. 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 back yards 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**.

Figure 3.11-3: Noise Receiver Locations

Source: Google Earth Pro; Carlson SLS

Table 3.11-12
Average Daily 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: 1. Bold text indicates that City exterior noise standards would be exceeded
2. Calculated noise levels are at first-floor elevations.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

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).

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 Noise Study (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.

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

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. 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, 1/2" 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 would occur at the exterior of multi-family homes closest to Beach Boulevard (Lot 278 of Vesting Tentative Tract Map 17845). 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 standard.

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, 2016.

Mitigation Measures

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.

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 proposed 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.

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.

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.

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 peak particle velocity 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 hones 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 proposed 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 nearly all cases, the addition of project-related traffic would result in less than a 1.0 dBA noise increase in roadway noise levels. The greatest increase in noise would occur in the PM peak hour along eastbound Rosecrans Avenue, where the addition of project-related traffic would increase noise levels by 1.5 dBA, 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 proposed project were evaluated using forecast peak-hour and average daily traffic (ADT) volumes on local roadways in future year conditions (Years 2023 and 2035) with and without the proposed 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 proposed project caused a 3-dBA or greater increase in noise levels.

Impact Assessment

Roadway Noise

Tables 3.11-15 and **3.11-16** summarize the with- and without-project impacts for Year 2023 (opening year) and Year 2035 (future) 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 Tables 3.11-15 and 3.11-16, 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 nearly all cases, the addition of project-related traffic would result in less than a 1.0-dBA noise increase. The greatest increase in noise would occur in the PM peak hour along eastbound Rosecrans Avenue, where the addition of project-related traffic would increase noise levels by 1.5 dBA. Such an increase would not be audible.

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 source 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.

Table 3.11-15
Comparison of Forecast Opening Year (2023) Traffic Noise Levels (in DBA) With and Without Project

	AM Peak Hour						PM Peak Hour					
	2023		2023 + Project		Difference		2023		2023 + 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 Av.	69.6	70.1	69.7	70.1	0.1	0.0	69.9	69.8	70.0	69.8	0.1	0.0
Valley View Av. - La Mirada Blvd.	70.2	70.7	70.3	70.8	0.1	0.1	70.3	70.2	70.5	70.4	0.2	0.2
La Mirada Blvd. - Santa Gertrudes Av	70.3	70.8	70.4	70.9	0.1	0.1	70.7	70.6	70.8	70.7	0.1	0.1
Santa Gertrudes Av. - 1st Av.	69.8	70.2	69.9	70.3	0.1	0.1	70.6	70.5	70.7	70.6	0.1	0.1
1st Av. to Beach Blvd.	70.0	70.3	70.1	70.4	0.1	0.1	70.8	70.8	71.0	70.9	0.2	0.1
Beach Blvd. - La Habra Hills Dr.	70.7	71.0	70.9	71.1	0.2	0.1	71.3	71.3	71.4	71.4	0.1	0.1
La Habra Hills Dr. - Idaho St.	70.5	70.7	70.6	70.8	0.1	0.1	71.1	71.1	71.1	71.2	0.0	0.1
Idaho St. - Walnut St.	71.6	71.7	71.7	71.8	0.1	0.1	72.4	72.5	72.3	72.5	-0.1	0.0
Walnut St. - Euclid St.	71.7	71.7	71.8	71.8	0.1	0.1	72.3	72.5	72.3	72.5	0.0	0.0
Euclid St. - Harbor Blvd.	72.4	72.4	72.5	72.4	0.1	0.0	72.6	72.8	72.5	72.8	-0.1	0.0
East of Harbor Blvd.	68.7	68.9	68.7	68.9	0.0	0.0	68.9	69.4	68.9	69.4	0.0	0.0
Beach Boulevard												
Artesia Blvd. - Malvern Av.	69.6	70.0	69.7	70.1	0.1	0.1	69.7	70.9	69.8	71.0	0.1	0.1
Malvern Av. - Rosecrans Av.	72.3	71.8	72.4	71.9	0.1	0.1	72.3	72.6	72.4	72.8	0.1	0.2
Rosecrans Av. - Hillsborough Dr.	73.5	73.4	73.7	73.6	0.2	0.2	73.2	73.9	73.4	74.1	0.2	0.2
Hillsborough Dr. - Hillsborough Park Apts.	72.1	72.3	72.3	72.5	0.2	0.2	72.5	73.1	72.7	73.3	0.2	0.2
Hillsborough Park Apts. - Imperial Hwy.	72.9	72.8	73.0	72.9	0.1	0.1	73.3	73.7	73.5	73.9	0.2	0.2
Imperial Hwy. Lambert Rd.	70.6	70.0	70.6	70.1	0.0	0.1	70.9	71.1	71.0	71.2	0.1	0.1
Lambert Rd. La Habra Blvd.	69.8	69.3	69.8	69.4	0.0	0.1	69.8	70.3	69.9	70.4	0.1	0.1
La Habra Blvd. Whittier Blvd.	68.6	68.3	68.7	68.4	0.1	0.1	68.9	69.5	69.0	69.5	0.1	0.0
Artesia Boulevard												
West of Beach Blvd.	67.2	67.7	67.2	67.8	0.0	0.1	68.0	67.9	68.0	67.9	0.0	0.0
Beach Blvd. - Gilbert St.	65.6	65.7	65.6	65.7	0.0	0.0	66.8	66.9	66.8	66.9	0.0	0.0
Malvern Avenue												
West of Beach Blvd.	67.7	68.2	67.7	68.2	0.0	0.0	67.8	68.5	67.8	68.5	0.0	0.0
Beach Blvd. - Gilbert St.	67.8	67.8	67.8	67.9	0.0	0.1	68.0	68.3	68.0	68.3	0.0	0.0
Gilbert St. - Euclid St.	67.4	67.9	67.5	67.9	0.1	0.0	68.1	68.7	68.1	68.8	0.0	0.1
Euclid St. - Harbor Blvd.	66.3	66.2	66.3	66.3	0.0	0.1	67.0	67.4	67.1	67.5	0.1	0.1
Rosecrans Avenue												
West of Beach Blvd.	67.4	66.9	67.5	67.0	0.1	0.1	68.2	67.5	68.3	67.5	0.1	0.0
Beach Blvd. - Gilbert St.	67.0	66.7	67.1	66.9	0.1	0.2	67.5	67.3	67.7	67.4	0.2	0.1
Gilbert St. - Euclid St.	66.0	66.5	66.0	66.5	0.0	0.0	65.3	66.6	65.3	66.6	0.0	0.0
Lambert Road												
Wall St. - Beach Blvd.	67.4	67.5	67.4	67.5	0.0	0.0	67.7	67.5	67.7	67.5	0.0	0.0
Beach Blvd. Idaho St.	67.8	67.8	67.8	67.8	0.0	0.0	68.0	68.0	68.0	68.0	0.0	0.0
Idaho St. - Euclid St.	67.7	67.5	67.7	67.5	0.0	0.0	67.9	67.9	67.9	67.9	0.0	0.0
Euclid St. - Harbor Blvd.	67.3	67.0	67.3	67.0	0.0	0.0	67.4	67.6	67.4	67.6	0.0	0.0
East of Harbor Blvd.	67.7	67.4	67.8	67.5	0.1	0.1	67.5	67.7	67.5	67.7	0.0	0.0

Table 3.11-15
Comparison of Forecast Opening Year (2023) Traffic Noise Levels (in DBA) With and Without Project

	AM Peak Hour						PM Peak Hour					
	2023		2023 + Project		Difference		2023		2023 + 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
La Habra Boulevard												
West of Beach Blvd.	65.8	66.2	65.8	66.2	0.0	0.0	66.4	66.8	66.4	66.9	0.0	0.1
East of Beach Blvd.	66.0	66.4	66.0	66.4	0.0	0.0	66.4	66.7	66.4	66.7	0.0	0.0
Whittier Boulevard												
West of Beach Blvd.	66.9	67.2	67.0	67.2	0.1	0.0	67.6	67.6	67.6	67.6	0.0	0.0
East of Beach Blvd.	68.0	68.5	68.1	68.5	0.1	0.0	68.9	68.7	68.9	68.8	0.0	0.1
Valley View Avenue												
South of Imperial Hwy.	68.8	68.3	68.8	68.3	0.0	0.0	68.7	68.7	68.7	68.7	0.0	0.0
North of Imperial Hwy.	65.1	64.3	65.1	64.3	0.0	0.0	64.3	64.4	64.3	64.4	0.0	0.0
La Mirada Boulevard												
South of Imperial Hwy.	66.6	66.5	66.6	66.5	0.0	0.0	67.3	67.2	67.3	67.2	0.0	0.0
North of Imperial Hwy.	65.6	65.4	65.7	65.4	0.1	0.0	66.5	66.4	66.5	66.4	0.0	0.0
Santa Gertrudes Avenue												
South of Imperial Hwy.	65.6	65.3	65.6	65.3	0.0	0.0	65.1	65.3	65.1	65.3	0.0	0.0
North of Imperial Hwy.	64.8	64.5	64.8	64.5	0.0	0.0	64.6	65.0	64.6	65.0	0.0	0.0
1st Avenue												
South of Imperial Hwy.	54.7	55.1	54.8	55.1	0.1	0.0	55.0	54.8	55.2	55.0	0.2	0.2
North of Imperial Hwy.	61.2	60.8	61.3	60.8	0.1	0.0	61.1	61.1	61.2	61.2	0.1	0.1
Gilbert Street												
South of Malvern Ave.	67.2	67.6	67.3	67.7	0.1	0.1	67.0	68.2	67.1	68.3	0.1	0.1
Malvern Av. - Rosecrans Av.	65.9	65.4	66.0	65.5	0.1	0.1	66.3	66.8	66.4	66.9	0.1	0.1
Idaho Street												
Rosecrans Av. - Sandlewood Av.	66.1	65.4	66.2	65.6	0.1	0.2	67.0	67.1	67.1	67.2	0.1	0.1
Sandlewood Av. to Imperial Hwy.	67.2	67.1	67.3	67.2	0.1	0.1	67.7	67.8	67.8	67.9	0.1	0.1
Imperial Hwy. to Lambert St.	65.3	65.0	65.4	65.0	0.1	0.0	65.8	65.8	65.8	65.8	0.0	0.0
North of Lambert St.	64.4	64.2	64.5	64.2	0.1	0.0	64.5	64.5	64.5	64.5	0.0	0.0
Euclid Street												
Commonwealth Av. - Malvern Av.	65.8	65.5	65.8	65.5	0.0	0.0	65.7	65.7	65.7	65.8	0.0	0.1
Malvern Av. - Rosecrans Av..	66.4	66.7	66.4	66.7	0.0	0.0	65.8	66.9	65.8	67.0	0.0	0.1
Rosecrans Av. - Sandlewood Av	69.4	66.6	69.4	66.6	0.0	0.0	69.1	67.3	69.1	67.3	0.0	0.0
Sandlewood Av. - Imperial Hwy.	68.3	66.9	68.3	66.9	0.0	0.0	67.8	67.0	67.8	67.0	0.0	0.0
Imperial Hwy. - Lambert St.	65.2	64.3	65.6	65.0	0.4	0.7	65.2	65.6	65.2	65.6	0.0	0.0
North of Lambert St.	64.8	64.3	64.8	64.3	0.0	0.0	64.8	65.3	64.8	65.3	0.0	0.0
Harbor Boulevard												
South of Imperial Hwy.	69.7	69.3	69.7	69.2	0.0	-0.1	69.6	69.7	69.6	69.7	0.0	0.0
Imperial Hwy. - Lambert St.	69.2	68.9	69.2	68.9	0.0	0.0	69.2	69.4	69.2	69.4	0.0	0.0
North of Lambert St.	69.3	68.4	69.3	68.4	0.0	0.0	69.2	69.1	69.3	69.1	0.1	0.0

Notes: SB = southbound, EB = eastbound, NB = northbound, WB = westbound
Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

Table 3.11-16
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 Av.	69.9	70.3	69.9	70.4	0.0	0.1	70.2	70.0	70.3	70.1	0.1	0.1
Valley View Av. - La Mirada Blvd.	70.6	71.1	70.7	71.1	0.1	0.0	70.7	70.7	70.8	70.7	0.1	0.0
La Mirada Blvd. - Santa Gertrudes Av.	70.8	71.2	70.9	71.3	0.1	0.1	71.0	70.9	71.1	71.0	0.1	0.1
Santa Gertrudes Av. - 1st Av.	70.4	70.7	70.5	70.8	0.1	0.1	70.9	70.7	71.0	70.8	0.1	0.1
1st Av to Beach Blvd.	70.7	70.8	70.7	70.9	0.0	0.1	71.0	71.1	71.1	71.2	0.1	0.1
Beach Blvd. - La Habra Hills Dr.	71.7	71.6	71.7	71.7	0.0	0.1	71.6	71.6	71.7	71.7	0.1	0.1
La Habra Hills Dr. - Idaho St.	71.4	71.3	71.5	71.4	0.1	0.1	71.3	71.3	71.3	71.3	0.0	0.0
Idaho St. - Walnut St.	72.4	72.4	72.5	72.4	0.1	0.0	72.5	72.6	72.5	72.6	0.0	0.0
Walnut St. - Euclid St.	72.5	72.3	72.5	72.4	0.0	0.1	72.5	72.8	72.5	72.7	0.0	-0.1
Euclid St. - Harbor Blvd.	73.7	73.4	73.7	73.4	0.0	0.0	72.9	73.1	72.9	73.1	0.0	0.0
East of Harbor Blvd.	72.3	72.3	72.3	72.3	0.0	0.0	72.1	72.4	72.1	72.4	0.0	0.0
Beach Boulevard												
Artesia Blvd. - Malvern Av.	69.9	70.2	70.3	70.7	0.4	0.5	70.0	71.2	70.4	71.8	0.4	0.6
Malvern Av. - Rosecrans Av.	72.6	72.1	72.7	72.2	0.1	0.1	72.6	72.9	72.7	73.0	0.1	0.1
Rosecrans Av. - Hillsborough Dr.	73.8	73.7	73.9	73.8	0.1	0.1	73.5	74.2	73.8	74.5	0.3	0.3
Hillsborough Dr. - Hillsborough Park Apts.	72.3	72.5	72.5	72.7	0.2	0.2	72.8	73.3	72.9	73.5	0.1	0.2
Hillsborough Park Apts .- Imperial Hwy.	73.2	73.2	73.3	73.3	0.1	0.1	73.5	73.8	73.5	74.0	0.0	0.2
Imperial Hwy. Lambert Rd.	71.0	70.6	70.8	70.2	-0.2	-0.4	71.7	71.6	71.8	71.6	0.1	0.0
Lambert Rd. La Habra Blvd.	70.1	69.8	70.1	69.9	0.0	0.1	70.1	70.6	70.1	70.6	0.0	0.0
La Habra Blvd. Whittier Blvd.	69.1	68.9	69.2	69.0	0.1	0.1	69.2	69.7	69.3	69.8	0.1	0.1
Artesia Boulevard												
West of Beach Blvd.	67.5	68.0	67.5	68.0	0.0	0.0	68.3	68.2	68.4	68.2	0.1	0.0
Beach Blvd. - Gilbert St.	65.7	65.8	65.7	65.8	0.0	0.0	67.0	67.1	67.0	67.1	0.0	0.0
Malvern Avenue												
West of Beach Blvd.	68.3	68.7	68.1	68.5	-0.2	-0.2	68.1	68.8	68.1	68.8	0.0	0.0
Beach Blvd. - Gilbert St.	68.3	68.3	68.3	68.3	0.0	0.0	68.3	68.6	68.3	68.6	0.0	0.0
Gilbert St. - Euclid St.	67.7	68.1	67.7	68.2	0.0	0.1	68.3	68.9	68.3	69.0	0.0	0.1
Euclid St. - Harbor Blvd.	66.6	66.6	66.7	66.6	0.1	0.0	67.4	67.7	67.4	67.8	0.0	0.1
Rosecrans Avenue												
West of Beach Blvd.	67.7	67.2	67.8	67.3	0.1	0.1	68.4	67.7	68.5	67.8	0.1	0.1
Beach Blvd. - Gilbert St.	67.2	67.0	67.3	67.1	0.1	0.1	67.8	67.6	68.0	67.7	0.2	0.1
Gilbert St. - Euclid St.	66.5	66.9	66.5	66.9	0.0	0.0	64.3	66.5	65.8	67.1	1.5	0.6
Lambert Road												
Wall St. - Beach Blvd.	67.8	67.7	67.8	67.7	0.0	0.0	68.4	68.4	68.4	68.4	0.0	0.0
Beach Blvd. Idaho St.	67.9	68.0	67.9	68.0	0.0	0.0	68.8	69.2	68.8	69.2	0.0	0.0
Idaho St. - Euclid St.	68.3	68.2	68.3	68.2	0.0	0.0	68.7	69.2	68.7	69.2	0.0	0.0
Euclid St. - Harbor Blvd.	67.6	67.3	67.6	67.3	0.0	0.0	68.5	69.0	68.5	69.1	0.0	0.1
East of Harbor Blvd.	68.1	67.9	68.1	67.9	0.0	0.0	68.9	69.6	68.9	69.6	0.0	0.0

Table 3.11-16
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
La Habra Boulevard												
West of Beach Blvd.	66.0	66.5	66.0	66.5	0.0	0.0	66.7	67.1	66.7	67.1	0.0	0.0
East of Beach Blvd.	66.4	66.8	66.4	66.8	0.0	0.0	66.9	67.1	66.9	67.1	0.0	0.0
Whittier Boulevard												
West of Beach Blvd.	67.5	67.8	67.5	67.8	0.0	0.0	67.8	67.8	67.9	67.8	0.1	0.0
East of Beach Blvd.	68.3	68.7	68.3	68.8	0.0	0.1	69.2	69.0	69.2	69.0	0.0	0.0
Valley View Avenue												
South of Imperial Hwy.	69.0	68.6	69.0	68.6	0.0	0.0	68.9	69.0	68.9	69.0	0.0	0.0
North of Imperial Hwy.	65.3	64.6	65.3	64.6	0.0	0.0	64.6	64.7	64.6	64.7	0.0	0.0
La Mirada Boulevard												
South of Imperial Hwy.	68.3	67.6	68.3	67.6	0.0	0.0	67.6	67.4	67.6	67.4	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.	65.8	65.6	65.8	65.6	0.0	0.0	66.1	66.6	66.1	66.6	0.0	0.0
North of Imperial Hwy.	65.1	64.7	65.1	64.7	0.0	0.0	65.7	66.4	65.7	66.4	0.0	0.0
1st Avenue												
South of Imperial Hwy.	55.1	55.4	55.2	55.5	0.1	0.1	55.3	55.1	55.4	55.2	0.1	0.1
North of Imperial Hwy.	61.9	61.3	61.9	61.3	0.0	0.0	61.6	61.7	61.6	61.7	0.0	0.0
Gilbert Street												
South of Malvern Ave.	67.6	68.0	67.7	68.0	0.1	0.0	67.3	68.5	67.4	68.6	0.1	0.1
Malvern Av. - Rosecrans Av.	66.3	66.0	66.4	66.1	0.1	0.1	66.6	67.1	66.7	67.1	0.1	0.0
Idaho Street												
Rosecrans Av. - Sandlewood Av.	66.7	65.9	66.8	66.0	0.1	0.1	67.3	67.4	67.4	67.5	0.1	0.1
Sandlewood Av. to Imperial Hwy.	67.8	67.6	67.8	67.7	0.0	0.1	68.0	68.1	68.1	68.3	0.1	0.2
Imperial Hwy. to Lambert St.	65.6	65.3	65.5	65.2	-0.1	-0.1	66.2	66.3	66.2	66.3	0.0	0.0
North of Lambert St.	64.7	64.4	64.7	64.4	0.0	0.0	64.8	65.0	64.8	65.0	0.0	0.0
Euclid Street												
Commonwealth Av. - Malvern Av.	66.0	65.7	66.0	65.8	0.0	0.1	66.0	66.0	66.0	66.0	0.0	0.0
Malvern Av. - Rosecrans Av.	66.7	67.0	66.8	67.1	0.1	0.1	66.3	67.6	66.3	67.6	0.0	0.0
Rosecrans Av. - Sandlewood Av.	69.6	66.9	69.7	66.9	0.1	0.0	69.5	67.9	69.5	67.9	0.0	0.0
Sandlewood Av. - Imperial Hwy.	68.6	67.2	68.6	67.2	0.0	0.0	68.2	67.4	68.2	67.4	0.0	0.0
Imperial Hwy. - Lambert St.	67.3	67.0	67.3	67.0	0.0	0.0	65.6	66.0	65.6	66.0	0.0	0.0
North of Lambert St.	66.3	65.6	66.3	65.6	0.0	0.0	66.3	66.6	66.3	66.6	0.0	0.0
Harbor Boulevard												
South of Imperial Hwy.	71.1	70.5	71.1	70.5	0.0	0.0	70.3	70.5	70.4	70.6	0.1	0.1
Imperial Hwy. - Lambert St.	69.6	69.2	69.6	69.3	0.0	0.1	69.6	69.8	69.6	69.8	0.0	0.0
North of Lambert St.	69.6	68.7	69.6	68.7	0.0	0.0	69.9	69.9	69.9	69.9	0.0	0.0

Notes: SB = southbound, EB = eastbound, NB = northbound, WB = westbound
Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

Significance Conclusion for Impact NOI-3

The proposed 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 nearly all cases, the addition of project-related traffic would result in less than a 1.0-dBA noise increase. The greatest increase in noise would occur in the PM peak hour along eastbound Rosecrans Avenue, where the addition of project-related traffic would increase noise levels by 1.5 dBA, 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 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 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 by 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 3.11-17** 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.

As indicated in **Table 3.11-17**, 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.

Table 3.11-17
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	--
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	--

Note: Locations shown in **bold** identify increases audible increases of 5 dBA or more.
Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

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 20 working days. Grading of Area 3 would take 100 working days to complete.

Table 3.11-18 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 3.11-18**, comparison of the combined construction and background noise levels to those 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 3.11-18
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	28	48	48	--
ST-2	50	49	53	4
ST-3	54	45	55	**10**
ST-4	55	42	55	**13**
ST-5	53	46	54	**8**

Table 3.11-18
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-5A	68	46	68	**22**
ST-6	53	48	54	**6**
ST-7	45	59	59	--
ST-8	56	50	57	**7**
ST-9	65	45	65	**20**
ST-10	71	40	71	**31**
ST-14	49	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, 2016.

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 3.11-19 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.

Table 3.11-19
Comparison of Infrastructure and Building Construction Noise to Existing Noise Levels

Monitoring Location	Infrastructure and Building Construction	Existing L_{eq}	Construction + Existing L_{eq}	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, 2016.

Construction Traffic Noise

Table 3.11-20 summarizes the comparison of AM peak-hour L_{eq} values between existing conditions and with-construction conditions. As shown in **Table 3.11-20**, proposed construction activities would increase the hourly traffic noise level by only 0.1 dB at the exterior of homes along Imperial Highway and at the exterior of apartments along the west side of Beach Boulevard.

Table 3.11-20
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.	1,584	1,591	69.8	69.9	0.1
WB Imperial Hwy. - West of Beach Blvd.	2,045	2,116			
SB Beach Blvd. - South of Imperial Hwy.	2,164	2,170	72.3	72.4	0.1
NB Beach Blvd. - South of Imperial Hwy.	1,683	1,751			

Notes: SB = southbound, EB = eastbound, NB = northbound, WB = westbound
Source: Rancho La Habra Noise and Vibration Analysis Report, 2016.

As shown in **Table 3.11-20**, construction traffic would increase noise levels in the AM peak hour by 0.1 dBA at noise-sensitive locations along both Imperial Highway and Beach Boulevard. Such a noise increase would not be audible.

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 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: The construction contractor shall properly maintain and tune all construction equipment to minimize noise emissions.

Mitigation Measure NOI-4c: The construction contractor shall locate all stationary noise sources (e.g., generators, compressors, staging areas) as far from residential receptor locations as feasible.

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

Mitigation Measure NOI-4e: The construction contractor shall select and use quieter tools or construction methods whenever feasible. Examples of this 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 the use of enclosures as feasible. This includes four-sided or full enclosures with a top for compressors and other stationary machinery. This also includes locating activities, such as metal stud and rebar cutting, within constructed walled structures to minimize noise propagation.

Significance Conclusion for Impact NOI-4 with Implementation of Mitigation Measures

While **Mitigation Measures NOI-4a** through **NOI-4f** 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 site 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 proposed 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 proposed 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 proposed 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 proposed Specific Plan would not expose people working in the area to excessive noise levels, no impacts would result.

3.11.5 REFERENCES

A/E Tech LLC, *Noise and Vibration Analysis Report, Proposed Rancho La Habra Development, City of La Habra, California,* November 30, 2016.

California Department of Transportation (Caltrans), *Transportation- and Construction-Induced Vibration Guidance Manual,* 2004. Accessed at: http://www.dot.ca.gov/hq/env/noise/pub/vibrationmanFINAL.pdf.

California Department of Transportation (Caltrans), *Technical Noise Supplement (TeNS), A Technical Supplement to the Traffic Noise Analysis Protocol*, 2016. Accessed at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf.

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, 2013.

City of La Habra, *City of La Habra General Plan 2035*, adopted January 21, 2014. Accessed May 26, 2017: http://www.lahabracity.com/320/General-Plan-2035.

City of La Habra, Municipal Code Chapter 9.32, Noise Control. Accessed May 26, 2017: http://qcode.us/codes/lahabra/.

Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, 2006. Accessed at: https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/fta-noise-and-vibration-impact-assessment.

Federal Transit Administration (FTA), U.S. Department of Transportation, and Los Angeles County Metropolitan Transportation Authority; *Crenshaw Transit Corridor Project Draft Environmental Impact Statement/Environmental Impact Report*, State Clearinghouse No. 2007091148, September 2009.

Federal Transit Administration (FTA), U.S. Department of Transportation, and Los Angeles County Metropolitan Transportation Authority; *Crenshaw Transit Corridor Project Final Environmental Impact Statement/Environmental Impact Report*, State Clearinghouse No. 2007091148, August 2011.

Nugent & Amick, *Environmental Monitor Vibration Considerations in Land Use Planning*, 1992.

3.12 HAZARDS AND HAZARDOUS MATERIALS

3.12.1 INTRODUCTION

a. Overview

This section considers the nature and range of foreseeable hazardous materials and physical hazards/impacts that would result from implementation of the proposed Rancho La Habra Specific Plan. It identifies the ways that hazardous materials and other types of hazards could expose people and the environment to various health and safety risks during construction activities and operation of proposed land uses within and adjacent to the Specific Plan area.

This section also describes routine hazardous materials that are likely to be used, handled, or processed within the Specific Plan area, and the potential for upset and accident conditions in which hazardous materials could be released. The impact analysis identifies ways in which hazardous materials might be routinely used, stored, handled, processed, or transported, and evaluates the extent to which existing and future populations could be exposed to hazardous materials. The potential for fire hazards and emergency response/access issues associated with proposed development of the Specific Plan is also addressed.

Air emissions can also carry hazardous materials and create potential risks to human health and the environment. Sources of hazardous or toxic air emissions include but are not limited to industrial processes, vehicle use (diesel particulate emissions from exhaust), and proximity to existing or relocated sources of diesel or other toxic air emissions. Impacts related to toxic air contaminants, including the release of diesel particulate matter, from construction truck trips and/or delivery truck trips (when the haul routes are located within 0.25-miles of an existing or proposed school) are identified in Section 3.8, *Air Quality*. Flooding is addressed in Section 3.13, *Hydrology and Water Quality*. Other safety hazards, such as earthquakes, are addressed in Section 3.14, *Geology, Soils, and Seismicity*.

b. Definitions

Some of the key terms used in the management of hazardous materials and the context within which they apply to sites where contaminants have been identified in soil or groundwater are presented below.

- **Constituent of Concern** or **Contaminant of Concern** is a hazardous material that has the potential to cause damage to human health or the environment and create a "risk" to human health and the environment.
- **Exposure Pathway** is the course a chemical or pollutant takes from the source to the organism exposed. A "complete" exposure pathway consists of four elements: chemical

sources, migration routes (i.e., transport in the environment), an exposure point for contact (i.e., soil, air, or, water), and exposure routes.

- **Exposure Route** is the way a chemical or pollutant enters the organism after contact. Four exposure routes are recognized in risk evaluation methods: ingestion, inhalation, dermal (skin and eye), and injection.
- **Extremely Hazardous Substance**, in the context of Public Resources Code Section 21151.4 pertaining to hazardous materials emissions near schools, refers to a material included on lists compiled pursuant to Section 25532 of the California Health and Safety Code, which incorporates regulated toxic and flammable substances under Section 112(r) of the federal Clean Air Act. Table 3 of Section 112(r) lists those regulated substances pursuant to Section 25532(g)(2) of the California Health and Safety Code.
- **Hazard** includes any condition, practice, or procedure that is or may be dangerous, harmful, or perilous to employees, property, neighbors, or the general public.
- **Hazardous Material** refers to any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or an administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code, Section 25501).
- **Hazardous Materials Release Site** refers to any area, location, or facility where a hazardous material has been released or threatens to be released to the environment.
- **Hazardous Waste** refers to any waste substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed (California Health and Safety Code, Section 25117).
- **Recognized Environmental Concerns** are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property (1) due to any release to the environment, (2) under conditions indicative of a release to the environment, or (3) under conditions that pose a material threat of a future release to the environment.[1]
- **Remedial Action** or **Remediation** refers to actions required by federal, state, or local laws, ordinances, or regulations necessary to prevent, minimize, or mitigate damage that may result from the release or threatened release of a hazardous material. These actions include site cleanup; monitoring, testing, and analysis of site conditions; site operation and maintenance; and placing conditions or restrictions on the land use of a site upon completion of remedial actions.

[1] As per ASTM Standard Practice E 1527-13.

- **Risk** is determined by the probability of exposure to a hazardous material or a hazardous condition and the severity of harm such exposure would pose. Accordingly, the likelihood and means of exposure, in addition to the inherent toxicity of a material or damage that could be caused by a hazardous condition, are used to determine the degree of risk to human health or the environment.

3.12.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Federal and state laws require that hazardous materials be specially managed and that excavated soils having concentrations of contaminants that are higher than specified acceptable levels be specially managed, treated, transported, and/or disposed of as a hazardous waste. Title 22 of the California Code of Regulations Sections 66261.20–24 contains technical descriptions of characteristics that would cause a soil, once excavated and discarded, to be designated a hazardous waste. California regulations are compliant with federal regulations and, in most cases, are more stringent. State and federal regulations also set standards for allowable concentrations of contaminants in order to protect the public health from harmful concentrations of hazardous materials.

Numerous federal, state, and local regulations have been enacted to prevent or mitigate damage to public health and safety and the environment from the release or threatened release of hazardous substances into the environment or workplace, to protect human health and environmental resources from existing site contamination, and to protect human health and safety in relation to airport operations. Thus, 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 primary federal agencies responsible for hazardous materials management include the U.S. Environmental Protection Agency (USEPA) and the U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

Resource Conservation and Recovery Act of 1976

Federal hazardous waste regulations are generally promulgated under the Resource Conservation and Recovery Act (RCRA). Pursuant to RCRA, USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in a "cradle to grave" manner. RCRA was designed to protect human health and the environment, reduce or eliminate the generation of hazardous waste, and conserve energy and natural resources.

The Hazardous and Solid Waste Amendments of 1984 both expanded the scope of RCRA and increased the level of detail in many of its provisions, reaffirming the regulation from generation to disposal and prohibiting the use of certain techniques for hazardous waste

disposal. USEPA has largely delegated responsibility for implementing the RCRA program to the State of California, which implements this program through the California Hazardous Waste Control Act.

RCRA regulates landfill siting, design, operation, and closure (including identifying liner and capping requirements) for licensed landfills. In California, RCRA landfill requirements are delegated to the California Department of Resources Recycling and Recovery (CalRecycle), which is discussed in detail below.

RCRA allows USEPA to oversee the closure and post-closure of landfills. Additionally, the federal Safe Drinking Water Act, 40 Code of Federal Regulations (CFR) Part 141, gives USEPA the power to establish water quality standards and beneficial uses for waters from below- or above-ground sources of contamination. For the Specific Plan area, water quality standards are administered by the Regional Water Quality Control Board (RWQCB).

RCRA also allows USEPA to control risk to human health at contaminated sites. Vapor intrusion presents a significant risk to human populations overlying contaminated soil and groundwater and is considered when conducting human health risk assessments and developing Remedial Action Objectives.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA in 1986, stressing the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund to $8.5 billion. There are no Superfund sites within the Specific Plan area.

Emergency Planning and Community Right-to-Know Act of 1986

Through the Emergency Planning and Community Right-to-Know Act of 1986 (also known as Title III of Superfund), USEPA also imposes requirements that hazardous materials are properly handled in order to prevent or mitigate risk to human or environmental health in the event of an accidental release.

Occupational Safety and Health Act of 1970

Federal and state occupational health and safety regulations also contain provisions regarding hazardous waste management through the Occupational Safety and Health Act of 1970 (amended), which is implemented by OSHA. Code 29 of Federal Regulations (29 CFR) requires special training of handlers of hazardous materials; notification to employees who work in the vicinity of hazardous materials; acquisition from the manufacturer of material safety data sheets (MSDS), which describe the proper use of hazardous materials; and training of employees to remediate any hazardous material accidental releases. OSHA regulates administration of 29 CFR.

OSHA also establishes standards regarding safe exposure limits for chemicals to which construction workers may be exposed. Safety and Health Regulations for Construction (29 CFR 1926.65 Appendix C) contains requirements for construction activities, which include occupational health and environmental controls to protect worker health and safety. The guidelines describe the health and safety plan(s) that must be developed and implemented during construction, including associated training, protective equipment, evacuation plans, chains of command, and emergency response procedures.

Due to the existence of hazardous materials in the vicinity of the Specific Plan area, adherence to applicable hazard-specific OSHA standards would be required to maintain worker safety. For example, methane is regulated by OSHA under 29 CFR Part 1910.146 relative to worker exposure to a "hazardous atmosphere" within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, labeling, and the marking of hazardous material transport, and Title 42, Chapter 82 governs solid waste disposal and resource recovery.

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act (HMTA), which is administered by the Research and Special Programs Administration (RSPA) of the U.S. Department of Transportation (USDOT). The HMTA provides USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property, which is inherent in the commercial transportation of hazardous materials. The HMTA governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The Research and Special Programs Administration carries out these responsibilities by prescribing regulations and managing a user-funded grant program for planning and training grants for states and Indian tribes. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or is involved in any way with the manufacture or testing of hazardous

materials packaging or containers. USDOT regulations pertaining to the actual movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing. Additionally, USDOT is responsible for developing curricula to train for emergency response, and administers grants to states and Indian tribes for ensuring the proper training of emergency responders. The HMTA was enacted in 1975 and was amended and reauthorized in 1990, 1994, and 2005.

b. State Plans, Policies, and Regulations

Hazardous Materials Management

In the regulation of hazardous waste management, California law often mirrors or is more stringent than federal law. The California Environmental Protection Agency (CalEPA) and California Occupational Safety and Health Administration (CalOSHA) are the primary state agencies responsible for hazardous materials management. Additionally, the California Emergency Management Agency (CalEMA) administers the California Accidental Release Prevention (CalARP) program. The California Department of Toxic Substances Control (DTSC), which is a branch of CalEPA, regulates the generation, transportation, treatment, storage, and disposal of hazardous waste, as well as the investigation and remediation of hazardous waste sites. The California DTSC program incorporates the provisions of both federal (RCRA) and state hazardous waste laws.

Hazardous Waste Control Act

The Hazardous Waste Control Act was passed in 1972 and established the California Hazardous Waste Control Program within the Department of Health Services. California's hazardous waste regulatory effort became the model for the federal RCRA. California's program, however, was broader and more comprehensive than the federal system, regulating wastes and activities not covered by the federal program. California's Hazardous Waste Control Act was followed by emergency regulations in 1973 that clarified and defined the hazardous waste program, as follows:

- The regulations included definitions of what was a waste and what was hazardous as well as what was necessary for appropriate handling, processing, and disposal of hazardous and extremely hazardous waste in a manner that would protect the public, livestock, and wildlife from hazards to health and safety.
- The early regulations also established a tracking system for the handling and transportation of hazardous waste from the point of waste generation to the point of ultimate disposition, as well as a system of fees to cover the costs of operating the hazardous waste management program.

- Advancing the newly developing awareness of hazardous waste management issues, the program established a technical reference center, for public and private use, dealing with all aspects of hazardous waste management.

California Government Code Section 65962.5 (a), Cortese List

The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with CEQA requirements for providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop an updated Cortese List at least annually. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Hazardous Materials Business Plans

Article 1 of Chapter 6.95 of the California Health and Safety Code (Sections 25500–25520) requires that any business that handles, stores, or disposes of a hazardous substance at a given threshold quantity must prepare a hazardous materials business plan (HMBP). HMBPs are intended to minimize hazards to human health and the environment from fires, explosions, or an unplanned release of hazardous substances into air, soil, or surface water. The HMBP must be carried out immediately whenever a fire, explosion, or unplanned chemical release occurs. An HMBP includes three sections: (1) an inventory of hazardous materials, including a site map that details their location; (2) an emergency response plan; and (3) an employee-training program. HMBPs serve as an aid to employers and employees in managing emergencies at a given facility. They also help better prepare emergency response personnel for handling a wide range of emergencies that might occur at the facility.

HMBPs are submitted to the Department of Environmental Health Hazardous Materials Division. The plans must be resubmitted, reviewed, revised, or amended as necessary every 3 years. The HMBP must also be amended within 30 days whenever there are changes in the amount or location of stored hazardous chemicals on a site. The Hazardous Materials Division conducts routine inspections at businesses required to submit business plans. The purpose of these inspections is to (1) ensure compliance with existing laws and regulations concerning HMBP requirements, (2) identify existing safety hazards that could cause or contribute to an accidental spill or release, and (3) suggest preventative measures designed to minimize the risk of a spill or release of hazardous materials. After initial submission of an HMBP, the business must review and recertify the HMBP every year.

Risk Management Plans

Article 2 of Chapter 6.95 of the California Health and Safety Code (Sections 25531–25543.3) requires the owner or operator of a stationary source (non-transportation) with more than a threshold quantity of a regulated substance to prepare a risk management plan. The state statutes and regulations—called the CalARP program—combine federal and state program requirements for the prevention of accidental releases of listed substances into the atmosphere. The CalARP program requires that a risk management plan include a hazard assessment program, an accidental release prevention program, and an emergency response plan. The risk management plan must be revised every 5 years or as necessary. Typical facilities or businesses that are required to prepare risk management plans include ammonia refrigeration facilities, water treatment and wastewater treatment plants that handle chlorine gas, and facilities that store flammable chemicals such as methane and propane.

Title 22 of California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Act. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Act to county health departments and other Certified Unified Program Agencies.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In 1996, CalEPA adopted the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The Unified Program consolidates and coordinates the six state programs that regulate business and industry use, storage, handling, and disposal of hazardous materials and wastes. The Los Angeles County Fire Department Health and Hazardous Materials Division provides the regulatory oversight for federal, state, and local laws and regulations related to hazardous materials use and disposal within the City of La Habra (City).[2] This County agency protects the public health and the environment from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight. In addition, the County Fire Department Health and Hazardous Materials Division implements the following programs that are relevant to existing uses and the new uses that are proposed by the Specific Plan:

[2] The Orange County Health Care Agency, as the Certified Unified Program Agency (CUPA), has local authority for site remediation.

- Hazardous Materials Reporting and Response Planning (Hazardous Materials Disclosure)
- Uniform Fire Code Business Plan
- Hazardous Waste Generation and Onsite Treatment
- Accidental Release Prevention Program
- Above-Ground Storage Tank Regulations
- Underground Storage Tank Regulations

Title 23 of California Code of Regulations, Underground Storage Tank Act

The underground storage tank monitoring and response program is required under Chapter 6.7 of the California Health and Safety Code and Title 23 of the California Code of Regulations. The program was developed to ensure that facilities meet regulatory requirements for design, monitoring, maintenance, and emergency response in operating or owning underground storage tanks. Health departments are the local administering agencies for this program.

Title 27 of California Code of Regulations, Solid Waste

Title 27 of the California Code of Regulations contains a waste classification system that applies to solid wastes that cannot be discharged directly or indirectly to waters of the state and that therefore must be discharged to waste management sites for treatment, storage, or disposal. CalRecycle and its certified Local Enforcement Agency regulate the operation, inspection, permitting, and oversight of maintenance activities at active and closed solid waste management sites and operations.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs or "Chisels") are concentrations of 54 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by USEPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Senate Bill 1889, Accidental Release Prevention Law/CalARP

Senate Bill (SB) 1889 required California to implement a new federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1, 1997, the CalARP program replaced the previous California Risk Management and Prevention Program and incorporated the mandatory federal requirements. The CalARP program addresses facilities that contain specified hazardous materials, known as "regulated substances," which if involved in an accidental release could result in adverse off-site consequences. The CalARP program defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

Occupational Safety

Title 8 – CalOSHA

CalOSHA administers federal occupational safety requirements and additional state requirements in accordance with California Code of Regulations Title 8. CalOSHA requires preparation of an Injury and Illness Prevention Program (IIPP), which is an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. This program is administered via inspections by the local CalOSHA enforcement unit.

CalOSHA regulates lead exposure during construction activities under California Code of Regulations Title 8, Section 1532.1, Lead, which establishes the rules and procedures for conducting demolition and construction activities such that worker exposure to lead contamination is minimized or avoided.

Compliance with CalOSHA regulations and associated programs would be required for the proposed Specific Plan due to the potential hazards posed by on-site construction activities and contamination from former uses.

Emergency Response to Hazardous Materials Incidents

The State of California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. The plan is administered by CalEMA and includes response to hazardous materials incidents. CalEMA coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, Regional Water Quality Control Board Santa Ana Region, South Coast Air Quality Management District, County of Los Angeles Fire Department, and the Orange County Health Care Agency.

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the state. This Act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after the following occurs: (1) a local declaration of emergency is issued, or (2) CalEMA gives concurrence with the local declaration, or the governor issues a proclamation of a state emergency. Once the Act is activated, local government is eligible for certain types of assistance, depending upon the specific declaration or proclamation issued.

State Fire Regulations

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The state fire marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

California Fire Code (Chapter 33, Fire Safety During Construction and Demolition)

California Fire Code Chapter 33 related to fire safety during construction and demolition prescribes safeguards to provide reasonable safety to life and property from fire during such operations. Specific safeguards relate to oil-fired heaters, gas heaters, refueling, smoking, waste disposal, welding, electrical, flammable and combustible odors, water supply for fire protection, and fire extinguishers. Implementation of these safeguards is designed to reduce the potential for fire-related hazards during construction and demolition activities.

Abandoned Oil Wells – Public Resources Code Section 3208.1a

The Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) is charged with implementing Section 3208.1 of the Public Resources Code. As a result, DOGGR developed the Construction Site Well Review Program to assist local permitting agencies in

identifying and reviewing the status of oil or gas wells located near or beneath proposed structures.

Before issuing building or grading permits, local permitting agencies review and implement DOGGR's pre-construction well requirements. DOGGR recommends interaction between local permitting agencies and DOGGR to help resolve land use issues and allow for "responsible development in oil and gas fields."

As part of DOGGR's construction site plan review process, DOGGR requires wells to be tested for leakage, and wells under buildings or with restricted access to be vented and abandoned or re-abandoned to present-day standards.

Fire Safety

California Building Code and Fire Code

California Building Code Chapter 7a, Materials and Construction Methods For Exterior Wildfire Exposure, and California Fire Code Chapter 47, Requirements for Wildland-Urban Interface Fire Areas, set forth minimum standards to increase the ability of a building to resist the intrusion of flame or burning embers being projected by a vegetation fire, and are intended to reduce fire losses along the interface between wildlands and urban areas through the use of performance and prescriptive requirements. These standards are applied in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area designated by the enforcing agency (e.g., City of La Habra, Los Angeles County Fire Department). These California Building Code provisions establish requirements for building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a Fire Hazard Zone or a Wildland-Urban Interface Fire Area.

General Guidelines for Creating Defensible Space

Following changes to Public Resources Code Section 4291 that expanded the defensible space clearance requirement to be maintained around buildings and structures from 30 feet to a distance of 100 feet, the State of California developed guidelines to provide property owners with examples of fuel modification measures that can be used to create an area around buildings or structures to create defensible space. The intent of defensible space guidelines is to establish a perimeter around buildings and structures that provides firefighters a working environment to protect buildings and structures from encroaching wildfires, as well as to minimize the chance that a structure fire will escape to the surrounding wildland.

c. Regional and Local Plans, Policies, and Regulations

South Coast Air Quality Management District Rule 1166

Rule 1166 sets requirements to control the emission of volatile organic compounds (VOC) from excavating, grading, handling, and treating soil containing VOCs due to leakage from storage or transfer operations, accidental spillage, or other deposition. This rule requires development and approval of a mitigation plan, monitoring of VOC concentrations, and implementation of the mitigation plan if VOC-contaminated soil is detected. Worker safety and health are also regulated by the federal Occupational Safety and Health Act of 1970 and CalOSHA. Exposure limits define the maximum amount of hazardous airborne chemicals to which an employee may be exposed over specific periods. When administrative or engineering controls cannot achieve compliance with exposure limits, protective equipment or other protective measures must be used. Employers are also required to provide a written health and safety program, worker training, emergency response training, and medical surveillance.

Orange County Health Care Agency

Hazardous Waste Inspection Program

The OCHCA Environmental Health Division implements a Hazardous Waste Inspection Program throughout Orange County. The purpose of this program is to ensure that all hazardous wastes generated by Orange County businesses are properly handled, recycled, treated, stored and disposed.

Specialists in this program inspect facilities that generate hazardous waste, evaluate hazardous waste generating industries, investigate reports of illegal hazardous waste disposal, and respond to emergency spills of hazardous chemicals. Specialists also participate in public education programs designed to inform industries and residents about the laws and regulations relating to safe disposal of hazardous waste.

Underground Storage Tank Inspection Program

The OCHCA Environmental Health Division oversees an underground storage tank inspection program throughout Orange County, with the exception of cities of Anaheim, Fullerton, and Orange. As the Certified Unified Program Agency (CUPA), the Environmental Health Division is tasked by the California Secretary for Environmental Protection to implement and enforce the underground storage tank codes. To this end, specialists from Environmental Health Division inspect underground storage tanks, monitoring equipment and compliance documents of UST systems to ensure that these systems are in compliance with the applicable laws and regulations. The OCHCA also serves to educate and assist tank owners and operators with regulatory requirements.

Above-Ground Petroleum Storage Act Compliance

Effective January 1st, 2008, Assembly Bill 1130 (Above-ground Petroleum Storage Act) authorized implementation of the Above-ground Petroleum Storage Tank Program to the local Certified Unified Program Agency (CUPA). The Act applies to business with a total storage capacity, at any one site of more than 1,320 gallons of petroleum products in tanks or containers larger than 55 gallons.

As the Certified Unified Program Agency responsible for the inspections of these facilities in all cities in Orange County, except for Anaheim. Tank facilities that are regulated under the Aboveground Petroleum Storage Act (APSA) are also regulated by the USEPA Region 9 Oil Program Clean Water Act Compliance Office. The Federal standards regulates non-petroleum oils that are not regulated under the Act, such as vegetable oil. It is possible for a tank facility to be regulated and inspected by both the USEPA and Orange County, or just the USEPA.

Hazardous Material Disclosure and Business Emergency Plan Programs

The Hazardous Material Disclosure and Business Emergency Plan programs require businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity, report this information to the local implementing agency called the Certified Unified Program Agency (CUPA). The purpose of the programs is to prevent or minimize damage to public health and safety and the environment, from a release or threatened release of hazardous materials. These locally implemented programs also satisfy federal community right-to-know laws.

The Environmental Health Division was designated as the Certified Unified Program Agency for the County of Orange by the State Secretary for Environmental Protection on January 1, 1997. The Hazardous Material Disclosure and Business Emergency Plan programs require Orange County businesses to

- Inventory their hazardous materials
- Develop a site map,
- Develop an emergency plan, and
- Implement a training program for employees.

The Environmental Health Division verifies information disclosed by businesses and provides it to agencies that are responsible for the protection of public health and safety and the environment, such as fire departments, hazardous materials response teams and other local environmental regulatory groups. The public also has a right to review this information, with the exception of documents containing trade secrets or other confidential information.

City of La Habra General Plan

City of La Habra General Plan policies relevant to hazards and hazardous materials include the following.

Chapter 7, Community Safety

NH 2.1 Urban/Wildland Interface. Locate, design, and construct development within or adjacent to areas subject to high wildland fire risks, such as La Habra's hillsides, to standards that reduce exposure and potential impacts.

NH 2.2 Open Space Fire Suppression Access. Ensure existing access points to La Habra's open space areas are maintained for fire suppression.

NH 2.3 Fuel Modification and Vegetation Management Review. Continue to support the City's fire service provider's review of new development to assure it complies with fuel modification requirements, creation of defensible space, and incorporates appropriate plantings and proper vegetation management, as applicable.

NH 2.4 Wildland Fire Coordination. Work with the City's fire service provider and surrounding jurisdictions that are subject to wildland fires which may impact La Habra to ensure coordinated wildland fire hazard protection and prevention services.

EP 1.1 Emergency and Hazard Mitigation Plans. Maintain and implement emergency response and disaster preparedness/hazard mitigation plans to reduce or eliminate the long-term risk to life and property from natural or human-induced disasters and emergencies and to be eligible for certain disaster assistance and mitigation funding including the La Habra Emergency Response Plan (ERP) and the La Habra Hazard Mitigation Plan (HMP).

EP 1.2 Emergency Management Systems. Maintain and implement compliance standards and protocol provisions for emergency response organization, communication, and incident management to retain eligibility for federal and state grant and recovery funds including the National Incident Management System (NIMS) and California's Standardized Emergency Management System (SEMS).

EP 1.4 Adequate Emergency Services. Coordinate with fire and police service, emergency medical aid providers, and other support services that include first-response to disasters and emergencies including hazardous materials spills.

EP 1.5 Emergency Site Access. Require that roads, driveways, and other clearances around structures are located and designed to ensure emergency access.

HW 1.1 Hazardous Materials Response. Maintain and periodically update the City's Hazardous Material Response Plan for the disclosure, regulation, and mitigation of the

hazards created by the use, creation, storage, or on-site processing of hazardous materials.

HW 1.3 Hazardous Material Disclosure. Require that essential information is provided to emergency service personnel of the known use and dangers of hazardous materials present in La Habra, in accordance with La Habra's Hazardous Material Disclosure Ordinance.

HW 1.4 Assessment of Known Areas of Contamination. Require new development in known contamination areas to perform comprehensive soil and groundwater contamination assessments, in accordance with applicable regulations, and if contamination exceeds regulatory levels, require new development to undertake remediation procedures consistent with county, regional, and state regulations prior to any site disturbance or development.

HW 1.5 Remediation of Known Sites. Require that businesses and property owners of known hazardous materials contamination and waste sites develop and implement a remediation plan to investigate, facilitate, and manage the cleanup in coordination and compliance with Orange County, state, and/or appropriate federal agency requirements including the California Department of Toxic Substances Control (DTSC).

HW 1.6 Hazardous Materials Business Plan. Require that owners and/or operators of facilities that handle hazardous materials or a mixture containing hazardous materials having a quantity equal to or greater than 55 gallons for liquid, 500 pounds for solids, or 200 cubic feet of gas complete a Hazardous Materials Business Plan (HMBP) to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies pursuant to the California Hazardous Materials Release Response Plans and Inventory Law (Business Plan Act).

HW 1.7 Project Review. Review all proposed development projects that manufacture, use, or transport hazardous materials and waste in coordination with appropriate state and federal agencies.

HW 1.8 Best Practices and New Technologies. Encourage industries, businesses, and residents to utilize best practices and technologies to reduce the use of hazardous materials and generation of hazardous wastes.

HW 1.9 Hazardous Materials Transport. Coordinate with Orange County and other relevant agencies to enforce applicable state and local laws regulating the transport of hazardous materials through the City of La Habra including the restriction of hazardous materials transport to designated routes.

HW 3.1 Household Hazardous Waste Program. Provide incentives, when available, to encourage source reduction of hazardous wastes through the City's Household Hazardous Waste Program.

HW 3.2 Hazardous Waste Collection. Encourage La Habra residents to safely dispose of household hazardous waste such as batteries and paints and E-waste at community collection events or at designated Orange County collection centers.

HW 3.3 Used Motor Oil. Encourage La Habra residents to safely dispose of used motor oil at the certified oil recycling centers in the City.

HW 3.6 Proper Disposal of Prescription and Over-the-Counter Medications. Continue to collect unused and waste prescription and other over-the-counter medications at the Police Department's annual collection event and work with pharmacies in La Habra to expand their collection throughout the year for proper disposal.

City of La Habra Hazard Mitigation Plan

The City of La Habra Hazard Mitigation Plan was developed to reduce or eliminate long-term risk to human life and property from the hazards identified in **Table 3.12-1**.

La Habra Emergency Response Plan

The City prepared an Emergency Response Plan to comply with the California Standardized Emergency Management System and the Federal Emergency Management Agency (FEMA) National Incident Management System. The plan includes information on the Emergency Operations Organization, the roles and responsibilities of each City division, and operational checklists to guide response actions.

The Emergency Response Plan identifies the actions to be taken by the City to prevent disasters where possible, reduce the vulnerability of residents to any disasters that cannot be prevented, establish capabilities for protecting citizens from the effects of disasters, respond effectively to the actual occurrence of disasters, and provide for recovery in the aftermath of any emergency involving extensive damage or other debilitating influence on the normal pattern of life within

Table 3.12-1
Hazards Addressed in La Habra Hazard Mitigation Plan

Hazard	Risk Rank				
	Low	Moderately Low	Moderate	Moderately High	High
Earthquake					√
Pandemic					√
Extreme Heat				√	
Terrorism				√	
Power Failure				√	
Wildfire				√	
Pipeline Failure				√	
Severe Storm				√	
Nuclear Plant Failure				√	
Transportation Accident - Air			√		
Drought Risk			√		
Transportation Accident - Rail		√			
Civil Unrest		√			
Tornado - Wind		√			
Hazmat Release		√			
Flood		√			
Reservoir Failure		√			

Source: La Habra Hazard Mitigation Plan, 2014.

the community. The response procedures and organization strategies provided in the plan are a step-by-step guide to response and operations during disasters and events necessitating emergency response. Although the City planning area is exposed to hazardous waste incidents that have the potential to disrupt the community and cause localized damage and severe injury or disability, the City adopted several policies intended to ensure that adequate emergency response is maintained throughout the City.

The Emergency Response Plan provides for (1) the maintenance, organization, communication, and management of the plan; (2) a comprehensive evacuation plan that identifies evacuation strategies, routes, and resources required for the safe and orderly evacuation of affected areas of the City and provides emergency shelters; (3) coordination with fire and police service, emergency medical aid providers, and other support services that include first response to

disasters and emergencies including hazardous materials spills; and (4) requirements that roads, driveways, and other clearances around structures be located and designed to ensure emergency access.

City of La Habra Municipal Code

La Habra Municipal Code Chapter 18.36, Hazardous Materials Disclosure, requires any person or business handling at least 500 pounds or 55 gallons per year, whichever is the lesser, of a hazardous material to submit a completed disclosure form to the Los Angeles County Fire Department each January and July. The form describes the types of hazardous substances being handled, their quantity, and information on how and where the hazardous materials are handling or used, including submission of general floor plans of the facility and specific site plans that designate exact locations where chemicals are stored, so as to allow safety personnel to prepare adequate emergency response plans for potential releases of hazardous materials. Municipal Code Chapter 15.46 of the La Habra Municipal Code adopts the Los Angeles County Fire Code, and sets fire safety standards.

3.12.3 ENVIRONMENTAL SETTING

a. Historic Uses of Project Site

Oil and Gas Production

The project site was used for oil production from the early 1900s through 1995. Oil operations at the West Coyote Hills oil field were principally conducted by Chevron USA, Inc. (Chevron), and oil produced from the property was transferred by pipeline to the Chevron Refinery in El Segundo, California. Natural gas produced from the field was piped to Chevron's former Murphy-Coyote gas processing plant in Fullerton south of the Westridge property. Water produced during oil field operations was re-injected to enhance secondary oil recovery. A total of 23 oil wells were formerly in production within the project site, all of which have since been abandoned in accordance with DOGGR regulations (see **Figure 3.12-1**). Other oil field operational facilities, such as tank sites, sumps, pipelines, condensate drips, transformer sites, and a fueling facility that were formerly present on the project site, were investigated and remediated during development of the Westridge Golf Club in 1996-1997. Copies of the closure reports are included as an appendix to the Phase I report for the project site (EIR Appendix H).

La Habra Hills Specific Plan/Westridge Golf Club

In 1992, the City of approved the La Habra Hills Specific Plan to create a master planned community on the 380-acre portion of the 915-acre West Coyote Hills oil field within La Habra. The remaining 535 acres of the 915-acre West Coyote Hills oil field are located within the City of Fullerton. The approved La Habra Hills Specific Plan set forth a development plan consisting of four residential neighborhoods with a maximum of 700 dwelling units, an 18-hole golf course (which is the current site of the proposed Rancho La Habra Specific Plan), 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 556 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, and driving range are open to the public. The golf course includes a clubhouse with a restaurant and pro shop.

b. Existing Environmental Hazard Conditions

The Los Angeles County Fire Department, Orange County Health Care Agency (OCHCA), DTSC, and State Water Resources Control Board (SWRCB) were contacted as part of preparation of the Phase I report for the project site, and other state and federal databases were reviewed to determine if the project site or any adjacent properties were listed as hazardous waste generators or underground storage tank (UST) release sites, or as having other environmental concerns (i.e., spill, leak, or above-ground tank).

Project Site

Abandoned Oil Wells

A review of the DOGGR website for oil and gas fields in California indicated the historic presence of 23 former oil and gas wells, which had been operated by Chevron USA, Inc., on or immediately adjacent to the project site. According to information on file at DOGGR, these wells were drilled as early as the 1920s and were used for oil and gas production until their abandonment under the regulatory guidance of DOGGR during the 1960s through the 1990s. Well records currently list the wells as plugged and indicate they were abandoned pursuant to DOGGR guidelines.

Based on information provided by DOGGR staff, that agency requires construction review only for wells either directly on top of or in close proximity to (i.e., approximately 50 feet from) an existing well. Many of the existing wells have permanent vents to allow methane gas to escape. Although DOGGR does not mandate methane testing prior to construction, methane testing was conducted by EEI Geotechnical & Environmental Solutions (EEI) as part of the Phase I environmental site assessment to evaluate the potential for methane on the project site. A total of 28 locations were sampled for the presence of methane gas at a depth of 5 feet below ground

Figure 3.12-1: Abandoned Well Locations

Source: Google Earth Pro; Carlson SLS

surface. Nineteen of the locations were in the western half of the golf course, either above or in close proximity to the crude oil-impacted soil designated reuse areas. Nine of the locations were in the eastern half of the golf course, in areas of former oil field operations. Of the 28 locations surveyed, only five (5) indicated detectable methane concentrations (i.e., 0.01 percent or 1,000 ppm). The remaining 23 locations had no detectable concentrations of methane.

Contaminated Soils

Starting in 1986, Chevron began a 10-year investigation and cleanup that involved 17 oil well sites, 10 "historical" sites impacted with crude oil, three above-ground tank areas, and numerous "miscellaneous" locations including pipelines, sumps, pits, and detention basins. Soils in these areas were excavated, stockpiled on-site, and tested to determine the degree of crude oil contaminants on-site. Testing determined that the principal contamination was heavy petroleum hydrocarbons (crude oil) with minor fractions of VOCs and lighter end hydrocarbons. Once tested, the soils were placed in the three designated reuse areas as approved by the Santa Ana RWQCB and the OCHCA, due to the low potential for the crude oil contamination to leach from the soil in the future. Approximately 220,000 cubic yards of impacted soil was placed in Reuse Area 1 (beneath the western half of the golf course), 30,000 cubic yards in Reuse Area 2 (beneath the driving range), and 176,000 cubic yards in Reuse Area 3 (beneath the far western portion of the golf course). During placement, the impacted soils were "landfarmed" (discing and hydration to promote natural biodegradation of the soil) to reduce overall hydrocarbon concentrations in accordance with the Santa Ana RWQCB's approval. Upon successful completion of the fill placement and capping, the property received regulatory closure from the RWQCB and OCHCA in 1999.

The subject property, identified as Westridge Golf Course, was also reported as an active current OCHCA Industrial Cleanup Program site (Case #15IC004), related to the management of soil in place at the subject property. EEI prepared a Soils Management Plan (SMP) (dated September 29, 2015) related to known environmental conditions for the subject property, as well as action for potential unknown environmental conditions that may be encountered during future site improvements for a proposed residential development. The SMP was submitted to the OCHCA for review and comment. On October 29, 2015, the OCHCA responded to EEI regarding the SMP dated September 29, 2015. The OCHCA provided several comments regarding the SMP and requested that EEI submit an addendum to the SMP that addressed the comments. To address OCHCA comments, EEI prepared and submitted an SMP Addendum dated July 14, 2016. The information provided in the addendum was deemed sufficient and the SMP received final approval by the OCHCA on September 9, 2016. The Soil Management Plan and Addendum are provided in Appendix H.

As part of the Phase I environmental site assessment, Tier 1 Vapor Encroachment Screen was conducted for the project site to evaluate whether potential chemicals of concern may migrate as vapors onto the property as a result of contaminated soil and/or groundwater that may be

present on or near the property (i.e., a Vapor Encroachment Condition). Based on the Tier 1 screening evaluation, the past use of the project site was considered to pose a potential Vapor Encroachment Condition.

During grading of the golf course, approximately 430,000 cubic yards of soil containing total petroleum hydrocarbons (TPH) were placed in three designated soil reuse areas beneath the golf course. However, the grading and compaction that occurred to accommodate the golf course and create the reuse areas were neither suitable for, nor compatible with, residential development. As a result, two of the three reuse areas will need to be removed and replaced, along with surrounding fill soils, and properly compacted prior to final grading and construction.

The presence of the impacted soil beneath portions of the subject property necessitated a Tier 2 screening, consisting of a review of existing data related to the former oil production operation and designated soil reuse areas at the site. In the Tier 2 screening, EEI concluded that a Vapor Encroachment Condition can be ruled out for the former oil production operation area and soil reuse areas because site-specific invasive testing data collected during previous investigations indicated that the soil beneath the property contains crude oil contamination (not refined fuel products) with a lack of significant VOCs.

As stated in the Phase I environmental site assessment of the project site, based on the presence of the on-site golf course maintenance facilities, petroleum hydrocarbons and chemicals of concern are likely to have affected the subsurface beneath the project site. Areas of concern include above-ground waste oil and gasoline storage tanks, a chemical storage shed, a grease interceptor (clarifier), and a wash area with surface drains present in the vicinity of the maintenance facilities.

Phase I Environmental Site Assessment Site Reconnaissance

A site reconnaissance was conducted on March 16, 2016 as part of the Phase I environmental site assessment (provided in Appendix H) to physically observe the site and adjoining properties for conditions indicating a potential environmental concern, including any evidence of contamination, distressed vegetation, petroleum hydrocarbon staining, waste drums, illegal dumping, or improper waste storage and/or handling. Apart from the presence of the abandoned oil wells noted above and two above-ground storage tanks (ASTs), no other evidence of environmental concerns, including contamination, distressed vegetation, petroleum hydrocarbon surface staining, waste drums, USTs, illegal dumping, or improper waste storage/handling, was noted during the site reconnaissance, as reflected in **Table 3.12-2**.

Table 3.12-2
Summary of Site Reconnaissance (Phase I Environmental Site Assessment)

Item	Concerns	Comments
General Housekeeping	No	No concerns observed.
Surface Spills	No	No concerns observed.
Stained Surfaces	No	No concerns observed.
Fill Materials	No	No concerns observed.
Pits/Ponds/Lagoons	No	No concerns observed.
Surface Impoundments	No	No concerns observed.
ASTs/USTs	No	A waste oil AST and a gasoline AST were noted on the west and north sides of the maintenance building, respectively.
Oil Wells	No	Several former oil wells are located throughout the project site, although they were not apparent during the site reconnaissance.
Distressed Vegetation	No	No concerns observed.
Wetlands	No	No concerns observed.
Electrical Substations	No	No concerns observed.
Areas of Dumping	No	No concerns observed.
Transformers	No	No concerns observed.
Waste/Scrap Storage	No	No concerns observed.
Chemical Use/Storage	No	No concerns observed.

Source: Phase I Environmental Assessment; EEI, April 15, 2016.

Historical Conditions

The former occupant of the project site, Environmental Golf, was listed under the Hazardous Waste Information System database (HAZNET), which tracks data from hazardous waste manifests received by the DTSC. The date of the listing was 2000, and the waste category included "aged or surplus organics." The disposal method was listed as "Transfer Station." The current occupant of the project site, Westridge Golf Club, was also listed on the HAZNET database with the date of 2004. The waste category was listed as "waste oil/mixed oil" and the disposal method was "recycler." The Westridge Golf Club was also listed under the Above-ground Storage Tank (AST) database as the site of a 1,320-gallon capacity tank (type of content not provided). The Westridge Golf Club was also listed under the OCHCA databases as the site of an AST and as a hazardous waste facility.

In addition, the former occupant of the project site, Chevron USA, Inc., was listed under the following databases: Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) – No Further Assessment Planned (NFRAP), Federal Resource Conservation Recovery Act (RCRA) hazardous waste generator database, NY

Manifest, and Historical Auto Station. The site was also listed under the OCHCA Industrial Cleanup Program and Local Oversight Program databases (PLC Land Company, Tracts 15030 and 15031), as a closed oil field cleanup site with on-site soil reuse areas and a closed UST site.

Other Environmental Conditions

Asbestos-Containing Materials

Most friable (i.e., easily broken or crushed) asbestos-containing materials were banned in building materials by 1978. In October 1995, OSHA redefined the manner by which building materials are classified in regard to asbestos and also the way these materials are to be handled. Under this ruling, "thermal system insulation and sprayed-on or troweled on or otherwise applied surfacing materials," as well as floor or ceiling tiles, siding, roofing, and transite panels applied or installed before 1980 are presumed to contain asbestos-containing materials.

Because golf course facility structures located on the project site were constructed in 1998, the presence of asbestos-containing materials is considered unlikely.

Lead-Based Paint

Lead-based paint has been identified by OSHA, USEPA, and the Department of Housing and Urban Development (HUD) as being a potential health risk to humans, particularly children, based on its effects to the central nervous system, kidneys, and bloodstream. Because structures on the project site were built in 1998 or after, the presence of lead-based paint is unlikely.

Radon

Radon is a radioactive gas that has been identified as a human carcinogen. Radon gas is typically associated with fine-grained rock and soil, and results from the radioactive decay of radium. USEPA recommends that homeowners in areas with radon screening levels greater than 4 Picocurries per liter (pCi/L) conduct mitigation of radon gas to reduce exposure. USEPA's Map of Radon Zones (EPA-402-R-93-071) assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential. Based on such factors as indoor radon measurements, geology, aerial radioactivity, and soil permeability, USEPA has identified Orange County as Zone 2 (i.e., a predicted average indoor radon screening level between 2 and 4 pCi/L), which is less than the 4 p/Ci/L threshold recommended by USEPA.

Surrounding Area

The Phase I environmental site assessment included the results of a search of electronic database listings that identify possible hazardous waste generating establishments in the vicinity of the project site, as well as adjacent sites with known environmental concerns. Facilities that generate, store, or dispose of hazardous materials were identified by county, state,

or federal agencies. Although several sites were identified as having known environmental concerns, only those discussed below were identified as a potential concern. A complete listing of all of the sites is included in the Phase I environmental site assessment (refer to Appendix J).

Federal RCRA Generators List (RCRA-LQG SQG CESQG)

Several listings were reported within a 0.25-mile radius of the project site. Generator permits are not generally cause for an environmental concern, unless a release has occurred at the site. The aforementioned sites were not listed with a release on the Leaky Underground Storage Tank (LUST) database. However, the following two sites are located adjacent to the project site, although neither of them have a documented release:

- Sam's Club No. 4735 (1390 South Beach Boulevard, adjacent to the north)
- ARCO Facility No. 06545 (13550 South Beach Boulevard, adjacent to the southwest)

In addition, the Westridge Plaza Shopping Center was listed as the site of a waste oil release, the case for which was closed by the OCHCA in August 2001. Since the case has been closed by a regulatory agency, this site is not considered an ongoing environmental concern.

EDR US Historical Auto State List

Three listings were reported within a 0.25-mile radius of the project site:

- 1300 South Beach Boulevard, which is historically associated with Chevron USA, Inc.
- 1390 South Beach Boulevard, which is the adjacent Sam's Club #4735 Service Station
- 1950 West Imperial Highway, which is a Chevron gas station

c. Wildland Fire Hazards

The City of La Habra Hazard Mitigation Plan identified wildland fire risk as a "moderately high" hazard with moderate warning time and the potential to occur between once every 8 years and once every 50 years. Anticipated consequences of wildland fire are extensive building damage in a localized area; widespread loss of water, gas, electricity, sanitation, and roads; and potential loss of life. Secondary impacts could include evacuations and increased water supply demand. A wildfire in the City of La Habra Heights to the north may represent the greatest fire threat for the La Habra planning area; however, a mandatory vegetation management program is in place within La Habra Heights to mitigate wildlife damage.

Portions of the project site are designated as having "Very High," "High," and "Moderate" fire hazard potential as reflected in the La Habra General Plan EIR. In September 2015, a fire that started in the West Coyote Hills to the south in Fullerton consumed over 100 acres and posed a risk to the adjacent Westridge residential development south of the project site.

The California Department of Forestry and Fire Protection (CAL FIRE) assesses fire danger through the creation of maps designating Very High Fire Hazard Severity Zones. It appears that the hillside portions of the project site, the existing Westridge community, and the West Coyote Hills property to the south in Fullerton fall within a Very High Fire Hazard Severity Zone.

3.12.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of hazards and hazardous materials impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;

Threshold HAZ-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment;

Threshold HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within 0.25-mile of an existing or proposed school;

Threshold HAZ-4 Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

Threshold HAZ-5 Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such plan has not been adopted, within 2 miles of a public airport;

Threshold HAZ-6 Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area;

Threshold HAZ-7 Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or

Threshold HAZ-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.12.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.

Impact HAZ-1: Because site demolition and construction activities, as well as operation of proposed new residential and commercial uses, would be required to comply with applicable regulations for the use of hazardous materials, the impact related due to routine transport, use, or disposal of hazardous materials would be *less than significant*.

Methodology

Analysis in this impact discussion is focused on the day-to-day (routine) use, disposal, transport, or management of hazardous or potentially hazardous materials that would occur as the result of the residential and commercial uses proposed in the Rancho La Habra Specific Plan. The severity of potential hazards to people, property, and the environment associated with the day-to-day use, transport, and/or disposal of hazardous materials by proposed residential and commercial uses is analyzed. Additionally, this section addresses short-term impacts resulting from demolition of existing structures and facilities associated with the golf course and construction of the proposed residential and commercial uses.

In determining the level of significance, the analysis recognizes that all development under the proposed Specific Plan would be required to comply with relevant federal, state, and local regulations that are designed to ensure the safety of routine transport, use, or disposal of hazardous materials.

A significant impact would result if the project would not comply with applicable federal, state, and local regulations, or would otherwise expose people to health risks or create an environmental hazard due to the day-to-day use, disposal, transport, or management of hazardous or potentially hazardous materials.

Impact Assessment

Demolition and Construction

Construction activities would include demolition and crushing of the existing large parking lot, golf cart paths, maintenance yard, and driving range; grading; and construction of residential and commercial structures and related infrastructure.

Demolition of existing structures is not anticipated to result in the use, transport, or release of hazardous materials. As documented in the Phase I environmental site assessment, due to the

age of the existing structures to be demolished (i.e., after 1998), it is unlikely that either asbestos-containing materials or lead-based paint are present. The asphalt and concrete from demolition would be crushed and reused on the project site. Crushing asphalt and concrete has the potential to cause dust, but not the release of hazardous materials.

Construction of residential and commercial structures and related infrastructure would use hazardous materials in the form of paints, solvents, glues, roofing materials, and other common construction materials containing potentially toxic substances. In addition, hazardous materials would be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials is regulated by County of Los Angeles Fire Department Health and Hazardous Materials Division and the OCHCA, which provide regulatory oversight for federal, state, and local laws related to hazardous materials use. In addition, construction-related refueling would take place in a designated, protected area of the project site in accordance with best management practices (BMPs) outlined in the Stormwater Pollution Prevention Plan (SWPPP) required to be prepared and implemented for the project (see Section 3.13, *Hydrology and Water Quality*).

Operations

The Rancho La Habra Specific Plan proposes residential and retail commercial development with open space. These uses would routinely use limited quantities of potentially hazardous materials consisting of typical household and maintenance products (e.g., paints, fuels, lubricants, cleaning solvents, adhesives, sealers, pesticides/herbicides) that are common in residential neighborhoods and neighborhood commercial centers. Industrial and other uses that would involve the transport, use, or disposal of large quantities of hazardous materials would not be permitted under the Specific Plan.

Significance Conclusion for Impact HAZ-1

Because site demolition and construction activities, as well as operations of new residential and commercial uses, would be required to comply with applicable regulations for the use of hazardous materials, and would not otherwise expose people to health risks or create an environmental hazard, the impact related to routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation measures would be required.

Threshold HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-2.1: Demolition, grading, and construction activities related to the proposed Specific Plan would be required to comply with existing laws and regulations for the routine transport, use, and disposal of hazardous materials. As a result, the impact would be *less than significant*.

Methodology

Analysis in this impact discussion is focused on the potential of a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment from construction under the proposed Specific Plan. This section addresses short-term impacts resulting from demolition of existing golf course facilities, as well as from site grading and construction. Impacts related to the handling of previously buried TPH-affected soils are addressed in Impact HAZ-2.2.

In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and local laws and regulations that are designed to minimize the potential for upset or accident conditions, and to protect public health and safety from foreseeable upset or accident conditions involving release of hazardous materials into the environment.

A significant impact would result if the project would not comply with applicable federal, state, and local regulations, or would otherwise expose people to health risks or create an environmental hazard due to a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment.

Impact Assessment

While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during demolition, grading, and construction activities as discussed in Impact HAZ-1, above, would not pose health risks or result in significant impacts, improper use, storage, transportation, or disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. Thus, construction under the proposed Specific Plan could result in the accidental release of hazardous materials. Additionally, exposure to unanticipated hazardous substances could occur from currently unknown soil contamination that may be present.

The use of BMPs during construction, implemented as part of a SWPPP as required by the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, would minimize potential adverse effects on the general public and the environment. Construction contract specifications would include strict on-site handling rules to keep construction and maintenance materials out of groundwater and soils. BMPs include but are not limited to:

- Establishing a dedicated area for fuel storage and refueling activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

Significance Conclusion for Impact HAZ-2.1

Because construction activities related to the proposed Specific Plan would be required to comply with existing laws and regulations, impacts related due to routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation measures would be required.

Threshold HAZ-2:	**Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.**
Impact HAZ-2.2:	**Soils containing petroleum hydrocarbons would be encountered during site grading. A Soils Management Plan approved by the Orange County Health Care Agency sets forth extensive controls that make a substantial health risk unlikely; however, a health risk is nevertheless possible. The impact would be *significant but mitigable*.**

Methodology

Analysis in this impact discussion is focused on the potential of a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment from the exposure, excavation, and re-burying of TPH-affected soils during site grading activities.

In determining the level of significance, the analysis recognizes that management of TPH-affected soils during site grading activities would be required to comply with relevant federal,

state, and local laws and regulations that are designed to minimize the potential for upset or accident conditions, and to protect public health and safety from foreseeable upset or accident conditions. Specifically, the EIR's analysis recognizes that exposure, excavation, and placement of previously buried on-site soils containing TPH-affected soils would occur under the regulatory authority and supervision of the OCHCA.

A significant impact would result if the project would not comply with applicable federal, state, and local regulations, or would otherwise expose people to health risks or create an environmental hazard due to a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment.

Impact Assessment

Release of hazardous materials into the environment could occur during transport of equipment and fuel to and from the project site and/or during remedial grading of contaminated soils. The transport of equipment and fuel to the project site would create the potential for spills of gasoline or diesel fuel. Refueling is limited to a designated location with BMPs to be specified in the required SWPPP for the project site. Furthermore, the transport of fuel onto the project site would be regulated by federal and state laws, which minimize the potential for upset or an accident condition.

As discussed in Chapter 2, *Project Description*, to provide for adequate soil compaction and adequate depth below ground surface to allow for proposed residential development, approximately 260,000 cubic yards of previously buried TPH-affected soil would be excavated and placed in one of four pre-designated deep fill locations in accordance with standards previously established by the OCHCA and the RWQCB (see **Figure 2-6** and **Figure 2-7** in Chapter 2, *Project Description*). Thus, grading, utility trenching, soils excavation and stockpiling, and related activities would be conducted in areas previously identified as having VOCs and/or petroleum hydrocarbon-impacted soils, which could expose construction workers to potential health hazards and risks associated with the impacted soil. Improper handling of these soils (and any other TPH-affected soil that may be encountered) could also result in their release into the environment as fugitive dust, erosion, or infiltration into groundwater.

In addition, to provide for adequate soil compaction, soils previously placed during golf course construction would be excavated down to bedrock and re-compacted to provide an adequate base for proposed residential and commercial development. During the drilling and sampling of 10 geotechnical soil borings at the site in 2014, EEI screened samples collected for evidence of contamination (dark staining and/or odor) and retained a total of 18 samples for laboratory analysis of petroleum hydrocarbons. Of the 18 samples, three showed evidence of crude oil-impacted soil at specific depths. These locations were along the southern margin of the golf course (at a depth of 50 to 70 feet), near the maintenance building (at a depth of 2 to 3 feet), and

in the northwest corner of the golf course along Beach Boulevard (at a depth of 10 to 40 feet). Site grading activities would expose these soils.

Grading and excavation of sites during construction under the proposed Specific Plan may expose construction workers and the public to potentially unknown hazardous substances present in the soil. If any previously unidentified sources of contamination are encountered during grading or excavation, the handling and removal activities required could pose health and safety risks to workers and the public. Soil, water, or air contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances.

Significance Conclusion for Impact HAZ-2.2

The reuse of soil containing crude oil on-site as deep fill and the overlaying of that fill with clean soil (i.e., soil capping) is a standard industry practice that is a common form of engineering control at regulated cleanup sites. This practice is regularly approved by USEPA, the SWRCB, RWQCBs, and cities and counties throughout the state, including the OCHCA, because it has been found to eliminate the risk of contaminants being released from soil into the environment.

Soil capping, as proposed for the project site, involves the placement of a defined thickness of clean soil over the top of reused soil. The clean soil layer provides a buffer separating the contamination from future site occupants and the environment. USEPA requires the thickness of clean soil to be at least 2 to 3 feet in non-residential locations, and 10 feet for residential uses. In accordance with the approved Soils Management Plan for Rancho La Habra, the project would use a total of 20 feet of clean soil throughout the site. Underneath the reused soil, there would also be a 20-foot clean soil buffer maintained between the base of the contaminated fill and the estimated groundwater surface, as required by the RWQCB. This buffer would prevent any potential mixing of soil containing crude oil and shallow groundwater.

The OCHCA has directed that soil used in the buffer must contain less than 100 milligrams per kilogram (mg/kg) TPH, and must meet the screening levels outlined in USEPA's Regional Screening Levels and supplemented by DTSC HERO Note 3. These buffer soils would be tested by a remediation specialist to ensure compliance with the mandated soil screening levels.

The Soils Management Plan for the project site, approved for the project site by the OCHCA, sets forth the following requirements to minimize hazards from the excavation and placement of TPH-affected soils:

- Standard work practices, such as suppressing dust, performing proposed site improvements in the upwind position, and monitoring for the potential presence of VOCs, shall be observed. Where impractical, the site safety officer, or designated alternate, is to be consulted to identify acceptable alternatives. If an inhalation hazard is identified, Level C respiratory protection using National Institute for Occupational Safety and Health (NIOSH)-approved half-face air purifying respirators with volatile

organic or combination high-efficiency particulate (HEPA)/volatile organic cartridges shall be required.

- Skin exposure of workers is to be limited by use of gloves, eye protection, and hard hat; hand washing; and limiting incidental ingestion of soil.

The excavation, stockpiling, sampling, and placement of TPH-affected soils must follow the approved Soils Management Plan. This includes the proper handling of potentially impacted soils during removal and placement such that potential impacts due to odor, dust, runoff, and physical contact are mitigated.

In addition, control of petroleum hydrocarbon vapor emissions would follow the guidelines set forth by South Coast Air Quality Management District Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. While significant VOCs are not anticipated at this site, based on previous testing, impacted soil would be monitored during grading with an Organic Vapor Analyzer for vapor emissions and control measures would be implemented whenever levels exceed applicable thresholds (i.e., greater than 50 ppm).

Soil testing is required to be performed by a qualified remediation specialist, as overseen by the OCHCA, and would occur prior to completion of grading to (1) verify the complete removal of previously placed fill soil in the original reuse areas, (2) characterize the excavated fill once it is placed in stockpiles, and (3) verify that all soils in the upper 10 feet meet the criteria established by the OCHCA.

During construction, soil piles would be watered (misted) or covered when necessary to prevent fugitive dust. This would prevent the potential release of contaminated soil into the environment.

In addition, the fugitive dust control measures set forth in EIR Section 3.8, *Air Quality*, and the erosion control measures set forth in EIR Section 3.13, *Hydrology and Water Quality*, would be maintained.

Recognizing the potential of encountering TPH-affected soil outside of existing reuse areas, the Soils Management Plan also provides requirements for general site grading, as follows:

- During site grading, excavated soil originating from outside of the three reuse areas that visually displays dark discoloration/staining shall be flagged and segregated during the excavation process. These segregated soils shall be tested to determine whether the soil can be reused as cover or must be placed within a deep fill location.
- Potentially impacted soils shall be stockpiled on plastic sheeting to segregate contaminated soils from clean soils. Vapor and dust from excavation and stockpiling activities shall be controlled using one or more of the following: water misting, covering with poly sheeting; backfilling of off-gassing excavations, locating stockpiles away from and/or downwind of on-site workers and public receptors, and reducing the pace of project site activities and/or halting activities. In general, flagged (impacted) locations

outside of the reuse areas are to be visually located, and confirmed by hand-held (or equivalent) global positioning system (GPS) equipment, when necessary.

- Excavation efforts shall proceed at individual flagged (impacted) suspect areas based upon visual staining and/or other methods (i.e., air monitoring equipment). Confirmation soil samples shall be collected from stockpiled soil and excavation limits, and properly documented as excavation proceeds. Final excavation confirmation sampling should be conducted at a rate of at least one soil sample per 5-foot vertical interval/20-foot horizontal interval of exposed sidewall and/or excavation floor. However, this sample frequency may be modified in the field based on site-specific conditions such as accessibility, soil homogeneity, and results of previous sampling data.
- Soil samples shall be collected using appropriate hand sampling tools or from the bucket of the excavation equipment and placed in laboratory-supplied glass sample jars and/or stainless steel sleeves, as required. In either case, samples should be compacted within the sample container to remove any head space. Soil samples shall be sealed with Teflon-lined lids/caps, labeled with a number unique to the sample, placed in a chilled cooler, and logged under proper chain-of-custody (COC) protocol for transportation to a California-state certified laboratory. A mobile laboratory may be used to analyze soil samples during the excavation confirmation process, depending upon the nature of the contaminant and/or the scheduling needs of the project.

The Soils Management Plan does not, however, mandate preparation of a human health risk assessment to quantify exposure of workers and neighborhood residents to airborne contaminants during proposed remedial grading activities. Although the controls mandated by the Soils Management Plan make a substantial health risk unlikely, a health risk is nevertheless possible. Thus, a significant impact would result.

Mitigation Measures

Mitigation Measure HAZ-2.2: Excavation, handling, and placement of contaminated soils within the project site shall be undertaken so as to achieve a residential cleanup standard of an acceptable excess cancer risk (ECR) of 1×10^{-5} for construction workers, residents and workers within proposed uses on-site, and residents of adjacent neighborhoods.

Significance Conclusion for Impact HAZ-2.2 with Implementation of Mitigation Measures

Implementation of **Mitigation Measure HAZ-2.2**, combined with the controls mandated by the Soils Management Plan, would ensure that the project would not result in a substantial health risk. The Soils Management Plan, in combination with **Mitigation Measure HAZ-2.2**, would reduce the impact to a less-than-significant level.

Threshold HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-2.3: Three dwelling units are proposed directly over previously abandoned wells, and site grading, including lowering of ground elevations over previously abandoned wells, could affect their integrity. Compliance with site review requirements of the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) would ensure public safety. The impact would be *less than significant*.

Methodology

Analysis in this impact discussion is focused on the potential of a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment from development envisioned under the proposed Specific Plan. This section addresses impacts that proposed site grading might have on former oil wells within the project site that were previously abandoned pursuant to DOGGR regulations at the time of golf course construction.

In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and local laws and regulations that are designed to minimize the potential for upset or accident conditions, and to protect public health and safety from foreseeable upset or accident conditions.

A significant impact would result if the project would not comply with applicable federal, state, and local regulations, or would otherwise expose people to health risks or create an environmental hazard due to a reasonably foreseeable upset or accident condition involving damage to a previously abandoned oil well.

Impact Assessment

Three dwelling units are proposed over wells in the western portion of the project site (see **Figure 3.12-1**). These wells were previously abandoned per DOGGR requirements as part of golf course construction. In addition, grading of the project site would occur and lower existing grades in some areas over abandoned wells, potentially affecting as many as 20 of the abandoned wells, damaging their integrity and requiring previously abandoned wells to be cut and capped (re-abandoned). According to the Phase I environmental site assessment, the DOGGR would require construction review for wells where development is either directly on top of or in close proximity to (i.e., roughly 50 feet from) an existing well.

Significance Conclusion for Impact HAZ-2.3

Although three dwelling units are proposed directly over previously abandoned wells and site grading over abandoned wells could affect their integrity, compliance with DOGGR site review requirements would ensure public safety. Where homes are being built over an abandoned well, as a condition of approval, the City will require full disclosure of this fact be made to the homebuyer, the condition noted on the grant deed, and a disclosure form signed with a copy to be provided to the City. The impact would be less than significant.

Threshold HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-2.4: Proposed residential and commercial uses would routinely use and store result small quantities of common chemicals (e.g., paints, solvents, and cleaning products). Such hazardous materials would be used and stored in accordance with applicable regulations. As a result, reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be unlikely, and the impact would be *less than significant*.

Methodology

Analysis in this impact discussion is focused on the potential of a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment from proposed residential and commercial uses during ongoing operations. This section addresses the potential for risk of upset and the severity of consequences to people or property associated with the potential release of hazardous materials into the environment from operation of proposed land uses.

In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and local laws and regulations that are designed to minimize the potential for upset or accident conditions, and to protect public health and safety from foreseeable upset or accident conditions involving release of hazardous materials into the environment.

A significant impact would result if proposed uses would not comply with applicable federal, state, and local regulations, or would otherwise expose people to health risks or create an environmental hazard due to a reasonably foreseeable upset or accident condition involving release of hazardous materials into the environment.

Impact Assessment

Development under the proposed Specific Plan would involve residential and commercial land uses, and would include the use of and storage of common hazardous materials such as paints, solvents, and cleaning products. Additionally, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides. The environmental and health effects of different chemicals are unique to each chemical and depend on the extent to which an individual is exposed. The extent and exposure of individuals to hazardous materials would be limited by the relatively small quantities of these materials that would be stored and used on the proposed residential and commercial portions of the project site.

Significance Conclusion for Impact HAZ-2.4

Proposed residential and commercial uses would routinely use and store small quantities of common chemicals (e.g., paints, solvents, and cleaning products) in accordance with applicable regulations designed to reduce the potential consequences of hazardous materials accidents. As a result, reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be unlikely, and the impact would be less than significant.

Threshold HAZ-3:	**Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within 0.25-mile of an existing or proposed school.**
Impact HAZ-3:	**While project site development would not result in hazardous emissions or handling of acutely hazardous materials, site grading would result in the excavation, stockpiling, and placement of total petroleum hydrocarbon (TPH)-affected soils below the project site, which is within 0.25-mile of Las Positas Elementary School. TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the Orange County Health Care Agency, and the project would be required to comply with applicable rules of the South Coast Air Quality Management District; however, a hazard is nevertheless possible. The impact would be *significant but mitigable*.**

Methodology

Analysis in this impact discussion is focused on the potential of the proposed Specific Plan to result in hazardous emissions or handling of hazardous or acutely hazardous materials within

0.25-mile of an existing or proposed school. The potential severity of consequences to people or property at school facilities in the event of a release of hazardous materials into the environment from operation of proposed residential and commercial uses is analyzed.

In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and local laws and regulations that are designed to minimize emission or release into the environment of hazardous or acutely hazardous materials, particularly within 0.25-mile of an existing or proposed school.

A significant impact would occur if (1) the proposed project would handle hazardous or acutely hazardous materials within 0.25-mile of an existing or proposed school, either due to routine use or an upset or accident condition; and (2) such handling could result in the release of these materials into the environment.

Impact Assessment

Las Positas Elementary School is located approximately 0.25 miles northeast of the project site.

Common hazardous materials would be used in the construction and operation of new residential and commercial uses within the Specific Plan area. Materials used would include standard construction materials (e.g., paints, solvents, and adhesives), cleaning and other maintenance products, diesel and other fuels (used in construction and maintenance equipment and vehicles), and pesticides associated with landscaping around new developments. The Specific Plan provides for residential and commercial uses, and does not propose industrial uses that would result in hazardous emissions or that are considered acutely hazardous.

Additionally, routine use, transport, and disposal of hazardous materials would occur with implementation of the Specific Plan; however, the types of uses that would emit or release hazardous or acutely hazardous materials into the environment are typically industrial manufacturing facilities, which are not proposed by the Specific Plan. In addition, retail businesses that handle or store hazardous materials (such as cleaning solvent) would be required to comply with the provisions of previously described state and federal regulations for hazardous wastes. The laws and regulations related to the generation of hazardous emissions and handling hazardous materials are intended to minimize potential health risks associated with their use or the accidental release of such substances. Compliance with existing regulations would minimize the risks to sensitive receptors, including schools.

As previously discussed, development of the Westridge neighborhood and the Westridge Golf Club involved extensive grading of an abandoned oil field, including placement of approximately 430,000 cubic yards of soil containing TPHs, a chemical compound associated with crude oil, in several low-lying locations beneath the golf course.

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, approximately 260,000 cubic yards of TPH-affected soils would be removed and placed a minimum of 20 feet below the ground surface in accordance with standards previously established by the OCHCA and the RWQCB. Excavation, stockpiling, and placement of TPH-affected soils below the ground surface could result in exposure of TPH to the surrounding environment.

Significance Conclusion for Impact HAZ-3

While project site development would not result in hazardous emissions or handling of acutely hazardous materials, site grading would result in the excavation, stockpiling, and placement of TPH-affected soils below the project site, which is within 0.25-mile of Las Positas Elementary School. Thus, a significant impact would result, requiring mitigation.

Mitigation Measures

See **Mitigation Measure HAZ-2.2**.

Significance Conclusion for Impact HAZ-3 with Implementation of Mitigation Measures

Because TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the OCHCA and such handling would be required to comply with applicable rules of the South Coast Air Quality Management District and the requirements of **Mitigation Measure HAZ-2.2**, the impact would be reduced to a less- than-significant level.

Threshold HAZ-4: **Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.**

Impact HAZ-4: **Due to past oil extraction activities, the project site is included on a list of hazardous materials sites. TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the Orange County Health Care Agency, and such handling would be required to comply with applicable rules of the South Coast Air Quality Management District; however, a hazard is nevertheless possible. The impact would be *significant but mitigable*.**

Methodology

The methodology used in this assessment includes review of database information to assess the potential presence of hazards and hazardous materials sites within the Specific Plan area. The Specific Plan area was evaluated for the presence of hazardous materials based on a review of the USEPA CERCLIS database, the DTSC EnviroStor database, and the RWQCB GeoTracker database. In addition, a Phase I environmental site assessment report (EEI 2016) was prepared for the project site.

To identify the level of significance in relation to this threshold, the first step is to determine whether the Specific Plan area encompasses any sites that are included on a list of hazardous materials sites or that contain unidentified/unknown contaminants. Next, the analysis recognizes that all development would be required to comply with relevant federal, state, and local laws and regulations that are designed to remediate such sites so as to protect the public health.

A significant impact would occur if development would occur on a hazardous materials site that could endanger public health or the environment.

Impact Assessment

Given past oil activities, the project site is included on lists of hazardous materials sites.

As discussed in relation to **Impacts HAZ-2.2 and HAZ-3**, 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, approximately 260,000 cubic yards of TPH-affected soils would be removed and placed a minimum of 20 feet below the ground surface in accordance with standards previously established by the OCHCA and the RWQCB. Excavation, stockpiling, and placement of TPH-affected soils below the ground surface could result in exposure of TPH to the surrounding environment.

Significance Conclusion for Impact HAZ-4

While project site development would not result in hazardous emissions or handling of acutely hazardous materials, development would occur on a hazardous materials site that could endanger public health or the environment. Thus, a significant impact would result, requiring mitigation.

Mitigation Measures

See **Mitigation Measure HAZ-2.2**.

Significance Conclusion for Impact HAZ-4 with Implementation of Mitigation Measures

Because TPH-affected soils would be handled pursuant to a Soils Management Plan approved by the OCHCA and such handling would be required to comply with applicable rules of the South Coast Air Quality Management District and the requirements of **Mitigation Measure HAZ-2.2**, the impact would be reduced to a less- than-significant level.

Threshold HAZ-5: Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such plan has not been adopted, be within 2 miles of a public airport use airport or public use airport.

Impact HAZ-5: Because the project site is not within an airport land use plan or within 2 miles of a public airport for which an airport land use plan has not been adopted, *no impact* would result.

Methodology

The first test in evaluating whether a significant impact would occur is to determine whether any portion of proposed development within the Specific Plan area would be within an airport land use plan or within 2 miles of a public airport for which an airport land use plan has not been adopted. Because development pursuant to the proposed Specific Plan would not be located within a noise contour or airport influence area of any public airport facility that has an airport land use plan, and would also not be within 2 miles of a public use airport for which an airport land use plan has not been adopted, further analysis related to the potential hazards related to public airports was unnecessary.

Impact Assessment

The project site 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, 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 the County of Orange. The project site and the City 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.

Significance Conclusion for Impact HAZ-5

Because the project site is not within an airport land use plan or within 2 miles of a public airport for which an airport land use plan has not been adopted, there would be no impact. No mitigation is required.

Threshold HAZ-6: Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area.

Impact HAZ-6: Because the project site is not within 2 miles of a private airstrip, there would be *no impact*.

Methodology

The first test in evaluating whether a significant impact would occur is to determine whether any private airstrips were located within 2 miles of the Specific Plan area. Because there are no private airstrips within 2 miles of the Specific Plan area, further analysis related to the potential hazards related to private airstrips was unnecessary.

Impact Assessment

No private airstrips are located within 2 miles of the project site. Therefore, future residents would not be exposed to safety hazards associated with aviation operations related to a private airstrip.

Significance Conclusion for Impact HAZ-6

Because the project site is not within 2 miles of a private airstrip, there would be no impact. No mitigation is required.

Threshold HAZ-7: Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact HAZ-7: La Habra Hills Drive would be temporarily closed during site grading, temporarily eliminating emergency access to the Westridge community during project construction. The temporary closure of La Habra Hills Drive that would occur during project site grading would not affect emergency access from the two closest fire stations serving the project site and the Westridge community. In addition, as a standard condition for issuance of a building permit, the applicant would be required to prepare and implement a Construction Phase Emergency Fire Access Plan and a Construction Phase Emergency Access Plan, which would ensure adequate emergency response is available to

the project site and the adjacent Westridge community in the event of an emergency. Therefore, the impact would be *less than significant*.

Methodology

The following analysis determines whether the proposed Specific Plan would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan due to proposed site access or another configuration.

In determining the level of significance, the analysis assumes that if implementation of the Specific Plan would interfere with implementation of an adopted emergency plan, impede evacuation routes, or restrict access of emergency response personnel, impacts would be considered significant.

Impact Assessment

In the existing condition, La Habra Hills Drive extends from Imperial Highway to the golf course clubhouse and then south to a gated access at the Westridge community. For approximately 15 months during project site grading and infrastructure installation, La Habra Hills Drive would be closed to Westridge residents across the project site. During this time, the remaining two access points to the Westridge community -- Hillsborough west to Beach Boulevard and Nicklaus Avenue east to Idaho Street – would remain available for daily traffic and emergency access.

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 mile of the Westridge community. The two fire stations are:

- Station 193 at 1000 Risner Way, La Habra, located just east of Idaho Street, near the entry to the eastern portion of the Westridge community; and
- 13540 Beach Boulevard, La Mirada, located near the entry to the western portion of the Westridge community.

Following grading and infrastructure improvements, La Habra Hills Drive would be re-opened to the Westridge 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 both daily and emergency use.

Significance Conclusion for Impact HAZ-7

The temporary closure of La Habra Hills Drive that would occur during project site grading would not affect emergency access from the two closest fire stations serving the Westridge

community. In addition, as a standard condition for issuance of a building permit, the applicant would be required to prepare and implement a Construction Phase Emergency Fire Access Plan and a Construction Phase Emergency Access Plan, subject to approval of the Fire Chief, Police Chief, and Community Development Director. These plans would ensure adequate emergency response is available to the project site and adjacent Westridge community. Therefore, the impact would be considered less than significant and no mitigation would be required.

Threshold HAZ-8: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact HAZ-8: Proposed project site development would place new residential uses within a Very High Fire Hazard Area and intensify development along a wildland-urban interface, increasing fire hazards. Compliance with existing codes, along with implementation of the proposed Fire Management Plan as approved by the Los Angeles County Fire Department, would ensure an adequate level of fire safety. As a result, the impact would be *less than significant*.

Methodology

A significant impact would occur if development were proposed within or adjacent to a high fire hazard zone or within a wildland-urban interface. To determine whether a significant impact would result from the proposed project, the Specific Plan was evaluated against existing State of California wildland fire hazard maps, as well as discussion of wildland fire hazards in the La Habra General Plan and General Plan EIR.

Impact Assessment

Proposed project site development would place new residential uses within a Very High Fire Hazard Area and intensify development along a wildland-urban interface. As a result, proposed residential structures would be subject to hazards from wildland fires, and the potential would exist for a structural fire within the project site to spread into adjacent wildland areas.

Significance Conclusion for Impact HAZ-8

The proposed project includes a Fire Management Plan (**Figure 3.12-2**). The plan would require fuel modification on newly constructed slopes between residential lots and the approximately 11 acres of Coastal Sage Scrub habitat in the southwest corner of the project site and on a portion of the existing slope separating the project site from the existing Westridge community.

As a condition of approval, prior to issuance of a grading permit, the Chief Building Official would ensure that the proposed Fire Management Plan has been submitted to and review by the Los Angeles County Fire Department, and that the Fire Department has approved the plan along with any required revisions to the plan.

Fire suppression services in La Habra are provided by the Los Angeles County Fire Department. To help protect the City and its residents from fire hazards, the City of La Habra and the County of Los Angeles require that development complies with both building and fire codes. Provisions include sprinkler and fire hydrant requirements in new structures and

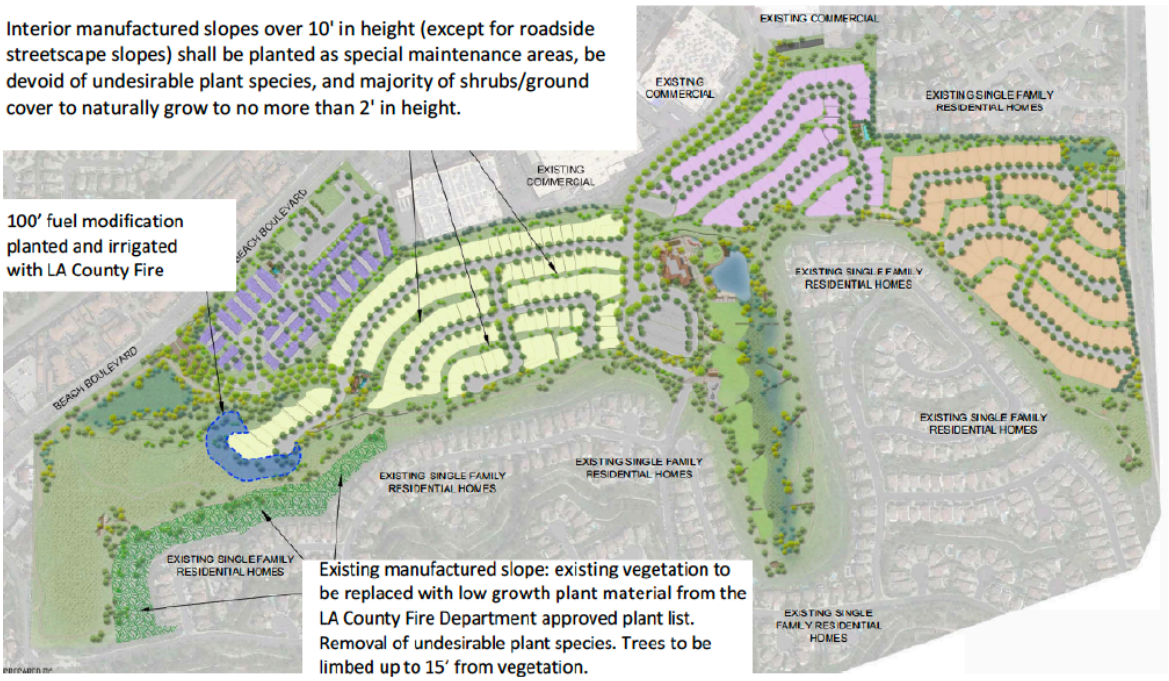


Figure 3.12-2 Proposed Fire Management Plan

remodels, road widths and configurations designed to accommodate the passage of fire trucks and engines, and requirements for minimum fire flow rates for water mains and fire hydrants. The City has also adopted the most recent edition of the California Building Code that includes sections on fire-resistant construction material requirements based on building use and occupancy. The construction requirements are a function of building size, purpose, type, materials, location, proximity to other structures, and the type of fire suppression systems installed.

The proposed project would also be required to comply with the City's Fire Code (Section 15.46 of the La Habra Municipal Code).

Compliance with existing codes, along with implementation of the proposed Fire Management Plan as approved by the Los Angeles County Fire Department, would ensure an adequate level

of fire safety within high fire hazard zones and along the wildland-urban interface. As a result, the proposed project would have a less-than- significant impact, and no mitigation measures are required.

3.12.6 REFERENCES – HAZARDS AND HAZARDOUS MATERIALS

CAL FIRE, Very High Fire Hazard Severity Zones in LRA (Local Response Area) As Recommended By CAL FIRE. Accessed June 15, 2017: http://frap.fire.ca.gov/webdata/maps/orange/fhszl_map.30.pdf.

California Board of Forestry and Fire Protection (BOF), California Department of Forestry and Fire Protection, *General Guidelines for Creating Defensible Space*, Adopted by BOF on February 8, 2006, Approved by Office of Administrative Law on May 8, 2006. Accessed June 15, 2017: http://bofdata.fire.ca.gov/PDF/Copyof4291finalguidelines9_29_06.pdf.

City of La Habra, *City of La Habra General Plan 2035,* adopted January 21, 2014.

City of La Habra, La Habra General Plan Update Final Environmental Impact Report (SCH No. 20130151092), The Planning Center/DC&E, certified January 21, 2014.

EEI Geotechnical & Environmental Solutions, Phase I Environmental Site Assessment – Proposed Rancho La Habra, November 2016.

EEI Geotechnical & Environmental Solutions, Soil Management Plan – Proposed Rancho La Habra, September 2015.

EEI Geotechnical & Environmental Solutions, Soil Management Plan Addendum – Proposed Rancho La Habra, November 2016.

Orange County Airport Land Use Commission, Airport Environs Land Use Plan for Fullerton Municipal Airport, November 18, 2004. Accessed June 14, 2017: http://www.ocair.com/commissions/aluc/docs/FMA_AELUP-November-18-2004.pdf.

3.13 HYDROLOGY AND WATER QUALITY

3.13.1 INTRODUCTION

a. Overview

This section addresses hydrology and water quality issues associated with proposed Rancho La Habra Specific Plan, and evaluates the potential for environmental impacts related to surface and groundwater quality, groundwater supplies, erosion, flood zones, levee and dam failure, and inundation due to seiche, tsunami, or mudflow.

Issues related to the capacity and construction of construction of stormwater drainage facilities are addressed in Section 3.17, *Utilities, Service Systems, and Water Supply*.

b. Definitions

- **100-Year Flood** is a flood that has a 1 percent statistical chance of occurring in any given year. The 100-year flood can, however, occur in consecutive years or multiple times within a year.
- **100-Year Storm** is a storm that has a 1 percent statistical chance of occurring in any given year. The 100-year storm can, however, occur in consecutive years or multiple times within a year.
- **Aquifer** refers to a body of rock or sediment that is sufficiently porous and permeable to store, transmit, and yield significant or economic quantities of groundwater to wells and springs.
- **Area of Shallow Flooding** includes lands designated as Zone AO, AH, or VO on the Flood Insurance Rate Map (FIRM). The base flood depths range from 1 to 3 feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
- **Area of Special Flood Hazard** includes lands in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year; sometimes referred to as the "Base Flood." This area is designated as Zone A, AO, AH, A1-A30, AE, A99, VO, V1-30, VE, or V on the FIRM.
- **Base Flood** is a flood having a 1 percent chance of being equaled or exceeded in any given year (also called the "100-year flood").
- **Basin Plan** refers to a water quality control plan developed pursuant to the federal Clean Water Act[1] Section 13240. The Basin Plan is a master policy document that

[1] The Clean Water Act (CWA) was originally known as the Federal Water Pollution Control Act of 1948, which was the first major U.S. law to address water pollution. Concern for controlling water pollution led to sweeping amendments in 1972. As amended in 1972, the law became commonly known as the Clean Water Act (CWA).

contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the region. The Basin Plan must include (1) a statement of beneficial water uses that the Regional Water Quality Control Water Board (RWQCB) will protect, (2) the water quality objectives needed to protect the designated beneficial water uses, and (3) the strategies and time schedules for achieving the water quality objectives. Factors to be considered by a RWQCB in establishing water quality objectives must include, but are not necessarily limited to, all of the following: (1) past, present, and probable future beneficial uses of water; (2) environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; (3) water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area; (4) economic considerations; (5) the need for developing housing within the region; and (6) the need to develop and use recycled water.

- **Best Management Practices (BMPs)**, in relation to stormwater management, are control measures taken to mitigate changes to both quantity and quality of urban runoff caused through changes to land use. BMPs are designed to reduce stormwater volume, peak flows, and/or nonpoint source pollution through evapotranspiration, infiltration, detention, and filtration or biological and chemical actions. Stormwater BMPs are often classified as "structural" (i.e., devices installed or constructed on a site) or "non-structural" (procedures, such as modified landscaping practices). The U.S. Environmental Protection Agency (USEPA) publishes lists of stormwater BMPs for use by local governments, builders, and property owners.
- **FEMA** refers to the Federal Emergency Management Agency.
- **Flood Insurance Rate Map (FIRM)** refers to the official map on which the Federal Insurance and Mitigation Administration has delineated both the Areas of Special Flood Hazards and the risk premium zones applicable to the community.
- **Flooded** refers to any condition in which the soil surface is temporarily covered with flowing water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or any combination of sources.
- **Frequency (Inundation)** refers to the average frequency of flooding by surface water or soil saturation. It is usually expressed as the number of years (e.g., 50 years) the soil is inundated or saturated at least once during a year.
- **Groundwater** includes water that occurs beneath the land surface and fills the pore spaces of the alluvium, soil, or rock formation in which it is situated. It excludes soil moisture, which refers to water held by capillary action in the upper unsaturated zones of soil or rock.
- **Groundwater Basin** refers to any basin identified in the California Department of Water Resources "California's Groundwater: Bulletin No. 118" (September 1975, updated 2003), and any amendments to that bulletin, but does not include a basin in which the

average well yield, excluding domestic wells that supply water to a single-unit dwelling, is less than 100 gallons per minute.

- **Groundwater Table** refers to the upper surface of the zone of saturation in an unconfined aquifer.
- **Hydrologic Conditions of Concern** represent a combination of upland hydrologic conditions and stream biological and physical conditions that present a condition of concern for physical and/or biological degradation of streams.
- **Hydromodification** refers to any activity that increases the velocity and volume (flow rate)—and often the timing—of runoff, such as development of impervious surfaces, vegetation removal, dredging/filling, or other alterations to natural land contours for the purposes of new development.
- **Inundation** is the condition in which water from any source temporarily or permanently covers a land surface.
- **Low Impact Development (LID)** is an approach to land development that uses various land planning and design practices and technologies to simultaneously conserve and protect natural resource systems and reduce infrastructure costs. Typically, emphasis is on employing natural and constructed features that reduce the rate of stormwater runoff, filter out pollutants, facilitate stormwater storage on-site, infiltrate stormwater into the ground to replenish groundwater supplies, or improve the quality of receiving groundwater and surface water.
- **Mudflow** refers to a landslide composed of saturated rock debris and soil with a consistency of wet cement.
- **National Flood Insurance Program (NFIP)** is the federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.
- **National Pollutant Discharge Elimination System (NPDES)** refers to the provision of the federal Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the USEPA, a state, or another delegated agency.
- **Nonpoint Source Pollution** refers to pollution that enters water from dispersed and uncontrolled sources, such as surface runoff, rather than through pipes. Nonpoint sources (e.g., landscape practices, on-site sewage disposal, and automobiles) may contribute pathogens, suspended solids, and toxicants. While individual sources may seem insignificant, the cumulative effects of nonpoint source pollution can be significant.
- **Non-Stormwater Discharge** includes any discharge that is not entirely composed of stormwater except those noted within an NPDES permit.
- **Pollutant of Concern** refers to a contaminant that would contribute to impairments in downstream receiving waters.
- **Receiving Waters** refers to water bodies, (including streams or rivers, existing lakes, or the ocean) that receive treated or untreated runoff from upland areas.

- **Seiche** is a surface wave created when a body of water is shaken, usually by earthquake activity.
- **Stormwater** refers to discharges generated by runoff from land and impervious areas, such as paved streets, parking lots, and building rooftops, during rainfall and snow events that often contain pollutants in quantities that could adversely affect water quality. Most stormwater discharges are considered point sources and require coverage by a NPDES permit.
- **Surface Water** refers to water present above the substrate or soil surface.
- **Total Maximum Daily Loads (TMDLs)** is a regulatory term in the U.S. Clean Water Act, describing a plan for restoring impaired waters that identifies the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards.
- **Tsunami** refers to the ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. Tsunamis are sometimes referred to as "tidal waves" due to their common appearance as that of an extraordinarily high, rapidly rising, and forceful tide. The use of this term to describe tsunamis is discouraged by the scientific community, however.

3.13.2 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

Clean Water Act

The Clean Water Act established the basic structure for regulating discharges of pollutants into "waters of the U.S." The act specifies a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Key components of the Clean Water Act that are relevant to the proposed Specific Plan are as follows:

- Sections 303 and 304, which provide for water quality standards, criteria, and guidelines. Section 303(d) requires the state to develop lists of water bodies that do not attain water quality objectives (are impaired) after implementation of required levels of treatment by point-source dischargers (municipalities and industries). Section 303(d) also requires that the state develop TMDLs for each of the listed pollutants. The TMDL is the amount of pollutant loading that the water body can receive and still be in compliance with water quality objectives. After implementation of the TMDL, it is anticipated that the contamination that led to the 303(d) listing would be remediated. Preparation and management of the Section 303(d) list are administered by the RWQCBs.

- Section 401 requires every applicant for a federal permit or license for any activity that may result in a discharge to a water body to obtain a water quality certification that the proposed activity would comply with applicable water quality standards.
- Section 402 regulates point- and nonpoint-source discharges to surface waters through the NPDES program. In California, the State Water Resources Control Board (SWRCB) oversees the NPDES program, which is administered by the RWQCBs. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits.
- Section 404 establishes a program to regulate the discharge of dredged or fill material into "waters of the United States," including wetlands. Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).
- The basic premise of the 404 program is that no discharge of dredged or fill material may be permitted if (1) a practicable alternative exists that is less damaging to the aquatic environment, or (2) the nation's waters would be significantly degraded. In other words, permit applicants must show that steps have been taken to avoid impacts on wetlands, streams, and other aquatic resources; that potential impacts have been minimized; and that compensation will be provided for all remaining unavoidable impacts.
- Proposed activities are regulated through a permit review process. For most discharges that will have only minimal adverse effects, a "general permit" may be suitable. General permits are issued on a nation-wide, regional, or state basis for particular categories of activities. The general permit process eliminates individual review, and allows certain activities to proceed with little or no delay, provided that the applicable conditions for the general permit are met. For example, minor road improvements and utility lines are activities that can be considered for a general permit. States also have a role in Section 404 decisions, through state program general permits, water quality certification, or program assumption.
- An individual permit is required for potentially significant impacts. Individual permits are reviewed by the U.S. Corps of Engineers, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the Clean Water Act Section 404(b)(1) Guidelines, regulations promulgated by USEPA.

National Pollutant Discharge Elimination System

The NPDES permit system was established in the Clean Water Act to regulate municipal and industrial discharges to the surface waters of the United States. Section 402 of the Clean Water Act contains general requirements regarding NPDES permits. Section 307 of the Clean Water Act describes the factors that USEPA must consider in setting effluent limits for priority pollutants.

The purpose of the NPDES municipal program is to establish a comprehensive water quality program to manage urban stormwater in order to minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of characterization of the receiving water quality, identification of harmful constituents, identification of potential sources of pollutants, and implementation of a Comprehensive Storm Water Management Program. One of the primary objectives of water quality regulations, including the NPDES program, is the reduction of pollutants and sediments in urban stormwater runoff to the maximum extent possible through the use of BMPs.

There are two categories of BMPs: structural and non-structural. Structural BMPs involve the specific construction, modification, operation, maintenance, or monitoring of facilities to minimize the introduction of pollutants from the drainage system. Non-structural BMPs are activities, programs, and other non-physical measures that would contribute to the reduction of pollutants from nonpoint source pollutants to the drainage system.

National Flood Insurance Program

The City of La Habra (City) is a participant in the NFIP, which is administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria, including adopting an ordinance that is in compliance with minimum regulatory standards issued by FEMA and monitoring construction and building permits and the status of the City ordinance to ensure that all are in compliance with federal laws and regulations.

Established in 1968 with the passage of the National Flood Insurance Act, the NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the federal government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the federal government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an affordable insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Communities are occasionally audited by the California Department of Water Resources to ensure the proper implementation of FEMA floodplain management regulations.

b. State Plans, Policies, and Regulations

Porter-Cologne Act

The SWRCB and the RWQCB share the responsibility under the Porter-Cologne Act to formulate and adopt water policies and plans, and to adopt and implement measures to fulfill

Clean Water Act requirements. In order to meet this requirement for the Los Angeles area, the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) (discussed below) was prepared by the RWQCB to protect the water quality of the state according to the beneficial uses identified for each water body. Prior to authorizations of waste discharge by the RWQCB, the Porter-Cologne Act requires reports of waste discharges to be filed. The RWQCB then prescribes Waste Discharge Requirements, which serve as NPDES permits under a provision of the Porter-Cologne Act.

Anti-Degradation Policy

A key policy of California's water quality program is the state's Anti-Degradation Policy. This policy, formally known as the Statement of Policy with Respect to Maintaining High Quality Waters in California (SWRCB Resolution No. 68-16), restricts degradation of surface and ground waters. In particular, this policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses. Under the Anti-Degradation Policy, any actions that can adversely affect water quality in all surface and ground waters must (1) be consistent with maximum benefit to the people of the state, (2) not unreasonably affect present and anticipated beneficial use of the water, and (3) not result in water quality less than that prescribed in water quality plans and policies, (i.e., will not result in exceedances of water quality objectives) (SWRCB 1968).

Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site stormwater management. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the general permit for discharges of stormwater associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents, including a risk-level assessment for construction sites, an active stormwater effluent monitoring and reporting program during construction, rain event action plans, and numeric action levels (NALs) for pH and turbidity as well as requirements for qualified professionals to prepare and implement the plan. An appropriate permit fee must also be mailed to SWRCB.

The Construction General Permit requires the SWPPP to identify BMPs that will be implemented to reduce potential chemical contaminants that would affect water quality. Types of BMPs include erosion control (e.g., preservation of vegetation), sediment control (e.g., fiber rolls), non-storm-water management (e.g., water conservation), and waste management. The SWPPP also includes descriptions of BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs).

Recycled Water General Permit for Landscape Irrigation

In July 2009, the SWRCB released General Waste Discharge Requirements for Landscaping Irrigation Uses of Municipal Recycled Water (Recycled Water General Permit), allowing municipal entities to distribute disinfected tertiary-treated recycled water to select customers for landscape irrigation (Order No. 2009-0006-DWQ). The Recycled Water General Permit is intended to further the state's Recycled Water Policy (California Code of Regulations [CCR] Title 22) and California Water Code Section 13552.5, both of which encourage recycled water for non-potable uses.

Under the Recycled Water General Permit, recycled water is limited to recycled water produced by a public entity at a municipal wastewater treatment plant. The Recycled Water General Permit does not apply to water produced from the treatment of other non-municipal wastewaters (e.g., oil field production, food processing, stormwater, etc.) and other types of treatment facilities (e.g., industrial wastewater treatment plants). To obtain coverage under the Recycled Water General Permit, the producer/distributor of recycled water must submit a Notice of Intent (NOI) and Operations and Maintenance Plan to the SWRCB. The Operations and Maintenance Plan must contain a detailed operations plan for use areas, including procedures for implementation of regulations regarding recycled water use and maintenance of equipment and emergency backup systems to maintain compliance with the conditions of the Recycled Water General Permit. In addition, it must have an irrigation management plan specifying measures to ensure that recycled water is applied efficiently, at an agronomic rate, and using practices necessary to minimize application of salinity constituents to use areas. Characteristics of the soil, the recycled water, plant species being irrigated, climatic conditions, and other relevant conditions must be considered in this plan.

The Recycled Water General Permit notes that the use of recycled water may not be appropriate for all situations because of unique site-specific characteristics and conditions. In addition, because there are certain public health concerns associated with recycled water, the Recycled Water General Permit includes exposure control measures, including minimum setback distances, signage, method of application, and use restrictions and only allows use of water treated to CCR Title 22 tertiary treatment requirements. Other potential public health issues, such as cross-contamination of recycled water and potable water sources, control of recycled water salinity, and chlorination, are regulated under the Recycled Water Policy and the Water

Code. Landscape irrigation with recycled water would require coverage under this Recycled Water General Permit or an individual permit.

State Water Resources Control Board Low Impact Development Policy

The SWRCB adopted the Low Impact Development Policy which, at its core, promotes the idea of "sustainability" as a key priority in the design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions.

The intent of the LID policy is to benefit water supply, contribute to water quality protection, and manage stormwater. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal stormwater NPDES permits.

c. Regional and Local Plans, Policies, and Regulations

City of La Habra Stormwater Requirements

The following three NPDES permits apply to stormwater regulations within the City:

1. State General Permit CAS000001, which regulates discharges of stormwater associated with industrial activities;
2. State General Permit CAS000002, which regulates discharge of stormwater runoff associated with construction activities; and
3. Santa Ana Regional Water Quality Control Board Order Number R8-2009-0030 as Amended by Order No. R8-2010-0062, State Permit CAS618030, which regulates waste discharge requirements (WDR).

Fourth Term Municipal Stormwater (MS4) Permit R8-2009-0030 requires cities and the County of Orange to mitigate, among other things, illegal discharges into the storm drainage system. The programs include (1) inspections of commercial and industrial properties, (2) inspection and cleaning of stormwater pipelines, and (3) responses to complaints. The permit also requires development to maintain existing drainage patterns.

Stormwater requirements must comply with Chapter 13.24 (Water Quality Ordinance) of the La Habra Municipal Code. The intent of this ordinance is to control urban runoff. The ordinance requires compliance with the Drainage Area Management Plan and the preparation of a Water Quality Management Plan (WQMP).

Model Water Quality Management Plan (MWQMP)

The Model Water Quality Management Plan (MWQMP) and Technical Guidance Document (TGD) were developed to aid the County of Orange, the Orange County Flood Control District,

and cities of Orange County (the Permittees) and development project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects.

The MWQMP describes the process that the Permittees would employ for developing a Project WQMP for individual new development and significant redevelopment projects. A Project WQMP is a plan for minimizing the adverse effects of urbanization on site hydrology, runoff flow rates, and pollutant loads. Development of an MWQMP to provide guidance for preparation of a Project WQMP is required by the two NPDES permits held jointly by the Permittees administered by two RWQCBs. The permits also require development of Conceptual or Preliminary WQMPs prior to submission of a Project WQMP.

Drainage Area Management Plan

The Drainage Area Management Plan (DAMP) is Orange County's principal policy and guidance document for the NPDES program. The County and stakeholders created the DAMP, which has been in effect since 1993, with subsequent updated elements. A revised DAMP, known as the 2007 DAMP, was submitted to the Santa Ana RWQCB in July 2006. In May 2009, the Santa Ana RWQCB re-issued the MS4 Permit for the Santa Ana Region of Orange County (fourth term permit), which would result in future changes to the Orange County DAMP and stormwater program. In addition to the previous requirements under the third term permit, the requirements of the new fourth term permit include requirements pertaining to hydro-modification and LID features associated with new developments and redevelopments.

City of La Habra General Plan

City of La Habra General Plan policies relevant to hydrology and water quality include the following.

Chapter 2, Community Development

LU 17.9 Stormwater Facilities. Work with the Orange County Flood Control District to ensure that structures channeling or retaining water be designed and constructed of materials and colors so as to blend with the natural environment.

Chapter 4, Infrastructure

SD 1.1 Storm Drain Master Plan. Implement the City's Storm Drain Master Plan to ensure an adequate storm drainage system.

SD 1.2 NPDES Permit. Require new development and rehabilitated structures to minimize stormwater runoff and pollutants consistent with the City's National Pollutant Discharge Elimination System (NPDES) permit.

SD 1.3 Adequate Storm Drainage Infrastructure. Ensure that the City's storm drainage culverts, channels, and facilities are adequately sized, maintained, and upgraded to adequately convey stormwater runoff and prevent flooding for existing and new development.

SD 1.4 Facility Design. Design stormwater drainage systems to be environmentally sustainable, appear natural in character, and to be compatible with surrounding uses.

SD 1.5 Best Practices. Use and update best practices for stormwater management.

SD 1.7 Drainage Channels. Maintain storm drainage channels to adequately convey stormwater.

SD 1.9 No Net Increase. Require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

WQ 1.1 National Pollutant Discharge Elimination System and Regional Water Quality Control Board. Implement the requirements of the Regional Water Quality Control Board (RWQCB) for compliance with the National Pollutant Discharge Elimination System permit and apply best management practices for point source discharges.

WQ 1.2 Orange County Drainage Area Management Plan and Water Quality Management Plan. Continue to enforce that all new developments and redevelopments comply with the Orange County Drainage Area Management Plan (DAMP) and that all applicable new developments and redevelopments prepare a Water Quality Management Plan (WQMP).

WQ 1.3 Low Impact Development. Encourage the incorporation of Low Impact Development (LID) techniques (e.g., permeable paving, cells, bioswales, tree box filters, rain barrels, rooftop runoff for irrigating lawns) to manage stormwater and urban runoff, reduce runoff and pollution, and assist in maintaining or restoring the natural hydrology.

WQ 1.4 Protection of Water Bodies. Require new development to protect the quality of water bodies and natural drainage systems consistent with the City's NPDES permit.

WQ 1.5 New Development. Require new development to protect the quality of water resources and natural drainage systems through site design, and use of source controls, stormwater treatment, runoff reduction measures, best management practices, and LID techniques.

WQ 1.6 Site Development. Encourage site design and development to minimize lot coverage and impervious surfaces.

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

W 1.5 New Development and Post-Development Stormwater Runoff. Require new development and post-development stormwater runoff to control sources of pollutants and improve and maintain urban runoff water quality through site design, stormwater treatment and protection measures, and best management practices (BMPs) consistent with the City's National Pollutant Discharge Elimination System (NPDES) Permit.

W 1.8 Pervious Surfaces. Encourage maximizing pervious surfaces within new or substantially renovated public, institutional, residential, commercial, and industrial development projects.

W 1.9 Percolation. Design landscaping and other open space areas in development projects to capture stormwater runoff and percolate into the groundwater basin, to the extent feasible.

Chapter 7, Community Safety

NH 3.1 Protection of People and Property. Adopt, maintain, and implement applicable federal, state, and local laws, standards, and guidelines to protect people and property from the risks of flooding.

NH 3.2 National Flood Insurance Program. Continue to participate in the National Flood Insurance Program (NFIP) and floodplain management practices in accordance with federal guidelines to maintain the City's eligibility for flood insurance and qualification for disaster assistance.

NH 3.3 Flood Hazard Zones. Require new development and substantial improvements or upgrades in identified Federal Emergency Management Agency (FEMA) flood hazard zones (i.e., 100- and 500-year floodplains), as shown on General Plan Figure 7-1 (Flood Hazards) be constructed in accordance with applicable city, state, and federal regulations including compliance with the minimum standards of FEMA's National Flood Insurance Act to avoid or minimize the risk of flood damage.

NH 3.5 City Storm Drains. Design and construct storm drains per Orange County Public Works' standards and ensure that City-owned storm drains are operated and maintained to allow for maximum capacity of the system.

3.13.3 ENVIRONMENTAL SETTING

The project site was originally part of the 915-acre West Coyote Hills oil field, located within the cities of La Habra and Fullerton. In 1992, the City 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 for development of an 18-hole golf course (Westridge Golf Club) in the northern part of this area and residential neighborhoods and parks in the southern part.

Existing impervious surfaces within the project site currently consist of 0.74 acre of building and other structures, 5.17 acres of concrete cart paths, 4.82 acres of concrete pavement, 2.00 acres of concrete lined v-ditches, and 2.20 acres of water features. The combined existing impervious area equals 14.93 acres, equating to 9.9 percent of the 151-acre project site.

a. Hydrology and Drainage

Runoff from the project site is conveyed as sheet flow northerly and westerly, where it is collected by an underground storm drain system that outlets into the various water features throughout the golf course before discharging to the City's existing 48-inch storm drain system within Imperial Highway and its 60-inch storm drain system within Beach Boulevard. Runoff is then conveyed southwesterly in these systems and discharged into Coyote Creek, which is located approximately 400 feet to the west of the site on the west side of Beach Boulevard, before discharging to the San Gabriel River, Alamitos Bay, San Pedro Bay and the Pacific Ocean.

Existing topography divides the project site into seven distinct drainage areas—'A', 'B', 'C', 'D', 'E', 'F', and 'G'—with Coyote Creek flowing from northeast to southwest behind the existing commercial/industrial and residential properties located west of Beach Boulevard (see **Figure 3.13-1**). Drainage Area 'G' consists of the slopes along the northeasterly boundary of the project site, which drain off-site in both the existing and proposed conditions. There are no improvements proposed in association with Drainage Area 'G', and it was therefore not analyzed.

In 1999, when the project site was graded and the Westridge Golf Club was constructed, it was designed to accept stormwater drainage from the residential neighborhoods to the south. Two residential tracts (Westridge Tracts 15030 and 15031) were developed south of the golf course and their off-site storm drain system was integrated into the golf course design. A portion of the runoff from both of these tracts co-mingles with existing water features along the golf course fairways. The water features were intended to act as retarding basins, ultimately mitigating the increase in stormwater runoff associated with the development of both the residential tracts and the golf course.

Existing runoff volumes on the project site are summarized in **Table 3.13-1**.

Table 3.13-1
Existing Project Site Hydrology

Drainage Area	Runoff Volume (acre-feet over 24 hours)			
	2-Year Storm	10-Year Storm	25-Year Storm	100-Year Storm
A	0.8	1.8	5.8	11.0
B	0.6	1.5	4.5	8.1
C	3.5	8.3	26.4	49.1
D	0.7	1.7	4.9	8.7
E	0.8	1.3	2.0	2.6
F	0.2	0.4	0.6	0.8

Source: Hydrology Analysis, Vesting Tentative Tract Map 17485, 2016.

According to FEMA floodplain mapping, the project site is outside of the 100-year flood zone and within the 0.2 percent chance (500-year) flood zone.

b. Water Quality

The downstream receiving waters for stormwater from the project site include Coyote Creek, San Gabriel River (Reach 1 and Estuary), Alamitos Bay, San Pedro Bay, and the Pacific Ocean. Coyote Creek and San Gabriel River (Estuary) are listed as impaired under Section 303(d) of the Clean Water Act, and are therefore designated as Environmentally Sensitive Areas pursuant to the Orange County Drainage Area Management Plan. However, the project site is not located adjacent to (within 200 feet of) these water bodies and does not directly discharge to them. Based on the most current 303(d) list, downstream receiving waters are impaired by the following contaminants:

- **Coyote Creek Channel**: ammonia, copper (dissolved), diazinon, indicator bacteria, lead, pH, toxicity.
- **Coyote Creek**: diazinon, indicator bacteria, pH, toxicity.
- **San Gabriel River (Reach 1)**: coliform bacteria, pH.
- **San Gabriel River (Estuary):** copper, dioxin, nickel, dissolved oxygen.
- **Alamitos Bay:** indicator bacteria.
- **San Pedro Bay:** chlordane, DDT, polychlorinated biphenyls (PCBs), sediment toxicity.

The Los Angeles RWQCB (Region 4) has approved TMDLs for Coyote Creek/San Gabriel River that apply to those portions of Orange County that drain to Coyote Creek and the San Gabriel River.

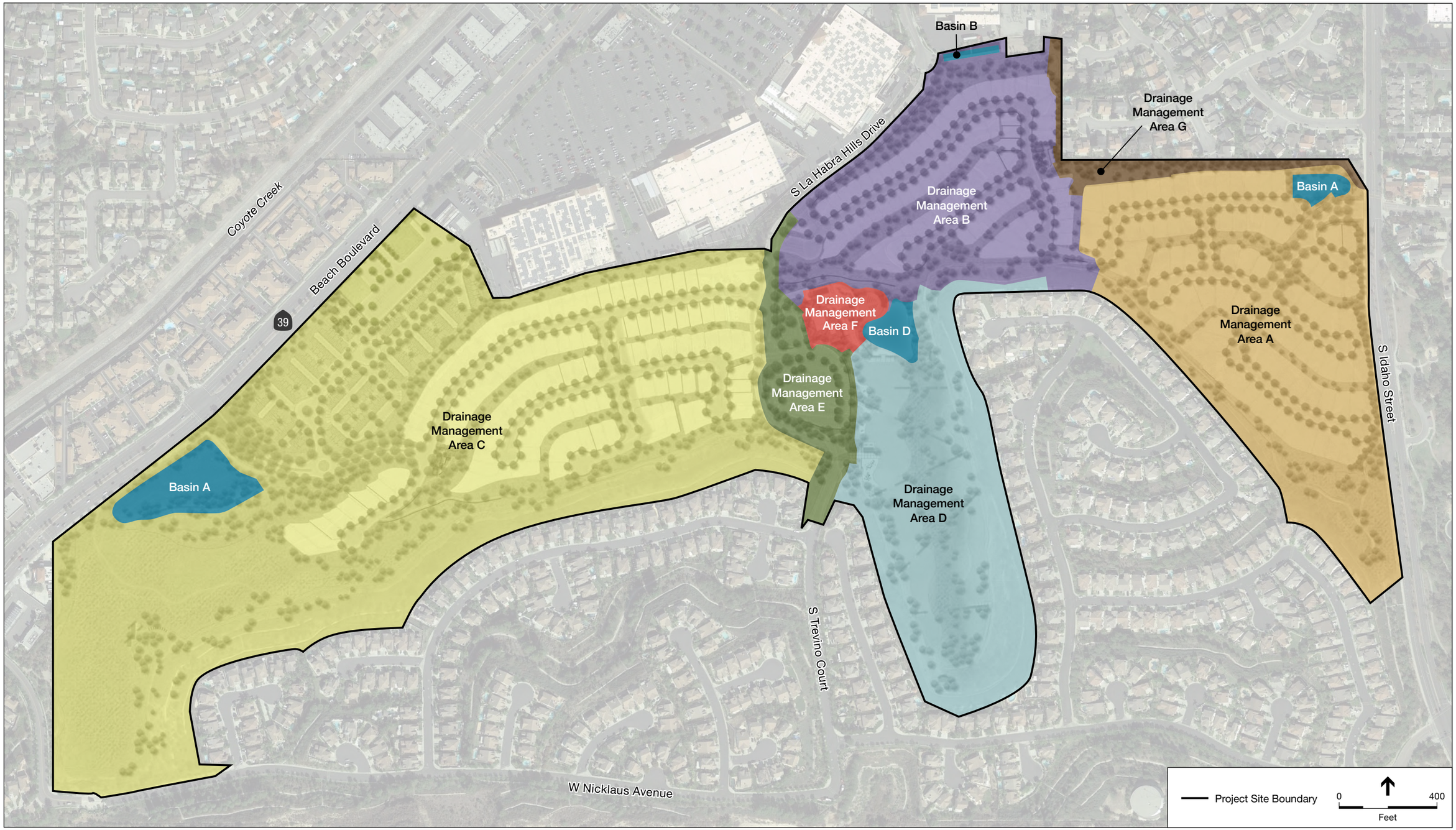


Figure 3.13-1: Drainage Management Areas and Basin Locations

Source: Google Earth Pro; Carlson SLS

3.13.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of identified impacts on hydrology and water quality. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect on the environment if it were to:

Threshold HWQ-1 Violate any water quality standards or waste discharge requirements;

Threshold HWQ-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

Threshold HWQ-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Threshold HWQ-4 Otherwise substantially degrade water quality;

Threshold HWQ-5 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

Threshold HWQ-6 Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

Threshold HWQ-7 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

Threshold HWQ-8 Cause inundation by seiche, tsunami, or mudflow.

3.13.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold HWQ-1: Violate any water quality standards or waste discharge requirements.

Impact HWQ-1.1: Site grading and construction activities would result in short-term increases in the transport of silt and sediment, along with hydrocarbon-based pollutants, to receiving waters. Site construction activities would also allow for infiltration of hydrocarbon and other pollutant discharges into the groundwater. However, compliance with National Pollutant Discharge Elimination System (NPDES) requirements, as well as implementation of a Stormwater Pollution Prevention Plan (SWPPP), including Best Management Practices (BMPs), would avoid the potential to violate any water quality standards or waste discharge requirements. The impact would therefore be *less than significant*.

Methodology

A project's impacts on water quality generally occur during three periods: (1) the earthwork and construction phase of site development, when the potential for erosion, siltation, and sedimentation is the greatest; (2) following construction, prior to the establishment of ground cover, when erosion potential remains relatively high; and (3) following completion of future development, when impacts related to erosion and sedimentation decrease markedly, but those associated with urban runoff and waste discharges increase. Impact HWQ-1.1 addresses the first two of these three periods, while the third period, ongoing operations, is addressed in Impact HWQ-1.2.

The potential for impacts in relation to water quality standards and waste discharge requirements was evaluated by considering the general type of pollutants that development projects under the proposed Specific Plan would generate during construction. In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, regional, and local laws and regulations that are designed to ensure that applicable water quality standards and waste discharge requirements are met. These laws and regulations have been developed to reduce the potential for pollutants in receiving waters (as described in Section 3.13.2 above).

A violation of water quality standards or waste discharge requirements would occur if the Specific Plan would not implement or would be inconsistent with existing regulatory requirements designed to protect water quality and prevent erosion and sedimentation during construction. Conversely, implementation of all relevant water quality requirements would

ensure that impacts related to an exceedance of water quality standards would not occur and that impacts would be less than significant.

Impact Assessment

Construction and grading within the project site would involve removal of vegetative cover and temporary disturbance of surface soils. During the construction period, grading, excavation, and remediation activities would result in exposure of soil to runoff, causing erosion and entrainment of sediment and contaminants in the runoff. In addition, construction equipment used on-site would operate, park, and be maintained within unpaved areas, leading to the potential for accidental spillage of fuels and oils.

Soil stockpiles and excavated areas within the project site would be exposed to runoff from initial clearing of vegetation and demolition of golf course facilities until grading and excavation activities are completed and new ground cover (landscaping, hardscape, paving, buildings) is established. During this period of time, which is expected to last approximately 11 to 12 months, approximately 3,400,000 cubic yards of soil would be moved within the project site.

If not properly managed, runoff from exposed ground would cause erosion and increased sedimentation and pollutants in stormwater. The potential for chemical releases would also be present during construction given the types of materials that would be used, including fuels, oils, paints, and solvents. Because of buried contaminants within subsurface soils[2] in some areas, erosion could also result in release of those contaminants. If released, these substances could be transported to the Pacific Ocean via receiving waters in stormwater runoff, causing an incremental reduction in water quality.

Significance Conclusion for Impact HWQ-1.1

The project applicant would be required to submit a notice of intent with the appropriate fees to the SWRCB under the Construction General Permit prior to initiation of construction.

In addition, the project applicant would be required to prepare a SWPPP, which would establish BMPs in order to reduce sedimentation and erosion and prevent construction pollutants from leaving the site. The project would also incorporate all monitoring elements as required in the General Construction Permit. The project applicant would also develop an erosion and sediment control plan to be reviewed and approved by the City of La Habra Chief Building Official prior to issuance of a grading permit.

[2] See Section 3.12, *Hazards and Hazardous Materials*, of this EIR, for a discussion of on-site contamination and remediation requirements.

Implementation of the BMPs prescribed in the SWPPP that must be prepared for the proposed project would ensure that site grading would minimize the amount of silt and sediment that is transported to downstream locations, as well as control peak stormwater flows and velocities.

BMPs that would be installed for the project include temporary stormwater detention/desilting basins, silt fences, fiber rolls, and gravel bags, as appropriate, designed to retain storm flows on-site, slow surface runoff velocities, and provide pollutant/silt containment. Implementation of stormwater detention/desilting basins would be designed to capture and temporarily hold peak storm flows prior to discharge to the storm drain system to prevent runoff from the project site from exceeding capacity of the system. The basin would also allow provide for settlement of solids prior to discharge. The silt fences, fiber rolls, and gravel bags would also be used in appropriate locations approved by the City to direct and slow storm runoff. As a result, these BMPs would reduce sediment discharge.

In addition, other standard conditions (e.g., compliance with the drainage controls prescribed in the California Building Code and Chapter 15.44, Excavations and Grading, of the La Habra Municipal Code) would further minimize potential construction-related erosion and siltation impacts.

As a result, the impact would be less than significant, and no mitigation measures would be required.

Threshold HWQ-1: Violate any water quality standards or waste discharge requirements.

Impact HWQ-1.2: Following completion of grading and construction, urban runoff and waste discharges from project streets, parking lots, and other paved areas, as well as runoff from landscaped areas, would carry a variety of pollutants to receiving waters. However, implementation of Best Management Practices (BMPs) as required to be set forth in the project's Stormwater Management Plan and Water Quality Management Plan would avoid the potential to violate any water quality standards or waste discharge requirements during ongoing operations. The impact would therefore be *less than significant*.

Methodology

The potential for impacts in relation to water quality standards and waste discharge requirements was evaluated by considering the general type of pollutants that development projects under the proposed Specific Plan would generate during ongoing operations. In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and regional

laws and regulations that are designed to ensure that applicable water quality standards and waste discharge requirements are met.

A violation of water quality standards or waste discharge requirements would occur if the Specific Plan would not implement or would be inconsistent with existing regulatory requirements designed to protect water quality and prevent erosion and sedimentation during project operations. Thus, a significant water quality impact could occur if increased runoff generated by the new development is not properly detained and treated for specified pollutants before being released into the downstream drainage system. Conversely, implementation of all relevant water quality requirements, including proper on-site detention and treatment for specified pollutants, would ensure that impacts related to an exceedance of water quality standards would not occur and that impacts would be less than significant.

Impact Assessment

Urban Runoff

Conversion of the Westridge Golf Club into the proposed Rancho La Habra community would introduce new or additional pollutants to receiving waters.

Sedimentation would not be considered a potential environmental effect post-construction because the site would be paved, covered with buildings, or landscaped, which would stabilize soils for the long term. Project site development would result in greater vehicular use of new and existing nearby roadways, which would lead to the accumulation and release of petroleum hydrocarbons, lubricants, sediments, and metals (generated by the wear of automobile parts). The management of landscaped areas would result in runoff and/or infiltration of herbicides and pesticides. These types of common urban pollutants would be transported in runoff, adversely affecting the quality of receiving waters and groundwater. Therefore, post-construction during the life of project site development, nonpoint source pollutants would be the primary contributors to potential water quality degradation. Nonpoint source pollutants would be washed by rainwater from rooftops and landscaped areas into on-site and local drainage networks. Potential nonpoint source pollutants include products used in landscaping (e.g., pesticides, herbicides, and fertilizers); oil, grease, gasoline, heavy metals (nickel, copper, zinc, cadmium, and lead), and trash from roads and parking areas; and petroleum hydrocarbons from fuels. Roof runoff can also contribute zinc if galvanized rain gutters are provided.

Pollutants of Concern

As noted above, the project site drains to receiving waters that are impaired by one or more pollutants. **Table 3.13-2** reflects anticipated pollutants of concern that would be generated by the proposed project.

Table 3.13-2
Pollutants of Concern

Pollutant	Expected from Project?	Additional Information and Comments
Suspended-Solid/ Sediment	Yes	Potential sources of sediment include existing landscaping areas and disturbed earth surfaces.
Nutrients	Yes	Potential sources of nutrients include fertilizers, sediment, and trash/debris.
Heavy Metals	Yes	Potential sources of heavy metals include streets, as well as commercial and multi-family parking areas.
Pathogens (Bacteria/Virus)	Yes	Potential sources of pathogens include pets, food wastes, and landscaping/sediment areas.
Pesticides	Yes	Potential sources of pesticides include landscaping and open space areas.
Oil and Grease	Yes	Potential sources of oil and grease include streets and parked vehicles.
Toxic Organic Compounds	No	Toxic organic compounds are not expected to be of concern due to the predominance of residential development.
Trash and Debris	Yes	Potential sources include common litter and trash cans from homes.

Source: Hunsaker Associates, *Rancho La Habra Preliminary Water Quality Management Plan*, 2018.

Hydrologic Conditions of Concern

In the North Orange County area, hydrologic conditions of concern are considered to exist if any streams located downstream from the project are determined to be potentially susceptible to hydromodification impacts and either of the following conditions exists:

- Post-development runoff volume for the 2-yr, 24-hr storm exceeds the pre-development runoff volume for the 2-yr, 24-hr storm by more than 5 percent; or
- Time of concentration (Tc) of post-development runoff for the 2-yr, 24-hr storm event is less than the time of concentration of the pre-development condition for the 2-yr, 24-hr storm event by more than 5 percent.

If these conditions do not exist or streams are not potentially susceptible to hydromodification impacts, a hydrologic conditions of concern would not exist and hydromodification would not need to be considered further. Although all downstream storm water drainage conveyances have been improved and earthen channels have been stabilized, the most current Orange County Hydromodification Susceptibility map indicates that the project site is within an area that is susceptible to hydromodification impacts. A summary of the project's hydromodification analysis is provided in **Table 3.13-3**. Blue values indicate an insignificant change between the project's existing condition and the developed condition where the developed condition is greater than 5 percent of the pre-project condition. Red values indicate a change where the

developed condition is less than 5 percent of the pre-project condition, thus requiring detention of the 2-year event to address the increase in developed condition runoff.

Table 3.13-3
Hydromodification Analysis

Drainage Area	Condition	Acres	Q_2 (cfs)	Tc (min)	V_{2YR} (ac-ft)	Hydromodification Control
A	Existing	27.40	19.5	21.84	0.81	Detention Basin
	Developed	27.40	27.0	14.78	2.18	
	Change	**0.00**	**+7.5**	**-7.06**	**+1.37**	
B	Existing	19.60	18.3	13.95	0.63	Subsurface Detention
	Developed	19.70	20.9	13.73	1.77	
	Change	**+0.10**	**+2.6**	**-0.22**	**+1.14**	
C	Existing	121.00	86.5	17.88	3.47	Detention Basin
	Developed	117.30	104.1	11.37	7.05	
	Change	**-3.70**	**+17.6**	**-6.51**	**+3.58**	
D	Existing	20.31	15.97	16.73	0.7845	None
	Developed	20.54	16.24	16.67	0.7531	
	Change	**+0.23**	**+0.27**	**-0.06**	**+0.0046**	
E	Existing	5.81	6.8	9.87	0.81	None
	Developed	5.79	8.4	9.64	0.81	
	Change	**-0.02**	**+1.6**	**-0.23**	**0.00**	
F	Existing	1.68	2.6	5.44	0.25	None
	Developed	1.68	2.6	5.44	0.25	
	Change	**0.00**	**0.0**	**0.00**	**0.00**	

Notes:

Q_2 (cfs) = Two-year storm flow measured in cubic feet per second.

Tc (min)= Time of concentration measured in minutes.

V_{2YR} (ac-ft) = Volume of 2-year storm flows measured in acre-feet.

Source: Preliminary Water Quality Management Plan, Vesting Tentative Tract Map 17845, Rancho La Habra, February 2015.

Based on the results of the analysis, detention of post-development condition is required for Areas A, B and C. The proposed project provides for onsite detention basins (flow-through design) to detain the increase in runoff volume (2-year event) that would occur as the result of project development.

Significance Conclusion for Impact HWQ-1.2

The Draft WQMP for Rancho La Habra includes BMPs that would be incorporated into the design of the project. These BMPs, including those for LID, site design, and source control, are described below. Because (1) downstream storm water drainage conveyances have been improved and earthen channels have been stabilized and (2) the proposed project provides for detention of increase in runoff volume (2-year event) that would occur as the result of project development hydromodification is not a concern for the project and impacts would be less than significant.

Pursuant to the Fourth Term MS4 Storm Water Permit (Order No. R8-2009-0030, as amended by Order No. R8-2010-0062), LID BMPs must be incorporated into design features and source

controls to reduce project-related stormwater pollutants. The incorporation of LID BMPs into project design requires evaluation of LID measures in the following treatment hierarchy: infiltration, evapotranspiration, harvest/reuse, and biotreatment. The project proposes the use of flow-through LID BMPs to address pollutants from the project's runoff.

The following site design BMPs have been incorporated into the proposed project:

Minimize Impervious Area

- The project's permeable area has been maximized by limiting the impermeable areas primarily to the roadways, driveways, and building footprints.
- Open jointed paving materials would not be used within the project site.
- All roadways have been designed to the minimum City requirements.

Maximize Natural Infiltration Capacity

- The project would consist of approximately 69.3 percent landscaped or open area, which would reduce runoff and maximize the potential for natural infiltration.

Preserve Existing Drainage Patterns and Time of Concentration

- Although the project proposes to increase the percentage of impervious area, the time of concentration is anticipated to increase due to longer flow lengths and routed conditions, as compared to the pre-developed condition.

Disconnect Impervious Areas

- Landscaping would be provided adjacent to walkways and within common areas and private homeowner areas in an effort to disconnect impervious areas, avoid large impervious surface areas that could direct urban pollutants into receiving waters, and increase pervious surface areas above their water quality filtration capabilities.

Protect Existing Vegetation and Sensitive Habitat Areas, and Revegetate Disturbed Areas

- Before development of the existing golf course, the project site consisted of dry brush in a chaparral climate. The existing condition is that of a developed and irrigated golf course. Where feasible, existing landscaping would be preserved. Approximately 13 acres of the project site would be preserved as natural habitat.

Xeriscape Landscaping

- Native and/or tolerant landscaping would be incorporated into the site design consistent with City guidelines to reduce the need for use of pesticides and herbicides.

Biotreatment BMPs

- The proposed project would incorporate a proprietary vegetated biotreatment system in its design to reduce pollutant loading in site runoff prior to discharging into the storm drain system. Runoff from the project's development areas would be conveyed as surface flow toward and into the public right-of-way. Runoff would then be concentrated in the gutter and directed into one of the proposed water quality basins via

a network of underground storm drain pipes. The basins would outlet through a series of modular wetland systems by BioClean for treatment prior to discharging into the municipal storm drain system. These proprietary biotreatment BMPs have been selected for use based on the system's proven pollutant removal efficiencies, small footprint, and the ease of incorporating into the project's site design.

Non-Structural BMPs

- **Education for Property Owners, Tenants, and Occupants**. Educational materials would be provided to homeowners at close of escrow by owner and periodically thereafter by the homeowners' association (HOA) to inform them of potential impacts on downstream water quality. Materials would include those described in the WQMP.
- **Activity Restrictions**. Activity restrictions[3] to minimize potential impacts on water quality and with the purpose of protecting water quality would be prescribed by the project's Covenant, Conditions, and Restrictions (CC&Rs), or other equally effective measure.
- **Common Area Landscape Management**. Maintenance activities for landscape areas would be required to be consistent with County and manufacturer guidelines for fertilizer and pesticide use (Orange County DAMP Section 5.5). Maintenance includes trimming, weeding, debris removal, and vegetation planting and replacement. Materials stockpiled during maintenance activities would be required to be placed away from drain inlets and runoff conveyance devices. Wastes would be required to be properly disposed of or recycled.
- **BMP Maintenance**. Responsibility for implementation, inspection, and maintenance of all BMPs (structural and non-structural) would be required to be consistent with the BMP Inspection and Maintenance Responsibilities Matrix provided in Section V of the WQMP, with documented records of inspections and maintenance activities completed.
- **Common Area Litter Control**. Litter control on-site would include the use of HOA litter patrols, violation reporting, and cleanup during landscaping maintenance activities and as needed to ensure good housekeeping of the project's common areas.
- **Employee Training**. All employees, contractors, and subcontractors of the HOA would be required to be trained on the proper use and staging of landscaping and other materials with the potential to affect runoff and proper cleanup of spills and materials.
- **Common Area Catch Basin**. At least 80 percent of the project's private drainage facilities would be inspected, cleaned, and maintained annually, with 100 percent of facilities inspected and maintained within a 2-year period.
- **Street Sweeping, Private Streets, and Parking Lots**. The project's private streets and its parking lots within commercial and multi-family development areas would be swept, at

[3] "Activity restrictions" refers to prohibitions or limitations on specific types of activities (e.g., use of pesticides, herbicides).

minimum, on a weekly basis and as needed. Responsibility for maintaining such activities would be vested with the project's homeowners' association.

Structural Source Control BMPs

- **Storm Drain Stenciling**. Storm drain stencils or signage prohibiting dumping and discharge of materials ("No Dumping – Drains to Ocean") would be provided adjacent to each of the project's proposed inlets. The stencils would be inspected and re-stenciled as needed to maintain legibility.
- **Trash Storage Areas**. Trash container areas would be designed in such a way so that drainage from adjoining roofs and pavement would be diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater. Trash enclosures would be designed with either a roof or awning to minimize direct precipitation and prevent rain from entering containers.
- **Use Efficient Irrigation Systems and Landscape Design**. In conjunction with routine landscaping maintenance activities, irrigation systems would be inspected for signs of leaks and overspray and repaired or adjusted accordingly. The system cycle would be adjusted to accommodate seasonal fluctuations in water demand and temperatures. Native or drought tolerant/non-invasive plant species would be used to minimize water consumption.
- **Protect Slopes and Channels**. To prevent storm and/or irrigation runoff from causing erosion, all manufactured slopes would be stabilized with vegetation and/or mulch in accordance with the "Use Efficient Irrigation Systems and Landscape Design" source control BMP. To minimize runoff and infiltration, slope landscaping would consist of drought-tolerant plantings that would require little or no irrigation. The property owner and/or the HOA would be responsible for maintaining the vegetative cover and/or mulch on the project area slopes to eliminate exposed soils, and would inspect the slopes to check for signs of erosion, gullies, and sloughing at least twice a year, at the beginning and end of the rainy season, and after all major storm events.
- **Hillside Landscaping**. To prevent storm and/or irrigation runoff from causing erosion, all manufactured slopes would be stabilized with vegetation and/or mulch in accordance with the "Use Efficient Irrigation Systems and Landscape Design" source control BMP. Slope landscaping would consist of drought-tolerant plantings that would require little or no irrigation to minimize runoff and infiltration. The property owner and/or the HOA would be responsible for maintaining the vegetative cover and/or mulch on the project area slopes to eliminate exposed soils, and would inspect the slopes to check for signs of erosion, gullies, and sloughing at least twice a year, at the beginning and end of the rainy season, and after all major storm events.

Based on the provisions of the project's WQMP, it is concluded that proposed drainage facilities and BMPs would adequately protect downstream water quality in accordance with local, state, and federal water quality requirements. Therefore, impacts would be less than significant and no mitigation is required.

Threshold HWQ-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Impact HWQ-2: Implementation of the proposed Rancho La Habra Specific Plan would increase the impervious surface area within the project site, reducing groundwater infiltration. However, because the proposed project would also substantially reduce the amount of groundwater consumed within the project site, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. This impact would be *less than significant*.

Methodology

The analysis of impacts on groundwater considers changes in groundwater recharge due to increases in impervious surfaces, increase in water demand, and the condition of the local groundwater basin.

Impacts are considered significant if the Specific Plan would result in a depletion of groundwater supplies or interfere with groundwater recharge such that there would be a lowering of the groundwater levels. In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to use municipal water supplies.

Impact Assessment

Development of the proposed project would result in a substantial decrease in the existing use of groundwater and would result in an increase in impervious surfaces within the project site that would reduce infiltration into the groundwater table (see **Table 3.13-4**).

Table 3.13-4
Existing and Post-Project Impervious and Pervious Surfaces

	Pervious		Impervious	
	Area (Acres)	Percentage	Area (Acres)	Percentage
Existing Conditions	135.9	90.1	15.0	9.9
Buildout Conditions	104.5	69.3	46.4	30.7

Source: Rancho La Habra Preliminary Water Quality Management Plan, 2018.

This reduction in pervious surfaces within the project site would be offset by a substantially decreased use of groundwater. As discussed in Section 3.17, *Utilities, Services Systems, and Water Supply*, water consumption for the Westridge Golf Club averaged 276 acre feet per year (AFY) from 2011 through 2014. Because recycled water was not available, all of the water consumed by the golf course use was potable supply. As noted in Section 3.17, approximately 38 percent of the City's water supply comes from local groundwater. Thus, approximately 104.9 AFY of local groundwater is being consumed by the existing golf course. At build-out, the proposed project would consume 180 AFY (80 AFY for indoor uses and 100 AFY for outdoor uses). Assuming a decrease in the proportion of local groundwater used in the City's water supply to 25 percent,[4] the proposed project would consume approximately 45 AFY of groundwater. Thus, the proposed project would result in a reduction in the consumption of local groundwater of 59.9 AFY.

Significance Conclusion for Impact HWQ-2

Because the amount of local groundwater that would be used by the proposed development would be 57 percent less than is currently being used by the existing golf course, the proposed Specific Plan would not deplete groundwater supplies even if the amount of onsite pervious surface area would be increase. The impact would be less than significant.

Threshold HWQ-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Impact HWQ-3: The proposed Rancho La Habra Specific Plan would maintain existing drainage patterns within the project site but would

[4] The City is in the process of increasing use of imported groundwater supply to 65 percent and local groundwater production to 25 percent of the City's water supply.

substantially increase the site's impervious surface area, increasing runoff. Because drainage would be directed through a series of detention basins, runoff from the project site would not increase beyond the capacity of downstream drainage facilities, with one exception: the existing 48-inch drainage pipe crossing Beach Boulevard, which is deficient in the existing condition. The on-site flooding that could result would be addressed by construction of a second drainage pipeline under Beach Boulevard. The impact therefore would be *significant but mitigable*.

Methodology

The potential for erosion and siltation, on- or off-site, was analyzed in Impacts HWQ-1.1 and HWQ-1.2.

As required by the Santa Ana RWQCB and the applicable MS4 Permit, existing drainage patterns are to be maintained. Thus, proposed project site grading has been designed to maintain existing drainage patterns, and no further analysis of changes to drainage patterns was undertaken.

In relation to increases in the rate or amount of runoff and flooding, on- or off-site, a significant impact would result if increased runoff generated by the new development would increase the flow rates to levels that could overload the downstream storm drain system.

To determine impacts related to hydrology and drainage at the project site and in the downstream stormwater system, a hydrology study was undertaken to evaluate pre-and post-development conditions for the 2-year, 5-year, 25-year, and 100-year storm events. Orange County Flood Division rational methods and unit hydrograph methodologies were used to determine pre-and post-development flow rates. The hydrology study is provided as EIR Appendix N. The hydrology study addressed stormwater flows for the seven distinct drainage management areas identified as 'A', 'B', 'C', 'D', 'E', 'F' and 'G' and illustrated in **Figure 3.13-1**, as follows:

- Area 'A' consists of the eastern quarter of the site and would generally drain northeasterly into a proposed water quality and detention basin.
- Area 'B' consists of the western half of the eastern half of the site and would generally drain northerly into a proposed water quality and detention basin.
- Area 'C' consists of the western half of the site and would generally drain northerly into a proposed water quality and detention basin.
- Area 'D' consists of the southern center portion of the site that would remain in open space use. This area would continue to generally drain northerly toward and into an

existing water feature that would remain and directly connect to a realigned storm drain system.

- Area 'E' consists of La Habra Hills Drive and would continue to generally drain northerly toward and into existing catch basins that would remain.
- Area 'F' consists of the existing clubhouse along La Habra Hills Drive and would continue to generally drain toward the existing water feature within Area 'D'.
- Area 'G' consists of the slopes that adjoin the northeasterly boundary of the site and drain off-site in existing and proposed conditions.[5]

Impact Assessment

As shown in **Table 3.13-4**, development of the proposed project would decrease the perviousness of the site through the addition of pavement, sidewalks, residential and commercial structures, and parking areas. Reduction in pervious area would reduce the ability for rain water to be captured and infiltrated, and would thus increase total stormwater runoff volumes as indicated in **Table 3.13-5**.

As shown in **Table 3.13-6** through **Table 3.13-11**, a series of proposed water quality basins and detention basins would be provided to meet water quality requirements, mitigate for increases in runoff volume and flow rates associated with proposed development, and ensure that flow rates would be reduced to be equal to or less than the existing flow rates.

Drainage Area 'A' – Basin 'A'

Area 'A' contains 27 acres that would drain to the proposed Basin 'A'. Development in Area 'A' would produce a peak flow of 69.8 cubic feet per second (cfs) during the 100-year storm, which is the major storm event of primary design concern. The existing 30-inch storm drain pipe in Tract 9590, into which flows from Area 'A' would drain, has a maximum capacity of 47.12 cfs. Therefore, the outlet structure for Basin 'A' would be designed to reduce the peak flows to a maximum of 47.12 cfs. In addition, water quality would be addressed by installing a "modular wetlands" system (or approved equivalent) on the outlet pipe that would be sized to treat the entire BMP volume. This BMP device would be installed in such a way as to not restrict or prevent larger storm volumes from safely passing through the basin while still addressing water quality requirements.

[5] There are no improvements proposed within Area 'G' that would increase storm water flow, and the area was therefore not analyzed.

Table 3.13-5
Existing and Post-Project Site Runoff

	Unit Hydrograph – Storm Volume over 24 Hours (Acre Feet)			
	2-Year Storm	**5-Year Storm**	**25-Year Storm**	**100-Year Storm**
Existing Condition – Area 'A'	0.8	1.8	5.8	11.0
Proposed Condition – Area 'A'	2.2	3.6	7.1	11.0
Increase – Area 'A'	**1.4**	**1.8**	**1.3**	**0.0**
Existing Condition – Area 'B'	0.6	1.5	4.5	8.1
Proposed Condition – Area 'B'	1.8	2.9	5.4	8.0
Increase – Area 'B'	**1.2**	**1.4**	**0.9**	**-0.1**
Existing Condition – Area 'C'	3.5	8.3	26.4	49.1
Proposed Condition – Area 'C'	7.1	12.9	29.1	48.9
Increase – Area 'C'	**3.6**	**4.6**	**2.7**	**-0.2**
Existing Condition – Area 'D'	0.7	1.7	4.9	8.7
Proposed Condition – Area 'D'	0.8	1.7	5.0	8.7
Increase – Area 'D'	**0.1**	**0.0**	**0.1**	**0.0**
Existing Condition – Area 'E'	0.8	1.3	2.0	2.6
Proposed Condition – Area 'E'	0.8	1.2	2.0	2.6
Increase – Area 'E'	**0.0**	**-0.1**	**0.0**	**0.0**
Existing Condition – Area 'F'	0.2	0.4	0.6	0.8
Proposed Condition – Area 'F'	0.2	0.4	0.6	0.8
Increase – Area 'F'	**0.0**	**0.0**	**0.0**	**0.0**

Note: Drainage Area 'G' encompasses slopes along the northeasterly boundary of the site that drain off-site under existing conditions. Because there are no improvements proposed that would alter drainage within Area 'G,' changes in runoff from Area 'G' were not analyzed.
Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Table 3.13-6
Basin 'A' Pre-Project and Post-Project Peak Flow Rate Comparison

	Basin 'A' - Unit Hydrograph - Peak Flow Rate (cfs)							
	2-Year		**5-Year**		**25-Year**		**100-Year**	
	Existing	**Proposed**	**Existing**	**Proposed**	**Existing**	**Proposed**	**Existing**	**Proposed**
3-Hour 6-Hour 12-Hour 24-Hour	13.3	27.0	32.1	35.0	52.5	54.3	69.8	69.8

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Drainage Area 'B' – Basin 'B'

Approximately 24.95 acres would be tributary to the proposed underground storage Basin 'B' in Area 'B', which produce a peak flow of 58.2 cfs during the 100-year storm. Any increase in storm flow would be retained by the proposed underground storage Basin 'B'.

Table 3.13-7
Basin 'B' Pre-Project and Post-Project Peak Flow Rate Comparison

Basin 'B' - Unit Hydrograph – Peak Flow Rate (cfs)								
	2-Year		5-Year		25-Year		100-Year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3-Hour 6-Hour 12-Hour 24-Hour	18.5	19.3	28.6	29.3	45.6	45.2	60.1	58.2

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Drainage Area 'C' – Basin 'C'

Approximately 121 acres in Area 'C', including 47 tributary off-site acres, would drain to Basin 'C'. Development within this drainage area would produce a peak flow of 360.1 cfs during the 100-year storm. Every storm that was modeled experienced an increased peak flow rate in the developed condition as compared to the existing condition. Increased flows resulting from increased impervious surface area from the proposed project would be detained by the proposed water quality/detention Basin 'C' located on the westernmost portion of the project site. Basin 'C' would restrict flows leaving the basin to a peak rate of 48.6 cfs, which equals the existing flow rate within Line 'M' of Tract 15030 into which the basin would drain.

Table 3.13-8
Basin 'C' Pre-Project and Post-Project Peak Flow Rate Comparison

Basin 'C' - Unit Hydrograph – Peak Flow Rate (cfs)								
	2-Year		5-Year		25-Year		100-Year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3-Hour 6-Hour 12-Hour 24-Hour	86.5	104.1	140.4	165.9	239.6	271.0	327.5	360.1

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Runoff in the existing condition is directed toward a manmade lake within the golf course fairway, which acts as a detention basin, reducing the peak 25-year 24-hour storm flow rate with the effluent pipe (Line 'M' in Tract 15030[6]) to 48.6 cfs.

The proposed development would mirror the existing condition by restricting the outlet flow rates to a maximum of 48.6 cfs for all storms except the 100-year storm, where the maximum flow rate would be 63.4 cfs. The proposed detention basin would have a 16.2-acre-foot storage capacity and could route all of the storm events that were analyzed through the basin without using the emergency spillway.

However, the existing storm drain under Beach Boulevard is substandard in size for existing conditions. In the 25-year storm, 254 cfs pass through the golf course in a 48-inch pipe from the Westridge community. Another 140 cfs are conveyed through an existing 48-inch pipe from off-site areas to the south. The design capacity of the existing 48-inch pipe under Beach Boulevard is approximately 101 cfs and the 25-year peak storm event is approximately 320 cfs. Therefore, even without development of the project site, the existing storm drain facility is substandard. The existing substandard facility could cause flooding within Beach Boulevard or the project site.

Drainage Area 'D' – Basin 'D'

Area 'D' would consist of 21.19 acres and would generally be left undeveloped with the exception of some minor remedial grading. The existing water feature along the northerly boundary of Area 'D' would act as a detention facility to detain anticipated runoff from this area. Area 'D' would produce a peak flow of 59.4 cfs during the 100-year storm. The 0.7-cfs increase during the 100-year storm event could be accommodated by downstream facilities, which have adequate capacity to accept this drainage.

Table 3.13-9
Basin 'D' Pre-Project and Post-Project Flow Rate Comparison

Basin 'D' - Unit Hydrograph - Peak Flow Rate (cfs)								
	2-Year		5-Year		25-Year		100-Year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3-Hour 6-Hour 12-Hour 24-Hour	16.0	16.3	26.1	26.5	43.3	44.2	58.7	59.4

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

[6] Line 'M' in Tract 15030 is a dedicated storm drain pipe serving as the outlet for an existing lake in the golf course fairway. Line 'M' is connected to the existing municipal storm drain system, which outlets into Coyote Creek.

Drainage Area 'E'

Approximately 5.8 acres would be tributary to Area 'E', which includes realigning La Habra Hills Drive and the clubhouse parking lot. The post-project hydrology condition would be substantially similar to the existing condition, with negligible difference in impervious surface area. The 5.8-acre area within Area 'E' flows toward and into two existing catch basins along La Habra Hills Drive and produces a peak flow of 24.0 cfs during the 100-year storm. The existing 42-inch storm drain has a capacity of 171 cfs with a 25-year design flow rate of 147 cfs. Sufficient capacity in that storm drainage exists to accept an additional 3.7 cfs flow.

Table 3.13-10
Area 'E' Pre-Project and Post-Project Peak Flow Rate Comparison

Area 'E' - Unit Hydrograph - Peak Flow Rate (cfs)								
	2-Year		5-Year		25-Year		100-Year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3-Hour 6-Hour 12-Hour 24-Hour	6.8	8.4	10.0	12.0	15.6	18.5	20.3	24.0

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Drainage Area 'F'

Area 'F' encompasses 1.68 acres, consisting of the existing clubhouse along La Habra Hills Drive, and produces a peak flow of 7.1 cfs during the 100-year storm. The area would continue to generally drain toward the existing water feature within Area 'D'.

Table 3.13-11
Area 'F' Pre-Project and Post-Project Peak Flow Rate Comparison

Basin 'F' - Unit Hydrograph - Peak Flow Rate (cfs)								
	2-Year		5-Year		25-Year		100-Year	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3-Hour 6-Hour 12-Hour 24-Hour	2.6	2.6	3.6	3.6	5.5	5.5	7.1	7.1

Source: Hydrology Analysis, Vesting Tentative Map 17845, 2016.

Significance Conclusion for Impact HWQ-3

Because insufficient capacity exists within the existing 48-inch storm drain under Beach Boulevard, flooding could occur within Beach Boulevard and portions of the project site adjacent to Beach Boulevard. Placing new development within an area where such flooding could occur would represent a significant impact for which mitigation is required.

Mitigation Measures

Mitigation Measure HWQ-3: The applicant shall construct a 48-inch storm drain underneath Beach Boulevard parallel to the existing storm drain pipe that connects the on-site detention basin with the existing storm drain pipe on the west side of Beach Boulevard. The applicant shall perform the work using a jack and bore method to avoid impacts on traffic on Beach Boulevard. The applicant shall also obtain (1) approval from Caltrans to jack and bore underneath Beach Boulevard and, (2) to the extent necessary, a temporary construction easement from the Hillsborough Apartment complex on the west side of Beach Boulevard. Furthermore, the applicant shall recalculate the size of the detention basin, and if additional storage is necessary, the Applicant shall show underground buried stormwater storage adjacent to the detention basin shown on the Vesting Tentative Tract Map. The final hydraulic calculations document that existing off-site storm flows and the additional on-site storm flows would not exceed the design capacity of the existing and new storm drain pipes under Beach Boulevard. All final calculations and design plans shall be approved by the City of La Habra.

Significance Conclusion for Impact HWQ-3 with Implementation of Mitigation Measures

With implementation of **Mitigation Measure HWQ-3**, adequate capacity to carry increased stormwater drainage resulting for the proposed project would be available, and impacts related to on-site flooding would be less than significant.

Threshold HWQ-4: Otherwise substantially degrade water quality.

Impact HWQ-4: Implementation of the proposed project would introduce water quality pollutants during site grading and construction and ongoing operations. Implementation of BMPs and compliance with applicable requirements designed to protect water quality

would ensure that water quality in receiving waters and groundwater would not be substantially degraded. The impact would therefore be *less than significant*.

Methodology

Impacts on water quality were evaluated by considering the general type of pollutants that future site-specific development pursuant to the Specific Plan would generate during construction and operation and whether meeting the requirements of applicable regulations would reduce potential impacts to a less-than-significant level.

The analysis also takes into consideration mandatory compliance with applicable federal, state, and local regulations addressing water quality and urban runoff. In determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal and state laws and regulations that are designed to ensure that water quality is not substantially degraded. Thus, implementation of all relevant water quality requirements would ensure that an exceedance of water quality standards would not occur.

Impact Assessment

Construction

Implementation of the proposed Specific Plan would involve demolition of the existing golf course, site preparation and grading, construction of new buildings, stockpiling of materials, landscaping activities, and infrastructure improvements that could result in degradation of water quality.

However, as described in Impact HWQ-1.1, the proposed Specific Plan would be required to comply with applicable NPDES requirements to control pollutants and protect water quality during construction. The SWRCB Construction General Permit (that would be implemented through the City's permitting process) requires the implementation of BMPs to eliminate or reduce the discharge of pollutants in stormwater discharges, and prohibits the discharge of non-stormwater from construction sites as these non-stormwater discharges are likely to carry pollutants to receiving waters. The proposed project would be required to prepare a SWPPP and implement construction BMPs detailed in the SWPPP during construction. The BMPs are designed to protect water quality and thereby avoid significant impacts. Therefore, with compliance with the required permit actions, project construction activities would not result in a substantial degradation of water quality.

Operation

The residential and commercial land uses that would result from the Rancho La Habra Specific Plan could introduce new or additional pollutants, such as sediments, trash, petroleum products, metals, and chemicals, that could potentially discharge into surface waters by storm drains either directly or during stormwater runoff events. Therefore, Specific Plan development would be required to implement BMPs to reduce the discharge of pollutants to the maximum extent practicable. Implementation of BMPs (such as those identified in Impact HWQ-1.2) would remove potential pollutants from runoff and would ensure that the project would not contribute additional pollutant loads into receiving waters. With implementation of BMPs and LID standards, the proposed Specific Plan would not result in a substantial degradation of water quality, and impacts would be less than significant during ongoing operations.

Significance Conclusion for Impact HWQ-4

Based on the analysis of Impact HQW-1.1 and HWQ-1.2, as well as the findings of the project's WQMP, it is concluded that proposed drainage facilities and BMPs would adequately protect downstream water quality in accordance with local, state, and federal water quality requirements. Therefore, the impact would be less than significant and no mitigation is required.

Threshold HWQ-5: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Impact HWQ-5: Implementation of the proposed Specific Plan would not place housing within a 100-year flood hazard area. *No impact* would occur.

Methodology

Because the project site does not include any land areas within a 100-year flood area, no housing development pursuant to the proposed Specific Plan would be located within a 100-year flood area. Thus, further analysis related to the potential hazards of placing housing within a 100-year flood area is unnecessary.

Impact Assessment

No land areas within the project site are designated as Areas of Special Flood Hazards by FEMA under the NFIP (i.e., areas subject to a 1 percent or greater chance of flooding in any given year; 100-year flood zone). As a result, implementation of the proposed Specific Plan would not result in placement of housing within a 100-year flood hazard, and no impact would occur.

Significance Conclusion for Impact HWQ-5

No impacts related to the placement of housing within a 100-year flood area would occur from implementation of the proposed Specific Plan.

Threshold HWQ-6: Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Impact HWQ-6: Implementation of the Rancho La Habra Specific Plan would not place within a 100-year flood area structures that could impede or redirect flood flows. *No impact* would occur.

Methodology

Because no portion of the project site is within a 100-year flood area, all specific development pursuant to the proposed Specific Plan would be located outside of 100-year flood areas, and no structures could impede or redirect 100-year flood flows. Thus, further analysis of potential hazards related to impeding or redirecting 100-year flood flows is unnecessary.

Impact Assessment

No portion of the project site is subject to a 1 percent or greater chance of flooding in any given year (also identified as a 100-year flood area). Therefore, implementation of the proposed Specific Plan would not place within a 100-year flood area structures that could impede or redirect flood flows.

Significance Conclusion for Impact HWQ-6

Because no structures that could impede or redirect flood flows would be placed within a 100-year flood area, no impacts would occur.

Threshold HWQ-7: Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact HWQ-7: Implementation of the proposed Rancho La Habra Specific Plan would not expose people or structures to risks related to flooding due to the failure of a levee or dam. *No impact* would occur.

Methodology

The project site is not within a dam inundation area, nor is any portion of the site at risk of flooding due to failure of a levee. Thus, no development pursuant to the proposed Specific Plan

would be at risk of flooding due to failure of a dam or levee, and further analysis related to potential dam or levee inundation hazards is unnecessary.

Impact Assessment

The project site is not located within a dam inundation area, nor are any portions of the site at risk of flooding due to failure of a levee.

Significance Conclusion for Impact *HWQ-7*

No impacts related to the exposure of people or structures to significant risk involving flooding due to the failure of a levee or dam would occur.

Threshold HWQ-8: Cause inundation by seiche, tsunami, or mudflow.

Impact HWQ-8: Implementation of the proposed Rancho La Habra Specific Plan would not cause or be subject to inundation due to seiche, tsunami, or mudflow. *No impact* would result.

Methodology

Because the project site does not include any areas that are at risk of a seiche, tsunami, or mudflow, development pursuant to the proposed Specific Plan would not be located within areas that have risks related to these hazards. Thus, analysis related to seiche, tsunami, or mudflow impacts is not necessary.

Impact Assessment

Inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. The Specific Plan area does not contain or adjoin any large water bodies that could have seiche risks and, as a result, implementation of the proposed Specific Plan would have no impact related to seiche. The Specific Plan area is not located adjacent to the Pacific Ocean, and is not at risk of flooding due to a tsunami. The slopes within the Specific Plan area have not been identified as being at risk for mudflow.

Significance Conclusion for Impact HWQ-8

No impacts related to inundation from seiche, tsunami, or mudflow would occur from implementation of the proposed Specific Plan.

3.13.3 REFERENCES – HYDROLOGY AND WATER QUALITY

City of La Habra, *City of La Habra General Plan 2035*, adopted January 21, 2014.

City of La Habra, *Hazard Mitigation Plan*, October 2007.

Hunsaker Associates, *Hydrology Analysis, Vesting Tentative Tract Map 17845, Rancho La Habra*, December 2016.

Hunsaker Associates, *Preliminary Water Quality Management Plan, Tentative Tract Map 17845, Rancho La Habra*, February 2018.

SWRCB, Statement of Policy with Respect to Maintaining High Quality of Waters in California. Resolution No. 68-16, 1968.

3.14 GEOLOGY, SOILS, AND SEISMICITY

3.14.1 INTRODUCTION

a. Overview

This section addresses potential environmental effects of the proposed Rancho La Habra Specific Plan related to geology, soils, and seismicity. The impacts examined include risks related to geologic hazards such as earthquakes, landslides, liquefaction, and expansive soils, and impacts on the environment related to soil erosion and sedimentation.

b. Definitions

- **Buttress Keyway** refers to an engineering technique for stabilizing slopes in areas of poor foundational soil conditions. Poor stability soils are over-excavated to create what is called a "key," the dimensions of which are based on site-specific calculations that define the specific blends of engineered soils needed to backfill the key and slope to meet applicable slope stability standards.
- **Earthquake** is the result of a sudden release of energy in the earth's crust that creates seismic waves. Earthquakes are classified by their magnitude, which is a measure of the amount of energy released during an event. The seismicity or seismic activity of an area refers to the frequency, type, and size of earthquakes experienced over a period of time.
- **Erosion** refers to the loosening and transportation of rock and soil debris by wind, rain, or running water.
- **Expansive Soils** are soils containing water-absorbing minerals that expand as they take in water. These soils can damage buildings due to the force they exert as they expand.
- **Factor of Safety** refers to the ratio of forces resisting movement to those causing movement. When a calculated factor of safety is less than 1.0, forces that make a slope susceptible to failure have exceeded those that tend to hold it in place.
- **Fault** refers to a fracture in the earth's crust forming a boundary between rock masses that have shifted.
- **Fault, Active** is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 11,000 years).
- **Fault, Inactive** is defined by the State Mining and Geology Board as one that has had not surface displacement since before the Quaternary period (more than 1,800,000 years ago).
- **Fault, Potentially Active** is defined by the State Mining and Geology Board as one that has had surface displacement within Quaternary tine (the last 1,800,000 years).
- **Fill** refers to earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon.

- **Fill Material** refers to any material placed in an area to increase surface elevation.
- **Ground Failure** includes mudslides, landslides, liquefaction, or the compaction of soils due to groundshaking from an earthquake.
- **Liquefaction** is the phenomenon in which saturated granular soils temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. The susceptibility of a site to liquefaction is a function of depth to density, water content of granular sediments, and the magnitude and frequency of earthquakes in the surrounding region. Saturated, unconsolidated silt, sand, and silty sand within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomena may include lateral spreading, ground oscillation, loss of load bearing strength, subsidence, and buoyancy effects.
- **Richter Scale** is a scale used to quantify the energy released by an earthquake. The Richter scale is logarithmic, which means that an earthquake registering 5.0 on the Richter scale has a shaking amplitude 10 times that of an earthquake that registered 4.0, and thus corresponds to a release of energy 31.6 times that released by the lesser earthquake.

3.14.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed 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

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program, which provides for characterization and prediction of hazards and vulnerabilities, improvement of building codes and land use practices, risk reduction through post-earthquake investigations and education, development and improvement of design and construction techniques, improvement of mitigation capacity, and accelerated application of research results. This Act designated the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under this Act provide building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which developments under the proposed Specific Plan would be required to adhere.

b. State Plans, Policies, and Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface fault rupture in structures used for human occupancy. The main purpose of the Act is to prevent the construction of buildings for human occupancy on top of the traces of active faults. It was passed into law following the February 1971 magnitude (M) 6.5 San Fernando (Sylmar) Earthquake that resulted in over $500 million in property damage and 65 deaths. Although the Act addresses the hazards associated with surface fault rupture, it does not address other earthquake-related hazards, such as seismically induced groundshaking, liquefaction, or landslides.

This Act requires the State Geologist to establish regulatory zones, now referred to as Earthquake Fault Zones, around the mapped surface traces of active faults, and to publish appropriate maps that depict these zones. Earthquake Fault Zone maps are publicly available and distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. The Act requires local agencies to regulate development within Earthquake Fault Zones. Before a development project can be permitted within an Earthquake Fault Zone, a geologic investigation is required to demonstrate that proposed buildings would not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back a minimum of 50 feet from the fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, which was passed by the California legislature in 1990, addresses earthquake hazards related to liquefaction and seismically induced landslides. Under the act, seismic hazard zones are mapped by the State Geologist in order to assist local governments in land use planning. The Act states that "it is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety." Public Resources Code Section 2697(a) states that "cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard."

California Building Code

The California Building Code (CBC) is included in Title 24 of the California Code of Regulations. The CBC incorporates the International Building Code, a model building code adopted across the United States. Current state law requires every city, county, and other local

public agency enforcing building regulations to adopt the provisions of the CBC within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission. The most recent version of the CBC was published as of July 1, 2016. The effective date of the 2016 Code is January 1, 2017.

The current CBC was adopted by the City of La Habra (City) in Chapter 15.04 of the City's Municipal Code. These codes provide standards to protect property and public safety. They regulate the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, and thereby mitigate the effects of seismic shaking and adverse soil conditions. The codes also regulate grading activities, including drainage and erosion control.

California Construction General Permit

The State of California adopted a Statewide National Pollutant Discharge Elimination System (NPDES) Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 or more acres, are required to obtain coverage under the Construction General Permit for discharges of storm water associated with construction activity.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents, including a risk-level assessment for construction sites, an active stormwater effluent monitoring and reporting program during construction, rain event action plans, and numeric action levels (NALs) for pH and turbidity, as well as requirements for qualified professionals to prepare and implement the plan.

The Construction General Permit requires the SWPPP to identify best management practices (BMPs) that will be implemented to reduce soil erosion. Types of BMPs include preservation of vegetation and sediment control (e.g., fiber rolls).

c. Local Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to geology, soils, and seismicity include the following.

Chapter 7, Community Safety

NH 1.1 Safety Standards. Enforce state and local seismic and geologic safety laws, standards, and guidelines, including the California Building Code, for site design and construction of new and renovated structures.

NH 1.2 Geotechnical Investigations. Require geotechnical investigations prior to approval of development in areas where the potential for geologic or seismic hazards exists addressing, as appropriate, groundshaking, landslides, liquefaction, expansive soils, subsidence, and erosion and incorporate recommended mitigation measures to reduce or avoid the identified hazards.

NH 1.4 Reduce and Control Erosion. Require that development projects involving grading in hillside areas reduce and control erosion potential by utilizing rapid developing planting techniques, slope terracing, replacement with cohesive soils not subject to erosion, and/or the construction of slope drainage improvements.

d. City of La Habra Municipal Code

The La Habra Municipal Code incorporates the CBC, 2013 Edition, including Appendix Chapter J, as the building code of the City "for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the city."

3.14.3 ENVIRONMENTAL SETTING

The approximately 151-acre project site is located within a portion of the former West Coyote Oil Field located along the southern boundary of La Habra. As part of oil production activities, site topography was altered slightly with construction of oil extraction pads and roads throughout the hills. The transition from an oil field to a golf course was undertaken over several years with the involvement of various geotechnical and environmental consultants, as detailed in the Geotechnical Report (refer to Appendix P).

a. Faulting and Seismicity

The La Habra area is in a high seismic risk zone, subject to seismic activity from earthquake faults, including the San Andreas, Sierra Madre, Newport-Inglewood-Rose Canyon, and Whittier-Elsinore. The Puente Hills Thrust Fault covers a broad, rectangular area, including northern Orange County, and would affect La Habra with seismic shaking if an earthquake were to occur on that fault. In addition, there is an unnamed fault listed in the Alquist-Priolo Map within La Habra; it is approximately 0.5 mile long, runs north–south, and is south of Imperial Highway and east of Idaho Street.

San Andreas Fault Zone

The San Andreas Fault Zone runs northwest–southeast approximately 35 miles northeast of La Habra and is the dominant active fault in California. Because the San Andreas Fault is the primary surface boundary between the Pacific and North American plates, it is thought to be capable of producing an M 8.0 to 8.5 earthquake. The last major earthquake on the Southern San Andreas Fault occurred in 1857 and registered M 8.0. The project site and the rest of La Habra would experience strong groundshaking, which would result in damage to older structures, if and when a major episode occurs on this fault.

Sierra Madre Fault Zone

The Sierra Madre Fault Zone is associated with surface rupturing and groundshaking and generally runs east–west through Los Angeles County approximately 15 miles to the north of La Habra. The 1971 San Fernando earthquake occurred on a branch of the Sierra Madre Fault Zone. As a result, the entire length of the Sierra Madre Fault Zone is now being considered to be potentially active.

Newport-Inglewood-Rose Canyon Fault Zone

The Newport-Inglewood-Rose Canyon Fault Zone is approximately 15 miles southwest of La Habra and runs northwest–southeast near Santa Monica, Long Beach, Huntington Beach, and Newport Beach. This fault zone is considered active. Historic earthquakes caused by movement in this fault zone include the Long Beach earthquake (March 10, 1933; M 6.3), the Signal Hill earthquake (October 2, 1933; M 5.0), and the Gardena earthquake (November 14, 1941; M 5.5).

Whittier-Elsinore Fault Zone

The active Whittier-Elsinore Fault Zone runs through the Puente Hills, just over 2 miles north of La Habra, and poses the most significant earthquake threat to the project site and the rest of the City. An M 6.9 earthquake on the northwest segment of this fault zone has been estimated to have a return period of 450 years. Earthquakes with surface rupture on only the Whittier Fault are estimated to have return intervals of 100 years for an M 6.5 earthquake and 1,200 years for an M 7.5 earthquake. An unpublished paleoseismic investigation suggests that the Whittier Fault segment has not moved for 2,000 years, suggesting that an earthquake along this fault is overdue.

Puente Hills Thrust Fault

The Puente Hills Thrust Fault is a broad, rectangular area 25 miles long and 15 miles wide running through the counties of Los Angeles, Orange, and San Bernardino, including northern La Habra. The 1987 M 5.9 Whittier-Narrows earthquake led to the discovery of the Puente Hills Thrust Fault. This fault has ruptured at least four times in the past 11,000 years with

magnitudes ranging from M 7.2 to M 7.5. Scientists with the Southern California Earthquake Center (SCEC) and the United States Geological Survey (USGS) estimate that an M 7.0 earthquake along this fault would result in substantial damage to structures in the La Habra area.

Unnamed West Coyote Hills Fault

On October 1, 1968, while the project site was still an active oil field, a fault ruptured off-site to the east near Idaho Street. Subsequent extensive fault trenching in 1970 allowed for detailed mapping of the approximately 3-inch, vertically offset fault trace. The well-defined fault lineament was documented, evaluated, and became known as the "Unnamed West Coyote Hills Fault." Oil field operations (subsidence due to oil extraction and groundwater injection activities) were presumed to be a probable cause of the fault rupture. The fault was mapped as an Alquist-Priolo Earthquake Fault Zone.

A fault study of the region was performed in the early 1990s by trenching the area of the project site and the two now-existing adjacent tracts to the south. Numerous inactive north-south trending faults, along with the historically active off-site Unnamed West Coyote Hills Fault, were documented as part of this study. This early 1990s study led to a recommended structural setback extending 100 feet from either side of the Unnamed West Coyote Hills Fault lineament. With the exception of the Unnamed West Coyote Hills Fault, no other documented faults or fault splays within or adjacent to the project site were determined to be active or potentially active.

b. Seismic Hazards

Surface Rupture

Surface rupture or displacement occurs as a fault breaks the ground surface during an earthquake. Generally, this hazard occurs along known, pre-existing faults. Because surface rupture cannot be prevented, faults are identified in order to avoid construction over the surface trace of potentially hazardous faults. Buildings typically collapse or suffer significant damage as a result of differential movement through a foundation. The Unnamed West Coyote Hills Fault, located south of Imperial Highway and east of Idaho Street within the Coyote Hills, has been mapped as an Alquist-Priolo Earthquake Fault Zone and could cause surface rupturing in an earthquake.

Groundshaking

La Habra and surrounding communities experienced an M 5.1 earthquake on March 28, 2014, along with numerous smaller foreshocks and aftershocks. The earthquake epicenter was estimated to be located about 1 mile east of La Habra, at a depth of approximately 3 miles below

ground. Based on USGS reports, the earthquake was associated with the Puente Hills Blind Thrust Fault System, the same fault that caused the 1987 Whittier Narrows earthquake but not related to the Unnamed West Coyote Hills Fault that is located east of the project site.

Nearby active faults and corresponding maximum magnitude are summarized in **Table 3.14-1**.

Table 3.14-1
Regional Earthquake Faults

Fault	Distance from Project Site (miles)	Maximum Magnitude Earthquake
Puente Hills (Coyote Hills section)	2.7	6.8
Lake Elsinore (Whittier section)	3.2	6.9
Puente Hills (Santa Fe Springs section)	2.0	6.6
Unnamed West Coyote Hills	<0.1	2.2 to 2.6

Source: Preliminary Geotechnical Report for Rancho La Habra Residential Development, 2016.

c. Project Site Soils and Geology

The existing golf course was rough graded between 1997 and 1999 concurrent with grading of adjacent residential Tracts 15030 and 15031 within the Westridge neighborhood south of the project site. Grading of the golf course generally involved cuts and fills of up to approximately 35 feet, greater in some areas of the westernmost portion of the site. Remedial grading also included removal and stockpiling of crude oil-affected soils (see Section 3.12, *Hazards and Hazardous Materials*, for a discussion of crude oil-affected soils within the project site).

Grading of the existing golf course included placement of both structural fill (i.e., compacted fill with a required minimum relative compaction of 90 percent) and non-structural fill considered unsuitable for support of structures (i.e., fill placed with a required minimum relative compaction of 85 percent). Structural fill was reportedly placed along the southern perimeter of the golf course in support of the adjacent Westridge residential developments (Tracts 15030 and 15031), below structures and utility alignments across the golf course, and within adjacent perimeter slopes and roadways. Non-structural artificial fill was placed within the central area of the western portion of the project site and within several small canyons at the eastern portion of the site. Removals of the near-surface weathered alluvial deposits were reportedly limited in these areas, and the deposits were not specifically removed to competent native soils prior to fill placement.

Buttress keyways were constructed for stabilization of ascending slopes to the south of the golf course, and smaller stabilization fill keyways were constructed for the 2:1 (horizontal to vertical) slopes along the northern perimeter of the golf course. During grading, approximately nine

ancient "major" and numerous "minor" northwest and northeast trending normal faults (typical for the region) were encountered and mapped. As stated above, these faults were not considered active or potentially active.

The project site is located partially on alluvium deposits and partially within the uplifted bedrock that forms the low hills of the Coyote Hills geologic complex south of the site. The comparatively young alluvium locally incised a broad, very old alluvial fan that spans the La Habra area to the north. The local alluvium consists of interfingered deposits derived from upstream to the northeast and from the low hills ascending to the south of the site. The bedrock unit underlying the site consists of Quaternary San Pedro Formation, and two existing landslides derived from this material have been identified within the limits of the site. Also, both structural and non-structural artificial fills mantle portions of the site. A brief description of these geologic units is presented below. Their approximate locations are depicted in **Figure 3.14-1**.

Artificial Fill – Older (Map Symbol - Afo)

Older artificial fill soils encountered at the project site are generally considered structural, reportedly having been placed in relatively thin lifts, at near optimum moisture content, and compacted with heavy construction equipment to achieve a minimum relative compaction of at least 90 percent. Structural fill was placed at certain locations for support of golf course structures and utility alignments, along the southern perimeter of the site for support of adjacent tracts to the south, and along the northern perimeter in areas of 2:1 (horizontal to vertical) slopes. The material consists of variable layers of silty clay to clayey sand with some gravel, generally moist to very moist, stiff to very stiff/dense.

Artificial Fill – Unsuitable (Map Symbol - Afu)

Unsuitable artificial fill soils occur within the western-central area of the project site and within several small canyon fill areas within the eastern portion of the site. The unsuitable fill is considered non-structural and has a minimum relative compaction of 85 percent. Reportedly, the non-structural fill was placed directly on native soils with minimal remedial grading with the exception of areas graded for environmental mitigation. The material consists of variable layers of silty clay to clayey sand with some gravel, generally moist to very moist, stiff to very stiff/medium dense to dense. Reuse Areas (areas with crude oil-affected soils placed under regulatory agency supervision during golf course construction) are located within this material (see **Figure 2-6** in Chapter 2, *Project Description*)

Quaternary Alluvium (Map Symbol – Qal)

Quaternary alluvium underlies the majority of the western portion of the project site, and is undifferentiated from colluvium within the smaller canyons of the Coyote Hills to the south. It

generally consists of medium dense silty and clayey sands and stiff to very stiff sandy clays with minor amounts of gravel.

Quaternary Landslide Deposit (Map Symbol – Qls)

Several bedrock-block type landslides occur in the vicinity of the project site. Two landslides were removed during grading of the adjacent tracts to the south within the Westridge community, and one on-site landslide at the western side of the project site was previously stabilized with shear keyways and left in place. Another small, relatively thin landslide was identified at the northeastern edge of the site and was subsequently determined to have been left in place. Where encountered, the landslide material was observed to be similar to the bedrock unit at the site, but highly fractured and weathered.

Quaternary San Pedro Formation (Map Symbol – Qsp)

The sedimentary bedrock unit that underlies the project site is the Pleistocene-age Quaternary San Pedro Formation, derived from a shallow marine depositional environment. The formation is broken into four units that vary in dominant material type, variably exposed between the faults that intersect the site. The fossiliferous material generally consists of sandy siltstone and minor amounts of claystone interbedded with medium to coarse, weakly to well-cemented sandstone. The eastern portion of the site has more sandstone, while the central and western portions of the site have a more variable mix of interbedded siltstone, sandstone, and clayey siltstone.

d. Liquefaction Potential

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similar to a fluid when subject to high-intensity groundshaking. Liquefaction occurs when three general conditions co-exist: (a) shallow groundwater, (b) low-density non-cohesive (granular) soils, and (c) high-intensity ground motion. Studies indicate that saturated, loose, near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. In general, cohesive soils are not considered susceptible to liquefaction. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. Dynamic settlement of dry loose sands can occur as the sand particles tend to settle and densify as a result of a seismic event.

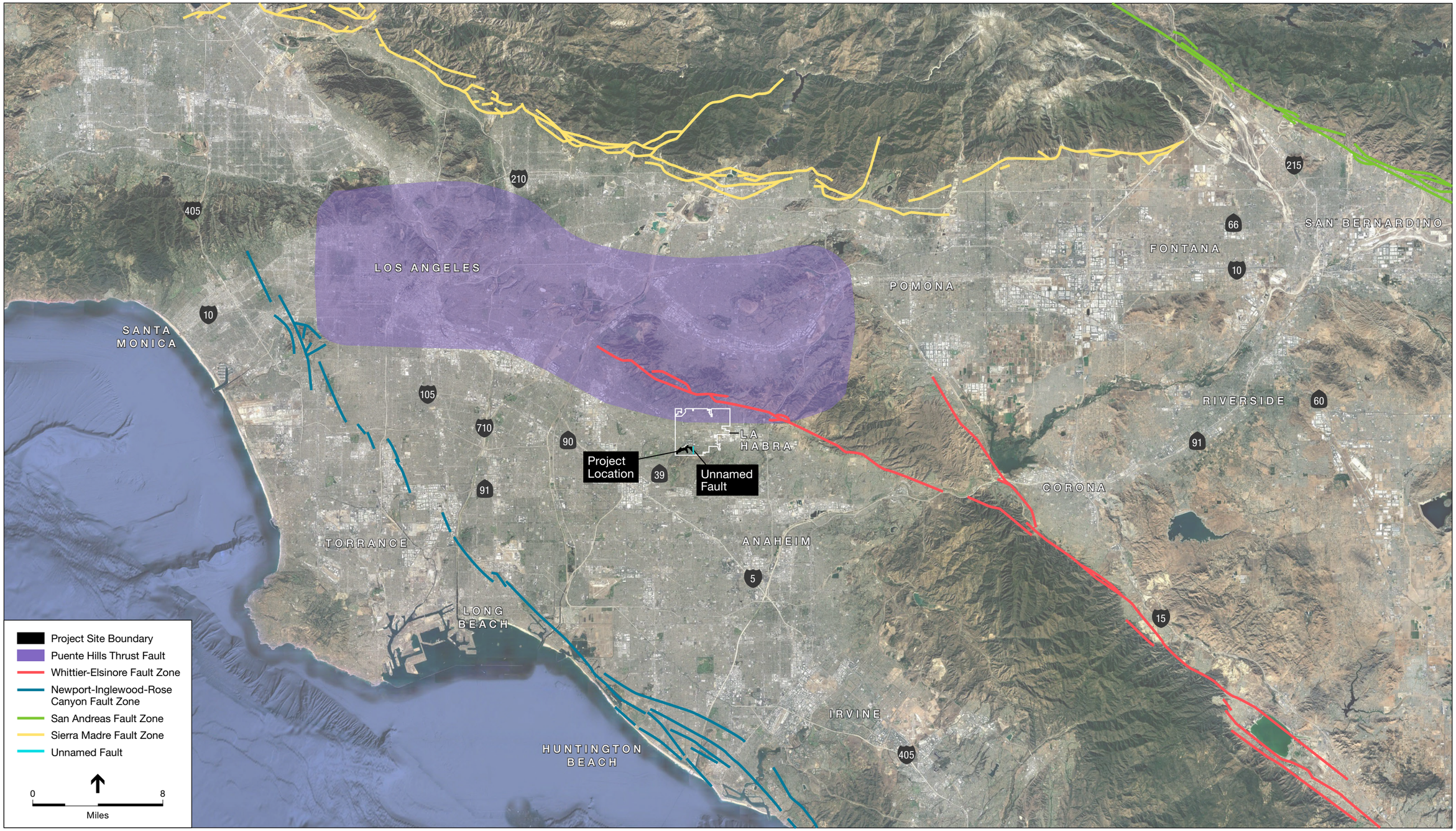


Figure 3.14-1: Area Faults

Source: Google Earth Pro; Atkins

The lower portions of the project site are located within a State of California Seismic Hazard Zone for liquefaction potential. The majority of the developed site would consist of compacted fill over dense/hard bedrock and would not be considered susceptible to liquefaction. However, the west portion of the site contains alluvial soils that may be susceptible to liquefaction depending primarily on their apparent density (e.g., loose to dense) and plasticity. The majority of the alluvial soils that were tested were found to be cohesive and not susceptible to liquefaction based on their saturated moisture content compared to their liquid limit.

Based on the applicable seismic criteria (e.g., 2013 CBC), the data obtained from field evaluation indicate that the site contains isolated sandy layers susceptible to liquefaction in the upper 50 feet. Based on the data obtained from field evaluation, total seismic settlements are estimated to be on the order of 1 to 2 inches. Differential seismic settlement can be estimated as half of the total estimated settlement over a horizontal span of about 30 feet.

e. Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope toward a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements, and such movement typically damages pipelines, utilities, bridges, and structures. Due to the lack of an adjacent free face at the project site, the potential for lateral spreading was determined to be very low.

f. Earthquake-Induced Landslides

The slopes within the southwestern and eastern portions of the project site are located within a State of California Seismic Hazard Zone for earthquake-induced landslide. The remedial grading that was conducted for construction of the golf course and the Westridge residential tracts to the south of the golf course consisted of buttress keyways and replacement fill slopes. As a result, the current potential for earthquake-induced landslides within the project site is low.

g. Expansive Soils

As part of the Geotechnical Report, previous studies conducted at the project site during grading for the existing golf course and surrounding development were reviewed, along with laboratory testing of on-site soils. These data sources indicate a “very low” to “very high” potential for expansive soils, with a high degree of variability in expansion potential across the project site.

h. Corrosive Soils

Preliminary corrosion testing undertaken for the Geotechnical Report indicated soluble sulfate contents ranging from 0.01 to 0.05 percent, chloride contents ranging from 33 to 175 parts per million (ppm), pH values ranging from 7.6 to 8.2, and minimum resistivity values ranging from 478 to 1,898 ohms centimeter (ohms-cm). Caltrans Corrosion Guidelines indicate that soils are considered corrosive to structural elements if the pH is 5.5 or less, or the chloride concentration is 500 ppm or greater, or the sulfate concentration is 2,000 ppm (0.2 percent) or greater. Based on preliminary and previous laboratory sulfate test results at the project site, near-surface soils have a severity categorization of "Not Applicable" to "Severe."

3.14.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of cultural resources impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold GEO-1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (Refer to Division of Mines and Geology Special Publication 42);

ii) Strong seismic groundshaking;

iii) Seismic-related ground failure, including liquefaction; and/or

iv) Landslides;

Threshold GEO-2 Result in substantial soil erosion or the loss of topsoil;

Threshold GEO-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

Threshold GEO-4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or

Threshold GEO-5 Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

3.14.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold GEO-1: Expose people or structures to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and/or landslides.

Impact GEO-1.1: Proposed residential structures on Lots 12, 28 and 29 would be located within the Alquist-Priolo Earthquake Fault Zone, which could potentially expose those structures and people to a significant safety risk should active faults or active fault splays be located within 100 feet of the lots. The resulting impact would be *significant but mitigable*.

Methodology

In determining whether a significant impact would result from the proposed project, the analysis includes consideration of state law, including the Alquist-Priolo Earthquake Fault Zoning Act, which prohibits construction of structures for human occupancy astride an active fault, as well as the CBC, which sets standards for buildings to withstand seismic events. In general, existing state law and building codes provide for an adequate level of safety such that buildings built to code would withstand groundshaking forces of a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. In addition, critical facilities and structures (e.g. hospitals, emergency operations centers) built to code would remain standing and functional following an earthquake. Any building designed for human occupancy that would not meet applicable seismic design standards would be considered to have a significant impact.

The analysis of impacts is based on the "Preliminary Geotechnical Report for Proposed Westridge Residential Development, VTTM 17845, City of La Habra, California" (Geotechnical Report) prepared by LGC Geotechnical, Inc. (LGC), dated June 23, 2016. The Geotechnical Report, which can be found in Appendix P, includes (1) a review of previous geotechnical reports, geologic maps, and air photos pertinent to the project site; (2) the results of a subsurface geotechnical evaluation of the site; (3) a geotechnical map of the site incorporating available geotechnical information; (4) geotechnical cross-sections depicting the interpreted subsurface conditions of the site relative to the proposed design; (5) a global slope stability analysis in support of the proposed design; and (6) preliminary recommendations for the site in consideration of the proposed development.

In July 2014, February 2015, and November 2016, LGC performed a subsurface geotechnical evaluation of the project site consisting of the excavation of six large-diameter bucket auger borings, 18 hollow-stem auger borings, and 11 Cone Penetration Test (CPT) soundings to

evaluate on-site geotechnical conditions. In addition, laboratory testing included in-situ moisture content and in-situ dry density, Atterberg Limits, grain size analysis, consolidation, direct shear, expansion index, and laboratory compaction and corrosion (sulfate, chloride, pH and minimum resistivity) (see **Figure 3.14-2**). LGC's review of previous reports and literature included analysis of information and data that has been collected for the project site and existing development dating back to the early 1900s, when the site was associated with petroleum production as part of the now former West Coyote Hills oil field, and through the 1990s, when the site was graded and developed as the now existing Westridge Golf Club.

Impact Assessment

As indicated in the Geotechnical Report (Appendix P), a small portion of the project site along Idaho Street is located within the Alquist-Priolo Earthquake Fault Zone of the Unnamed West Coyote Hills Fault. Proposed Vesting Tentative Tract Map 17845 indicates that Lots 12, 28 and 29 would be located within the Alquist-Priolo Earthquake Fault Zone.

The residential structures proposed for these lots would be located at least 200 feet away from the reported surface trace of the Unnamed West Coyote Hills Fault, exceeding the previously recommended 100-foot structural setback described in 1992 as part of the previous Westridge development. The Geotechnical Report concluded that proposed Lots 12, 28 and 29 are not underlain by an active fault. However, the Geotechnical Report also stated that "those three lots will require verification geologic mapping prior to construction of habitable structures." The Geotechnical Report further stated, "Due to the distance of proposed structures from the surface trace of the Unnamed West Coyote Hills Fault, the possibility of damage due to ground rupture is considered low, provided that the portion of development located within the Earthquake Fault Zone is verified to be lacking fault indicators."

Significance Conclusion for Impact GEO-1.1

While the three proposed residential lots within Alquist-Priolo Earthquake Fault Zone would be located at least 200 feet from the Unnamed West Coyote Hills Fault, exceeding the setback distance required by law (50 feet) and previous geotechnical recommendations for the Westridge development (100 feet), until the recommended verification is provided that Lots 12, 28, and 29 are lacking fault indicators, a significant impact relative to risk of fault rupture along a known fault would result from development of residential structures on Lots 12, 28 and 29.

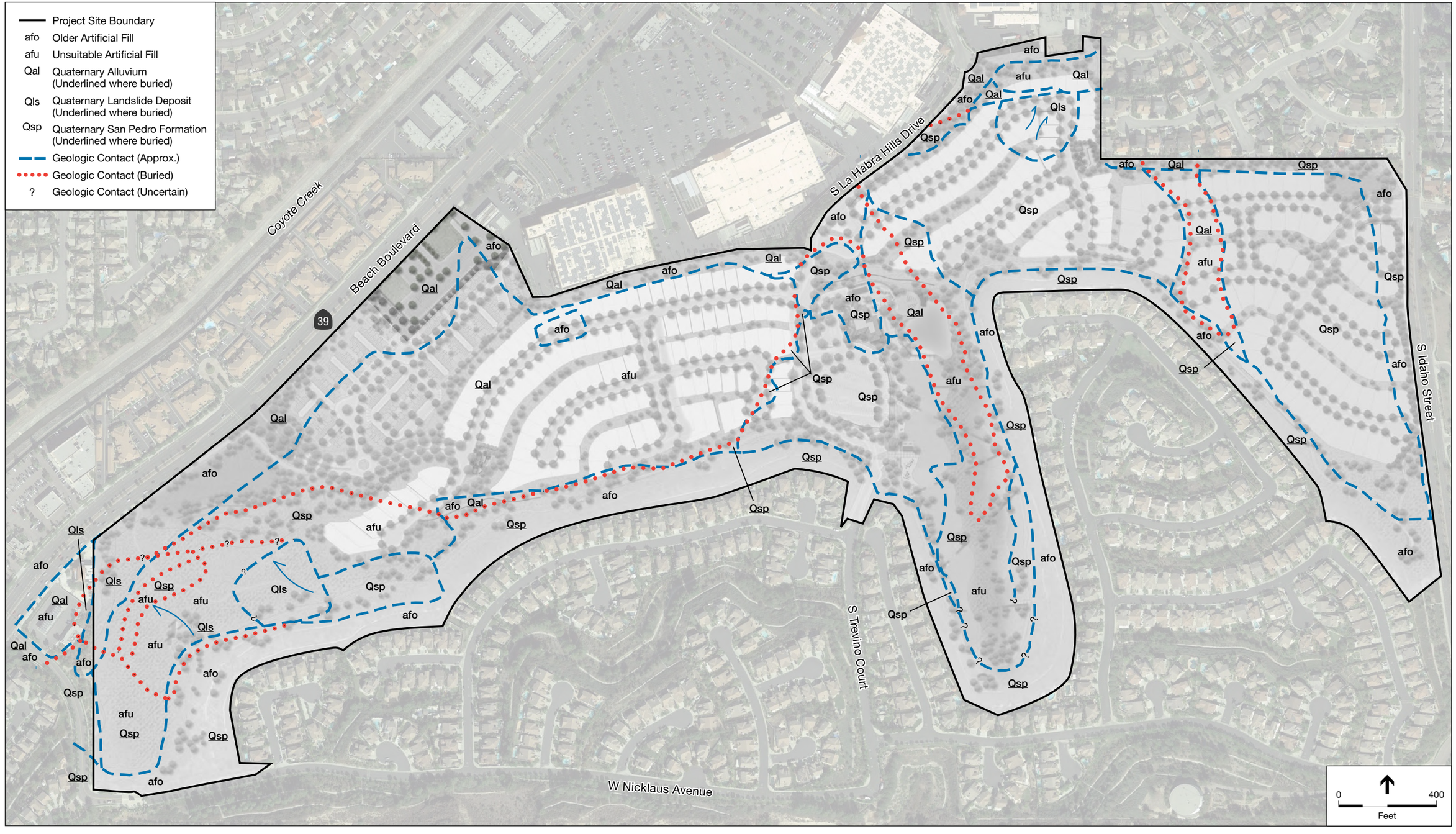


Figure 3.14-2: Onsite Geotechnical Conditions

Source: Google Earth Pro; Carlson SLS

Mitigation Measures

Mitigation Measure GEO-1.1: A minimum 100-foot setback for all residential structures shall be maintained from any active fault or fault splay.

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

With implementation of **Mitigation Measure GEO-1.1**, all residential structures would have an adequate setback from active faults, and impacts related to risk of fault rupture would be less than significant.

Threshold GEO-1: Expose people or structures to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and/or landslides.

Impact GEO-1.2: Implementation of the Rancho La Habra Specific Plan would expose people and structures to strong seismic groundshaking. However, compliance with existing California Building Code requirements as they would apply to site-specific conditions would ensure that impacts related to risk of loss, injury, or death involving strong seismic groundshaking would be *less than significant*.

Methodology

The analysis of impacts related to risk of loss, injury, or death as the result of strong seismic groundshaking is based on the Geotechnical Report (Appendix P). The analysis considers the risk of loss, injury, or death due to strong seismic groundshaking that would result from the proposed Specific Plan increasing the number of people and buildings the project site. In determining whether a significant impact would result from the proposed project, the analysis includes consideration of CBC requirements for new construction aimed at minimizing earthquake hazards to life and property.

Impact Assessment

The City and the project site are located within a seismically active region. Implementation of the proposed project would add residents, employees, and new structures for human occupancy within the Specific Plan area. Therefore, project implementation would result in an increased number of people and structures subject to hazards from strong groundshaking. However, seismic groundshaking is a risk throughout Southern California, and seismic risks within the Specific Plan area are typical of those throughout the region.

The Specific Plan provides for new structures for human occupancy to be constructed pursuant to applicable seismic design regulations at the time of construction. The CBC, as currently adopted in the La Habra Municipal Code, includes provisions to reduce impacts caused by potential major structural failures or loss of life resulting from earthquakes or other geologic hazards. For example, the CBC requires that a California Certified Engineering Geologist or California-licensed civil engineer prepare a site-specific engineering analysis that demonstrates the satisfactory performance of proposed structures, and contains requirements for design and construction of structures to resist loads and peak ground accelerations that could result from earthquakes. In addition, the City (through implementation of the CBC) requires that a site-specific soil engineering report be prepared to include appropriate subsurface exploration, laboratory testing and engineering analysis necessary to provide specific foundation, floor slab, and grading recommendations that include considerations for type of occupancy, and building structural system, and height that are required to be incorporated into grading plans and specifications as a condition of project approval.

Significance Conclusion for Impact GEO-1.2

Specific Plan development would be required to conform to the seismic design parameters of the CBC, which are reviewed by the City for appropriate inclusion into the building plan check and development review process. The Geotechnical Report identifies the specific seismic design parameters that would be required by the City for on-site development to comply with the CBC based on site-specific conditions. Because the Specific Plan area is located in a seismically active region, some risk related to seismic groundshaking would remain, even with compliance with all applicable regulatory standards. However, compliance with CBC and La Habra Municipal Code requirements for structural safety would provide an appropriate level of safety and reduce hazards from strong seismic groundshaking to a less-than-significant level.

Threshold GEO-1: Expose people or structures to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and/or landslides.

Impact GEO-1.3: Implementation of the Rancho La Habra Specific Plan would expose people and structures to seismic-related ground failure, including liquefaction. The impact would be *significant but mitigable*.

Methodology

The analysis of impacts related to risk of loss, injury, or death as the result of seismic-related ground failure, including liquefaction, is based on the Geotechnical Report (Appendix P). The analysis considers the risk of loss, injury, or death due to seismic-related ground failure that

would result from the proposed Specific Plan increasing the number of people and buildings within the project site. In determining whether a significant impact would result from the proposed project, the analysis includes consideration of CBC requirements for new construction aimed at minimizing the risks of seismic-related ground failure, including liquefaction, to life and property.

Impact Assessment

Secondary effects of seismic shaking resulting from large earthquakes on the major faults in the Southern California region include ground lurching and shallow ground rupture, soil liquefaction, dynamic settlement, and landsliding. These secondary effects of seismic shaking are a possibility throughout the Southern California region and are dependent on the distance between the site and causative fault and the on-site geology.

As previously indicated, a portion of the project site is located in a State of California Seismic Hazard Zone for liquefaction potential. Upon completion of project grading, the areas within which structures would be located would generally consist of compacted fill over dense/hard bedrock, which would provide for conditions that are not considered susceptible to liquefaction. However, a portion of the site contains alluvial soils that are generally considered susceptible to liquefaction depending on their apparent density and plasticity. Based on laboratory testing, the majority of the site's alluvial soils are cohesive and not susceptible to liquefaction. However, subsurface data indicate that relatively isolated sandy layers within alluvial soils are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface. Total dynamic settlement is estimated to be on the order of 1 to 2 inches. Differential dynamic settlement can be estimated at half of the total settlement over a horizontal span of 30 feet for design of foundations.

Significance Conclusion for Impact GEO-1.3

Because the project site contains relatively isolated sandy layers within alluvial soils that are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface, the potential for liquefaction and dynamic settlement exists within the proposed development area, and a significant impact would result, requiring mitigation.

Mitigation Measures

Mitigation Measure GEO-1.3: Stiffened and/or post-tensioned slab foundations shall be used to support all new proposed development within the project site. Pre-soaking of the subgrade soils shall be required to reduce the potential impact of expansive soils.

Significance Conclusion for Impact GEO-1.3 with Implementation of Mitigation Measures

Compliance with CBC requirements for new construction aimed at minimizing seismic-related ground failure, including liquefaction, along with implementation of **Mitigation Measure GEO-1.3**, which reflects the recommendation of the Geotechnical Report, will reduce impacts related to the exposure of people or structures to risk of loss, injury, or death involving seismic related ground failure, including liquefaction, to a less-than-significant level.

Threshold GEO-1: Expose people or structures to risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic groundshaking, seismic-related ground failure, and/or landslides.

Impact GEO-1.4: The mechanically stabilized earth (MSE) wall below proposed Lots 241 through 245 would be at risk from landslide. The impact related to risk of loss, injury, or death involving landslides would be *significant but mitigable*.

Methodology

The analysis of impacts related to risk of loss, injury, or death as the result of landslides is based on the Geotechnical Report (Appendix P). The analysis considers the risk of loss, injury, or death due to landslides that would result from the proposed Specific Plan permitting development adjacent to existing slopes, as well as the effect of site grading on those slopes in relation to existing development within the Westridge community to the south. In determining whether a significant impact would result from the proposed project, the analysis includes consideration of CBC requirements for new construction aimed at minimizing landslide hazards to life and property.

As stated in the Geotechnical Report, a minimum factor of safety of 1.5 is typically required for static loading conditions. In addition, the County of Orange Grading Manual requires a horizontal seismic coefficient (Kh) of 0.15 with a minimum resulting factor of safety of 1.1. Therefore, a significant impact would occur if (1) any slope constructed as part of the proposed project would not meet these factor-of-safety standards, (2) site grading would cause an existing manufactured slope to drop below these factor-of-safety standards, or (3) new structures were sited so as to be susceptible to a landslide of a slope not affected by site grading.

Impact Assessment

The maximum proposed cut and fill slopes shown on the project grading plan are approximately 80 feet and 40 feet, respectively. Slope stability analyses were performed as part of the geotechnical analysis to evaluate the stability of proposed manufactured fill slopes within

the project site. The analyses indicate a factor of safety greater than 1.5 and 1.1 for static and pseudo-static (seismic) loading conditions, respectively, which meet applicable safety requirements for slope stability and indicate that proposed manufactured slopes are anticipated to be both grossly and surficially stable as proposed. In addition, the Geotechnical Report concluded that existing native and cut slopes surrounding the development are anticipated to be grossly stable; however, minor surficial failures may occur.

Numerous mechanically stabilized earth (MSE) retaining walls up to approximately 13 feet in height are proposed, including a mid-slope MSE retaining wall (see **Figure 2-8** in Chapter 2, *Project Description*). In addition, numerous relatively small conventional retaining walls are proposed. According to the Geotechnical Report, proposed MSE and retaining walls would be stable. However, global slope stability analysis also indicated that reinforcement is necessary in order to provide an adequate factor of safety for the proposed mid-slope MSE wall located below Lots 241 through 245 of Vesting Tentative Tract Map 17845 due to the proposed height of the wall.

Proposed site grading would not cut into or otherwise modify existing perimeter slopes adjacent to the Westridge community. As stated earlier, these slopes were provided with buttress keyways and remedial grading when first constructed to ensure that stability. Based on the results and recommendations of the Geotechnical Report, proposed site development would not adversely affect adjacent perimeter properties.

Significance Conclusion for Impact GEO-1.4

As indicated in the Geotechnical Report, slopes within the project site would be stable and structures would not be at risk from landslide with one exception. Reinforcement is necessary in order to provide an adequate factor of safety for the proposed MSE walls located below Lots 241 through 245 of Vesting Tentative Tract Map 17845. As a result, a significant impact would result, requiring mitigation.

Mitigation Measures

Mitigation Measure GEO-1.4: Additional geogrid reinforcement length beyond local stability requirements to be determined by the MSE wall designer and approved by the Chief Building Official shall be required to provide adequate global stability factors of safety (greater than 1.5 and 1.1 for static and pseudo-static [seismic] loading conditions, respectively, for the MSE wall located below Lots 241 through 245 of Vesting Tentative Tract Map 17845.[1]

[1] Preliminary slope stability analysis set forth in the project geotechnical report indicates at least 6 layers of geogrid reinforcement lengths of 60 feet, with an allowable strength (after appropriate reduction factors are applied by the

Significance Conclusion for Impact GEO-1.4 after Implementation of Mitigation Measures

With the implementation of **Mitigation Measure GEO-1.4**, all slopes within the project site would have an adequate factor of safety and would not pose a landslide risk, resulting in a less-than-significant impact.

Threshold GEO-2: Result in substantial soil erosion or the loss of topsoil.

Impact GEO-2: Site grading and construction activities would result in short-term increases in the transport of silt and sediment to receiving waters. However, compliance with National Pollutant Discharge Elimination System (NPDES) requirements, as well as implementation of a Stormwater Pollution Prevention Plan (SWPPP), including best management practices (BMPs), would avoid substantial erosion or loss of topsoil. The resulting impact would therefore be *less than significant*.

Methodology

Erosion-related impacts are addressed in detail in Section 3.14, *Hydrology and Water Quality*. As stated under **Impact HWQ-3**, in determining the level of significance, the analysis recognizes that development under the proposed Specific Plan would be required to comply with relevant federal, state, and regional laws and regulations that are designed to reduce erosion and siltation during construction and ensure that applicable water quality standards and waste discharge requirements are met.

A significant impact related to erosion would occur if the Specific Plan would not implement or would be inconsistent with existing regulatory requirements designed to prevent erosion and sedimentation during construction. Conversely, implementation of all relevant erosion control requirements would ensure that impacts would be less than significant.

Impact Assessment

Construction and grading within the project site would involve removal of vegetative cover and temporary disturbance of surface soils. During the construction period, grading, excavation, and remediation activities would result in exposure of soil to runoff, causing erosion and entrainment of sediment in the runoff.

manufacturer) of approximately 3.5 kips per foot, spaced at a maximum vertical spacing of 2 feet, are required for adequate global factors of safety. Further refinement of the design for required global stability geogrid will occur during preparation of the 40-scale grading plan and with input from the MSE wall designer subject to approval of the La Habra Chief Building Official.

Soil stockpiles and excavated areas within the project site would be exposed to runoff from initial clearing of vegetation and demolition of golf course facilities until grading and excavation activities are completed and new ground cover (landscaping, hardscape, paving, buildings) is established. During this period of time, which is expected to last approximately 11 to 12 months, approximately 3,400,000 cubic yards of soil would be moved within the project site.

If not properly managed, runoff from exposed ground would cause erosion and increased sedimentation and pollutants in storm water. Because of buried contaminants within subsurface soils[2] in some areas, erosion could also result in release of those contaminants. If released, these substances could be transported to the Pacific Ocean via receiving waters in storm water runoff, causing an incremental reduction in water quality.

Significance Conclusion for Impact GEO-2

Before construction begins, the project applicant would be required to submit a notice of intent with the appropriate fees to the State Water Resources Control Board under the Construction General Permit.

In addition, the project applicant would be required to prepare a SWPPP, which would establish BMPs in order to reduce sedimentation and erosion. The project would also incorporate all monitoring elements as required in the Construction General Permit. The project applicant would also develop an erosion and sediment control plan to be reviewed and approved by the City Chief Building Official prior to issuance of grading permit.

Implementation of the BMPs prescribed in the SWPPP that must be prepared for the proposed project would ensure that the construction-related impacts resulting from site grading would minimize the amount of silt and sediment that is transported to downstream locations.

BMPs that would be installed for the project include temporary storm water detention/desilting basins, silt fences, fiber rolls, and gravel bags, as appropriate, designed to retain storm flows on-site, slow surface runoff velocities, and provide pollutant/silt containment. Implementation of storm water detention/desilting basins would be designed to capture and temporarily hold peak storm flows prior to discharge to the storm drain system to provide for settlement of solids prior to discharge. The silt fences, fiber rolls, and gravel bags would also be used in appropriate locations approved by the City to direct and slow storm runoff. As a result, these BMPs would reduce sediment discharge.

[2] See Section 3.12, *Hazards and Hazardous Materials*, of this EIR for a discussion of on-site contamination and remediation requirements.

In addition, other standard conditions (e.g., compliance with the drainage controls prescribed in the CBC and Chapter 15.44, Excavations and Grading, of the La Habra Municipal Code) would further minimize potential construction-related erosion and siltation impacts.

As a result, impacts would be less than significant, and no mitigation measures would be required.

Threshold GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Impact GEO-3: The project would be located on unstable soils susceptible to landslides, liquefaction, settlement, and corrosivity. However, implementation of mitigation measures based on the recommendations of the project's Geotechnical Report and compliance with the California Building Code would resolve soil stability issues. The impact would therefore be *significant but mitigable*.

Methodology

The analysis of impacts related to risk of loss, injury, or death as the result of on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse is based on the Geotechnical Report (Appendix P). The analysis considers the risk of loss, injury, or death due to on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse that would result from the proposed Specific Plan increasing the number of people and buildings that may be subject to such hazards. In determining whether a significant impact would result from the proposed project, the analysis includes consideration of CBC requirements for new construction aimed at minimizing hazards to life and property in relation to landslide, lateral spreading, subsidence, and liquefaction.

Impact Assessment

Landslides

As discussed above in **Impact GEO-1.4**, the Geotechnical Report indicates that all slopes within the project site would be stable and structures would not be at risk from landslide with one exception: Needed factors of safety would not be achieved and reinforcement would be necessary to provide an adequate factor of safety for the proposed MSE walls located below Lots 241 through 245 of Vesting Tentative Tract Map 17845.

Lateral Spreading

Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope toward a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements, and such movement typically damages pipelines, utilities, bridges, and structures. Due to the lack of an adjacent free face, the Geotechnical Report concluded that the potential for lateral spreading within the project site is very low.

Subsidence

The Geotechnical Report concluded that, from a geotechnical perspective, existing on-site soils including existing fill are suitable for use as general fill (with the exception of MSE wall backfill and conventional retaining wall backfill), provided that they are relatively free from rocks (larger than 8 inches in maximum dimension), construction debris, and significant organic material. Moisture conditioning would be required to obtain the required compaction. Select grading and/or stockpiling of appropriate materials would be required. In addition, import of soils suitable for backfill of MSE and conventional retaining walls would likely be required.

Because the project site contains previously placed non-structural fill and near-surface alluvium soils in various locations that are not suitable for the proposed development in their present condition due to lack of compaction, earthwork removals would be required as outlined in the Geotechnical Report's recommendations to achieve a stable platform for proposed site development.

The proposed increase of grades over existing alluvium in portions of the site is estimated to induce up to 2½ inches of settlement within the alluvium. The Geotechnical Report estimates that settlement of alluvial soils would take approximately 6 to 12 months after the completion of rough grading, and that due to proposed fill depths and an increase of grades over existing alluvium, settlement monitoring would be required at the completion of grading.

Liquefaction

As noted in Geotechnical Report and discussed in **Impact GEO-1.3**, the project site contains relatively isolated sandy layers within alluvial soils that are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface. The potential for liquefaction and dynamic settlement exists within the proposed development area.

Corrosivity

The presence of corrosive soil could affect the long-term integrity of proposed structures' foundation systems. However, because soils would be mixed and moved around the site during grading operations, as noted in the Geotechnical Report, the ultimate determination of soil corrosivity and appropriate design must be based on test results completed for "as-graded" conditions.

Significance Conclusion for Impact GEO-3

Project impacts would be significant for the following reasons:

- Slopes within the project site would have an appropriate factor of safety with one exception: the mid-slope MSE walls located below Lots 241 through 245, which would require reinforcement to provide an adequate factor of safety.
- The project site contains relatively isolated sandy layers within alluvial soils that are susceptible to liquefaction and dynamic settlement within the upper 50 feet of the surface, resulting in the potential for liquefaction and dynamic settlement.
- The project site contains previously placed non-structural fill and near-surface alluvium soils in various locations that are not suitable for the proposed development in their present condition due to lack of compaction. The proposed increase of grades over existing alluvium in portions of the site is estimated to induce up to 2½ inches of settlement, which is estimated to occur over approximately 6 to 12 months after completion of rough grading.
- The presence of corrosive soil could affect the long-term integrity of proposed structures' foundation systems.

Mitigation Measures

Mitigation Measure GEO-3a: Removals of unsuitable fill material up to approximately 50 feet deep below existing grades shall be performed for the western portion of the project site and within several isolated small canyon areas at the eastern portion of the site, in accordance with recommendations of the Geotechnical Report.

Mitigation Measure GEO-3b: As part of remedial grading, unsuitable soils shall be removed to competent soils, temporarily stockpiled (where necessary) and replaced as properly compacted fill. Prior to placement as compacted fill, significant organic materials or other unsuitable materials shall be removed and properly exported off-site.

Mitigation Measure GEO-3c: Any concrete material from site demolition used in general fill shall be environmentally suitable and crushed such that it is no larger than 8 inches in maximum dimension and well blended (i.e., no nesting and voids) into site fills. Any concrete material placed in MSE wall backfill areas (refer to **Mitigation Measure GEO-3i**) shall be crushed to meet gradation requirements of aggregate base in accordance with the last edition of the Greenbook: Standard Specifications for Public Works Construction. The actual depths and lateral extents of grading shall be determined by the geotechnical consultant, based on subsurface conditions encountered during grading.

Mitigation Measure GEO-3d: Stabilization fill keyways shall be constructed for design cut slopes that are not undercut by remedial grading. Locations of the stabilization fill keyways shall be constructed in accordance with recommendations made in the Geotechnical Report, with final locations and design specifications made by the project's geotechnical consultant subject to review and approval by the City's Chief Building Official. Keyways shall be shown on the final grading plans. Design cut lots, or lots with less than 5 feet of design fill, shall be overexcavated a minimum of 5 feet below respective pad grades.

Mitigation Measure GEO-3e: Proposed fill slopes shall be constructed at a slope ratio of 2:1 (horizontal to vertical) or flatter so as to achieve the factors of safety recommended in the Geotechnical Report.

Mitigation Measure GEO-3f: Fills placed deeper than 40 feet below proposed grade shall be compacted to an increased minimum relative compaction of 93 percent relative compaction. Fill shall be moisture-conditioned to be between optimum moisture content and 2 percent over optimum moisture content, pursuant to ASTM D1557.

Mitigation Measure GEO-3g: Settlement monuments shall be installed within four weeks after completion of grading within fill areas greater than approximately 40 feet below finish grade and where significant amounts of fill are placed over left-in-place alluvium. Settlement monuments shall be read by a licensed surveyor with an off-site benchmark. The survey readings shall be obtained four times in the first two months, twice in the third month, and then once a month unless otherwise requested by the geotechnical consultant. Shallow footings

and slab-on-grade foundations shall be constructed after settlement monitoring data indicate future total settlements are within tolerable limits. Tolerable limits shall include a determination by the project's geotechnical engineer, subject to review and approval by the City's Chief Building Official, that the surveyed areas would maintain a predicted 3 inches or less of settlement for the next 50 years. If a determination is made that tolerable limits are not met, either impacted areas shall be surcharged with additional fill material and surveyed for an additional three months to determine that tolerable limits are met, or construction shall be delayed until additional settlement monitoring determines that tolerable limits are met.

Mitigation Measure GEO-3h: Additional geogrid reinforcement length (beyond local stability requirements) shall be required for adequate global stability factors of safety of the MSE retaining wall located at various areas throughout the site, as determined during final design and as approved by the City. Final design requirements including geogrid reinforcement length shall be determined by the MSE wall designer during preparation of the 40-scale grading plan and approved by the City based on the recommendation made in the Geotechnical Report. Geogrid reinforcement length requirements shall be noted on the final approved construction plans.

Mitigation Measure GEO-3i: MSE walls and conventional retaining walls shall be backfilled with relatively sandy soils obtained from either on-site or off-site locations. Sandy soils shall comprise the geogrid zone required for local stability as determined by the MSE wall designer and approved by the City. For conventional retaining walls, the sandy import zone shall be a minimum of one-half the height of the retaining wall. These requirements shall be noted on the final approved construction plans.

Mitigation Measure GEO-3j: Soil samples shall be collected and tested for presence of corrosive soils at the completion of rough grading. If corrosive soils are detected with (1) pH levels of 5.5 or less, (2) chloride concentration of 500 parts per million (ppm) or greater, or (3) sulfate concentration of 2,000 ppm or greater, specific remediation methods—such as increased compressive strength for structural concrete, decreased water-to-cement ratio for structural concrete and/or encapsulation of post-

tensioned cables—shall be implemented as approved by the Chief Building Official. Specific remediation methods shall include one or more of the above-listed options as determined by the foundation design engineer and as approved by the City. If corrosive soils are not detected at levels described above, no mitigation shall be required.

Significance Conclusion for Impact GEO-3 after Implementation of Mitigation Measures

Implementation of **Mitigation Measures GEO-3.a** through **GEO-3.j** would ensure compliance with the CBC and the recommendations of the Geotechnical report, and would therefore reduce unstable soils impacts to a less-than-significant level.

Threshold GEO-4: **Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.**

Impact GEO-4: **Soils within portions of the project site tested as having very high potential for expansion. However, implementation of mitigation measures based on the recommendations of the project's Geotechnical Report and compliance with the California Building Code would resolve expansive soil issues. The impact would therefore be *significant but mitigable*.**

Methodology

The analysis of impacts related to risk related to expansive soils is based on the Geotechnical Report (Appendix P). In determining whether a significant impact would result from the proposed project, the analysis includes consideration of CBC requirements for new construction aimed at minimizing hazards to life and property in relation to landslide, lateral spreading, subsidence, and liquefaction.

Impact Assessment

Based on the results of previous nearby and current laboratory testing, site soils have a "Very Low" to "Very High" expansion potential. The presence of expansive soils within the project site could affect the long-term integrity of proposed structures' foundation systems. However, because soils would be mixed and moved around the site during grading operations, as noted in the Geotechnical Report, the ultimate determination of expansion potential and appropriate design must be based on test results completed for "as-graded" conditions.

Significance Conclusion for Impact GEO-4

Because the presence of expansive soils could affect the long-term integrity of proposed structures' foundation systems, a significant impact would result, requiring mitigation.

Mitigation Measures

Mitigation Measure GEO-4: Soil samples shall be collected and tested at the completion of rough grading to assess expansive soil conditions. Based on the test results, the project shall incorporate specific recommendations set forth by the foundation design engineer, subject to review and approval by the City, such as the use of stiffened and/or post-tensioned slab foundations, pre-soaking of the subgrade soils, and establishment of minimum setbacks for structures located near slopes.

Significance Conclusion for Impact GEO-4 after Implementation of Mitigation Measures

Implementation of **Mitigation Measure GEO-4** would ensure compliance with the provisions of the CBC and the recommendations of the Geotechnical Report. As a result, the impact of expansive soils would be reduced to a less-than-significant level.

Threshold GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Impact GEO-5: Implementation of the Rancho La Habra Specific Plan would require all development to connect to municipal sewage systems, and no septic tanks or alternative wastewater disposal systems would be used. As a result, there would be *no impact*.

Methodology

Because all development pursuant to the proposed Specific Plan would be connected to municipal sewage systems, no impact would result, and no analysis related to the potential use of septic tanks or alternative wastewater disposal systems was necessary.

Impact Assessment

The city of La Habra, including the Specific Plan area, is served by a comprehensive network of sewer lines that are owned and maintained by the City's Department of Public Works Water/Sewer Division. All development that would occur under the proposed Specific Plan

would be connected to the municipal system, with sewage treated at Orange County Sanitation District regional treatment facilities. No septic tanks or alternative wastewater systems would be used within the Specific Plan area, and no impacts related to whether soils are capable of supporting such systems would result.

Significance Conclusion for Impact GEO-5

No impacts related to soils being incapable of supporting septic tanks or alternative wastewater disposal systems would occur.

3.14.6 REFERENCES

City of La Habra, *City of La Habra General Plan 2035*, adopted January 21, 2014. Accessed September 5, 2017: http://www.lahabracity.com/320/General-Plan-2035

LGC Geotechnical, Inc., *Preliminary Geotechnical Report, Proposed Rancho La Habra Residential Development, VTTM 17845, City of La Habra, California*, September 15, 2016.

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3.15 PUBLIC SERVICES AND FACILITIES

3.15.1 INTRODUCTION

This section of the EIR addresses the physical environmental effects of new or expanded governmental facilities that are necessary to maintain acceptable service levels for police, fire protection, schools, and libraries. Because CEQA focuses on physical environmental effects, this section analyzes whether increased service demands from development pursuant to the proposed Specific Plan could lead to the need for new or expanded public facilities that would in turn cause significant adverse environmental effects. Thus, an increase in demand for public services, expansion of staffing associated with provision of a public service, or an increase in students at local schools would not, by itself, be considered a physical change in the environment. However, physical changes to the environment resulting from construction of new facilities or an expansion of existing facilities to accommodate the increased demand, staff, or students could constitute a significant impact.

3.15.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Rancho La Habra Specific Plan is subject to a range of state and local plans, policies, and regulations,[1] which are described below.

a. State Plans, Policies, and Regulations

Building Standards

The California Building Standards Code establishes building requirements for construction and renovation. The most recent version of the California Building Standards Code was adopted in 2016 by the California Building Standards Commission and took effect January 1, 2017. It is based on the International Code Council's Building and Fire Codes. Included in the California Building Standards Code are the Electrical Code, Mechanical Code, Plumbing Code, Energy Code, and Fire Code.

The California Health and Safety Code, Section 13000, et seq., includes regulations concerning building standards (as also set forth in the California Building Code), fire protection systems, fire protection devices (such as extinguishers and smoke alarms, and high-rise building standards), and standards for building inspection and certification.

[1] There are no federal regulations, plans, or policies applicable to public services and facilities issues relevant to the Rancho La Habra Specific Plan.

The California Fire Code (CFC) and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC also establishes minimum requirements that would provide a reasonable degree of safety from fire, panic, and explosion.

School Facilities Financing Act and Education Code

The State of California Government Code Sections 53080, 65995, and 66001 authorize school districts to collect fees from new residential and commercial development. Additionally, California Education Code Sections 17620 through 17626 state that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities, subject to any limitations set forth in Chapter 4.9 (commencing with Section 65995) of Division 1 of Title 7 of the Government Code.

Senate Bill 50 – Leroy F. Greene Schools Facilities Act of 1998

Senate Bill (SB) 50, or the Leroy F. Greene School Facilities Act of 1998, restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered "full and complete mitigation" of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any school impacts.

b. Local Plans, Policies, and Regulations

City of La Habra Municipal Code

Chapter 2.52, Emergency Services, of the La Habra Municipal Code addresses emergency preparedness powers and duties. The declared purposes of this chapter are to provide for the preparation and carrying out of plans for protection of persons and property within the City of La Habra in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations and affected private persons. This chapter creates a disaster council and establishes its powers and duties. It is the duty of the disaster council to develop, and recommend for adoption by the city council, emergency and mutual aid plans and agreements as well as ordinances, resolutions, rules, and regulations to implement such plans and agreements.

City of La Habra Emergency Response Plan

The City of La Habra Emergency Response Plan determines the actions to be taken by the City to prevent disasters where possible, to reduce the vulnerability of residents to any disasters that cannot be prevented, to establish capabilities for protecting citizens from the effects of disasters, to respond effectively to the actual occurrence of disasters, and to provide for recovery in the aftermath of any emergency involving extensive damage or other debilitating influence on the normal pattern of life within the community.

City of La Habra General Plan

City of La Habra General Plan policies relevant to hazards and hazardous materials include the following:

Chapter 5, Community Services

> **PS 1.1 Response Time.** Maintain appropriate police service response times for all call priority levels that ensure the safety of La Habra's residents, businesses, and visitors.
>
> **PS 1.2 Sworn Personnel**. Maintain an acceptable sworn officer-to-resident ratio.
>
> **PS 1.3 Non-sworn Staffing**. Maintain acceptable non-sworn or civilian staff to provide quality police services.
>
> **PS 1.4 Operations and Facilities**. Ensure that police operations and facilities are adequate to accommodate increases in functions, staff, and technology as needed.
>
> **PS 1.7 Security and Design Features**. Require that security measures are integrated into the design of new development projects, and support the incorporation of Crime Prevention through Environmental Design (CPTED) principles, or other comparable concepts.
>
> **FS 1.1 Support Fire Service Provider.** Continue to work with and support the City's fire service provider to ensure adequate personnel, facilities, and infrastructure to maintain an acceptable level of fire protection and emergency services in La Habra.
>
> **FS 1.2 Adequate Water Supply**. Maintain adequate water supply and fire flow pressure for fire suppression in La Habra.
>
> **FS 1.3 Enforcement of Codes to Reduce the Risk of Fire.** Continue to enforce all relevant federal, state, and county codes and local ordinances to reduce the risk of fire hazards and implement into the design of all new developments, fire prevention measures as required by the La Habra Municipal Code.

FS 1.5 Review of Development Proposals. Include the City's fire service provider in the review of development proposals to ensure that projects adequately address safe design and onsite fire protection.

S 1.1 School Capacity. Cooperate with school districts to ensure that school facilities with sufficient capacity are reserved, constructed, and phased to meet the needs of current and projected enrollment, as permitted by State law.

S 1.2 Review of Development Proposals. Include school districts in the review of residential development proposals to ensure that projects adequately address school impacts and issues.

S 1.9 Developer Fees. Ensure that residential development fully mitigates its impact on school facilities through the payment of fees or other negotiated methods, as permitted by State law.

L.1.1 Library Services, Facilities, and Programs. Support OCPL in the provision of library services, facilities, and programs that meet the needs of all residents.

3.15.3 ENVIRONMENTAL SETTING

a. Police Services

Police services for La Habra, including the project site, are provided by the La Habra Police Department (LHPD). The LHPD headquarters are located at 150 North Euclid Street, La Habra, approximately 2.6 miles northeast of the project site. In addition, LHPD maintains a mutual aid agreement with all law enforcement agencies in Orange County in the event supplementary assistance is needed. The City has authorized 71 sworn officers. Based on a city-wide population of 61,905 (Department of Finance 2015), this equals a ratio of 1.15 officers to 1,000 citizens. There are currently 28 officers, 6 corporals, 8 sergeants, and 2 lieutenants assigned to patrol. In 2015, officers handled 47,478 calls for service, or an average of 3,957 calls per month, or about 132 calls for service daily. LHPD responded to Priority 1 emergency calls in 3:43 minutes in 2015, which is less than LHPD's response time goal of 4 minutes for Priority 1 calls. The less urgent Priority 2 response time goal remains less than 13 minutes (Price 2015).

b. Fire Protection Services

The City of La Habra contracts with the Los Angeles County Fire Department (LACoFD) for fire suppression and emergency medical services. LACoFD and other fire departments in Orange and Los Angeles counties operate on a "boundary drop" basis, which means that the closest available fire unit responds to a call regardless of the jurisdiction from which the call originated. There are four LACoFD stations serving La Habra, as shown in **Table 3.15-1**.

Table 3.15-1
Los Angeles County Fire Department Fire Stations Serving La Habra

Station No.	Station Address	Distance from Station to Project Site Entry[a]
Station No. 191	850 West La Habra Boulevard, La Habra	1.49 miles northeast
Station No. 192	520 South Harbor Boulevard, La Habra	2.50 miles northeast
Station No. 193	1000 Risner Way, La Habra	0.62 mile southeast
Station No. 194	13540 South Beach Boulevard, La Mirada	0.16 mile southwest

[a] Distance based on Google Earth measurement from the station to approximate entry point to the proposed project.

As indicated in **Table 3.15-1**, Fire Station No. 194, located at 13540 South Beach Boulevard in La Mirada, is the closest fire station to the project site and is the jurisdictional station (i.e., first responder) for the site. The station is approximately 0.16 mile from the project site and is estimated to have an emergency response time of 3:20 minutes or less. Fire Station No. 194 is staffed with a four-person assessment engine company consisting of one fire captain, one fire fighter specialist, one fire fighter/paramedic, and one fire fighter. Though the station is located in La Mirada, the City of La Habra owns the property.

Fire Station No. 193, located at 1000 Risner Way in La Habra, is the second jurisdictional station. This station is approximately 0.62 mile away and has an estimated emergency response time of 4:20 minutes or less. It is staffed with a three-person assessment engine company consisting of one fire captain, one fire fighter specialist, and one fire fighter/paramedic.

c. Schools

The project site lies within the boundaries of three public school districts: La Habra City School District (LHCSD) and Lowell Joint School District (LJSD), which serve students in grades Kindergarten (K)-8; and the Fullerton Joint Union High School District (FJUHSD), which serves students in grades 9-12. As shown in **Figure 3.15-1**, the project site is split between the LJSD (a small area in the western portion of the project site) and the LHCSD (the balance of the project site). The entire project site is within the FJUHSD for grades 9-12.

Students from the proposed Rancho La Habra community within the LHCSD would attend Las Lomas Elementary School (K-2), Las Positas Elementary School (3-5), Imperial Middle School (6-8), and Sonora High School (9-12). Students from the proposed Rancho La Habra community within the LJSD would attend Olita Elementary School (K-6), Rancho-Starbuck Intermediate School (7-8), and Sonora High School (9-12). It should be noted that the FJUHSD has an open enrollment policy allowing students to enroll in high schools within the FJUHSD other than the high school specified by geographic location.

La Habra City School District

The LHCSD covers a 5-mile area that includes La Habra and parts of Brea and Fullerton. The nine schools in the LHCSD serve approximately 5,600 students. The LHCSD operates seven elementary schools in three teamed school areas for grades K-5 and two middle schools for grades 6-8. In the teamed areas, students in grades K-2 attend school at one site and students in grades 3-5 attend at another site. Students in grades 6-8 attend one of the middle schools in the LHCSD.

According to the La Habra City School District Facilities Assessment and Implementation Plan prepared by Caldwell Flores Winters, Inc. in 2012, the capacity of a school is determined by the number of classrooms at the site, and the number of students per classroom used to "load" or populate those classrooms. This information is useful in determining the need for additional school facilities to be added or constructed in order to house students. The school capacity analysis used in the Facilities Assessment and Implementation Plan is based on local standards that include educational objectives, General Fund limitations, Education Code provisions, collective bargaining agreements, programs that require specialized spaces, and other considerations determined by the local district governing board. Local standard calculations do not include physical education facilities and core facilities, such as cafeterias, libraries, and administrative spaces. Classrooms that are used for music, libraries, and other uses are included in the calculation. Classrooms are loaded at 31 students for Kindergarten, 30 students for grades 2-5, and 30 students for grades 6-8 (Caldwell Flores Winters 2012).

Assuming the maximum loading standard for the different types of classrooms, the total student capacity in the LHCSD according to local standards is 8,278 students. Estimated enrollment in 2011 for the LHCSD was 5,418 students. This creates a surplus of space available in the LHCSD that would theoretically allow enrollment of as many as 2,860 more students. According to the Facilities Assessment and Implementation Plan, it is very unlikely that the LHCSD will experience enrollment increases that will test either local or state capacity standards used to determine funding for facilities upgrades due to overcrowding. Thus, the LHCSD is unlikely to receive state funding for new facilities construction or upgrades to mitigate overcrowding, and current and future enrollment should be adequately served through upgrades to existing facilities rather than construction of new buildings or sites.

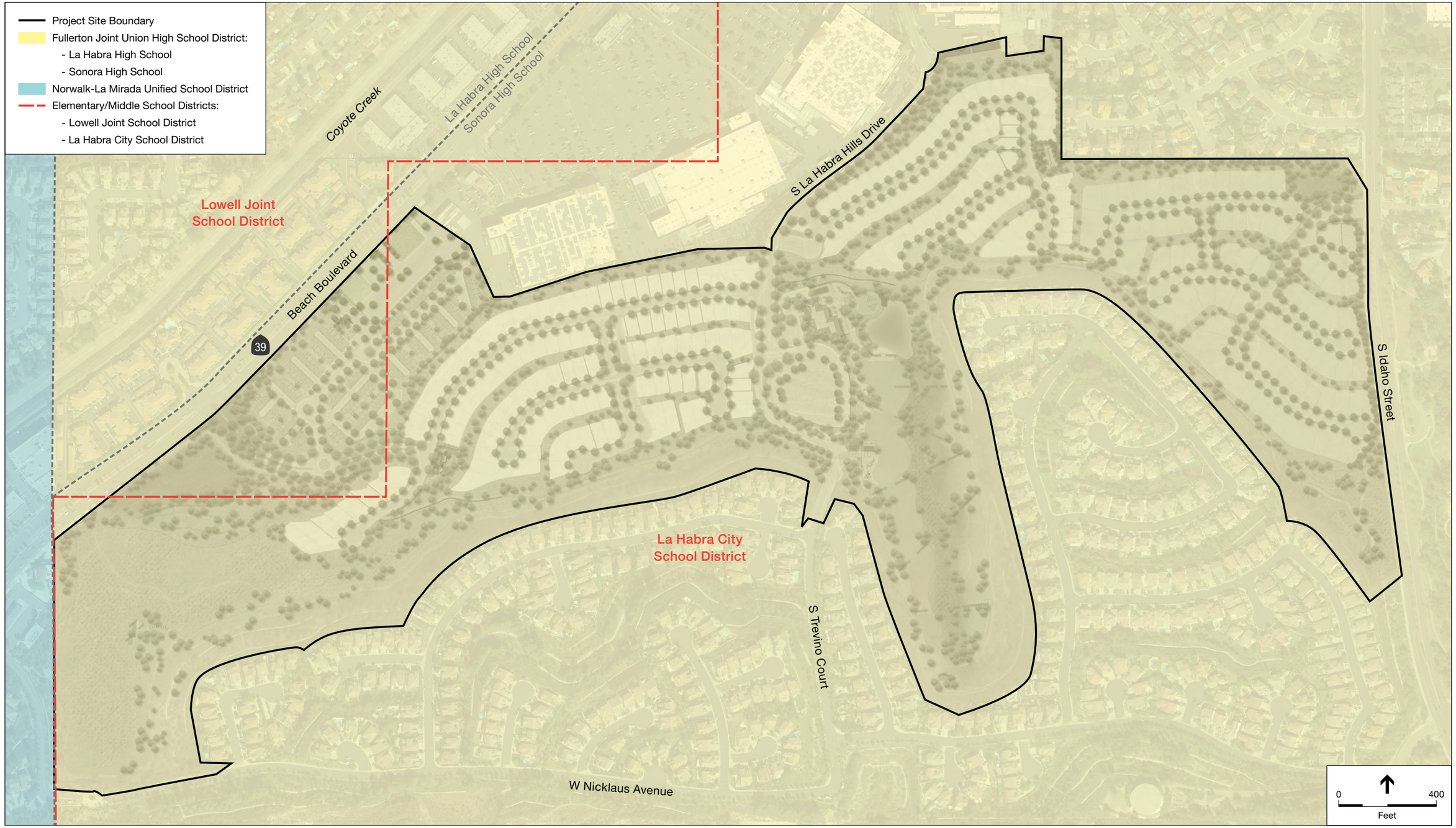

Figure 3.15-1: School District Boundaries

Source: Google Earth; Carlson SLS

Table 3.15-2 compares enrollment and capacity for the schools within the LHCSD that would serve the proposed project.

Table 3.15-2
Capacity Analysis For La Habra City School District Schools Serving Project Site

School	Grades	Total Local Standards Capacity[a]	Estimated Enrollment (2011)[b]	Local Capacity Surplus
Las Lomas Elementary	K-2	785	540	245
Las Positas Elementary	3-5	656	576	80
Imperial Middle	6-8	1,393	923	470
Total		**2,834**	**2,039**	**795**

[a] Based on projected number of students per classroom and number of classrooms

[b] The enrollment numbers in the table come from the Facilities Assessment and Implementation Plan prepared in 2012. More current California Department of Education enrollment numbers indicate that enrollment has gone down in more recent years. For example, enrollment for Las Lomas Elementary was 403 students in 2016. However, the 2011 numbers are included to show a more conservative estimate of capacity surplus.

Source: La Habra City School District Facilities Assessment and Implementation Plan

Lowell Joint School District

The La Habra General Plan included capacity data for the LJSD, shown in **Table 3.15-3**. Enrollment data was derived from California Department of Education data for 2016.

Table 3.15-3
Capacity Analysis for Lowell Joint School District Schools Serving Project Site

School	Grades	Total Local Standards Capacity[b]	Estimated Enrollment (2016)[a]	Local Capacity Surplus
Olita Elementary	K-6	600	450	150
Rancho-Starbuck Intermediate	7-8	1,091	790	301
Total		**1,691**	**1,240**	**451**

[a] Based on projected number of students per classroom and number of classrooms.

[b] Enrollment data from California Department of Education School Profiles, 2017. http://www.cde.ca.gov/sdprofile/details.aspx?cds=19647666020200

Source: City of La Habra General Plan.

Fullerton Joint Union High School District

According to the La Habra General Plan EIR, Sonora High School has capacity for 2,133 students. Latest enrollment numbers from the California Department of Education website show that 1,884 students attend the high school (CDE 2017). Therefore, Sonora High School has a capacity surplus of 249 students.

d. Public Libraries

Library services in the City of La Habra are provided by the Orange County Public Libraries, which is a network of 33 community branch libraries. The La Habra Library branch building, located at 221 East La Habra Boulevard, is owned by the City. The La Habra Library staffs 8.5 full-time employees. The building and its maintenance and improvements are the City's responsibility, while its operations are run and funded by the Orange County Public Libraries.

The La Habra Library includes a number of materials and databases, including books, magazines, periodicals, business materials, reference documents, and community information available for use by patrons. The La Habra Library contains approximately 101,900 books. Although not all special subject collections may be available at the La Habra Library branch, special subject collections—including government documents, music scores, consumer health information, cookbooks, and genealogy records—are available at specific branches and are available to La Habra. Additionally, the Interlibrary Loan Service provides access to books, journal articles, microfilm, and other materials that are not available from the Orange County Public Libraries system. Services offered by the La Habra Library include computer services; eBooks, which are available on four of the computers; cultural events; and book discussion groups.

As reported in the La Habra General Plan EIR, the county-wide average, for cities that have public libraries operated by the Orange County Public Libraries system, is 1.3 volumes per capita and 0.2-square-foot of space per capita.

3.15.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of impacts related to public services. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold PSF-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for the following public services: police protection, fire protection, schools, parks,[2] or other public facilities.

[2] Analysis of impacts related to parks is provided in Section 3.16, *Recreational Resources*, of this EIR.

3.15.5 IMPACTS AND MITIGATION MEASURES

Threshold PSF-1	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**
Impact PSF-1.1:	**Implementation of the proposed Rancho La Habra Specific Plan would increase demand for police services during construction and ongoing operations, but would not necessitate provision of new facilities or physical expansion of existing police facilities. Thus, *no impact* would result.**

Methodology

Determining the significance of impacts on police services is based on evaluating:

- The extent to which the proposed project would increase demand for services;
- Whether project-related increased demand for services would result in inadequate staffing levels and/or response times requiring construction of new facilities or expansion of existing facilities; and
- Whether such construction of new facilities or expansion of existing facilities would have an adverse physical effect on the environment.

For police services, a significant impact would occur if (1) the project generated the need for additional personnel or equipment that could not be accommodated within the existing station and would require the construction of a new station or an expansion of the existing station that (2) would have an adverse physical effect on the environment.

Impact Assessment

Construction

As part of construction activities, a substantial amount of construction equipment and materials would be stored on-site during non-working hours, creating a target for theft and vandalism. The result could be calls for service to the LHPD. It is unlikely, however, that the number of calls for police service to the project site during construction would be substantially greater than the number of calls for service to the existing golf course.

Operations

A total of 402 new households (448 if Planning Area 5 is developed for residential use), along with new businesses in the commercial portion of the project site, would generate service calls to the LHPD. Assuming that calls for service from the project site occur at the same rate as for existing residents and businesses, a total of 87 calls per month, or about 3 calls for service daily, would occur (97 calls per month if Planning Area 5 is developed for residential use or about 3 calls per day). In addition to services calls placed by new residents, site design concerns expressed by the LHPD in relation to increased demands for police services include the proposed linear park trail system and natural open space, which could provide places where crime or homelessness might occur.

Significance Conclusion for Impact PSF-1.1

To address the issue of safety within the project site and homelessness along the project's trail system, the applicant has committed to provide lighting and video cameras along the trail system. The applicant has also offered to install license plate readers at entry gates into the project's residential neighborhoods, and to work with the LHPD on the transmittal, storage, and review of the data collected by the readers. Implementation of these measures would assist the LHPD in patrolling and addressing crime and vandalism issues associated with new development. These commitments would be reflected in conditions of approval for the proposed project.

While increased police staffing would likely be needed over time as the result of cumulative development within the City, including the proposed project, an increase of three calls for service per day from the project site would not require new police facilities, or expansion of existing facilities. Because no new facilities would be constructed and existing facilities would not require expansion as the result of the proposed project, no impact would result.

Threshold PSF-1:	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**
Impact PSF-1.2:	**Implementation of the proposed Rancho La Habra Specific Plan would increase demand for fire protection services, but would not necessitate provision of new facilities or physical expansion of existing fire protection facilities. Thus, *no impact* would result.**

Methodology

Determining the significance of impacts on fire protection services is based on evaluating:

- The extent to which the proposed project would increase demand for services;
- Whether project-related increased demand for services would result in inadequate staffing levels and/or response times requiring construction of new facilities or expansion of existing facilities; and
- Whether such construction of new facilities or expansion of existing facilities would have an adverse physical effect on the environment.

For fire protection services, a significant impact would occur if (1) the project generated the need for additional personnel or equipment that could not be accommodated within existing fire stations and would require the construction of a new station or an expansion of one or more existing fire stations that (2) would have an adverse physical effect on the environment.

Impact Assessment

Construction

Site preparation and construction activities could require fire protection services as the result of accidents, fires, spills of hazardous materials, or other similar incidents associated with demolition of existing structures, clearing and grubbing, site grading, and storage of flammable materials (e.g., lumber, paints, and solvents) for construction of new structures. These activities are typical of site development and construction activities.

Based on correspondence from the LACoFD (Appendix Q), the potential increase in services associated with construction of the proposed project would not increase response times or require additional resources.

Operations

The addition of 402 dwelling units (448 dwelling units if Planning Area 5 is developed for residential use) with approximately 1,206 residents (1,264 residents if Planning Area 5 is developed for residential use), plus additional businesses in the commercial portion of the project site would increase demand for fire protection and emergency medical assistance services in the City compared to the existing golf course. Areas proposed for development within the project site are located within and adjacent to a Very High Fire Hazard Severity Zone. Thus, implementation of the proposed Specific Plan would result in the potential for a wildland fire to threaten on-site structures, or for a structural fire to expand into the adjacent wildland area.

Significance Conclusion for Impact PSF-1.2

The May 26, 2015 letter from the LACoFD (Appendix Q) states that existing resources and personnel are "well within" the LACoFD's service standards. The letter further states that, with the implementation of the proposed project, the LACoFD can accommodate the increased demand without compromising service levels and without construction of new facilities. The LACoFD's letter states that "While each additional development does create a greater demand on existing resources, this project is expected to have a less than significant effect on Fire Department services." When provided with the cumulative condition (demand from the project and other foreseeable projects in the City and service area), the LACoFD provided the same response, that the cumulative condition would result in a less-than-significant effect on LACoFD services.

In addition, the applicant has committed to implementation of a fire management plan that provides for areas of fuel modification between the coastal sage scrub habitat and the slope that separates the existing Westridge community from the project site. Approval and implementation of the fire management plan by the LACoFD prior to issuance of certificates of occupancy within the project site would be a condition of approval for the proposed Rancho La Habra development.

In its May 26, 2015 letter, the LACoFD also provided a list of requirements for project site development that would be conditions of project approval, including the following:

1. The proposed development will include multiple ingress/egress access points for the circulation of traffic and emergency response.
2. The development of this project will comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants.
3. Every building constructed will be accessible to Fire Department's apparatus by way of access roadways with an all-weather surface of not less than the prescribed width. The roadways will be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
4. The Fire Department's requirements for access, fire flows, and hydrants will be addressed during the subdivision tentative map stage.
5. Fire sprinkler systems will be installed in all residential and commercial occupancies on the subject property.
6. The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be determined per the County of Los Angeles Fire Code Appendix B Table 8105.1.
7. Fire hydrant spacing will be 300 feet and will meet the following requirements: a) No portion of lot frontage will be more than 200 feet via vehicular access from a public fire hydrant. b) No portion of a building will exceed 400 feet via vehicular access from a properly spaced public fire hydrant. c) Additional hydrants will be required if hydrant

spacing exceeds specified distances. d) When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants will be required at the corner and midblock. e) A cul-de-sac will not be more than 500 feet in length when serving land zoned for commercial use.

8. Non-Residential and High Density Residential Turning Radius - Turning radii will not be less than 32 feet. This measurement will be determined at the centerline of the road. Any Non-Residential, High Density Residential, and Single Family Dwellings that require a Fire Department approved turning area will have driveways exceeding 150 feet in length at the end of all cul-de-sacs.
9. For Non-Residential Access and High Density Residential Access, a minimum unobstructed width of 28 feet exclusive of shoulders except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance "clear to sky" Fire Department's vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building when the height of the building above the lowest level of the Fire Department's vehicular access road is more than 30 feet high or the building is more than three stories. The access roadway will be located a minimum of 15 feet and a maximum of 30 feet from the building and will be positioned parallel to entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned will be approved by the fire code official. Fire Code 503.1.1 and 503.2.2. The Fire Department's vehicular access will be cross hatched on the site plan and the required width will be clearly depicted. For Single Family Dwelling Access, the Fire Department's access will be provided through a minimum unobstructed width of 20 feet, clear-to-sky and will be within 150 feet of all portions of the exterior walls of the first story of any single unit.
10. For Non-Residential Access Widths – Driveway width for non-residential developments will be increased when any of the following conditions exist: a) Provide 34 feet in-width when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure. b) Provide 42 feet in-width, when parallel parking is allowed on each side of the access roadway/driveway. c) Any access way less than 34 feet in-width shall be labeled "Fire Lane" on the final recording map and final building plans. d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet will be posted with Fire Department approved signs stating "NO PARKING-FIRE LANE" in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.
11. High Density Residential Access Widths - The 28 feet in width will be increased to: a) 34 feet in width when parallel parking is allowed on one side of the access way. b) 36 feet in width when parallel parking is allowed on both sides of the access way. c) Any access way less than 34 feet in width will be labeled "Fire Lane" on the final recording map and final building plans. d) For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet will be posted with Fire Department approved signs stating "NO PARKING- FIRE LANE" in three-inch high letters. Driveways will be labeled to ensure access for Fire Department use.

12. Single Family Dwelling Access – Fire Department's access will be provided through a minimum unobstructed width of 20 feet, clear-to-sky and will be within 150 feet of all portions of the exterior walls of the first story of any single unit.
13. High Density Residential Fire Flow – The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be determined by the County of Los Angeles Fire Code Appendix B Table 8105.1.
14. Single Family Dwelling Fire Flow – Single-family detached homes will require a minimum fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Two family dwelling units (duplexes) will require a fire flow of 1,500 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. When there are five or more units taking access on a single driveway, the minimum fire flow will be increased to 1,500 gallons per minute at 20 pounds per square inch residual pressure for a 2-hour duration.
15. High Density Residential Hydrant Requirements – Fire hydrant spacing will be 300 feet and will meet the following requirements: a) No portion of lot frontage will be more than 200 feet via vehicular access from a public fire hydrant. b) No portion of a building will exceed 400 feet via vehicular access from a properly spaced fire hydrant. c) When cul-de-sac depth exceeds 200 feet, hydrants will be installed at the corner and midblock. d) Additional hydrants will be installed if the hydrant spacing exceeds specified distances.
16. Single-Family Dwelling Hydrant Requirement - Fire hydrant spacing will be 600 feet and will meet the following requirements: a) No portion of lot frontage will be more than 450 feet via vehicular access from a public fire hydrant. b) No portion of a structure will be placed on a lot where it exceeds 750 feet via vehicular access from a properly spaced public fire hydrant. c) When cul-de-sac depth exceeds 450 feet on a residential street, hydrants will be required at the corner and midblock. d) Additional hydrants will be required if hydrant spacing exceeds specified distances.
17. High Density Residential Net Acre – When serving land zoned for residential uses having a density of more than four units per net acre: a) A cul-de-sac will be a minimum of 34 feet in width and will not be more than 700 feet in length. b) The length of the cul-de-sac may be increased to 1000 feet if a minimum of 36 feet in width is provided.
18. All access devices and gates will meet the following requirements: a) Any single gated opening used for ingress and egress shall be a minimum of 26 feet in-width, clear-to-sky. b) Any divided gate opening (when each gate is used for a single direction of travel i.e., ingress or egress) shall be a minimum width of 20 feet clear-to-sky. c) Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device. d) All limited access devices shall be of a type approved by the Fire Department. e) Gate plans shall be submitted to the Fire Department prior to installation. These plans shall show all locations, widths, and details of the proposed gates.

Because of the proximity of existing fire stations and implementation of these LACoFD requirements, no new fire facilities would need to be constructed, nor would any existing fire facilities need to be expanded. No impacts would therefore result, and no mitigation measures would be required.

Threshold PSF-1:	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**
Impact PSF-1.3:	**Implementation of the proposed Rancho La Habra Specific Plan would generate additional students within the Lowell Joint School District and the La Habra City School District for grades Kindergarten (K)-8, and within the Fullerton Joint Union High School District for grades 9-12. Payment of required school impact fees to these districts would constitute mitigation in full for the increased number of students. Thus, *no impact* would result.**

Methodology

Determining the significance of impacts on schools is based on evaluating:

- The extent to which the proposed project would generate new students for local school districts;
- Whether the increased number of students generated by the proposed project could be accommodated within existing school facilities; and
- Whether any needed construction of new facilities or expansion of existing facilities would have an adverse physical effect on the environment.

For school facilities, a significant impact would occur if (1) the project generated an increased number of students that could not be accommodated within existing school facilities and would require the construction of a new school or an expansion of existing facilities that (2) would have an adverse physical effect on the environment.

Pursuant to the provisions of SB 50 (described above), impacts related to schools are considered to be less than significant with payment of development fees that were established to provide for school facilities construction, improvements, and expansion.

Impact Assessment

The proposed 277 single-family and 125 multi-family dwelling units (171 multi-family dwelling units if Planning Area 5 is developed for residential use) would generate school-age children and would result in an increased demand for school services and facilities within the LJSD and LHCSD for grades K-8, and within the FJUHSD for grades 9-12. As shown in **Figure 3.15-1**, while the entire project site is within the FJUHSD, some proposed housing would be located within the LJSD while other proposed housing would be located within the LHCSD.

A review of proposed site development and Tentative Vesting Tract Map 17845 indicates that the fronts of all single-family dwellings would be within the La Habra City School District, and all K-8 students within the single-family portions of the project site would therefore attend La Habra City School District schools.

The proposed 277 single-family and 125 multiple-family dwelling units (or 171 if the commercial is developed as residential) would generate school-age children and would result in an increased demand for school services and facilities. Three school districts overlap the project site. Lowell Joint School District (LJSD) and La Habra City School District (LHCSD) provide elementary and middle school education. The boundary between the two school districts cuts across the multi-family planning area and partially into PA 2 – single-family detached, see **Figure 3.15-1**.

Based on an acreage estimate of the where the school district boundary crosses the multi-family planning area (PA-1), approximately 59 percent of the planning area's students would attend LJSD and 41 percent would attend LHCSD. Thus, of the 105 proposed multi-family dwelling units, 74 dwelling units would occur in LJSD and 51 dwelling units would occur in LHCSD. Should Planning Area 5 be developed for residential use, an additional 46 dwelling units would generate students. Since approximately 65 percent of the land within Planning Area 5 would fall within LHCSD with 35 percent of the land area within LJSD, it is estimated that 30 dwelling units would be located within LHCSD and 16 dwelling units would be located within LJSD.

School districts adopt student generation rates to estimate the number of students that might attend schools based on the number of dwelling units. **Table 3.15-4** quantifies the number of students that would be generated by the proposed project for the proposed 402-dwelling unit project. **Table 3.15-5** quantifies the number of students that would be generated by the proposed project should Planning Area 5 be developed for residential use.

Table 3.15-4
Project-Related Student Generation (402 Dwelling Units)

School District	Grade Level	Number of Project Dwelling Units	Student Generation Rate (Student/ Dwelling Unit)	Projected Number of Students
La Habra City	Elementary (Grades K-5)	277 single-family	0.2246	63
		74 multi-family	0.2188	16
		Total Grades K-6		**79**
	Intermediate (Grades 6-8)	277 single-family	0.1173	33
		74 multi-family	0.1093	8
		Total Grades 7-8		**41**
Lowell Joint	Elementary (Grades K-6)	51 multi-family	0.1794	9
		Total Grades K-6		**9**
	Intermediate (Grades 7-8)	51 multi-family	0.0589	4
		Total Grades 7-8		**4**
Fullerton Joint Union High	High School (Grades 9-12)	277 single-family	0.181	51
		125 multi-family	0.120	15
		Total Grades 9-12		**66**

Sources: La Habra City School District: School Fee Justification Study, June 10, 2014.
Lowell Joint School District: School Fee Justification Study, March 24, 2016.
Fullerton Joint Union High School District: School Fee Justification Study, June 10, 2016.

As shown in **Table 3.15-2**, the surplus capacity for the schools within the LHCSD that would serve the project site is 795 students (325 elementary students and 470 middle/intermediate students). The addition of 120-130 students (79-86 elementary students and 41-44 middle/intermediate students) could be accommodated within existing facilities.

Similarly, as shown in **Table 3.15-3**, the surplus capacity for the schools within the LJSD that would serve the project site is 451 students (150 elementary students and 301 middle/intermediate students). The addition of 13-16 students (9-12 elementary students and 4 middle/intermediate students) could be accommodated within existing facilities.

Finally, Sonora High School has surplus capacity of 249 students, and therefore could accommodate the additional 66-72 students that would be generated by the proposed project.

Table 3.15-5
Project-Related Student Generation (448 Dwelling Units)

School District	Grade Level	Number of Project Dwelling Units	Student Generation Rate (Student/ Dwelling Unit)	Projected Number of Students
La Habra City	Elementary (Grades K-5)	277 single-family	0.2246	63
		104 multi-family	0.2188	23
		Total Grades K-6		**86**
	Intermediate (Grades 6-8)	277 single-family	0.1173	33
		104 multi-family	0.1093	11
		Total Grades 7-8		**44**
Lowell Joint	Elementary (Grades K-6)	67 multi-family	0.1794	12
		Total Grades K-6		**12**
	Intermediate (Grades 7-8)	67 multi-family	0.0589	4
		Total Grades 7-8		**4**
Fullerton Joint Union High	High School (Grades 9-12)	277 single-family	0.181	51
		171 multi-family	0.120	21
		Total Grades 9-12		**72**

Sources: La Habra City School District: School Fee Justification Study, June 10, 2014.
Lowell Joint School District: School Fee Justification Study, March 24, 2016.
Fullerton Joint Union High School District: School Fee Justification Study, June 10, 2016.

Significance Conclusion for Impact PSF-1.3

The proposed 277 single-family and 125 multi-family dwelling units (171 multi-family dwelling units if Planning Area 5 is developed for residential use) would generate 199 school-age children (218 students if Planning Area 5 is developed for residential use), and would result in an increased demand for school services and facilities within the LJSD and LHCSD for grades K-8, and within the FJUHSD for grades 9-12. However, as demonstrated above, the existing school facilities would have enough capacity to accommodate the additional students. Therefore, no new facilities would need to be built, and no physical effects on the environment would occur. Furthermore, payment of required school impact fees to these districts would constitute mitigation in full for the increased number of students. Thus, no impact would result, and no mitigation measures would be required.

Threshold PSF-1:	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**
Impact PSF-1.4:	**Implementation of the proposed Rancho La Habra Specific Plan would increase demand for library services but would not necessitate provision of new facilities or physical expansion of existing facilities. Thus, *no impact* would result.**

Methodology

Determining the significance of impacts on library services is based on evaluating:

- The extent to which the proposed project would increase demand for services;
- Whether project-related increased demand for services would result in inadequate facilities requiring construction of new facilities or expansion of existing facilities; and
- Whether such construction of new facilities or expansion of existing facilities would have an adverse physical effect on the environment.

For library services, a significant impact would occur if (1) the project generated the need for library space that could not be accommodated within the existing La Habra Library, and would require the construction of a library or an expansion of the existing library that (2) would have an adverse physical effect on the environment.

Impact Assessment

By increasing the City's population, the proposed project would also increase demands for library services. Based on a 2015 population of 61,905, the addition of 402 dwelling units, which would result in a population increase of 1,206 persons, would represent a 2 percent population increase, which would result in a 1.9 percent increase in demand for library services. If Planning Area 5 is developed for residential use, the proposed project would generate a population of 1,264, which would result in a 2.0 percent increase in demand for library services. Based on the county-wide average of 0.2-square-foot of library space per capita, the proposed project would result in the demand for 241 square feet of library space (253 square feet if Planning Area 5 is developed for residential use). Given the widespread availability of research materials online, this small increase in the City's population would not cause the need for a new library facility or physical expansion of the existing library.

Significance Conclusion for Impact PSF-1.4

While it is not likely that the existing La Habra Library would need to be expanded or a new facility constructed to accommodate the increased demands from the proposed project, given the projected increase in city-wide population of more than 13,600 discussed in the La Habra General Plan, it is reasonable to conclude that construction of new or expanded library facilities would be needed in the foreseeable future, and the proposed project would contribute to that need. As noted in the La Habra General Plan EIR, while localized environmental impacts would result from the construction of new facilities, "the location and size of future facilities is unknown, (and) it would be speculative to analyze the site-specific environmental impacts" of future library facilities. The La Habra General Plan EIR concluded that "impacts to library services resulting from buildout of the General Plan Update would be less than significant." Thus, impacts of the proposed project in relation to library services would also be less than significant.

3.15.6 REFERENCES – PUBLIC SERVICES AND FACILITIES

Caldwell Flores Winters, Inc., La Habra City School District Facilities Assessment and Implementation Plan, 2012. Accessed July 30, 2017: http://www.lahabraschools.org/business-services/documents/FINAL_-_Facilities_Assessment_and_Implementation_Plan_La_Habra.pdf.

California Department of Education, QuickQuest, http://dq.cde.ca.gov/dataquest/content.asp.

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.

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.

Fullerton Joint Union High School District (FJUHSD), School Fee Justification Study, June 10, 2016.

La Habra City School District (LHCSD), School Fee Justification Study, June 10, 2014.

Letter from La Habra Police Chief Price dated July 20, 2015.

Lowell Joint School District (LJSD), School Fee Justification Study, March 24, 2016.

State of California, Department of Finance, *State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2015*, May 2015. Accessed June 2, 2017: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

3.16 RECREATIONAL RESOURCES

3.16.1 INTRODUCTION

a. Overview

This section of the EIR analyzes whether the proposed Rancho La Habra Specific Plan would (1) increase the use of existing parks and recreational facilities such that substantial physical deterioration or degradation of the facilities would occur or be accelerated, or (2) result in adverse physical effects on the environment associated with the provision of new or expanded parks and recreational facilities.

b. Definitions

- **Bikeway, Class 1,** often referred to as a **bike path**, is a hiking/biking trail with improved surface of concrete or asphalt for the bike and an unimproved surface for jogging; minimum width for two bikes is 8 feet, one bike is 5 feet, and hikers is 4 feet.
- **Bikeway, Class 2**, often referred to as a **bike lane**, is for use along roadways in urban settings; it has a minimum lane width of 4 feet between the gutter or parking lane and the auto travel lane.
- **Bikeway, Class 3**, often referred to as a **bike route**, connects Class 1 and 2 bikeways; it is usually used only for a few blocks, often in developed areas.
- **Parks and Recreational Facilities**, as used in this EIR, include (1) active recreational use areas such as a children's play apparatus area, paved game concrete area, turf playfield, picnic area, community garden, dog park, running or walking trail, swimming pool, or recreation center building; (2) passive recreational use areas such as a landscaped park, public open space, or open space available only to the residents of the development; (3) special facilities open to the public such as lakes or golf courses; and (4) special facilities only open to the residents of the development such as such as swimming pools and tennis courts.

3.16.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of the proposed Specific Plan is subject to a range of state and local plans, policies, and regulations, which are described below.

a. State Plans, Policies, and Regulations

Mitigation Fee Act

The California Mitigation Fee Act, Government Code Sections 66000, et seq., allows cities to establish fees to be imposed upon development projects for the purpose of mitigating the

impact that the development projects have upon the city's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, the city must follow four primary requirements:

(1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee;

(2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds;

(3) For fees that have been in the possession of the city for five years or more and for which the dollars have not been spent or committed to a project, make findings each fiscal year describing the continuing need for the money; and

(4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

As described below, the City of La Habra has adopted a parkland dedication or in-lieu fee that is included as Municipal Code Chapter 15.48.

Quimby Act

The Quimby Act was established by the California legislature in 1975 to provide parks for the growing communities in California. The Act authorizes cities to adopt ordinances to require dedication of parkland and/or in-lieu fees for residential subdivisions for the purpose of providing parklands and recreational facilities. The Quimby Act is part of the Subdivision Map Act and applies to residential subdivisions. It permits cities and counties to require new residential development to dedicate land or pay fees for park and recreational purposes. The Quimby Act establishes a standard of dedicating 3 acres of parkland per 1,000 residents for subdivisions for jurisdictions.

A 2013 amendment to the Quimby Act (Assembly Bill [AB] 1359) allowed cities and counties to use developer-paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located. Previously, a city or county could only use these fees to provide parks that served the developer's proposed subdivision. Overall, AB 1359 provides cities and counties with opportunities to improve parks and create new parks in areas that would not have benefited before, if certain requirements are met, including the following:

- The neighborhood where the city or county is proposing to use the fees to provide parks must have fewer than 3 acres of park area per 1,000 population;
- The neighborhood where the proposed subdivision is located must have at least 3 acres of park area or more per 1,000 population;
- The city or county must hold a public hearing before using the fees in another neighborhood.

- The city or county must find it reasonably foreseeable that the new subdivision's residents will use the park facilities in the other neighborhood; and
- The city or county must use the fees in areas consistent with the city or county's local Quimby Act ordinance and General Plan.

AB 1359 also allows a city or county to enter into a joint or shared use agreement with one or more public districts in order to provide additional park and recreational access.

b. Local Plans, Policies, and Regulations

City of La Habra General Plan

City of La Habra General Plan policies relevant to recreational resources include the following.

Chapter 2, Community Development

LU 8.3 Parks and Open Space Amenities. Ensure that existing neighborhoods contain a diverse mix of parks and open spaces that are connected by trails, pathways, and bikeways and are within easy walking distance of residents.

LU 17.6 Parks and Open Spaces. Seek to expand the City's parklands, greenways, and open spaces as land becomes available and funding is available and coordinate with other appropriate agencies, as provided for in the Open Space, Parks, Trails, and Recreation (OS) Element.

Chapter 5, Community Services

OS 2.1 Parkland Standard. Provide, maintain, and support open space resources including parks, recreational facilities, and open space at a ratio of 2.5 acres per 1,000 residents for active and passive recreational purposes to allow residents opportunities to enjoy physical and mental health.

OS 2.2 Incentives for Additional Parklands. Encourage developers to provide land dedications for parks and improvements exceeding minimum City requirements in exchange for incentives established by the City.

OS 2.4 Park Types. Maintain a diverse and accessible system of parks and recreation facilities throughout La Habra, which include mini parks designed to provide passive open space, neighborhood parks generally planned for younger children and family groups, and community parks offering a wide range of indoor and outdoor recreation opportunities.

OS 2.5 New Parks and Recreational Facilities. Prioritize the development of new parks and recreational facilities with community needs including consideration of a community park.

OS 2.8 Privately Owned Open Space Areas. Enforce compliance with conditions placed on development projects where open space has been set aside for use as a recreational amenity for La Habra's residents and visitors.

OS 2.10 Quimby Act Park Fees and/or In Lieu Dedication. Continue to enforce local ordinances that require subdivision developments with residential land uses including large high-density residential and mixed-use projects to contribute fees or dedicate land, or combination thereof, for development or rehabilitation of parklands or recreational facilities accurately reflecting the burden of the new development on the City's recreational facilities and programs.

OS 2.12 Compatibility. Ensure that parks, recreation, and community centers are located and designed for compatibility with adjacent uses addressing such issues as noise, lighting, and parking.

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.

OS 2.14 Healthy Parks. Require that new parks are designed and existing parks retrofitted over time to incorporate elements that enhance opportunities for residents to engage in vigorous recreational activities and improve their health.

OS 2.15 Accessible Facilities. When renovating and creating new recreational facilities, ensure accessibility standards are met as specified in state and federal laws such as the American with Disabilities Act (ADA).

OS 2.17 Private Commercial Recreational Facilities. Encourage the development of private commercial recreational facilities, health clubs, and similar uses to help meet the needs and improve the health of La Habra's residents, workforce, and visitors.

OS 3.1 Recreational Programs and Services. Continue to provide a wide range of recreational programs and services for La Habra residents of all ages and abilities including passive, active, individual, team, and other organized opportunities.

OS 3.2 Youth, Adults, and Seniors. Continue to provide community services and programs that meet the social, recreational, and health needs of individuals and groups including youth, adults, and seniors.

OS 4.1 Connections. Connect recreational facilities, residential neighborhoods, and key commercial and activity centers, to the extent feasible, with walking paths, trails, and bikeways.

La Habra Municipal Code

La Habra Municipal Code Chapter 15.48 (Residential Building Fees) provides the mechanism in accordance with California Government Code Section 66477 (Quimby Act) for the payment of fees or dedication of land, or combination thereof, for developing or rehabilitating existing neighborhood or community parks or recreational facilities to serve proposed subdivisions. Requirements for dedication of land or payment of fee in lieu of dedication are based on 3 acres of parkland per 1,000 population in the proposed subdivision.

The fees collected under this ordinance are solely for the purpose of producing revenue for the acquisition, development, and maintenance of public parks. Upon filing residential tentative subdivision map applications, Municipal Code Section 15.48.064 requires the owner of the property "as part of such filing, (to) indicate whether they desire to dedicate property for park and recreational purposes, or whether they desire to pay a fee in lieu thereof." If the owner desires to dedicate land for park and recreational purposes, the Municipal Code requires that the lands to be dedicated be designated as such on the tentative map as submitted.

Municipal Code Section 15.48.064 also states that, "Prior to approval of the tentative map, the La Habra Community Services Commission and Planning Commission shall review and recommend to City staff whether to require a dedication of land within the subdivision, payment of a fee in-lieu thereof, or a combination of both.

3.16.3 ENVIRONMENTAL SETTING

La Habra has a wide range of park and recreational facilities. The La Habra Recreation Division offers a variety of services that include recreation classes, excursions for adults and youth, special events, summer day camp and a summer aquatic program, two youth sports leagues, and facility rentals. The Recreation Division also manages the use of City parks, as well as coordinating the joint use of City and school athletic fields with the various school districts in La Habra, and working closely with local non-profit organizations such as Little League and the American Youth Soccer Organization.

a. Parks

The City of La Habra currently operates and maintains 141.7 acres of parkland, encompassing 24 individual parks, all of which are within 3.3 miles of the proposed Specific Plan area. These parks are grouped into the following three categories based on usage (see **Table 3.16-1**):

Table 3.16-1
Existing City of La Habra Parks

Park Name	Acres	Facilities
Mini-Parks		
Constitution Plaza Park	1.0	Urban open space to commemorate the City's history, with three large flagpoles and park benches
Town Center Park	2.1	Open lawn area
Leslie Park	0.5	Natural open area with trees and lawn
Mahoney Park	2.2	Small landscaped-only area with a nearby historical plaque marking the location where former President Richard Nixon opened his first law office in La Habra
Richard's Park	0.3	Open space area with water-conserving landscaping features
Mini-Parks Subtotal	*6.1*	
Neighborhood Parks		
Guadalupe Park	5.0	Linear nature park and greenbelt area with a bike trail, two playgrounds, the Gary Center, Community Resource Center, and a boxing club at Guadalupe Hall
Las Lomas Park	2.2	Picnic facilities, restroom, playground, walking path and an oval dirt walking path for the nearby residential neighborhood
Loma Norte Park	4.9	Immediately west of Ladera Palma Elementary School and Esteli Park to the east, provides playground facilities, picnic areas, restroom, drinking fountains, barbecues, and concrete walkways
Loma Verde Park	1.7	Basketball court, multipurpose play field, and picnic tables
Montwood Park	0.6	Two playground areas, picnic tables
Portola Park	10.1	Children's Museum of La Habra, two City-operated day care centers, enclosed playground, community theater, La Habra Tennis Center, and three ball fields
Oeste Park	4.6	Open space area
Old Reservoir Park	1.1	Picnic facilities, park benches
Osornio Park	5.4	Basketball courts, turf area used by local soccer groups
San Miguel De Allende Park	3.0	Picnic facilities and playground, Cleata Harder Developmental School
Terraza Park	2.4	Picnic facilities, open grass area, playground
Corona Park	0.1	Picnic area, playground
Descanso Park	0.9	Playground, paved walking paths
Brio Park	1.2	Playground, picnic facilities, restroom, performing arts area, open grass area
Neighborhood Parks Subtotal	*43.2*	
Community Parks		
El Centro-Lions Park	6.1	Two playgrounds, restrooms, two basketball courts, patio area with shade structures, sinks, barbecues; serves as a focal point of the community with the annual Corn Festival

Park Name	Acres	Facilities
Esteli Park	9.8	Football and two baseball diamonds with bleachers and a concession building.
La Bonita	22.6	Picnic facilities, playgrounds, playgrounds, restrooms, softball fields, skate park, Girl Scouts Pavilion, Boys and Girls Club, four lighted baseball diamonds, basketball court, and batting cage
Vista del Valle	36.4	Picnic facilities, play equipment, restrooms, picnic facilities, playgrounds, and a gazebo; includes decomposed granite hiking trails and other walking paths that have informational signage about the plants and trees within the park
Vista Grande Park	17.5	Primarily an open space wilderness area and bird sanctuary, but also includes walking paths and a Head Start School
Community Parks Subtotal	*92.4*	

Source: City of La Habra General Plan, 2014; City of La Habra, 2017.

- **Mini Parks.** The City's five mini parks are designed to provide passive open space with an emphasis on aesthetics rather than formal recreational facilities.
- **Neighborhood Parks.** The City has 14 neighborhood parks within walking distance of homes. These parks are primarily planned for use by younger children and family groups. They contain a variety of community recreational facilities with areas available for organized sports (baseball/softball diamonds), day care, basketball courts, soccer fields, football field, and tennis courts. The City also offers places for informal recreational activities, including barbecues, walking and biking paths, picnic areas, and playgrounds.
- **Community Parks.** The City's five community parks serve several residential neighborhoods and have a wide range of indoor and outdoor recreation opportunities. All of the community parks are located within a 1-mile radius of the project site.

The closest existing parks to the project site are:

- Vista del Valle Park (0.5 mile away);
- Vista Grande Park (0.7 mile away); and
- Oeste Park: (0.9 mile away).

b. Recreational Facilities

The City's parks contain a variety of community recreational facilities with areas available for organized sports (baseball/softball diamonds), day care, basketball courts, soccer fields, football field, and tennis courts. The City also offers places for informal recreational activities, including barbecues, walking and biking paths, picnic areas, and playgrounds. The City's recreational facilities are identified in **Table 3.16-2**.

Table 3.16-2
Recreational Facilities in La Habra

Name	Location	Facilities/Activities
Children's Museum	Portola Park	Located in the historic 1923 Train Depot, the Children's Museum includes galleries, hands-on exhibits, an outdoor dinosaur topiary, a historic 1942 caboose, and other railroad cars.
La Habra Community Center	101 W La Habra Blvd.	A variety of recreation programs and services are offered at the community center, and the facility includes meeting rooms and a grand ballroom.
Girl Scouts Pavilion	La Bonita Park	This facility is used by the Girls Scouts of America and is available to the public to rent.
Boys and Girls Club	La Bonita Park	The Boys and Girls Club is focused primarily on teen-aged activities and includes a gym, classrooms, and programs (i.e., cultural enrichment classes, health and physical education, professional development, educational classes, social recreation, citizenship and leadership classes).
Veterans' Hall	209 Orange St.	Built in the 1920s, this facility accommodates 150 people.

Source: City of La Habra General Plan.

c. Walking Trails and Bicycle Paths

The City's parks include natural and paved walking trails and bicycle paths. The 0.9-acre Descanso Park includes a paved walking path, the 2.2-acre Las Lomas Park includes an oval dirt walking path, the 4.9-acre Loma Norte Park includes concrete walkways, the 4.6-acre Oeste Park includes a gravel walkway, the 10.1-acre Portola Park includes concrete and asphalt walking paths, the 17.5-acre Vista Grande Park includes dirt trails, the 22.6-acre La Bonita Park includes landscaped trails and paved bicycle paths, and the 36.4-acre Vista Del Valle Park includes hiking trails and walking paths. Paved bicycle paths are also included within the 5-acre Guadalupe Park.

d. Golf Course

The La Habra General Plan identifies the 18-hole Westridge Golf Club, located on the project site, as the "major recreational facility in the City." The General Plan further states as follows: "Panoramic views of the golf course, Puente Hills, and the San Gabriel Mountains can be seen looking north from the Westridge Golf Club. The facility is privately owned but restrictions have been placed by the City to assure it remains recreational open space."

e. School Facilities and Joint Use Agreement

Another source of recreational open space within La Habra is playgrounds and ball fields located at public schools. Although schools are not under the control of the City and school sites

do not fit the official criteria for parks, the La Habra General Plan states that "schools nevertheless provide play fields and playground equipment that neighborhood residents utilize during off-school hours." The City of La Habra participates in the conservation of recreational areas through a joint use agreement between the City and the La Habra City School District for the following schools:

- Arbolita Elementary School (West) Field: used primarily for practice field during the year and regulation field for spring soccer;
- Walnut Elementary School (North) Field: used for Pop Warner Football practice, girls softball practice, and potential soccer practice;
- Las Positas Elementary School (West and Northeast) Fields: used for practice and regulation play for youth/adult soccer and girls softball;
- Sierra Vista Elementary School (Southwest) Field: practice field used only for Little League and youth soccer;
- Las Lomas Elementary School (North) Field: practice field used for soccer;
- Ladera Palma Elementary School (North) Field: used for practice and regulation play for Pop Warner Football, Little League, and some soccer;
- Imperial Middle School (North) Field: used for practice and regulation play for youth soccer—or adult when available—and girls softball; and
- Washington Middle School (South) Field: practice field used only for soccer, baseball, and girls/adult softball.

The total collective acreage of all existing public schools in La Habra is approximately 205 acres. The General Plan notes, as a rule of thumb, that "the average land area of City school sites devoted to open playground and athletic field areas is 52 percent. Thus, roughly 107 acres of existing public school sites are available as public open space and recreational facilities for residents of La Habra."

f. Parkland per 1,000 Population

Based on a 2015 citywide population of 61,905 and a total of 141.7 acres of parks and recreational areas (6.1 acres of mini-parks + 43.2 acres of neighborhood parks + 92.4 acres of community parks), the City currently has 2.29 acres of park and recreational use land per 1,000 population. This estimate increases to 4.02 acres per 1,000 population if 107 acres of joint use public school sites are counted (see Section 3.16.3.e above).

3.16.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of recreation impacts. Appendix G of the CEQA Guidelines indicates that a project would have a significant effect if it were to:

Threshold REC-1 Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

Threshold REC-2 Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.16.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Impact REC-1: The proposed Rancho La Habra Specific Plan provides for parks and recreational land in excess of La Habra Municipal Code requirements. Thus, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project would include closure of the Westridge Golf Club, resulting in the loss of a major recreational resource; however, this closure would not cause or accelerate physical deterioration of other golf courses, which are available within a 5-mile radius of the project site. The impact would therefore be *less than significant*.

Methodology

The analysis below considers whether development under the proposed Specific Plan would increase the use of existing parks and recreation facilities, and if so, whether these parks and recreation facilities could accommodate the increased use.

A significant impact would result if (1) the proposed project would result in a shortfall in the provision of parks or recreation facilities that would (2) cause deterioration of these existing facilities. The amount of land proposed to be improved for parks and recreational use within the Specific Plan area is compared to adopted City standards. Should the Specific Plan result in a shortfall in the provision of on-site parks and recreational use areas, the proposed project

would be presumed to increase use of existing parks and recreational facilities and cause deterioration of these existing facilities, resulting in a significant impact.

As noted above, the La Habra General Plan and Municipal Code set forth different park standards, as follows:

- General Plan Policy OS 2.1 states "Provide, maintain, and support open space resources including parks, recreational facilities, and open space at a ratio of 2.5 acres per 1,000 residents for active and passive recreational purposes to allow residents opportunities to enjoy physical and mental health."
- Municipal Code Section 15.48.060 acknowledges that "there is an existing shortage of adequate parklands in the city, and that future residential subdivision development will exacerbate this condition." Chapter 15.48 thus sets a requirement for dedication or payment of fees in lieu based on a standard of 3 acres per 1,000 population to "mitigate the impacts and cumulative impacts of residential subdivision development on the availability of parklands within the city."

While the General Plan standard of 2.5 acres per 1,000 residents for active and passive recreational purposes sets a citywide standard, Municipal Code Chapter 15.48 specifically addresses the impacts of new residential development, setting a standard of 3 acres of parkland per 1,000 population along with a requirement for new residential development to dedicate parkland or pay fees equivalent to 3 acres per 1,000 population as a means of mitigating impacts on existing park facilities. Thus, in determining whether a shortfall of parkland would occur from the proposed project, the Municipal Code standard of 3 acres per 1,000 population is used.

While closure of the Westridge Golf Club as the result of the proposed project would increase use of other area golf courses, because there are a finite number of tee times available at a golf course, increased demand for golf courses would not necessarily result in deterioration of golf course facilities. Thus, analysis of impacts on recreational resources related to the loss of the existing golf course facility is analyzed based on the availability of other golf courses within a 5-mile radius of the existing Westridge Golf Club. A lack of existing golf courses within a 5-mile radius of the project site would constitute a significant impact related to loss of the existing Westridge Golf Club.

Impact Assessment

The project's proposed 277 single-family detached and 125 multi-family dwelling units would result in a need for 3.78 acres of parkland based on the formula of 3 acres per 1,000 persons specified in Municipal Code Section 15.48.063.[1] Should Planning Area 5 be developed for residential use, the additional 46 multi-family dwelling units would increase the need for

[1] Municipal Code Section 15.48.063 specifies the use of 3.41 persons per household for single-family detached homes and 2.51 persons per household for multi-family homes with 5 to 9 units per building.

parkland from 3.78 acres to 4.12 acres. By comparison, the proposed project would provide 25.1 acres of public parkland as follows:

- Public Community Center and Park: 4.1 acres
    - A 22,500-square-foot structure providing an indoor banquet hall, kitchen, meeting, and office facilities in the existing Westridge Golf Club clubhouse
    - Outdoor banquet, dining, and gathering space on patios adjacent to an existing open water pond
    - Kids water play, adventure play area, and open turf
    - Parking for daily use and special events
- Public Park and Picnic Area: 10.4 acres
    - An extension of the Community Center and park to the south
    - Picnic areas, shade trees
    - Natural drainage channel, oak woodland, and native grasslands
- Public Linear Park: 10.6 acres
    - Benches, shade trees, viewing overlooks, exercise equipment
    - Gardens

In addition to these public park and recreational facilities, 25.6 acres of private recreational facilities 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

Closure of the existing Westridge Golf Club to make way for proposed residential and commercial development would result in the loss of a major recreational resource in La Habra. As noted above, the La Habra General Plan identifies the 18-hole Westridge Golf Club as the "major recreational facility in the City," and states that facility is "privately owned but restrictions have been placed by the City to assure it remains recreational open space."

While proposed golf course closure for residential and commercial development would result in the loss of 63.6 acres of open space previously approved for the La Habra Hills Specific Plan,[2] golf course closure and development would not affect the 29.5-acre community park and 2.6 acres of non-golf course open space approved for the La Habra Hills Specific Plan.

With the proposed closure of the Westridge Golf Club, the following golf courses would be available within a 5-mile radius of the project site:

- La Mirada Golf Course: 1.25 miles west of the project site
- Fullerton Golf Course: 2.1 miles southeast of the project site
- Brea Creek Golf Course: 2.67 miles east of the project site; nine-hole executive course
- Coyote Hills Golf Course: 3.1 miles southeast of the project site; semi-private with traditional memberships
- Los Coyotes Country Club: 1.1 miles south of the project site; members-only
- Candlewood Country Club: 3.4 miles northwest of the project site; members-only

Significance Conclusion for Impact REC-1

Because the proposed project would provide 25.1 acres of public parkland, which is well in excess of Municipal Code requirements (3.78 acres), along with 25.6 acres of private recreational facilities, new residents within the project site would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.

[2] The 63.6 acres of open space loss is based on the acreage within the Rancho La Habra Specific Plan proposed for residential and commercial use, as well as roadways.

By closing the Westridge Golf Club, the proposed project would result in a substantial loss of open space originally approved for the La Habra Hills Specific Plan. However, the project would not affect the 29.5 acres of community parkland, and this acreage is substantially greater than La Habra Municipal Code requirements for parkland for the 556 single-family dwelling units constructed within the La Habra Hills Specific Plan (5.79 acres). Thus, loss of the Westridge Golf Club would not increase the use of existing neighborhood and regional parks or other recreational facilities by Westridge residents such that substantial physical deterioration of the facility would occur or be accelerated.

Finally, a number of golf course facilities would remain available to the public and for membership following closure of the Westridge Golf Club. Closure of the Westridge Golf Club as the result of the proposed project would increase use of these facilities; however, because there are a finite number of tee times available at a golf course, increased demand for golf courses would not necessarily result in deterioration of golf course facilities.

Thus, impacts related to increased use of existing parks and recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated would be less than significant.

Threshold REC-2:	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**
Impact REC-2:	**Construction and operation of proposed parks and recreation facilities would contribute to impacts addressed throughout this EIR, except for those impacts specifically related to population growth or to the project's proposed residential and commercial areas and their operations. The significance of these impacts would be as identified in other EIR sections.**

Methodology

The analysis of impacts associated with the development of parks and recreational facilities starts with the identification of whether the proposed project would involve or result in new park or recreation facilities. Should the project include or require the construction or expansion of park and recreational facilities, the analysis identifies whether construction or operation of these facilities could result in adverse physical effects on the environment. The analysis of the potential adverse physical effects is considered as part of the overall project and draws on conclusions in other sections of this EIR, such as biological resources, cultural resources, transportation and traffic, air quality, greenhouse gas emissions, noise, hazards and hazardous materials, geology and soils, hydrology and water quality, public services and facilities, and utilities and service systems.

Impact Assessment

The proposed Specific Plan would involve construction of new parks and recreational facilities as described above in **Impact REC-1**. Physical environmental effects from activities such as excavation, grading, landscaping, and construction of recreational facilities, as well as operations of proposed park and recreational areas, have been analyzed as part of overall project impacts throughout this EIR.

Significance Conclusion for Impact REC-2

Construction and operation of proposed parks and recreation facilities would contribute to impacts addressed throughout this EIR, except for those impacts specifically related to population growth or to the project's proposed residential and commercial areas and their operations. The significance of these impacts would be as identified in other EIR sections.

Mitigation Measures

All mitigation measures set forth in this EIR not specifically directed to residential and commercial areas of the site and their operations would apply to the physical effects of proposed parks and recreational uses.

Significance Conclusion for Impact REC-2 with Implementation of Mitigation Measures

With implementation of mitigation measures, impacts from construction and operation of proposed parks and recreation facilities would have the same level of significance as identified for impacts throughout this EIR, except for those impacts specifically related to population growth or the proposed residential and commercial areas and their operations.

3.16.6 REFERENCES

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.

City of La Habra, *City of La Habra Final Environmental Impact Report for: General Plan 2035,* certified January 21, 2014. Accessed June 9, 2017: http://www.lahabracity.com/DocumentCenter/Home/View/196.

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3.17 UTILITIES, SERVICE SYSTEMS, AND WATER SUPPLY

3.17.1 INTRODUCTION

a. Overview

This section of the EIR addresses the physical environmental effects of new or expanded facilities to maintain acceptable service levels in relation to utilities and service systems, including water and wastewater utilities, storm drainage, and solid waste management. Because CEQA focuses on physical environmental effects, this section analyzes whether increases in demand that would result from the proposed Rancho La Habra Specific Plan would result in significant adverse physical environmental effects.

For example, an increase in sewage generation, by itself, would not be considered a physical change in the environment; however, physical changes in the environment resulting from the construction of new facilities or an expansion of existing wastewater facilities could constitute a significant impact. This section also addresses water demand, supply, and reliability for the proposed Specific Plan. Flood management is addressed in Section 3.13, *Hydrology and Water Quality*. Energy, energy infrastructure, and renewable energy resources are discussed in Section 3.10, *Energy Resources*.

b. Definitions

- **100-Year Flood** is a flood that has a 1 percent statistical chance of occurring in any given year. The 100-year flood can, however, occur in consecutive years or multiple times within a year. Similarly, a 25-year flood has a 4 percent statistical chance of occurring in any given year, but could occur in consecutive years or multiple times within a year.
- **Acre-Foot** is the volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot. It is equal to 43,560 cubic feet or 325,851 gallons.
- **Biofiltration** refers to the use of plants and landscaping to capture and biologically degrade pollutants. Capturing harmful chemicals or silt from surface runoff is a common form of biofiltration.
- **Flooded** refers to any condition in which the soil surface is temporarily covered with flowing water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or any combination of sources.
- **Frequency (Inundation)** refers to the average frequency of flooding by surface water or soil saturation. It is usually expressed as the number of years (e.g., 50 years) the soil is inundated or saturated at least once during a year.
- **Inundation** is the condition in which water from any source temporarily or permanently covers a land surface.

- **Recycled Water** is former wastewater (sewage) that is treated to remove solids and impurities to a level that is safe for beneficial uses, such as landscape irrigation. The purpose of water recycling using these processes is to conserve water, rather than simply discharging treated wastewater.
- **Stormwater** refers to discharges generated by runoff from land and impervious areas, such as paved streets, parking lots, and building rooftops, during rainfall and snow events that often contain pollutants in quantities that could adversely affect water quality. Most stormwater discharges are considered point sources and require coverage by a National Pollutant Discharge Elimination System (NPDES) permit.

3.17.2 APPLICABLE PLANS, POLICIES, AND REGULATIONS

Implementation of proposed Rancho La Habra Specific Plan and related actions is subject to a range of federal, state, and local plans, policies, and regulations, which are described below.

a. Federal Plans, Policies, and Regulations

Safe Drinking Water Act

The United States Environmental Protection Agency (USEPA) administers the Safe Drinking Water Act, which is the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the requirements of the Act and oversees public water system quality state-wide. DHS establishes legal drinking water standards for contaminates that could threaten public health.

b. Clean Water Act

The Clean Water Act established the basic structure for regulating discharges of pollutants into "waters of the U.S." The Act specifies a variety of regulatory and non-regulatory tools to manage stormwater runoff. Clean Water Act Section 402 is relevant to drainage in the proposed Specific Plan area.

Section 402 regulates point- and nonpoint-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Resources Control Board (SWRCB) oversees the NPDES program, which is administered by the Regional Water Quality Control Boards (RWQCBs). The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits.

c. National Pollutant Discharge Elimination System

The NPDES permit program under the Clean Water Act controls point and nonpoint water sources that discharge into "waters of the U.S." California has an approved state NPDES program. USEPA has delegated authority for NPDES permitting to the SWRCB, which has nine regional boards. The Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB or RWQCB) area includes the City of La Habra (City). Under this system, discharge of stormwater runoff from construction areas of 1 acre or more requires either an individual permit issued by the RWQCB or coverage under the statewide Construction General Stormwater Permit for stormwater discharges. In addition, operational water discharges from land use operations that have direct stormwater discharges to navigable waters are also required either to obtain an individual permit or to obtain coverage under the statewide General Industrial Stormwater Permit.

d. State Plans, Policies, and Regulations

California Urban Water Management Planning Act

Section 10610 of the California Water Code established the California Urban Water Management Planning Act (CUWMPA), which requires urban water suppliers to initiate planning strategies to ensure an appropriate level of water service reliability. The CUWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that annually provides more than 3,000 acre-feet (AF) of water service, should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The CUWMPA describes the contents of Urban Water Management Plans as well as methods for urban water suppliers to adopt and implement the plans.

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the federal Clean Water Act to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, such as sewer outfalls, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge.

Senate Bill 610

Senate Bill (SB) 610 requires public urban water suppliers with 3,000 or more service connections to identify existing and planned sources of water for planned developments of a

certain size. It further requires the public water system to prepare a specified Water Supply Assessment for the following types of projects:

a) A proposed residential development of more than 500 dwelling units;
b) A proposed shopping center employing more than 1,000 persons or having more than 500,000 square feet of floor space;
c) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
d) A hotel or motel, or both, with more than 500 rooms;
e) An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area; or
f) A mixed-use project that includes one or more of the projects above.

A Water Supply Assessment must address existing water demand and future water demand by the project, and must ensure that water is available for the project during normal years, a single dry year, and multiple dry years during a 20-year future projection period. The Water Supply Assessment must also describe whether the project's water demand is accounted for in the water supplier's Urban Water Management Plan. Supplies of water for future use must be documented in the Water Supply Assessment.

Senate Bill 221

SB 221 requires the local water provider to provide "written verification" of "sufficient water supplies" to serve the project. SB 221 applies only to residential projects of 500 units or more (infill or low-income or very-low-income housing subdivisions are exempt) and requires the land use planning agency to include as a condition of approval of a tentative map, parcel map, or development agreement a requirement that "sufficient water supply" be available. SB 221 differs from SB 610 in that "sufficiency" is determined by considering the availability of water over the past 20 years, the applicability of any urban water shortage contingency analysis prepared pursuant to Water Code Section 10632, the reduction in water supply allocated to a specific use by an adopted ordinance, and the amount of water that can be reasonably relied upon from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer. In most cases, the Water Supply Assessment prepared under SB 610 meets the requirement for proof of water supply under SB 221.

California Green Building Standards Code

California Code of Regulations Title 24, Part 11, establishes the California Green Building Standards Code or CALGreen Code. The CALGreen Code was updated in 2013 and went into effect January 1, 2014. The CALGreen Code sets forth water efficiency standards (i.e., maximum flow rates) for all new federally regulated plumbing fittings and fixtures.

Governor Brown's Executive Order B-29-15

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, "…conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions…" and ordering that, among other things, the "State Water Resources Control Board shall impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use." On July 15, 2015, the SWRCB released the water-use-reduction targets that were imposed on each individual urban water supplier. Then, based on rainfall, the reduction targets were revised, and the new targets became effective March 1, 2016. The City's reduction target reflects the state-wide standard.

State Water Resources Control Board Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems

The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No 2006-0003-DWQ) applies to sanitary sewer systems that are greater than 1 mile long and collect or convey untreated or partially treated wastewater to a publicly owned treatment facility. The goal of Order No. 2006-0003 is to provide a consistent state-wide approach for reducing Sanitary Sewer Overflows (SSOs), accidental releases of untreated or partially treated wastewater from sanitary sewer systems, by requiring that:

1. In the event of an SSO, all feasible steps must be taken to control the released volume and prevent untreated wastewater from entering storm drains, creeks, etc.
2. If an SSO occurs, it must be reported to the SWRCB using an online reporting system developed by the SWRCB.
3. All publicly owned collection system agencies with more than 1 mile of sewer pipe in the state must develop a Sewer System Management Plan (SSMP), which must be updated every 5 years.

e. Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb 1 or more acres of soil, or whose projects disturb less than 1 acre but are part of a larger common plan of development

that in total disturbs 1 or more acres, are required to obtain coverage under the general permit for discharges of storm water associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents. The SWPPP is required to identify specific Best Management Practices (BMPs) that would be implemented to control drainage from project sites.

State Water Resources Control Board Low Impact Development Policy

The SWRCB adopted the Low Impact Development (LID) Policy which, at its core, promotes the idea of "sustainability" as a key parameter to be prioritized during the design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions. LID is a proven approach to manage storm water. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal storm water NPDES permits.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. The Act was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25 percent of the solid waste sent to landfills by 1995, and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy using new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation.

Other state statutes pertaining to solid waste include compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires adequate areas for collecting and loading recyclable materials within a project site.

Assembly Bill 341

On October 6, 2011, Governor Brown signed AB 341 establishing a state policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring the California Department of Resources Recycling and Recovery (CalRecycle) to

provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012.

f. Local Plans, Policies, and Regulations

La Habra General Plan

City of La Habra General Plan policies relevant to utilities, service systems, and water supply include the following.

Chapter 2, Community Development

LU 17.9 Stormwater Facilities. Work with the Orange County Flood Control District to ensure that structures channeling or retaining water be designed and constructed of materials and colors so as to blend with the natural environment.

Chapter 4, Infrastructure

WS 1.1 Urban Water Management Plan. Implement the City's Urban Water Management Plan to ensure adequate water supply.

WS 1.3 Adequate Water Infrastructure. Ensure that the City's potable water infrastructure is sized adequately for storage capacity and treatment to serve existing and future projected demands.

WS 1.7 New Water Facility Design. Ensure that water utility facilities are designed to be safe, aesthetically pleasing, and compatible with adjacent uses.

WS 2.1 Water Conservation Standards and Programs. Implement water conservation standards and programs during non-shortage conditions that reduce water consumption through conservation, reasonable and beneficial use of water, and prevention of water waste and implement water supply shortage actions during declared water shortage, including reducing water use during times of emergency.

WS 2.3 Water Efficient Landscaping. Encourage the use of water efficient landscaping (e.g., drought and fire-resistant landscaping and native vegetation) in new construction and rehabilitation projects.

WS 2.4 Water Conservation Irrigation. Require water conservation irrigation methods such as drip irrigation, soil moisture sensors, and automatic irrigation systems in new construction and rehabilitation projects.

WS 2.5 Water Conservation Devices. Require compliance with state laws for water conservation devices such as low flush toilets, self-closing faucets, and pressure reducing valves in all new and major renovated structures.

SS 1.2 Peak Flow Service. Provide sufficient wastewater conveyance, pumping, and treatment capacity for peak sewer flows and infiltration.

SS 1.4 Adequate Wastewater Facilities. Coordinate with the Orange County Sanitation District (OCSD) to provide adequate collection, supply, treatment, and disposal of wastewater to meet the demands of existing and future development.

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.

SS 1.7 New Development. Ensure that new development constructs, dedicates, and/or pays its fair share contribution to the wastewater treatment and collection system necessary to serve the demands created by the development.

SD 1.1 Storm Drain Master Plan. Implement the City's Storm Drain Master Plan to ensure an adequate storm drainage system.

SD 1.3 Adequate Storm Drainage Infrastructure. Ensure that the City's storm drainage culverts, channels, and facilities are adequately sized, maintained, and upgraded to adequately convey stormwater runoff and prevent flooding for existing and new development.

SD 1.4 Facility Design. Design stormwater drainage systems to be environmentally sustainable, appear natural in character, and to be compatible with surrounding uses.

SD 1.7 Drainage Channels. Maintain storm drainage channels to adequately convey stormwater.

SD 1.9 No Net Increase. Require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

WR 1.2 AB 939 and 50 Percent Diversion. Continue to partner, plan for, and document compliance with AB 939 source reduction and recycling requirements of 50 percent diversion of solid waste from landfills.

WR 1.4 Waste Diversion. Require recycling, composting, and waste separation to reduce the volume and toxicity of solid wastes sent to landfill facilities, with the objective of diverting non-hazardous waste through source reduction, reuse, and recycling.

WR 1.6 New Construction and Recycled Materials Use. Encourage the use of recycled materials in new construction through the continued enforcement of the California Green Building Standards Code.

WR 1.7 Adaptive Reuse of Existing Buildings. Promote the adaptive re-use and integration of existing buildings in new development projects in lieu of demolition unless they are structurally deficient, inconsistent with the spatial needs and functions of the new use, consume excessive energy and water, and/or financially infeasible.

WR 4.1 Recycling and Reuse of Construction Waste. Continue to enforce the waste management plan for certain construction and demolition projects to reduce landfill waste by diverting a minimum of 50 percent of the construction and demolition debris (e.g., concrete, asphalt paving, asphalt roofing, lumber, gypsum board, rock, and soil).

Chapter 6, Conservation/Natural Resources

W 1.1 Protection of Water Resources. Work with Orange County Public Works, private property owners, neighboring jurisdictions, and others as necessary to conserve undeveloped open space areas and natural drainage channels for the purpose of protecting water quality, groundwater recharges, and stormwater management in the City's watershed and waterbodies including Coyote Creek and La Mirada Creek.

W 1.5 New Development and Post-Development Stormwater Runoff. Require new development and post-development stormwater runoff to control sources of pollutants and improve and maintain urban runoff water quality through site design, stormwater treatment and protection measures, and best management practices (BMPs) consistent with the City's National Pollutant Discharge Elimination System (NPDES) Permit.

Chapter 7, Community Safety

NH 3.5 City Storm Drains. Design and construct storm drains per Orange County Public Works' standards and ensure that City-owned storm drains are operated and maintained to allow for maximum capacity of the system.

La Habra Municipal Code

Chapter 15.78 of the La Habra Municipal Code, Waste Management Plan for Certain Construction and Demolition Projects within the City, aims to reduce landfill waste from construction and demolition projects by requiring a minimum of 50 percent of construction and

demolition debris be diverted from landfills in compliance with state and local statutory goals and policies. Covered projects include residential additions, tenant improvements, new structures of 1,000 square feet or more, demolition of 1,000 square feet or more, all City and public works, and City public construction projects. All covered projects are required to complete and submit a waste management plan. Compliance with provisions of Chapter 15.78 is a condition of approval on all building or demolition permits issued for a covered project.

Municipal Code Chapter 13.10 defines responsibility for maintenance, repair and upkeep of main sewer, house sewer and connecting sewer lines; parameters for sewer design; and establishes restrictions of what materials may be deposited to sewer systems.

3.17.3 ENVIRONMENTAL SETTING

a. Wastewater/Sewer Treatment and Service

City of La Habra and Regional Sewage Collection and Treatment Facilities

Wastewater collection and treatment service to the project site is provided by the City (local sewer lines, trunk sewer line) and the Orange County Sanitation District (OCSD) for trunk sewers and wastewater treatment.

The City's existing sewer system is a network of gravity sewers consisting of approximately 125 miles of pipe. The majority of the local sewers, including sewers serving the project site, tie into the OCSD trunk system in Imperial Highway and Beach Boulevard. The sewage is transported southwestward out of the city.

The City of La Habra service area is at the northern end of OCSD's Revenue District 3. The OCSD sewer system collects wastewater through an extensive system of gravity flow sewers, pump stations, and pressurized sewers (i.e., force mains). The sewer system consists of a series of trunk lines ranging from 12 to 96 inches in diameter. The majority of the sewage generated in the City is conveyed to one of two OCSD trunk sewers: (1) the Imperial Relief Interceptor in Imperial Highway, or (2) the Miller Holder Trunk Sewer in Beach Boulevard. The City currently does not have the infrastructure or capacity to use recycled water from the sewer collection system.

Sewage from the project site is treated at OCSD's Reclamation Plant No. 2, located adjacent to the Santa Ana River approximately 1,500 feet from the Pacific Ocean in Huntington Beach. This plant provides a mix of advanced primary and secondary treatment. Approximately 33 percent of the influent receives secondary treatment through an activated sludge system, and all of the effluent is discharged into the ocean disposal system. OCSD's treated wastewater is discharged through a 120-inch outfall at 200 feet below sea level and nearly 5 miles off-shore. Current capacity for Reclamation Plant No. 2 is 168 million gallons per day (mgd) of primary treated

wastewater and 90 mgd of secondary treated wastewater. The current average flow is 151 mgd; thus, remaining capacity at this plant is approximately 17 mgd. Expansion plans by OCSD are ongoing and designed to address the incremental increase in sewage generation as a result of new development. The secondary treatment capacity at this plant is currently being increased by 60 mgd for a future total secondary treatment capacity of 150 mgd.

Existing Sewer Lines Serving Project Site

Sewer lines serving the project site (Westridge Golf Club) include a 39-inch OCSD trunk line within Beach Boulevard near Hillsborourgh Park Apartment Homes, a 36-inch OCSD trunk line in Imperial Highway at the intersection of Imperial Highway and La Habra Hills Drive, and an 8-inch City sewer line in Idaho Street. The existing 8-inch sewer line in Idaho Street joins the OCSD trunk line in Imperial Highway. Existing Westridge residential Tracts 15030 and 15031, located south of the project site, tie into the local sewer system through the project site.

b. Water Facilities and Supply

Existing Water Facilities

Several different water pressure zones surround the project site. The existing system within Beach Boulevard, Imperial Highway, La Habra Hills Drive, and Idaho Street is within Zone 1 (548 hydraulic grade line [HGL][1]), which serves the golf course. Zone 1 is served by two reservoirs: Puente Hills (5.9 million gallons) and Sev Byerrum (9.3 million gallons).

Water Supply

The City's water supply currently consists of (1) imported groundwater from the Main San Gabriel Basin, supplied through the California Domestic Water Company (CDWC); (2) local groundwater from the La Habra Basin; and (3) imported water from the Metropolitan Water District of Southern California (Metropolitan), supplied through the Municipal Water District of Orange County (MWDOC).

The imported groundwater supply from CDWC provides approximately 60 percent of the City's water supply. CDWC is a mutual water company and wholesale provider that supplies groundwater from the Main San Gabriel Basin to each of its member agencies that own and/or lease stock in the company. Local groundwater comprises 38 percent of the City's water supply. Local groundwater is pumped from the La Habra Basin by the City-owned Idaho Street Well. The remainder of the City's water supply (2 percent) is imported from Metropolitan via MWDOC. The imported water from Metropolitan is a blend of (1) Colorado River water from

[1] Hydraulic grade line (HGL) is the level that water would rise to in a small, vertical tube connected to the pipe.

Lake Mathews, and (2) State Water Project water, which flows through the Yorba Linda Feeder and is then treated at the Robert B. Diemer Filtration Plant located north of Yorba Linda.

The City is committed to reducing dependency on imported water from Metropolitan by implementing upgrades to the local groundwater extraction system and the CDWC supply system. Through the upgrades, the City has increased imported CDWC supply from 57 percent to 60 percent and local groundwater production from 23 percent to 38 percent. This has decreased the City's dependence on Metropolitan water by 18 percent of the City's water supply.

Existing Golf Course Water Use

Golf courses typically require a large supply of water to maintain the substantial amount of turf. The Westridge Golf Club property consists of approximately 151 acres, of which approximately 50 percent is turf area associated with the 18-hole golf course. Another 13 percent (20 acres) of the property consists of slopes that are irrigated by the homeowners' association for the residential neighborhoods immediately south of the project site.

The Water Supply Assessment prepared for the proposed project used water meter data from the Westridge Golf Club from November 2010 through March 2015 to establish a baseline of existing water demand at the project site. During this period, the golf course had four water meters: a golf course irrigation meter, a clubhouse meter, a maintenance building meter, and a fire flow meter. All four meters use potable water from the City's potable water supply. The water used for irrigation was found to be 94 to 97 percent of the golf course's total water usage in winter months and typically over 99 percent of the total water usage during the summer months, when water usage was greatest. The water usage of the four meters was combined to determine the total usage by the golf club. Yearly water usage is summarized in **Table 3.17-1**. As indicated in the table, the annual golf course water demand increased from 257 AF in 2011 to 302 AF in 2014, or approximately 17.5 percent over the three-year period. Using the four years of data provided, the average yearly water usage of the golf course was calculated to be 276 acre-feet per year (AFY) from 2011 through 2014.

Table 3.17-1
Existing Westridge Golf Club Water Use

Year	Minimum Monthly Demand (AF)	Maximum Monthly Demand (AF)	Total Annual Demand (AF)
2011	3.3	41.3	257
2012	1.0	51.2	262
2013	6.2	63.1	283
2014	3.0	58.8	302
Average	-	-	276

Note: AF = acre feet
Source: Rancho La Habra Water Supply Assessment, 2016.

c. Drainage Facilities

Runoff from the project site is conveyed as sheet flow northerly and westerly, where it is collected by an underground storm drain system that outlets into the various water features throughout the golf course before discharging to the City's existing 48-inch storm drain system

within Imperial Highway and its 60-inch storm drain system within Beach Boulevard. Runoff is then conveyed southwesterly in these systems and discharged into Coyote Creek, which is located approximately 400 feet to the west of the site on the west side of Beach Boulevard, before discharging to the San Gabriel River, Alamitos Bay, San Pedro Bay, and the Pacific Ocean.

As discussed in Section 3.13, *Hydrology and Water Quality*, the existing storm drain under Beach Boulevard is substandard in size. Under existing conditions, in the 25-year storm, 254 cubic feet per second (cfs) of runoff pass through the golf course in a 48-inch pipe from the Westridge community. Another 140 cfs are conveyed through an existing 48-inch pipe from off-site areas to the south. The design capacity of the existing 48-inch pipe under Beach Boulevard is approximately 101 cfs and the 25-year peak storm event is approximately 320 cfs.

Existing topography divides the project site into seven distinct drainage areas—'A', 'B', 'C', 'D', 'E', 'F', and 'G'—with Coyote Creek flowing from northeast to southwest behind the existing commercial/industrial and residential properties located west of Beach Boulevard (see **Figure 3.13-1** in Section 3.13, *Hydrology and Water Quality*).

In 1999, when the project site was graded and the Westridge Golf Club was constructed, it was designed to accept storm water drainage from the residential neighborhoods to the south. Two residential tracts (Westridge Tracts 15030 and 15031) were developed south of the golf course and their off-site storm drain system was integrated into the golf course design. A portion of the runoff from both of these tracts co-mingles with existing water features along the golf course fairways. The water features were intended to act as retarding basins, ultimately mitigating the increase in storm water runoff associated with the development of both the residential tracts and the golf course.

d. Solid Waste Management

Municipal Solid Waste Collection

Currently, CR&R Incorporated has a contract with the City to provide solid waste hauling services in La Habra. CR&R provides weekly pickup for customers throughout the City. The City of La Habra Refuse and Recycling Division oversees the waste collection services, as well as the many recycling programs the City offers. CR&R operates a transfer and materials recovery facility, as well as a public buy-back facility in the City of Stanton. These facilities handle and sort trash, recyclables, construction and demolition materials, and green waste.

Solid Waste Disposal Sites

OC Waste & Recycling operates Orange County's three active landfills and manages other solid waste activities for the County, including four regional household hazardous waste collection centers. The landfills are the Frank R. Bowerman Landfill near Irvine, the Olinda Alpha Landfill

near Brea, and the Prima Deshecha Landfill in San Juan Capistrano. All three landfills are designated as Class III landfills and have combined permitted throughput of 23,500 tons per day (OCWR, 2017). Class III landfills accept only non-hazardous municipal solid waste for disposal; no hazardous or liquid waste can be accepted. The City is served by the Olinda Alpha Landfill. **Table 3.17-2** shows the anticipated closure date, daily permitted capacity, and available daily amount of waste accepted for all three local landfills.

Table 3.17-2
Existing Landfill Conditions

Landfill	Location	Scheduled Closure Year	Permitted Maximum (tons/day)	Average Accepted (tons/day)	Remaining Capacity (tons/day)
Olinda Alpha[a]	Brea	2030	8,000	7,000	1,000
Frank R. Bowerman	Irvine	2053	11,500	6,300-6,700	4,800-5,300
Prima Deshecha	San Juan Capistrano	2067	4,000	1,500-2,000	2,000-2,500

[a] Most likely to serve the project site.
Sources OC Waste & Recycling Strategic Plan, 2016.

At the end of fiscal year 2015-16, the disposal system had approximately 212 million tons of remaining capacity. In 15 years (2031), the disposal system is projected to have 156 million tons of remaining disposal capacity. OC Waste & Recycling's current goal is to maintain 50 years of system life so that, by 2066, the disposal system is expected to have 71 million tons of remaining capacity. **Figure 3.17-1** shows the projected capacity through the life of the disposal system.

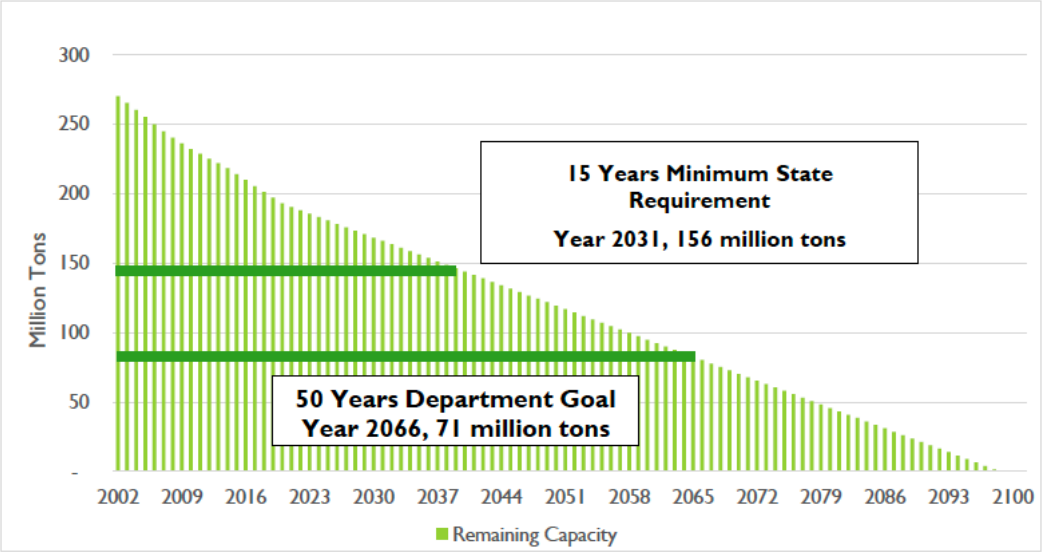

Figure 3.17-1 Projected Orange County Landfill Capacity

3.17.4 SIGNIFICANCE CRITERIA

Criteria outlined in the CEQA Guidelines were used to determine the level of significance of utilities, service systems, and water supply impacts. Based on Appendix G of the CEQA Guidelines the proposed project would have a significant effect if it were to:

Threshold UTI-1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

Threshold UTI-2: Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

Threshold UTI-3: Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

Threshold UTI-4: Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements;

Threshold UTI-5: Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

Threshold UTI-6: Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or

Threshold UTI-7 Fail to comply with federal, state, and local statutes and regulations related to solid waste.

3.17.5 PROJECT IMPACTS AND MITIGATION MEASURES

Threshold UTI-1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board

Impact UTI-1: Because proposed land uses would not discharge wastewater that contains harmful levels of chemicals and would not exceed the capacity of Orange County Sanitation District (OCSD) Reclamation Plant No. 2, implementation of the proposed Specific Plan would not exceed applicable wastewater treatment requirements, and the impact would be *less than significant*.

Methodology

The analysis related to wastewater treatment requirements identifies the types of wastewater that are anticipated to be generated by implementation of the proposed Specific Plan, and regulations related to wastewater. Impacts would be considered significant if implementation of the proposed Specific Plan would not comply with, would be in conflict with, or would exceed regulations related to wastewater, such that a substantial adverse physical effect on the environment would result.

Impact Assessment

The proposed Specific Plan would replace the existing Westridge Golf Club with 402 residential dwelling units, 20,000 square feet of commercial building area, and parks and open space uses, including conversion of the existing golf course clubhouse to a Community Center. Proposed project site development would result in increased generation of wastewater. Wastewater generated by proposed Specific Plan development would be treated at OCSD's Reclamation Plant No. 2, for which wastewater treatment requirements have been established by the Santa Ana RWQCB. Waste discharge requirements for the facility are based on all applicable state and federal regulations, policies, and guidelines, and include limitations on effluent discharge and receiving water. In general, waste effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity. Receiving water requirements include limitations related to temperature, sediments, pH, dissolved oxygen, fecal coliform and other pollutant concentrations, water clarity and color, turbidity, and toxicity. Additionally, the City has established sewer discharge standards (pursuant to Municipal Code Section 13.10.050).

The land uses proposed by the Specific Plan, which include residential, retail, and open space, would not discharge wastewater that contains harmful levels of toxins that are regulated by the Santa Ana RWQCB (such as large quantities of pesticides, herbicides, oil, grease, or other chemicals that are more typical in agricultural and industrial uses), and all effluent would comply with the wastewater treatment standards of the RWQCB and the City's Municipal Code and permitting process. Furthermore, as discussed in **Impact UTI-5** below, wastewater generated by the Specific Plan would not exceed the existing capacity of OCSD's Reclamation Plant No. 2.

Significance Conclusion for Impact UTI-1

Because proposed land uses would not discharge wastewater that contains harmful levels of chemicals and would not exceed the capacity of OCSD's Reclamation Plant No. 2, implementation of the proposed Specific Plan would not exceed applicable wastewater treatment requirements, and the impact would be less than significant.

Threshold UTI-2: **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

Impact UTI-2.1: **Construction of needed water infrastructure would not result in any on-site physical effects on the environment other than those that are analyzed as part of development of proposed residential and commercial uses (e.g., site grading). In addition, off-site improvements, other than connections to existing water lines adjacent to the project site, would not be needed. The off-site connections to existing water lines would occur exclusively within existing road rights-of-way. While such connections would require roadway lane closures during construction, such closures would be temporary and subject to standard City and Caltrans requirements to ensure public safety and minimal disruption of roadway operations. As a result, impacts related to construction of water facilities would be *less than significant*.**

Methodology

An evaluation of the physical environmental effects of proposed water improvements was undertaken to determine whether those effects would be considered significant in relation to the physical environmental effects analyzed throughout this EIR.

Impact Assessment

The Water System Hydraulic Analysis (Hunsaker Associates 2016) prepared for the proposed Specific Plan identifies existing water infrastructure in the Specific Plan area, as well as proposed water system improvements. Other than the on-site water lines to serve proposed dwellings and commercial uses, the only physical water system improvements determined to be required for the proposed project were two connections to the existing 8-inch water main in Beach Boulevard, one connection to the existing 8-inch water main in La Habra Hills Drive, and one connection to the existing 8-inch water main in Idaho Street. Each of these connections would be made within existing roadway rights-of-way adjacent to the project site. Temporary roadway lane closures would be required during construction.

Based on discussion with Brian Jones, City of La Habra Sewer and Water Manager, and modeling prepared for the proposed project, the Water System Hydraulic Analysis concluded that there is sufficient capacity in the City's Zone 1 water system to provide adequate service to the proposed project. While the existing system has capacity to serve the proposed project, the

zone break valve at Junction 34, which has been closed by the City, would need to be opened and the existing valve at Junction 56 would need to be closed.

Significance Conclusion for Impact UTI-2.1

Construction of needed water infrastructure would not result in any physical effects on the environment other than those that would occur as the result of development of proposed residential and commercial uses (e.g., site grading). In addition, off-site improvements, other than connections to existing water lines adjacent to the project site, would not be needed. While the connections to existing water lines would require roadway lane closures during construction, such closures would be temporary and subject to standard City and Caltrans (for Beach Boulevard) requirements for utility work within road rights-of-way to ensure public safety and minimal disruption of roadway operations. As a result, impacts related to construction of water facilities would be less than significant.

Threshold UTI-2:	**Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**
Impact UTI-2.2:	**Construction of needed sewer infrastructure would not result in any on-site physical effects on the environment other than those analyzed as part of development of proposed residential and commercial uses (e.g., site grading). In addition, the necessary off-site sewer improvements would occur exclusively within existing road rights-of-way. While such connections would require roadway lane closures during construction, the closures would be temporary and subject to standard City and Caltrans requirements to ensure public safety and minimal disruption of roadway operations. As a result, impacts related to construction of sewer facilities would be *less than significant*.**

Methodology

An evaluation of the physical environmental effects of proposed sewer improvements was undertaken to determine whether those effects would be considered significant in relation to the physical environmental effects analyzed throughout this EIR.

Impact Assessment

The Sewer System Hydraulic Analysis (Hunsaker Associations 2016) prepared for the proposed Specific Plan identifies existing sewer infrastructure in the Specific Plan area, as well as proposed sewer system improvements. Other than on-site sewer lines to serve proposed

dwellings and commercial uses, the only physical sewer system improvements required for the proposed project were two connections to the existing 39-inch OCSD sewer trunk line in Beach Boulevard, extension of a 10-inch sewer line in La Habra Hills Drive from the northern boundary of the project site to connect to the existing 36-inch OCSD sewer trunk line in Imperial Highway, and one connection to the existing 8-inch City sewer line in Idaho Street. Each of these connections, including extension of the sewer line along La Habra Hills Drive, would be made within existing road rights-of-way. Temporary roadway lane closures would be required during construction.

Modeling of the proposed sewer system for the Specific Plan was undertaken and was reviewed by OCSD, which confirmed that the OCSD collection system has the capacity to accept flows from the proposed project by analyzing projected peak wet weather flows using a 10-year storm event, while also considering infiltration and inflow.

The sewer system's ability to serve the proposed project was confirmed in email correspondence from OCSD Planning on January 4, 2016. The correspondence is included as an appendix to the Sewer System Hydraulic Analysis.

Significance Conclusion for Impact UTI-2.2

Construction of needed sewer infrastructure would not result in any on-site physical effects on the environment other than those that would occur as the result of development of proposed residential and commercial uses (e.g., site grading). In addition, off-site connections to existing sewer lines would occur exclusively within existing road rights-of-way. While such connections would require roadway lane closures during construction, such closures would be temporary and subject to standard City and Caltrans (for Beach Boulevard and Imperial Highway) requirements for utility work within road rights-of-way to ensure public safety and minimal disruption to roadway operations. As a result, impacts related to construction of sewer facilities would be less than significant.

Threshold UTI-3:	**Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**
Impact UTI-3:	**Construction of needed drainage infrastructure would not result in any on-site physical effects on the environment other than those that would occur as the result of development of proposed residential and commercial uses (e.g., site grading). In addition, the off-site construction of a 48-inch storm drain connection under Beach Boulevard would occur exclusively within existing rights-of-way. By using jack and bore, this construction would**

not cause lane closures or traffic interruptions. Boring for the storm drain would occur within an existing right-of-way in ground that was largely previously disturbed for construction of an adjacent storm drain. The equipment used in the jack and bore operation would generate less noise than the on-site grading operations analyzed in Section 3.11, Noise and Vibration. As a result, impacts related to construction of drainage facilities would be *less than significant*.

Methodology

An evaluation of the physical environmental effects of proposed drainage improvements was undertaken to determine whether those effects would be considered significant in relation to the physical environmental effects analyzed throughout this EIR.

Impact Assessment

To handle increased runoff from the project site resulting from increased impervious surface area to be constructed as part of the proposed project, a series of proposed water quality basins and detention basins would be provided to ensure that flow rates would be reduced to be equal to or less than the existing flow rates.

Since the proposed project would increase the amount of impervious surface, and therefore increase peak runoff, the project would include construction of on-site detention facilities consisting of two open detention basins, a re-constructed pond that provides stormwater detention, and subsurface treatment facilities that provide detention. As discussed in Section 3.13, *Hydrology and Water Quality*, and the project hydrology study (see Appendix I), proposed drainage facilities would attenuate peak storm flows equal to or below existing conditions in all but two locations. The existing 42-inch storm drain line that serves Drainage Areas 'D' and 'E' has additional capacity available to accommodate the increase of 3.7 cfs in this location. The downstream receiving water body in this location is an engineered and maintained channel that is not susceptible to hydraulic conditions of concern. Therefore, increased flows would be accommodated in Drainage Areas 'D' and 'E' without creating flooding conditions. The second location is Drainage Area 'A', adjacent to Beach Boulevard, where the existing 48-inch storm drain is not sufficiently sized to accommodate proposed project development. In this location, a detention basin and underground storage detain the majority of the peak flows; however, the project hydrology analysis recommends construction of a second 48-inch storm drain across Beach Boulevard to accommodate peak flows.

Construction of a new 48-inch storm drain would be accomplished by "jack and bore" under Beach Boulevard. Two pits would be dug on either side of Beach Boulevard and the new 48-inch pipe would be pushed underneath the roadway. Once across, the pipe would be connected

to an existing 60-inch storm drain on the west side of Beach Boulevard. On the project side, the new storm drain pipe would connect to the outlet of the detention basin. The new storm drain pipe would be located at the same elevation and next to the existing pipe to avoid conflicts with other utilities in Beach Boulevard. By using jack and bore, the construction would not require lane closure. The equipment used to push the pipe underneath the street would be located within the project site and within a pit, shielded from line of sight to sensitive receptors on the west side of Beach Boulevard. Similarly, the jack and bore activity would include a horizontal drilling machine to auger under the street. This machine is smaller in size and horsepower than most grading equipment. This activity would occur as part of utility trenching.

Significance Conclusion for Impact UTI-3

Construction of needed drainage infrastructure would not result in any on-site physical effects on the environment other than those that would occur as the result of development of proposed residential and commercial uses (e.g., site grading). In addition, the off-site construction of a 48-inch storm drain connection under Beach Boulevard would occur exclusively within existing rights-of-way.

By using jack and bore, the construction would not cause lane closures or traffic interruptions. Boring for the storm drain would occur within an existing right-of-way in ground that was largely previously disturbed for construction of an adjacent storm drain. The equipment used to push the pipe underneath the street would be located within the project site and within a pit, shielded from line of sight to sensitive receptors on the west side of Beach Boulevard, and a horizontal drilling machine that is smaller in size and horsepower than most grading equipment would be used to auger under the street, thereby reducing noise impacts to below those of the on-site grading operations analyzed in Section 3.11, *Noise and Vibration*. As a result, impacts related to construction of drainage facilities would be less than significant.

Threshold UTI-4:	**Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.**
Impact UTI-4:	**Development under the proposed Specific Plan would require approximately 101 acre-feet (AF) less water annually than the existing golf course use. In addition, because La Habra's water supplies are adequate to meet projected demands in normal, dry, and multiple dry years through 2040 even without the proposed project, new or expanded entitlements would not be needed. Therefore, *no impact* would result.**

Methodology

The analysis in this section focuses on the nature and magnitude of the change in levels of water use resulting from build-out of the proposed Specific Plan. To determine whether a significant impact would result, existing golf course water use was compared to the projected water demand over the 20-year horizon of the proposed Specific Plan. Projected water demand for the proposed Specific Plan was then compared to future available supplies from existing entitlements and resources, including projected availability of groundwater supplies and imported water supply. If the projected water demand that would result from build-out of the Specific Plan would exceed existing water entitlements and resources, new or expanded water supply entitlements would be required, and a significant impact would result.

Impact Assessment

Water Demand

As shown in **Table 3.17-3** below, estimated water demand for the proposed project would be 175.2 AF annually. By comparison, water demand for the existing golf course has averaged 276 AF annually.

Reliability of Water Supply

The City of La Habra's 2015 Urban Water Management Plan identifies three sources of water for the City: (1) imported groundwater from CDWC, (2) imported water from Metropolitan, and (3) local groundwater from the La Habra Basin. Through the Urban Water Management Plan, the City has determined that a sufficient supply of water would be available to serve its customers through 2040. **Table 3.17-4** provides a comparison of projected demand to projected supply through 2040 for a normal year, including the reduction in demand from the proposed project. **Table 3.17-5** for dry and multiple dry years, including the reduction in demand from the proposed project.

Table 3.17-3
Estimated Project Water Use

Per Capita Water Use (gallons)	Number of Units	People/ Unit	Population	Per Capita Daily Water Use (Gallons)	Daily Water Use (Gallons)	Annual Water Use (AF)
Indoor Water Use						
Single-Family – Indoor Use	277	3.25	900	45	40,511	45
Multi Family – Indoor Use	145[2]	3.25	471	45	28,373	18
Community Center – Indoor Use	-	-	150	15	2,250	3
Subtotal, Indoor Water Use	-	-	-	-	-	66
Outdoor Water Use						
Land Use	**Number of Units**	**Area (Square Feet per Unit)**	**Area (Acres)**	**% Irrigated**	**Water Demand (AFY per Acre)**	**Yearly Usage (AFY)**
Single-Family Yard	277	900	5.7	100	0.49	11.8
Multi-Family Yard	145[2]	250	1.1	100	0.49	2.3
Private Open Space (Show)	-	-	6.6	100	0.53	14.6
Private Open Space (Trans)	-	-	19.7	100	0.27	22.0
Public Community Center and Park	-	-	7.6	75	0.49	11.7
Public Park and Picnic Area (shrubs)	-	-	4.5	100	0.53	10.0
Public Park and Picnic Area (turf)	-	-	4.5	100	0.93	17.5
Public Linear Park	-	-	11.6	75	0.27	9.7
Private Park	-	-	0.2	100	0.53	0.5
Subtotal, Outdoor Water Use	-	-	-	-	-	100.0
Commercial Water Use						
		Employees	**Per Capita Water Use (Gallons)**	**Total Daily Water Use (Gallons)**	**Yearly Water Use (AF)**	
Commercial		100	83	8,300	9.2	
TOTAL WATER USE					**175.2**	

Notes: AF = acre feet; AFY = acre feet per year
Source: PACE, 2016. *Water Supply Assessment*.

[2] Following preparation of the Rancho La Habra Water Supply Assessment, the proposed project was reduced from 145 to 125 multi-family dwelling units. Thus, the Water Supply Assessment presents a worst case analysis.

Table 3.17-4
Projected Annual City of La Habra Normal Year Water Supply and Demand, 2020-2040

Fiscal Year	Total Annual Demand (AF)	Reduced Demand from Elimination of Golf Course (AF)	Annual Demand: Rancho La Habra (AF)	Total Annual Demand (AF)	Projected Annual Supply (AF)
2020	8,606	276	175	8,505	8,606
2025	9,152	276	175	9,051	9,152
2030	9,165	276	175	9,064	9,165
2035	9,182	276	175	9,081	9,182
2040	9,158	276	175	9,057	9,158

Note: AF = acre feet
Source: Rancho La Habra Water Supply Assessment, 2016.

Table 3.17-5
Projected Annual City of La Habra Multiple Dry Years Water Supply and Demand, 2020-2040

Fiscal Year	Total Annual Demand (AF)	Reduced Demand from Elimination of Golf Course (AF)	Annual Demand: Rancho La Habra (AF)	Total Annual Demand (AF)	Projected Annual Supply (AF)
2020	9,122	292	186	9,016	9,122
2025	9,701	292	186	9,595	9,701
2030	9,715	292	186	9,609	9,715
2035	9,733	292	186	9,627	9,733
2040	9,707	292	186	9,601	9,707

Note: AF = acre feet
Source: Rancho La Habra Water Supply Assessment, 2016.

Since the proposed development would reduce the demand on potable water in the City by approximately 101 AFY, the Water Supply Assessment determined that the 20-year supply, which was found sufficient to meet the City's demand estimated in the 2015 Urban Water Management Plan, would remain sufficient for the City with implementation of the proposed project. Thus, there are sufficient water supplies for the next 20 years to meet the water demand city-wide in consideration of the project's proposed demand and discontinuation of water use at the Westridge Golf Club.

The City's Urban Water Management Plan evaluated the reliability of La Habra's water supplies through 2040 and concluded that water supplies are adequate to meet projected demands in normal, dry, and multiple dry years through 2040.

Significance Conclusion for Impact UTI-4

Because proposed residential, commercial, and open space uses would consume approximately 101 AF less water annually than the existing golf course use, and the City's 2015 Urban Water Management Plan demonstrates that water supplies are adequate to meet projected demands in normal, dry, and multiple dry years through 2040 even without the proposed project, no impact would result, and no mitigation is required.

Threshold UTI-5:	**Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**
Impact: UTI-5:	**Adequate treatment capacity is available at Orange County Sanitation District (OCSD) Reclamation Plant No. 2 to treat wastewater generated by the proposed project in addition to OCSD's existing commitments. The project's impact would therefore be *less than significant*.**

Methodology

The analysis of the proposed Specific Plan's impact on wastewater treatment capacity identifies the increased amount of wastewater that would be generated by the Specific Plan and the capacity of the existing wastewater treatment plant serving the Specific Plan area. Impacts would be significant if the proposed Specific Plan would result in inadequate capacity to serve increased project-related wastewater service demands in addition to existing service commitments.

Impact Assessment

As shown in **Table 3.17-6**, the proposed project is expected to generate approximately 141,502 gallons per day (gpd) average daily flow of wastewater. The addition of 141,502 gpd of wastewater is within the available capacity of OCSD's Reclamation Plant No. 2. As noted in the La Habra General Plan EIR (City of La Habra 2014), "since General Plan buildout would generate approximately 1.098 mgd and there is approximately 17 mgd remaining capacity, there is adequate existing wastewater treatment capacity. Implementation of the General Plan would not require construction of new or expanded wastewater treatment facilities. In addition, OCSD's wastewater treatment expansion plans will provide ample capacity for the City." Thus, adequate wastewater capacity exists (17 mgd) for conversion of the existing golf course to residential and commercial use (addition of 0.141 mgd) even in light of projected buildout of the La Habra General Plan (1.998 mgd).

Table 3.17-6
Estimated Project Wastewater Generation

Proposed Land Use	Acreage	Average Daily Flows (CFS)	Average Daily Flows (GPD)	Peak Flow (CFS)
Single-Family Residential	46.1	0.11	68,597	0.27
Multi-Family Residential	7.3	0.09	54,867	0.21
Commercial	2.4	0.03	18,038	0.07
Total Wastewater Flows		**0.23**	**141,502**	**0.55**

Note: cfs = cubic feet per second; GPD - gallons per day
Source: Sewer System Hydraulic Analysis, 2016.

Significance Conclusion for Impact UTI-5

Implementation of the proposed Specific Plan would generate additional wastewater. However, adequate treatment capacity is available at OCSD Reclamation Plant No. 2 to treat wastewater generated by the proposed project in addition to OCSD's existing commitments. The project's impact would therefore be less than significant.

Threshold UTI-6: **Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.**

Impact UTI-6: **Because the Olinda Alpha Landfill and the Orange County landfill system have adequate daily capacity, the addition of 1.42 tons of solid waste per day from project operations would not exceed the permitted daily capacity of area landfills. Adequate daily landfill capacity also exists at area landfills to accept waste from project construction activities, which will be required to implement waste reduction programs. In addition, OC Waste & Recycling projects that, by 2066, Orange County's disposal system would have 71 million tons of remaining capacity, which is more than sufficient to accommodate the 51,900 tons of solid waste that would be generated by the project operations over this 50-year period. Thus, the proposed project would not exceed the total capacity of area landfills, and impacts would be *less than significant*.**

Methodology

The analysis of the proposed Specific Plan's impact on landfill facilities identifies changes in the amount of solid waste that would be generated during construction and operation of the proposed project. The analysis identifies the anticipated amount of non-hazardous construction debris and operational solid waste that would be generated from implementation of the Specific

Plan and the amount that would be disposed of in landfills after compliance with applicable recycling/diversion requirements.

Solid waste generation after recycling/diversion was compared with the available capacity of the landfills serving the Specific Plan area to assess the significance of the Specific Plan's solid waste generation during construction and at build-out. Impacts were considered significant if development within the Specific Plan area would result in a substantial increase in solid waste that would exceed available landfill capacity.

Impact Assessment

Construction Waste

Project implementation would require demolition of both surface and subsurface materials that could result in disposal of solid waste at a landfill. On the surface, existing structures such as the driving range building, maintenance building, cart paths, streets, and parking lot would be demolished. These structures mostly consist of concrete, masonry, and asphalt but also include metal, driving range netting, wood, and other materials. Demolition of surface materials would also include vegetation removal.

Subsurface materials not suitable for reuse as part of project construction include buried concrete rubble and total petroleum hydrocarbon (TPH)-contaminated soils. According to old golf course plans, approximately 170,000 cubic yards of concrete rubble from oil operations were buried under the golf course. The majority of the material is concrete, but metal may also be present. As described in Section 3.12, *Hazards and Hazardous Materials*, approximately 430,000 cubic yards of soil contaminated with TPH (from previous oil operations) were also buried below the golf course.

Lastly, construction of the new residential and commercial structures could also generate construction waste. This waste may consist of materials not fully used during construction, such as wood, metal, and plastic; packaging material; and surplus pipe, rebar, wire, and roofing material.

La Habra Municipal Code Chapter 15.78 requires preparation and implementation of a Waste Management Plan for demolition and construction of the proposed project. Municipal Code Section 15.78.040 mandates that a minimum of 50 percent of construction waste be diverted from landfills. Thus, to minimize the amount of construction debris and waste hauled to landfills, the applicant has committed to the following management strategies that would be required as conditions of project approval:

- TPH-contaminated soils would be buried deeper below the ground surface in accordance with the Soil Management Plan approved by the Orange County Health Care Agency, rather than being transported to a Class I landfill.

- All concrete, asphalt, and other masonry material from demolished buildings, roadways, or structures, or from buried stockpiles below the golf course, would be crushed on-site and reused as backfill or road base.
- Vegetation cleared from the site would be collected and taken to a green waste recycling facility for composting or mulch.
- Trash receptacles would be provided to separate recyclable materials (green waste, wood, metal, cardboard, etc.,) from non-recyclable material. Only non-recyclable materials would be taken to landfills.

The 50 percent of construction waste that is not recycled would be transported to the Olinda Alpha Landfill.

Operations Waste

As shown in **Table 3.17-7**, approximately 2.76 tons of solid waste would be generated daily by the proposed development, 1.38 tons of which would be hauled to a landfill.[3] On-site solid waste storage and handling would be required to comply with the City's Municipal Code and applicable state and federal regulations cited in Section 3.17.2, above.

Table 3.17-7
Proposed Project Solid Waste Generation

Land Use	No. of Dwelling Units or Employees	Solid Waste Generation Rate (Pounds Per Unit or Per Employee)	Pounds per Day	Tons per Day	Tons per Year
Single-Family Residential	277	12.23	3,387.7	1.69	618
Multi-Family Residential	125	8.60	1,075.0	0.54	197
Commercial (Retail and Restaurant)[a]	100	10.53	1,053.0	0.53	192
Total	**-**	**-**	**5,515.7**	**2.76**	**1,007**

[a] Should Planning Area 5 be developed with 46 dwelling units, rather than 20,000 square feet of commercial, Planning Area 5 would generate 396.6 pounds of solid waste daily, representing a reduction of 656.4 pounds of solid waste per day.
Source: Generation rates used are from the California Integrated Waste Management Board, Estimated Solid Waste https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates (July 21, 2017).

Waste generated within the Specific Plan area would continue to be hauled by CR&R to a transfer and materials recovery facility and then transported to the Olinda Alpha Landfill for disposal. As described in Section 3.17.3 above, the Orange County disposal system had approximately 212 million tons of remaining capacity as of the end of fiscal year 2015-16. OC Waste & Recycling's current goal is to maintain 50 years of system life so that, by 2066, the disposal system is expected to have 71 million tons of remaining capacity.

[3] As required by current state law, a minimum of 50 percent of the solid waste generated within the project site would be diverted from being deposited in a landfill.

Significance Conclusion for Impact UTI-6

Because the Olinda Alpha Landfill currently has 1,000 tons of excess capacity per day to accept solid waste, and the Orange County landfill system has an additional 6,800 tons of daily capacity, the addition of 1.38 tons of solid waste per day from the project site would not exceed the permitted daily capacity of area landfills. Adequate daily landfill capacity also exists at area landfills to accept waste from project construction activities, which will be required to implement waste reduction programs to divert 50 percent of construction waste from landfills. As noted above, OC Waste & Recycling's goal is to maintain 50 years of capacity. Over the next 50 years, the proposed project would generate 50,350 tons of solid waste, at least half of which would be recycled. As noted above, OC Waste & Recycling projects that, by 2066, Orange County's disposal system would have 71 million tons of remaining capacity. Thus, the proposed project would not exceed the total capacity of area landfills, and impacts would be less than significant.

Threshold UTI-7	**Fail to comply with federal, state, and local statutes and regulations related to solid waste.**
Impact UTI-7:	**Implementation of the proposed Specific Plan would comply with federal, state, and local statutes and regulations related to solid waste. *No impact* would occur.**

Methodology

The analysis related to solid waste regulations identifies the non-hazardous solid waste that is anticipated to be generated during both construction and operation of the project, and the ways in which the project would implement regulations related to disposal of that solid waste.

Impacts would be considered significant if implementation of the Specific Plan would fail to comply or would be in conflict with federal, state, or local statutes or regulations related to solid waste, such that an adverse physical effect on the environment could result.

Impact Assessment

The proposed Specific Plan would result in new site-specific development that would generate an increased amount of solid waste. All solid waste-generating activities within the city are subject to the requirements set forth in AB 939, as managed by the La Habra Public Works Department, Refuse and Recycling Division and its waste hauler, CR&R Incorporated. In addition, after 2020, development would be required to divert 75 percent of solid waste pursuant to AB 341. Implementation of the proposed Specific Plan would be consistent with all state regulations as well as La Habra Municipal Code construction and demolition waste diversion requirements. All projects in the City undergo development review, which includes an analysis of project compliance with these programs. Therefore, as a result of this

development review, future development under the proposed Specific Plan would comply with all solid waste policies and objectives.

Significance Conclusion for Impact UTI-7

Implementation of the proposed Specific Plan would be required to comply with City waste diversion programs and would not conflict with federal, state, or local statutes or regulations related to solid waste. Therefore, no adverse physical environmental effects would result, and no impacts related to solid waste regulations would occur.

3.17.5 REFERENCES – UTILITIES, SERVICE SYSTEMS, AND WATER SUPPLY

Arcadis U.S., Inc., *2015 Urban Water Management Plan, City of La Habra*, May 2016.

City of La Habra, *City of La Habra General Plan 2035*, adopted January 21, 2014.

City of La Habra, *City of La Habra, Final Environmental Impact Report for: General Plan 2035*, certified January 21, 2014.

Hunsaker Associates, *Sewer System Hydraulic Analysis*, September 2016.

Hunsaker Associates, *Water System Hydraulic Analysis*, September 2016.

Orange County Waste & Recycling, *Strategic Plan*, November 22, 2016.

Pacific Advanced Civil Engineering (PACE), *Water Supply Analysis, Rancho La Habra*, October 2016.

CHAPTER 4 IRREVERSIBLE ENVIRONMENTAL EFFECTS

Pursuant to Section 15126.2(c) of the California Environmental Quality Act (CEQA) Guidelines, this chapter evaluates the potential for significant irreversible environmental changes to result from the proposed project. Section 15126.2(c) reads as follows:

> (c) Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

As discussed in Section 3.3, *Population and Housing*, and Chapter 5, *Growth Inducement*, the proposed Project would not remove obstacles to growth on other properties, and thereby induce growth outside of the Specific Plan area. Thus, the discussion of irreversible environmental effects focuses on irreversible environmental effects related to proposed on-site development.

4.1 IRREVERSIBLE COMMITMENT OF RESOURCES

Nonrenewable resources, such as natural gas, petroleum products and fossil fuels, asphalt, petrochemical-based construction materials, steel, copper, other metals, and sand and gravel, are commodities with a finite supply. To varying degrees, these materials are readily available and some, such as asphalt and sand and gravel, are abundant. Future development that would be accommodated by the Rancho La Habra Specific Plan would entail the commitment of such nonrenewable resources along with water and other, slowly renewable resources such as lumber and other forest products during project construction. The project would also consume natural gas and electricity, as well as consumer products manufactured from nonrenewable sources, during ongoing operations. Evaluation of the nonrenewable energy resources that would be committed to Rancho La Habra is provided in Section 3.10, *Energy Resources*. As discussed in Section 3.17, *Utilities, Service Systems, and Water Supply*, the proposed Rancho La Habra Specific Plan would consume less water during operations than the current golf course use.

4.2 IRREVERSIBLE ENVIRONMENTAL CHANGES

Future development in accordance with the proposed Specific Plan would involve an irreversible commitment of an existing recreational resource, the Westridge Golf Club, for

development of additional housing and commercial space within La Habra. The significant change to the visual character of the site, as discussed in Section 3.4, *Aesthetic Resources*, would also be irreversible.

Additional irreversible environmental changes include the following:

- The increased population that would result from proposed development of the project site is analyzed in Section 3.3, *Population and Housing*. The proposed Specific Plan would result in 402 dwelling units and 20,000 square feet of commercial space with a resident population of 1,206 and an employee population of less than 100. Should Planning Area 5 be developed for residential rather than commercial use, the project would result in 448 dwelling units with a resident population of 1,304 and no employee population.
- The increase in local and regional vehicular traffic that would result from implementation of the Specific Plan is documented in Section 3.7, *Traffic and Circulation*. The proposed project would generate 4,398 daily two-way trips with 404 trips in the AM peak hour and 407 trips in the PM peak hour.
- The Specific Plan would result in increased air pollutant and GHG emissions as documented in Section 3.8, *Air Quality*, and Section 3.9, *Greenhouse Gas Emissions*, respectively.
- Increased noise resulting from implementation of the Specific Plan is documented in Section 3.10, *Noise and Vibration*.
- Increased commitment of public services (e.g., police, fire, schools, libraries) and utilities (e.g., water and sewer systems) would also be required for implementation of the Specific Plan, as discussed in Section 3.15, *Public Services*, and Section 3.17, *Utilities, Service Systems, and Water Supply*, respectively.

4.3 POTENTIAL ENVIRONMENTAL DAMAGE FROM ACCIDENTS

Section 3.12, *Hazards and Hazardous Materials*, addresses the potential for environmental damage related to management of soils containing petroleum hydrocarbons within the project site that were previously buried pursuant to regulatory approvals granted by the Orange County Health Care Agency as part of the original construction of the La Habra Hills Specific Plan and the Westridge Golf Club. These on-site soils, which were contaminated as a result of previous oil field operations, were buried at depths appropriate for the golf course use during its construction. 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. Therefore, soils containing petroleum hydrocarbons need to be placed deeper below the ground surface than is the current condition. Section 3.12, *Hazards and Hazardous Materials*, also evaluates types of hazardous materials that are likely to be routinely present within the proposed residential community, and the potential for upset and accident conditions in which hazardous materials could be released during site construction and operations.

As discussed in Section 3.14, *Geology, Soils, and Seismicity*, the project site is located within a seismically active region, and development under the Specific Plan would increase the number of structures and people in La Habra that would be exposed to groundshaking during a seismic event.

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CHAPTER 5 GROWTH INDUCEMENT

5.1 INTRODUCTION

This section analyzes the growth inducement potential of the proposed Rancho La Habra Specific Plan and the associated secondary effects of growth the Specific Plan might facilitate. As required by California Environmental Quality Act (CEQA) Guidelines Section 15126.2(d), an environmental impact report (EIR) must:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have a direct effect on population growth, for example, if it would involve construction of substantial new housing. A project could also have indirect growth-inducement potential if it would do any of the following:

- Establish substantial new permanent employment opportunities (e.g., commercial, industrial, governmental, or other employment-generating enterprises) or otherwise stimulate economic activity.
- Remove a physical or regulatory obstacle to additional growth and development, such as by removing a constraint to or increasing the capacity of a required public service (physical obstacle). For example, an increase in the capacity of utility or road infrastructure could allow either new or additional development in the surrounding area. A project could also include growth by removing a regulatory obstacle, such as by increasing allowable development intensity.
- Stimulate economic activity within an area such that additional housing, businesses, or services would be needed to support the new economic activity.

Thus, the discussion of growth inducement draws largely on the evaluations set forth in Section 3.3, *Population, Housing, and Employment*, of this EIR.

The CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, the conclusion that the project is growth-inducing as defined by CEQA requires that the

project would foster (i.e., promote or encourage) additional growth in economic activity, population, or housing, regardless of whether the growth is consistent with local plans or is beyond the level of growth that is anticipated by local plans. Consistent with CEQA Guidelines Section 15126.2(d), the conclusions set forth in this EIR regarding growth inducement do not address or imply whether such induced growth is beneficial or detrimental.

If the analysis contained in this chapter determines that the Specific Plan would have growth-inducing effects, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of "indirect" effects in Section 15358(a)(2) of the CEQA Guidelines. These indirect or secondary effects of growth may result in significant environmental impacts.

While the CEQA Guidelines require an EIR to "discuss the ways" in which a project could induce growth, and to discuss project characteristics that may "encourage… activities that could significantly affect the environment," the CEQA Guidelines do not require an EIR to attempt to predict where, when, or in what form induced growth might occur. The answers to such questions require substantial speculation, which CEQA discourages (CEQA Guidelines Section 15145).

Thus, any decision whether to allow projects that might result from induced growth is the subject of separate decision-making by the lead agency responsible for considering such projects. Because the decision to allow growth is subject to separate discretionary decision-making, and such decision-making is itself subject to CEQA, the analysis of growth-inducing effects is not intended to determine site-specific environmental impacts or mitigation for the potentially induced growth. Rather, the discussion is intended to disclose the potential for environmental effects to occur more generally, such that decision-makers are aware that additional environmental effects are a possibility if growth-inducing projects are approved. The decision about whether impacts do occur, their extent, and the ability to mitigate them is appropriately left to consideration by the agency responsible for approving such projects at such times as complete applications for development are submitted.

5.2 POTENTIAL FOR GROWTH INDUCEMENT

5.2.1 DIRECT POPULATION AND EMPLOYMENT GROWTH

Direct growth would result if a project, for example, involves construction of new housing or commercial development that would result in additional residents and jobs.

a. Population Growth

The proposed Rancho La Habra Specific Plan proposes the development of 402 new dwelling units, which would result in a population increase of 1,206 persons based on the City of La Habra's (City) current average household size of 3.0 persons per dwelling unit. If Planning Area 5 is developed with 46 multi-family dwelling units rather than for commercial use, the project would contain 448 dwelling units and have an estimated population of 1,344. Build-out of the proposed Specific Plan is equivalent to 16.3 percent of the City's population increase as projected by the Southern California Association of Governments (SCAG) (or 18.1 percent if Planning Area 5 is developed for residential use).

SCAG also estimates that by 2040, La Habra would have a total of 21,700 households, representing an increase of 2,700 households from 2012. Assuming the City's 2015 vacancy rate remains at 4.7 percent, this projected increase in households corresponds to an increase of approximately 2,827 dwelling units. The proposed Rancho La Habra Specific Plan represents 14.2 percent of this projected growth in housing (15.8 percent if Planning Area 5 is developed for residential, rather than commercial use).

The adopted La Habra General Plan provides for an increase of 4,213 units above January 2011 existing development. By comparison, SCAG projections set forth in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) indicate an increase of 2,700 households from 2012, which would represent an increase of approximately 2,827 dwelling units assuming the City's 2015 vacancy rate remains at 4.7 percent. However, the City's adopted Housing Element indicates La Habra's vacant land inventory for the development of housing would accommodate 356 new dwelling units. Thus, the General Plan anticipated that future housing development would consist of "new infill development on residentially zoned vacant land and through the densification of residential land uses."

The proposed project would increase the City's overall General Plan development capacity and provide for substantial growth beyond the General Plan's current anticipated build-out. As noted in Section 3.8, *Air Quality*, this increase in overall development capacity would also be above the growth projections used in preparation of the current South Coast Air Quality Management Plan (AQMP), and would therefore be inconsistent with the AQMP.

b. Employment Growth

Development of Planning Area 5 as a 20,000-square-foot commercial center would generate long-term on-site employment. The number of people who would be employed at such a commercial center is highly dependent upon the mix of specific businesses that would ultimately locate within the center, which cannot be known at this time. Typically, a full-time equivalent of fewer than 100 people would be employed within a 20,000-square-foot commercial center. Given the large amount of retail development existing to the north of the

project site, including the 695,000-square-foot Westridge Plaza Shopping Center, the substantial number of part-time jobs in the retail sector, and the small size of the proposed commercial center, it is unlikely any workers within the commercial site would relocate their households as a consequence of the job opportunities presented by the proposed project.

Implementation of the proposed Specific Plan would also include a temporary need for construction labor. As discussed in Section 3.3, *Population, Housing, and Employment*, due to the ready availability of construction workers in Southern California, it is unlikely that construction workers would relocate their households as a consequence of the job opportunities presented by the proposed project.

5.2.2 REMOVAL OF OBSTACLES TO GROWTH

The elimination of a physical obstacle to growth is considered to be a growth-inducing impact. A physical obstacle to growth typically involves the lack of public service infrastructure. The proposed Rancho La Habra Specific Plan would thus induce growth if it would provide public services or infrastructure with excess capacity to serve lands that would otherwise not be developable.

a. Release and Relocation of the Existing Deed Restriction

Release and relocation of the existing deed restriction would remove state-imposed restrictions that stipulate conservation of sensitive natural habitat as the only permitted use of currently deed restricted areas within the project site. Thus, a new subdivision map cannot be approved by the City nor could the proposed Rancho La Habra development project proceed in the absence of an agreement between the applicant and the California Department of Fish and Wildlife to release and relocate the existing deed restriction within the project site.

Removing existing land use restrictions placed on the existing conservation area by the deed restriction, would (1) eliminate a constraint to approval of the proposed Rancho La Habra Specific Plan and Vesting Tentative Tract Map 17845, development of which would (2) physically remove vegetation within the 11.43-acre conservation area provided as mitigation for construction of the golf course and housing within the La Habra Hills Specific Plan, and result in (3) all of the impacts associated with the proposed Rancho La Habra Specific Plan described in Sections 3.2 through 3.17, as well as Chapter 4 of this EIR. Release and relocation of the existing deed restriction would also indirectly lead to Rancho La Habra's contribution to each of the cumulative impacts described in Chapter 6 of this EIR.

b. Provision of Infrastructure

Water, sewer, drainage, and roadway infrastructure proposed for the Rancho La Habra Specific Plan would be sized to serve only project site development. As can be seen in **Figure 2-1** in

Chapter 2, *Project Description*, lands surrounding the Rancho La Habra Specific Plan area have been previous developed. Development of the proposed Specific Plan would not therefore remove any impediments to development of other properties, and would not indirectly induce substantial population increases.

5.2.3 SUPPORT ECONOMIC GROWTH

Induced growth can occur outside of a project site as the result of direct and indirect investment and spending by residents, employees, and businesses. Such growth stems from the "induced" employment generated by a project's economic activity. Indirect employment growth generated by a direct increase in economic activity can be due to the increases in spending that would occur on the part of the businesses, employees, and employee households. It could also be due to the additional spending that would occur on the part of suppliers of goods and services demanded by a project's direct economic activity (households, businesses, and employees).

Implementation of the proposed Rancho La Habra Specific Plan would encourage and facilitate economic growth. During project construction, a number of design, engineering, and construction-related jobs would be created. These jobs would be available until project construction is completed. This would be a direct but temporary growth-inducing effect of the proposed project. In addition, the project would generate approximately 100 full-time equivalent jobs if Planning Area 5 is developed for a 20,000-square-foot commercial use (rather than residential).

The project's employees and residents would represent an increased demand for economic goods and services, but they would not likely spur new economic investment, the creation of new businesses, or the expansion of existing businesses outside of the project site, given the large amount of commercial development that already exists to the north.

5.3 ENVIRONMENTAL IMPACTS OF INDUCED GROWTH

As described above, implementation of the proposed Specific Plan would result in development of 402 dwelling units along with either 20,000 square feet of commercial space or an additional 46 dwelling units. Additional off-site growth would not be generated by the proposed project. The direct and indirect physical environmental effects that would result from the proposed Specific Plan are analyzed throughout Chapter 3, *Environmental Setting, Impacts, and Mitigation*.

5.4 REFERENCES – GROWTH INDUCEMENT

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.

SCAG, *SCAG Proposed Final RTP/SCS*, 2016. Accessed June 2, 2017: http://scagrtpscs.net/Documents/2016/proposed/pf2016RTPSCS.pdf.

State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2015*, May 2015. Accessed June 2, 2017: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

CHAPTER 6 CUMULATIVE IMPACTS

This chapter analyzes ways in which the impacts of the proposed Rancho La Habra Specific Plan might combine with the impacts of other past, present, and probable future projects causing related impacts to create significant "cumulative impacts." If the effects of the proposed Specific Plan, in combination with the effects of other past, present, and probable future projects, would be significant, the project's contribution to the combined cumulative significant impact is analyzed as required by the California Environmental Quality Act (CEQA) to determine if it is "cumulatively considerable." Cumulative impacts 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 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 that is being evaluated in this EIR. 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 is, however, provided for all project 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 the 2015 baseline year 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 the 2015 baseline year 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 probable future projects within the geographic scope of the impact analyses is based upon information provided by the 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 aesthetic resources, for which cumulative impacts are limited to specific viewsheds. Thus, in assessing aesthetic resources impacts, only development within and immediately adjacent to the Rancho La Habra Specific Plan area that would contribute to a cumulative visual 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 51 projects were identified within the vicinity of the project site as of December 2016 (correlating with preparation of the Rancho La Habra Traffic Impact Analysis whose physical environmental effects might combine with those of the proposed project to create one or more cumulative impacts. Of the 51 projects, 15 are within the City of La Habra (City), one is in the City of La Habra Heights, two are in the City of Fullerton, 15 are in the City of Whittier, five are in the City of Brea, five are in the City of Buena Park, and eight are in the City of La Mirada. These cumulative projects for the proposed Rancho La Habra Specific Plan are identified in **Table 6-1** and illustrated in **Figure 6-1**.

Table 6-1
Cumulative Projects List

No.	Project	Location	Size or Density
City of La Habra			
1	Kaiser Permanente MOB	601 East Imperial Highway	28,257-square-foot medical office building
2	Apartments	951 South Beach Boulevard	335 apartment units
3	Whittier Boulevard/Hacienda Road Commercial	1701-1901 West Whittier Boulevard	22,945-square-foot commercial
4	City Hall Relocation/Residential	Northeast corner of Euclid Street and La Habra Boulevard	9 single-family dwelling units 62 condominium/ townhome units
5	Self-Storage	999 East Lambert Road	133,512-square-foot self-storage
6	Urban Village	1220-1240 West La Habra Boulevard	32 condominium units
7	701 East Imperial Highway Mixed-Use Development	North of Imperial Highway at Village Drive, east of Leslie Street	104-room hotel 2,250-square-foot fast food with drive-through 2,228-square-foot fast food with drive-through 10,000-square-foot day care center
8	Cervetto Village Project	1001 East Whittier Boulevard	32 single-family dwelling units
9	Aldi Grocery Store	North of Imperial Highway at Walmart/Alberto's Driveway	18,557-square-foot supermarket
10	Condominiums	306 South Monte Vista Street	12 condominium units
11	G&M Oil	110 South Harbor Boulevard	1,000-square-foot convenience store and pump islands
12	La Habra Memory Care	121 East Whittier Boulevard	17,330-square-footcare facility with 25 units
13	Pinnacle Residential	1101 North Harbor Boulevard	8 single-family dwelling units

No.	Project	Location	Size or Density
14	La Habra Towne Center Modernization	1231-1465 West Whittier Boulevard	104,423-square-foot existing commercial center; net increase of 8,962 square feet resulting in 113,385-square-foot commercial center
15	Condominiums	601 North Walnut Street	8 condominium units
City of La Habra Heights			
16	Sempra Oil Field Phase 3	Northwest part of the City of La Habra Heights	18-acre oil field
City of Fullerton			
17	West Coyote Hills	Generally north of Rosecrans Avenue between Beach Boulevard and Euclid Avenue	556 single-family dwelling units 204 condominium units 68,000-square-foot retail/office
18	Demolition of Beckman Coulter Facility and Construction of Beckman Business Center	4300 North Harbor Boulevard	978,665 square feet of warehouse, manufacturing and industrial floor area
City of Whittier			
19	Starbucks	14828 Whittier Boulevard	1,750-square-foot coffee shop with drive-through
20	16050 Whittier Blvd Condos	16050 Whittier Boulevard	67 condominium units (96 units total, 29 units built)
21	Morningstar Christian Chapel	16233 Leffingwell Road	13,791-square-foot church expansion
22	Self-Storage Project	11280 First Avenue	60,295-square-foot self-storage
23	Condominiums	15310 Ashley Court	114 condominium units
24	Assisted Living Facility	13617 Whittier Boulevard	104 beds
25	Training School	15915 Russell Street	10 students
26	Candlelight Residential	Northeast corner of 1st Street at Candlelight Drive	91 single-family dwelling units
27	LA Fitness	13806 Whittier Boulevard	38,000-square-foot health club
28	Condominiums	14640-14660 Whittier Boulevard	50 condominium units
29	Starbucks	10737 Beverly Boulevard	998-square-foot coffee shop with drive-through
30	Warmington Condos	12423 Whittier Boulevard	60 condominium units
31	S. Chen Condos Project	7941 Greenleaf Avenue	12 condominium units
32	Popeye's Project	12505 Washington Boulevard	3,800-square-foot fast food with drive-through

No.	Project	Location	Size or Density
33	Lincoln Specific Plan (former Fred C. Nelles Youth Correctional Facility)	11850 Whittier Boulevard (at Whittier Boulevard and Sorensen Avenue)	750 dwelling units consisting of 187 single-family units, 296 apartment units, and 267 condominium units 208,350 square feet of retail/commercial consisting of 8,000-square-foot medical office, 127,850-square-foot shopping center, 38,000-square-foot supermarket, 4,500-square-foot drive-through bank, 9,000-square-foot quality restaurant, 14,000-square-foot high-turnover restaurant, and 7,000-square-foot fast-food restaurant with drive-through
City of Brea			
34	Central Park Village	340-420 West Central Avenue	83 townhome units 369 apartment units 31,000-square-foot retail 35,000 sf medical office building
35	South Brea Lofts	500 South Brea Boulevard	37 live/work dwelling units 10 condominium units 7,500-square-foot commercial
36	Townhomes	146, 148, 150 Orange Avenue	13 townhome units
37	Benfield Pet Hospital	715 East Birch Street	3,368-square-foot veterinarian clinic
38	Albertsons Warehouse & Distribution Center	200 North Puente Street	54,946-square-foot warehouse expansion
City of Buena Park			
39	Los Coyotes Country Club Development Plan	Los Coyotes Country Club	125 condominium units 4,000-square-foot management/office space 1,000-square-foot private meeting space 5,000-square-foot gathering/event space
40	The Source, Beach/Orangethorpe Mixed-Use Development	Northeast corner of Beach Boulevard and Orangethorpe Avenue	300-room hotel 823 condominium units 195,000-square-foot office 355,000-square-foot retail
41	Village Circle	North of La Mirada/Malvern and west of Beach Boulevard	32,000-square-foot supermarket 10,000-square-foot pharmacy 32,000-square-foot retail
42	7301 Artesia Blvd/Nabisco Site	7301 Artesia Boulevard	149 condominium/townhome units 100-room hotel 45,000-square-foot automobile sales
43	OnBeach Mixed-Use	5742 Beach Boulevard	60 senior apartment units 6,000-square-foot restaurant 2,200-square-foot retail 36,000-square-foot medical office building

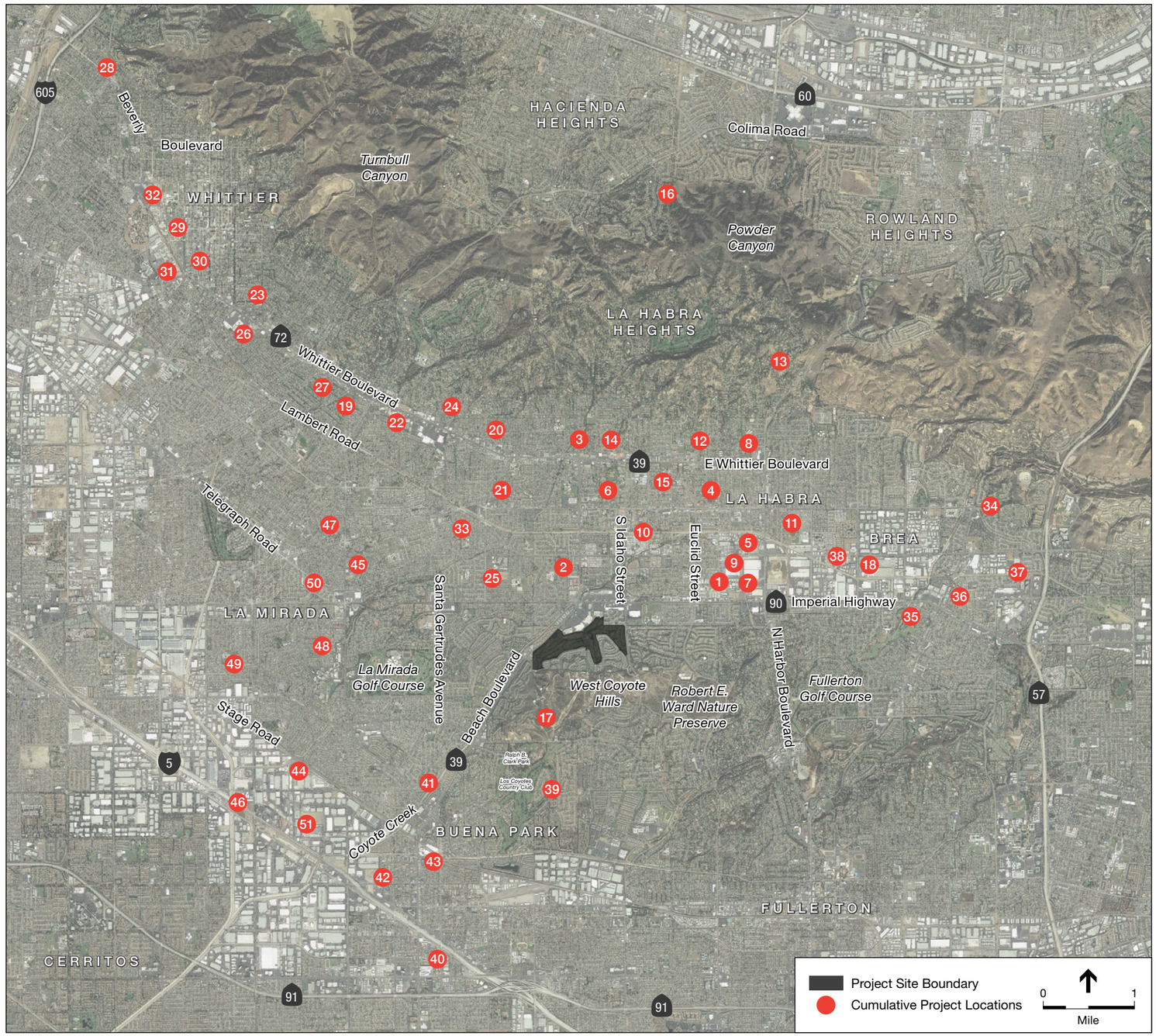
No.	Project	Location	Size or Density
City of La Mirada			
44	Alondra Boulevard Business Center	14445 Alondra Boulevard	200,369-square-foot warehouse
45	Condominiums	12000 La Mirada Boulevard	33 condominium units
46	Industrial	14930 Alondra Boulevard	80,000-square-foot industrial
47	Apartments	La Mirada Boulevard/Leffingwell Road	28 apartment units
48	Single Family Homes	13400 Biola Avenue	6 single-family dwelling units
49	Industrial	13811 Valley View Avenue	60,000-square-foot industrial
50	McDonald's	14871 Imperial Highway	4,300-square-foot fast-food restaurant with drive-through
51	Commercial	14447 Firestone Boulevard	28,000-square-foot commercial

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:

- Land Use and Planning
- Population and Housing
- Aesthetic Resources
- Biological Resources
- Cultural Resources
- Traffic and Circulation
- Air Quality
- Greenhouse Gas Emissions
- Energy Resources
- Noise and Vibration
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Geology, Soils, and Seismicity



1 Kaiser Permanente MOB
2 951 S. Beach Boulevard Residential
3 Whittier Boulevard / Hacienda Road Commercial
4 City Hall Relocation / Residential
5 Self Storage
6 Urban Village
7 701 E. Imperial Highway Mixed-Use Development
8 Cervetto Village Project
9 Aldi Grocery Store
10 Condominiums
11 G&M Oil
12 La Habra Memory Care
13 Pinnacle Residential
14 La Habra Towne Center Modernization
15 Condominiums
16 Sempra Oil Field Phase 3
17 West Coyote Hills
18 Beckman Business Center
19 Starbucks
20 16050 Whittier Boulevard Condos
21 Morningstar Christian Chapel
22 Condominiums
23 Assisted Living Facility
24 Training School
25 Candlelight Residential
26 LA Fitness
27 Condominiums
28 Starbucks
29 Warmington Condos
30 S. Chen Condos Project
31 Popeyes Project
32 Lincoln Specific Plan (Former Fred C. Nelles Youth Correctional Facility)
33 Self-Storage Project
34 Central Park Village
35 South Brea Lofts
36 Townhomes
37 Banfield Pet Hospital
38 Albertsons Warehouse & Distribution Center
39 Los Coyotes Country Club Development Plan
40 The Source, Beach / Orangethorpe Mixed-Use Development
41 Village Circle
42 7301 Artesia Boulevard / Nabisco Site
43 OnBeach Mixed-Use
44 Alondra Boulevard Business Center
45 Condominiums
46 Industrial
47 Apartments
48 Single-Family Homes
49 Industrial
50 McDonald's
51 Commercial

Figure 6-1: Cumulative Project Locations

Source: Google Earth Pro; Carlson SLS

- Public Services and Facilities, including separate discussions of police services, fire protection services, public schools, and public libraries
- Recreational Resources
- Utilities and Service Systems, including discussions of water facilities, water supply, sewer facilities, drainage facilities, and solid waste

In two cases subject—Public Services and Facilities and Utilities and Service Systems—separate discussions are provided for a single subject. This occurs since the cumulative analyses for the identified services and utilities are sufficiently different and independent from each other, including different cumulative impact areas, to warrant such separate subsections.

6.3.1 LAND USE AND PLANNING

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative land use impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The geographic area for analysis of land use impacts includes the City of La Habra and adjacent cities (Cumulative Projects 1-38, 44-51).

The only impact of the proposed project in relation to physical division of a community would result from the temporary closure of La Habra Hills Drive during site grading, which would reduce connectivity between the Westridge residential community and the Westridge Plaza Shopping Center. Because none of the cumulative projects identified in **Table 6-1** are located such that they could combine with the project's impact, no significant cumulative impact would result.

Future cumulative development of the projects identified in **Table 6-1** would modify the existing land use pattern of the cities within which these cumulative projects are located through conversion of vacant land to developed uses, as well as through conversion of existing land uses to higher development intensities. Development of cumulative projects would be subject to both environmental and planning review by the cities identified in **Table 6-1** that would address each of the significance criteria for land use and planning impacts set forth in CEQA Guidelines Appendix G. It is anticipated that each cumulative project would be required to demonstrate consistency with applicable plans and programs adopted within the individual jurisdiction.

The cumulative projects as a whole would result in a different built environment from what currently exists. However, because each community's General Plan sets forth policies to protect

the character of existing development and maintain connectivity between the various parts of the community, it is anticipated that cumulative projects adopted in a manner consistent with applicable General Plan policies would avoid any significant cumulative impact to which project site development could contribute.

b. Contribution of Proposed Project to Significant Cumulative Impacts

As noted above, cumulative projects, including project site development, would be subject to General Plan consistency determinations and environmental assessment, including mitigation measures as necessary to address policy conflicts that may result in physical environmental impacts. Consistency with General Plan policies aimed at ensuring land use compatibility would result in a less-than-significant cumulative impact. Therefore, analysis of the proposed project's contribution to a significant cumulative impact is unnecessary.

6.3.2 POPULATION AND HOUSING

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative population and housing impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The geographic area for analysis of population and housing is the City of La Habra, and the analysis of cumulative impacts is based on projections contained in the adopted La Habra General Plan. As described in Section 3.3, *Population and Housing*, La Habra General Plan Policy LU 1.2 notes that the General Plan land use diagram provides for development of 4,213 additional dwelling units above January 2011 existing development. Thus, the cumulative effect of the proposed Rancho La Habra Specific Plan (402 dwelling units) in addition to currently anticipated General Plan build-out would allow 4,615 new dwelling units within the City of La Habra (or 4,661 dwelling units if Planning Area 5 were developed with 46 multi-family dwelling units instead of commercial use).

The proposed project would thus combine with past, present, and probable future (as identified in the General Plan) projects to exceed projected General Plan build-out specified in Policy LU 1.2. Exceeding the General Plan build-out capacity is reflected in significant physical effects on the environment, such as inconsistency with the regional Air Quality Management Plan (AQMP). As noted in the General Plan EIR, a significant unavoidable air quality impact would result from implementation of the General Plan, even with application of all feasible mitigation. Thus, with addition of project-related air pollutant emissions to General Plan buildout, a significant cumulative impact would result.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because the proposed project would result in a significant unavoidable population and housing impact that directly causes a significant cumulative impact, the proposed project's contribution to that significant cumulative impact would be cumulatively considerable.

6.3.3 AESTHETIC RESOURCES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative aesthetics impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

As shown in **Figure 6-1**, cumulative projects are located a sufficient distance to the north so that they would not combine with the proposed project to affect scenic vistas to the north. Cumulative projects to the south are located below the ridge on which the Westridge residential community has been developed, and would thus not combine with the proposed project to affect scenic vistas to the south. Therefore, the proposed project would not combine with past, present, and probable future projects to cause a significant cumulative impact related to a scenic vista or scenic resource.

Because the project site is not generally visible from surrounding properties, with the exception of the most northerly portions of the Westridge residential community, and the area immediately surrounding the site has been previously developed with urban uses similar in development intensity, even though the proposed project was determined to have a significant unavoidable impact in relation to the visual character of the site, this impact would not combine with past, present, and probable future projects to cause a significant cumulative impact related to the visual character of the area.

None of the cumulative projects identified in **Table 6-1** are close enough to the proposed project site for nighttime lighting or daytime glare to combine with lighting or glare from the proposed project to form a cumulative impact. However, all of the cumulative projects identified in **Table 6-1** would contribute to a continued loss of dark night sky in the area. Because the area encompassing the cumulative projects identified in **Table 6-1** is highly urbanized, the effects of existing development have already created a significant loss of dark night sky, so much so that the past, present, and probable future projects identified in **Table 6-1** would not have a significant cumulative impact beyond that of existing development.

b. Contribution of Proposed Project to Significant Cumulative Impacts

As identified above, cumulative aesthetics impacts would be less than significant. Thus, discussion of the proposed project's contributions to significant cumulative impacts is unnecessary.

6.3.4 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 that would occur be cumulatively considerable?

a. Cumulative Impacts

The proposed project's direct impact analysis identified two biological resources—coastal sage scrub and riparian resources—that could combine with impacts from other past, present, and probable future projects to result in a cumulative biological impact.

Therefore, this section discusses those projects that could combine with the proposed project to cumulatively affect coastal sage scrub and riparian resources. A review of cumulative projects in relation to their location and potential to affect biological resources identified one project that could combine with the proposed Rancho La Habra Specific Plan to cumulatively affect coastal sage scrub and/or riparian resources: Cumulative Project 17, the West Coyote Hills Specific Plan (Coyote Hills Development), south of the project site. 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.

Cumulative Project 17 could involve removal and/or modification of areas that have the potential to contain coastal sage scrub and riparian resources. As the proposed project and Cumulative Project 17 proceed, natural habitats and sensitive wildlife species would be adversely affected through conversion of habitat to urbanized environments. However, both the proposed project and Cumulative Project 17 would be required to mitigate impacts such that no net loss of habitat values occurs. Because no net loss of habitat values would occur within either project, the combined effect of the proposed project and Cumulative Project 17 would be a less-than-significant cumulative impact. However, should Cumulative Project 17 fail to mitigate impacts to a less-than-significant level, a significant cumulative impact would result.

The proposed project is located in the Lower San Gabriel River Watershed, which has been heavily affected by removal of natural riparian vegetation along stream courses in favor of construction of concrete channels. Continued loss of riparian resources would constitute a significant cumulative impact. However, both the proposed project and Cumulative Project 17

would be subject to "no net loss" policies promulgated by federal and state regulatory agencies, CEQA, and the cities of La Habra and Fullerton. Therefore, no net cumulative loss of riparian resources would occur, and cumulative impacts would be less than significant.

b. Contribution of Proposed Project to Significant Cumulative Impacts

While the proposed project would remove 5.92 acres of coastal sage scrub habitat, the proposed project includes establishment of an 11.6-acre upland conservation area for the preservation, enhancement and restoration of coastal sage scrub. Furthermore, the majority of the coastal sage scrub within the project site is located in the central and eastern portions of the site, and is not contributing to maintaining a viable California gnatcatcher population. It is the southwest portion of the project site, with its proximity to the West Coyote Hills and consistent utilization as nesting habitat, that is important to the long-term viability of the California gnatcatcher population in the area. The proposed project includes preservation and creation of more coastal sage scrub in this location than exists today, which would contribute to the continued viability of the existing California gnatcatcher populations in the area. Thus, the proposed project's contribution to a significant cumulative impact on coastal sage scrub would not be cumulatively considerable.

6.3.5 CULTURAL RESOURCES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative cultural resources impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

Cumulative effects involving cultural resources occur as the result of multiple projects affecting cultural resources involving a resource type or theme, such as historic or prehistoric ethnic sites or an industry (e.g., oil), that occur within a larger geographic context than a single project site. Thus, this analysis considers cumulative development projects that are located immediately adjacent to the project site and elsewhere in La Habra and adjacent communities. These include each of the cumulative projects depicted in **Table 6-1** and **Figure 6-1** in addition to all past projects in this area, which are evident in the area's existing physical setting.

No historic structures exist on the project site; therefore, development of the proposed project would have no impacts on historic resources and would not contribute to any cumulative impacts on those resources.

The project site has been substantially altered from historic oil operations and the grading of the Westridge community and golf course. In addition, no tribal cultural resources have been

identified as being within the project site. The likelihood of discovering archaeological, tribal cultural, or paleontological resources on the site is low, and would be limited to currently unknown subsurface locations. Many of the cumulative projects identified in **Table 6-1** consist of redeveloping existing development sites and would similarly have a very low potential for affecting archaeological, tribal cultural, or paleontological resources. Other projects, such as Cumulative Project 17, are proposed on lands that have not been developed for urban use in the past, and thus have varying degrees of potential for affecting archaeological, tribal cultural, or paleontological resources. Each of the cumulative projects identified in **Table 6-1** would be required to mitigate any impacts on archaeological, tribal cultural, or paleontological resources. Because of such mitigation requirements and distances between cumulative project sites, the cumulative projects described in **Table 6-1** would not result in significant cumulative effects on archaeological, tribal cultural, or paleontological resources or human remains through accidental discovery and damage.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because no significant cumulative impacts would occur, discussion of the project's contribution to cumulative impacts is unnecessary.

6.3.6 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 provides a cumulative analysis of project traffic including the proposed project, all of the cumulative projects identified in **Table 6-1**, and a 1 percent growth factor to account for additional unspecified future socioeconomic growth in the communities surrounding La Habra. The traffic study 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**. Six of the 32 intersections studied would fail to meet applicable LOS standards.
- **Impact TRA-1.6, Caltrans Intersections, Year 2023**. Seven of the 19 Caltrans intersections studied would fil to meet applicable standards when analyzed with Caltrans methodology.
- **Impact TRA-1.7, Roadway Segments, Year 2023**. Sixteen of the 37 roadway segments analyzed would fail to meet applicable LOS standards.

- **Impact TRA-1.8, Local Intersections, Year 2035**. Nineteen of the 32 intersections studied would fail to meet applicable LOS standards.
- **Impact TRA-1.9, Caltrans Intersections, Year 2035**. Eleven 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**. Two of the three merge diverge locations analyzed would fail to meet applicable LOS standards in 2023, and all three merge diverge locations analyzed would fail to meet applicable LOS standards in 2035.
- **Impact TRA-2, Congestion Management Program (CMP) Intersections, Year 2023 and 2035**. Three of the four CMP intersections studied would fail to meet applicable LOS standards.

b. Contribution of 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 four 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 seven Caltrans intersections.
- **Impact TRA-1.7, Roadway Segments, Year 2023**. The proposed project's contribution to cumulative impacts was determined to be significant (cumulatively considerable) at one location.
- **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 (not cumulatively considerable) at all CMP intersections.

6.3.7 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 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.

6.3.8 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. As a result, the analysis of greenhouse gas emission impacts under CEQA effectively constitutes an analysis of a project's contribution to the significant statewide cumulative impact of GHG emissions.

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)), a significant cumulative greenhouse gas emission impact would result.

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.

6.3.9 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 includes past, present, and future development within Southern California because energy supplies (including electricity, natural gas, and petroleum) are generated and distributed throughout the Southern California region.

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 are expected to 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.

6.3.10 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 J), 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 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[1]. Thus, the proposed project's contribution to significant cumulative noise impacts would not be cumulatively considerable.

6.3.11 HAZARDS AND HAZARDOUS MATERIALS

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative hazards and hazardous materials impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

Hazards and hazardous materials impacts are generally localized and site-specific, with the exception of those resulting from transportation of hazardous materials, from upset conditions, or from contamination of groundwater. As a result, the cumulative context for this analysis varies, depending on the threshold being analyzed. For example, cumulative impacts associated with the transportation of hazardous materials would be analyzed for projects along area transportation routes, while the context for the use of hazardous materials would be limited to the area immediately surrounding the project site. Cumulative impacts associated with the accidental release of hazardous materials into the environment would also be limited to the project site and the immediately surrounding properties. Cumulative impacts associated with emergency response would be limited to development in the vicinity of emergency access routes.

Each of the cumulative projects could involve the routine need for use and disposal of hazardous materials. While there would be a substantial cumulative increase in the transportation, use, and disposal of hazardous materials, the resulting cumulative impact would be less than significant as described below.

The proposed project and cumulative projects would use hazardous chemicals common in other residential, medical, commercial/retail, and warehouse settings. These common consumer products would be used for the same purposes as in any residential commercial/retail, or medical setting. Because general commercial/retail, household, and medical hazardous materials are typically handled and transported in small quantities, and because the health effects associated with them are generally not as serious as large-scale industrial processing

[1] 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.

uses, adverse cumulative effects on the environment with respect to the routine transport, use, or disposal of general office and household hazardous materials would not result.

Implementation of remedial actions is proposed for the project site, as well as would be the case for the sites of Cumulative Project 16 (Sempra Oil Field Phase 3), Cumulative Project 17 (West Coyote Hills), and Cumulative Project 33 (Lincoln Specific Plan, former site of Fred C. Nelles Youth Correctional Center). As described in Section 3.12, *Hazards and Hazardous Materials*, of this EIR, project site remediation would occur under the oversight of the appropriate regulatory agency. Other cumulative projects that might excavate soils as part of routine construction would also be required to adhere to applicable regulatory requirements. Adherence to regulatory requirements would reduce cumulative impacts related to the release of hazardous materials to a less-than-significant level.

The geographic context for emergency response is the City of La Habra, including the project site and cumulative projects within the City (Cumulative Projects 1-15). The City of La Habra has an emergency response plan that was developed to ensure allocation and coordination of resources in the event of an emergency. Future development within La Habra would result in a cumulative increase in the demand for hazardous materials emergency response capabilities. However, as demonstrated in the La Habra General Plan EIR, the City's emergency response capabilities are able to address General Plan build-out. While both fire and police protection services would need to be expanded over time to address increased demand for services from new development, such needs would be reviewed and addressed on an annual basis as part of the City's budget process. The General Plan EIR also notes that the residential and commercial uses permitted under the General Plan "would involve the use of hazardous materials including solvents, cleaning agents, paints, and pesticides. However, these would generally be materials that, when used correctly, would not result in a significant hazard to residents." In addition, the Initial Study prepared for the General Plan EIR notes that the City's roadway system is largely built out, and that new development would not interfere with emergency response.

Any development involving increased hazardous materials use has the potential to increase the demand for emergency response capabilities in the area. Because the combination of project site and cumulative development (General Plan build-out with the addition of the proposed project) would increase La Habra's population and its commercial development inventory, an increased demand for first response capabilities and hazardous materials emergency response capabilities would result from build-out of the cumulative projects. However, the types of uses proposed within La Habra do not involve high levels of risk and would not substantially add to demands on City emergency services.

b. Contribution of Proposed Project to Significant Cumulative Impacts

As discussed above, cumulative impacts related to hazards and hazardous materials would be less than significant. Discussion of the proposed project's contribution to cumulative impacts is therefore unnecessary.

6.3.12 HYDROLOGY AND WATER QUALITY

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative hydrology and water quality impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The cumulative analysis area for hydrology and water quality is the watershed of Coyote Creek, including Cumulative Projects 1 through 51. Because current requirements call for either detaining stormwater flows such that pre-development peak flows are not exceeded during a major storm event, or constructing sufficient downstream drainage facilities to avoid flooding, cumulative impacts would be less than significant. In addition, current water quality requirements for new development projects and ongoing operations have been designed to avoid degradation of downstream water quality. Therefore, compliance with such standards and requirements, as would be expected of each of the cumulative projects, would avoid significant cumulative impacts.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because cumulative hydrology and water quality impacts would be less than significant, discussion of the proposed project's contribution to those impacts is unnecessary.

6.3.13 GEOLOGY, SOILS, AND SEISMICITY

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative geology, soils, and seismicity impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

Southern California is within a seismically active region with a wide range of geologic and soil conditions. Due to widely varying conditions and the types of local impacts that result from seismic and soils hazards, the geographic scope for considering cumulative impacts includes the

project site and adjacent areas. Thus, the geographic area for analysis of cumulative geology and soils impacts includes La Habra and adjacent cities (Cumulative Projects 1-38, 44-51).

Project site development, combined with the above-referenced cumulative development, would result in increased population in an area subject to substantial seismic risks and hazards. However, any new project, including proposed project site development, would be required to meet building code requirements that address the various seismic and geologic hazards present in the Southern California region, and would thereby reduce cumulative impacts related to geology and soils. Development projects are required to meet the most recent geologic and seismic standards, which are more stringent that older codes and practices, making new structures likely to perform better than older structures in the event of a significant seismic event. Generally, compliance with applicable building and other codes, as would be required for all present and future cumulative projects, would reduce cumulative impacts to a less-than-significant level.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because compliance with applicable building and other codes, as would be required for all present and future cumulative projects, would reduce cumulative impacts to a less-than-significant level, discussion of the proposed project's contribution to significant cumulative effects is unnecessary.

6.3.14 PUBLIC SERVICES AND FACILITIES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in substantial adverse physical impacts associated with the provision of new or physically altered public service facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

La Habra General Plan Policy LU 1.2 notes that the General Plan land use diagram provides for development of 4,213 additional dwelling units above January 2011 existing development. The proposed project (402 dwelling units) would increase this development capacity to 4,615 new dwelling units (or 4,661 dwelling units if Planning Area 5 were developed with 46 multi-family dwelling units instead of commercial use). This projected increase in City population through General Plan build-out would result in increased demands for public services. The proposed Rancho La Habra Specific Plan would increase the City's build-out by 9.5 percent (or 10.6 percent if Planning Area 5 were developed for residential use).

The following discussion reviews potential cumulative impacts on police service, fire protection service, public schools, and public libraries.

Police Services

The geographic scope for the analysis of cumulative impacts associated with police service is the service area of the La Habra Police Department, which is the area within the La Habra city limits.

As noted in the La Habra General Plan EIR, "additional police equipment, facilities, and personnel would be required to provide adequate response times, acceptable public service ratios, and other performance objectives for law enforcement services within the City" through build-out of the General Plan. Addition of the proposed Rancho La Habra Specific Plan to General Plan build-out would add to that need over time. Should the La Habra Police Department maintain its current sworn officer-to-resident ratio (1.1 officers per 1,000 residents) through General Plan build-out, the result would be an additional 17 sworn officers at General Plan build-out (or 19 sworn officers with the addition of the proposed project).

However, the City does not have an established standard for providing police services based on population size and does not base service needs strictly on population ratios because such ratios often do not properly reflect the need for police services. Indicators of need for additional resources and staffing include response times, incident loads, request for service, resident and transient population, and square footage of improvements. Thus, appropriate staff levels are determined on a yearly basis with a recommendation by the Police Chief to the City Manager, who then proposes the appropriate staffing level to the City Council.

As described in the General Plan EIR, future increases in City population "may require the hiring of new staff and could potentially require the building of new facilities." The General Plan EIR concluded that the physical impacts associated with construction noise, emissions, and traffic from the operation of a new police facility were part of the overall General Plan update project addressed in the General Plan EIR. Thus, impacts of potential future expansion of police facilities are included in the analyses set forth in the General Plan EIR, which concludes that General Plan build-out would have a less-than-significant effect in relation to police services.

The proposed project, when added to General Plan build-out, would not result in a significant cumulative impact in relation to police services, because (1) the General Plan EIR has already addressed at a programmatic level expansion of police facilities and concluded impacts would be less than significant, and (2) the proposed project would implement a safety program, including surveillance cameras and license plate readers.

Fire Protection Services

The geographic scope for the analysis of cumulative impacts associated with fire protection service is the area within the La Habra city limits.

Currently, there are no plans for additional staffing, equipment, or facility expansion in La Habra. As noted in the General Plan EIR, to account for additional service demands in the City, the Los Angeles County Fire Department (LACoFD), pursuant to its contract with the City of La Habra, may increase its annual fee charged to the City to account for the increase in demand. This determination process, made by LACoFD based on the actual increase in demand compared to existing conditions, would be continued into the future.

The City collects development impact fees, including fees for fire protection, pursuant to Chapter 15.48, Residential Building Fees, and 15.52, Development Fee, of its Municipal Code (City Ordinance Nos. 850, 1053, 1209, and 1213). Revenue from these fees, as well as property and sales taxes, would grow in rough proportion to the increase in residential units and/or businesses approved within the City, including the proposed project and General Plan build-out.

The General Plan EIR further notes that as the City's population increases, "additional fire stations may be required, and localized environmental impacts would result from the construction of those facilities." The General Plan EIR concluded that the physical impacts associated with construction noise, emissions, and traffic from the operation of a new fire stations were part of the overall General Plan update project addressed in the General Plan EIR. Thus, impacts of potential future expansion of fire protection facilities are included in the analyses set forth in the General Plan EIR, which concludes that General Plan build-out would have a less-than-significant effect in relation to fire protection services.

The proposed project, when added to General Plan build-out, would not result in a significant cumulative impact in relation to fire protection services, because (1) the General Plan EIR has already addressed at a programmatic level expansion of fire protection facilities and concluded impacts would be less than significant, (2) two existing LACoFD fire stations are located within one-quarter mile of the project site, and (3) the proposed project would pay required development impact fees for fire protection facilities.

Public Schools

The geographic context for cumulative school services is the area served by the La Habra City School District (LHCSD) and Lowell Joint School District (LJSD), which serve students in grades Kindergarten (K)-8, and the Fullerton Joint Union High School District (FJUHSD), which serves students in grades 9-12.

According to the La Habra General Plan EIR, future residential development and population growth in La Habra alone would exceed the capacity of school districts serving the City and could cause overcrowding to occur at schools within the LHCSD, LJSD, and FJUHSD. Adding the proposed project to General Plan build-out and development elsewhere within the LHCSD, LJSD, and FJUHSD would increase future student loads and increase the potential for overcrowding in area schools. As a result, expansion of existing schools or construction of new schools may be needed in order to accommodate the estimated number of students.

However, since the location and size of future school facilities improvements cannot be known at this time, it would be speculative to analyze whether site-specific school facilities expansions and/or construction of new schools would result in significant or less-than-significant environmental impacts. The LHCSD, LJSD, and FJUHSD would each have the responsibility under CEQA to analyze and mitigate environmental impacts associated with future expansion of school facilities and any construction of new schools.

All new residential and non-residential development will be required to pay statutory impact fees to the LHCSD, LJSD, and FJUHSD in accordance with Government Code Section 65995(b) to help fund construction of additional classrooms and offset any additional increases in education demand at schools, including costs for mitigation of impacts related to school facilities construction and operations. Because these fees are required by law for mitigation of impacts on schools under CEQA and presumed under the law to constitute full mitigation for impacts, the cumulative impact of cumulative development on public schools would be less than significant.

Public Libraries

The geographic scope for cumulative library services is the City of La Habra, which is the area served by the existing La Habra branch library operated by the Orange County Public Libraries system.

Future increases in population will generate increases in demand for library services citywide. Although technology and the information available on the Internet are anticipated to increase over time, which would act to limit increased demands on library services, cumulative development within the City through General Plan build-out could result in the need for new or expanded library facilities.

The General Plan EIR concluded that the physical impacts associated with construction noise, emissions, and traffic from the operation of expanded library facilities were part of the overall General Plan update project addressed in the General Plan EIR. Thus, impacts of potential future expansion of library facilities are included in the analyses set forth in the General Plan EIR, which concludes that General Plan build-out would have a less-than-significant effect in relation to library services.

The proposed project, when added to General Plan build-out, would not result in a significant cumulative impact in relation to library services, because (1) the General Plan EIR has already addressed at a programmatic level expansion of library facilities and concluded impacts would be less than significant, and (2) technology and information available on the Internet are anticipated to increase over time, providing an alternative to library use.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because cumulative public services impacts would be less than significant, discussion of the proposed project's contribution to such impacts is unnecessary.

6.3.15 RECREATIONAL RESOURCES

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative recreation impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

The geographic scope for cumulative recreational resources is the area within the La Habra city limits.

Future increases in population will generate increases in demand for recreational facilities citywide. In accordance with California Government Code Section 66477 (Quimby Act), La Habra Municipal Code Chapter 15.48 (Residential Building Fees) provides a mechanism for the payment of fees or dedication of land, or combination thereof, for developing or rehabilitating existing neighborhood or community parks or recreational facilities to serve proposed subdivisions. Requirements for dedication of land or payment of fee in lieu of dedication[2] are based on 3.0 acres of parkland per 1,000 population in the proposed subdivision. All residential development within La Habra, including the proposed project, would be required to comply with the requirements of Municipal Code Chapter 15.48 and provide for adequate park facilities so as to avoid significant impacts on existing parks. In addition, the proposed project will provide parkland in excess of Municipal Code requirements. The cumulative effect of required dedications and fee payments would be to reduce cumulative recreational impacts to less than significant.

[2] The fees collected under this ordinance are solely for the purpose of producing revenue for the acquisition, development, and maintenance of public parks.

In addition, because the existing Westridge Golf Club is the only golf course in the La Habra city limits, and none of the cumulative projects identified in **Table 6-1** involves conversion of a golf course to another use, loss of the existing golf course on the project site would not combine with any past, present, or reasonably anticipated future project to create a cumulative impact.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because cumulative public services impacts would be less than significant, discussion of the proposed project's contribution to such impacts is unnecessary.

6.3.16 UTILITIES AND SERVICE SYSTEMS

Would the proposed Rancho La Habra Specific Plan, in conjunction with past, present, and probable future projects, result in significant cumulative utilities and service systems impacts? Would the proposed project's contribution to significant cumulative impacts that would occur be cumulatively considerable?

a. Cumulative Impacts

Water Facilities

The area of analysis for water facilities is the area within the La Habra city limits.

As discussed in Section 3.17, *Utilities, Services Systems, and Water Supply*, the City's existing water facilities are capable of serving the proposed project and other projected development. Modeling prepared for the proposed project concluded that there is sufficient capacity in the City's Zone 1 water system to provide adequate service if the zone break valve at Junction 34, which has been closed by the City of La Habra, would be opened and the existing valve at Junction 56 would be closed. Thus, cumulative impacts would be less than significant.

Water Supply

The area of analysis for water supply is the area within the La Habra city limits.

The City's 2015 Urban Water Management Plan identifies three sources of water: (1) imported groundwater from the California Domestic Water Company (CDWC), (2) imported water from the Metropolitan Water District of Southern California (Metropolitan), and (3) local groundwater from the La Habra Basin. As discussed in Section 3.17, *Utilities, Services Systems, and Water Supply*, through the Urban Water Management Plan, the City has determined that a sufficient supply of water would be available to serve its customers through 2040. Table 3.17-4 in Section 3.17, *Utilities, Services Systems, and Water Supply*, provides a comparison of projected cumulative water demand to projected supply through 2040, including the reduction in demand from the proposed project, and indicates that the cumulative effect of the proposed project in

combination with past, present, and probable future projects (as determined by citywide projections prepared for the 2015 Urban Water Management Plan) would be a 101 acre-foot annual surplus of water supply in relation to water demand. Thus, cumulative impacts in relation to water supply would be less than significant.

Sewer Facilities

The area of analysis for sewer facilities is the Orange County Sanitation District (OCSD) service area.

Build-out of the La Habra General Plan may require local expansions of sewer mains to accommodate wastewater generated by future site-specific development projects. However, the La Habra Public Works Department and OCSD address changes in demand for wastewater conveyance infrastructure through implementation of their capital improvement programs (CIPs), which function as long-range planning tools for sewer infrastructure improvements and their financing. The CIPs ensure that wastewater infrastructure is repaired and expanded in an orderly manner. Furthermore, policies in the Infrastructure chapter of the La Habra General Plan address adequacy of wastewater facilities in the planning area. These include policies that require implementation of the sewer master plan (Policies SS 1.1 and 1.3), promote collaboration between the City and OCSD in providing wastewater facilities (Policies SS 1.4 and 1.6), and require that new development "constructs, dedicates, and/or pays its fair share contribution" to the wastewater treatment and collection system (Policy SS 1.7). Compliance with these policies and existing City plans and regulations would ensure that cumulative development within the City would be adequately served by wastewater facilities. Therefore, no significant cumulative impacts related to wastewater conveyance facilities would result.

As noted in the La Habra General Plan EIR, "since General Plan buildout would generate approximately 1.098 mgd and there is approximately 17 mgd remaining capacity, there is adequate existing wastewater treatment capacity. Implementation of the General Plan would not require construction of new or expanded wastewater treatment facilities. In addition, OCSD's wastewater treatment expansion plans will provide ample capacity for the City." Thus, adequate wastewater capacity exists for development of the proposed project (which would generate 0.141 million gallons per day [mgd] of wastewater). In combination with past, present, and probable future projects included in General Plan build-out (17 mgd), cumulative impacts would be less than significant.

Drainage Facilities

The area of analysis for water supply is the area within the La Habra city limits and its downstream drainage area.

As stated in the General Plan EIR, post-construction measures under the Orange County Drainage Area Management Plan (DAMP) require co-permittees such as the City of La Habra to

require new development to implement structural and non-structural Best Management Practices (BMPs) that would mimic pre-development quantity and quality runoff conditions. Thus, the proposed project in combination with past, present, and probable future projects in the City (i.e., General Plan build-out) would be required to install and maintain on-site storm drainage improvements pursuant to DAMP requirements. Thus, no large net increases in storm drainage rates or volumes would result, and widespread off-site storm drainage improvements are not anticipated. In addition, existing stormwater drainage quality would be improved as the result of requirements for implementation of BMPs as discussed in the "Applicable Plans, Policies, and Regulations" portion (Section 3.13.2) of EIR Section 3.13, *Hydrology and Water Quality*.

The La Habra General Plan addresses adequacy of stormwater drainage systems with policies in the Infrastructure chapter of the General Plan. These include policies that require implementation of the City's Storm Drain Master Plan (Policy SD 1.1), require new development to comply with the City's National Pollutant Discharge Elimination System (NPDES) permit (Policy SD 1.2), and ensure that stormwater drainage infrastructure is adequately sized to meet local needs (Policies SD 1.3, SD 1.7, and SD 1.8). Compliance with these policies and existing State Water Resources Control Board (SWRCB) regulations would ensure that cumulative development throughout the City would be adequately served by storm drainage systems. Therefore, no significant cumulative impacts related to storm drainage would occur.

Solid Waste

The area of analysis for cumulative solid waste impacts is the County of Orange, which operates a countywide system of landfills.

As discussed in Section 3.17, *Utilities, Service Systems, and Water Quality*, the Olinda Alpha Landfill (which serves La Habra) and the Orange County landfill system have adequate daily capacity for existing and future development, including the addition of 1.42 tons of solid waste per day from the proposed project operations. In addition, OC Waste & Recycling, which operates Orange County's three active landfills and manages other solid waste activities for the County, determined that, by 2066, Orange County's disposal system would have 71 million tons of remaining capacity after accepting solid waste from existing development and projected growth in the County over a 50-year period (see **Figure 3.17-2**). Over this 50-year period, the proposed project would generate an additional 51,900 tons of solid waste which, in combination with waste from past, present, and probable future projects (as determined by OC Waste & Recycling solid waste generation projections), would still leave more than 70 million tons of remaining capacity in Orange. County's landfills in 2066. In addition, each municipal agency within the County will be responsible for implementing the waste diversion requirements of AB 939. Thus, cumulative solid waste impacts would be less than significant.

b. Contribution of Proposed Project to Significant Cumulative Impacts

Because cumulative impacts would be less than significant, discussion of the project's contribution to utilities, service systems, and water supply impacts is unnecessary.

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.

CHAPTER 7 ALTERNATIVES

7.1 INTRODUCTION

Under the California Environmental Quality Act (CEQA), the identification and analysis of alternatives to a project are a fundamental part of the environmental review process. CEQA (Public Resources Code Section 21002.1(a)) establishes the need to address alternatives in an EIR by stating that, in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is . . . to identify alternatives to the project" that would avoid or lessen the project's significant effects.

Pursuant to CEQA Guidelines Section 15126.6(a), an EIR must describe a reasonable range of alternatives to the proposed project or to the project's location that would feasibly avoid or lessen its significant environmental impacts while attaining most of the proposed project's objectives. CEQA Guidelines Section 15126.6(b) emphasizes that the selection of project alternatives must be based primarily on the ability to reduce impacts relative to the proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation (CEQA Guidelines Section 15126.6(a)).

This chapter of the EIR describes and evaluates alternatives to the proposed project. Included in the identification and evaluation of project alternatives is identification of the "environmentally superior alternative" as required by CEQA Guidelines Section 15126.6(e)(2).

Pursuant to CEQA Guidelines Section 15126.6(d), discussion of each alternative presented in this chapter is intended "to allow meaningful evaluation, analysis, and comparison with the Proposed Project." As permitted by CEQA, the significant effects of each alternative are discussed in less detail than those of the proposed project, but in enough detail to provide perspective and allow for a reasoned choice among alternatives to the proposed project.

7.2 RATIONALE FOR SELECTION OF ALTERNATIVES

The specific reasons for selection of each alternative addressed in this EIR or rejection of an alternative from further analysis are discussed below as part of the summary of alternatives (see Section 7.3, *Description of Alternatives*). Consistent with CEQA Guidelines Section 15126.6, the alternatives analyzed in this chapter were selected based on the following general factors:

- The extent to which the alternative would avoid or substantially lessen any of the identified significant environmental effects of the proposed Specific Plan. (See Section 7.2.1 below for a listing of significant unavoidable impacts.)
- The ability of the alternative to meet the overarching project objective and purpose of the Specific Plan, along with the extent to which the alternative would accomplish other project objectives. (See Section 7.2.2 below for a listing of the project objectives used to evaluate project alternatives.) Only alternatives that could achieve the overarching project objective and the majority of other project objectives were selected for further evaluation.
- The potential feasibility[1] of the alternative, taking into account site suitability, economic viability, availability of infrastructure, property control (ownership), and consistency with applicable plans and regulatory limitations.
- The extent to which the alternative contributes to a "reasonable range" of alternatives necessary to permit a reasoned choice between the proposed project and alternatives.
- The extent to which the environmental effects of an alternative could be reasonably identified.
- The extent to which implementation of the alternative would not be remote or speculative.
- The requirement to consider a "no project" alternative, including an alternative that provides for the likely outcome should the proposed project not be approved.

Neither the CEQA statute, the CEQA Guidelines, nor recent court cases, indicate a specific number of alternatives to be evaluated in an EIR. Rather, "the range of alternatives required in an EIR is governed by the rule of reason that sets forth only those alternatives necessary to permit a reasoned choice" (CEQA Guidelines Section 15126(f)).

7.2.1 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

CEQA requires the alternatives selected for comparison in an EIR to avoid or substantially lessen one or more significant effects of the project being evaluated. In order to identify alternatives that would avoid or substantially lessen any of the identified significant environmental effects of the proposed Specific Plan, significant unavoidable impacts must be considered. It is recognized that alternatives aimed at reducing the significant unavoidable impacts of the Specific Plan would also avoid or reduce impacts that could be reduced to a less-

[1] CEQA Guidelines Section 15364 defines feasible as "capable of being accomplished within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." CEQA Guidelines Section 15126.6(f)(1) states that "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site…"

than-significant level. The analysis in Chapter 3 (Sections 3.2 through 3.17) of this EIR determined that development of the proposed project would result in the following significant unavoidable impacts.

a. Land Use and Planning

Impact LUP-2.1: The proposed Specific Plan would be inconsistent with a goal and several policies of the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Since these inconsistencies are reflected in significant unavoidable air quality, greenhouse gas (GHG), and traffic impacts, impacts related to inconsistencies with the 2016 RTP/SCS would be significant even with implementation of all feasible mitigation measures. Impacts would therefore be *significant and unavoidable*.

b. Population and Housing

Impact POP-1: Implementation of the proposed Rancho La Habra Specific Plan would generate population growth as the direct result of the housing proposed by the Specific Plan. While the proposed project would not necessarily increase the City's projected growth rate through 2040, it would substantially increase La Habra's inventory of land for the development of housing, and therefore result in substantial population growth. The resulting impact would be *significant and unavoidable*.

c. Aesthetic Resources

Impact AES-3: Implementation of the proposed Rancho La Habra Specific Plan would result in the loss of a major open space resource. While the proposed project would be well planned and designed, the substantial loss of open space that would result from project development would degrade the existing visual character of the site. Even with implementation of project design features and compliance with existing regulations, this impact would remain *significant and unavoidable*.

d. Traffic and Circulation

Impact TRA-1 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 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 7-1** for a summary of traffic impacts at specific intersections.

Table 7-1
Summary of Traffic Impacts

		Jurisdiction	Significant Impact?	Included in Fee Program?	Can La Habra Implement Mitigation?	Included in Fair Share?	Level of Significance
1.	Beach Boulevard at Rosecrans Avenue	La Mirada/Caltrans	Yes	No	No	Yes	SU
2.	Gilbert Street at Rosecrans Avenue	Fullerton	No	--	--	--	LTS
3.	Euclid Street at Rosecrans Avenue	Fullerton	No	--	--	--	LTS
4.	Beach Boulevard at Hillsborough Drive	La Mirada/Caltrans	No	--	--	--	LTS
5.	Beach Boulevard at Hillsborough Park Apt.	La Habra/Caltrans	No	--	--	--	LTS
6.	Idaho Street at Sandlewood Avenue	La Habra	No	--	--	--	LTS
7.	Euclid Street at Sandlewood Avenue	La Habra	Yes	--	--	--	LTS
8.	Santa Gertrudes Ave at Imperial Highway	La Mirada	No	--	--	--	LTS
9.	1st Avenue at Imperial Highway	La Mirada	No	--	--	--	LTS
10.	Beach Boulevard at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
11.	La Habra Hills Drive at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
12.	Idaho Street at Imperial Highway	La Habra/Caltrans	No	--	--	--	LTS
13.	Euclid Street at Imperial Highway	La Habra/Caltrans	Yes	No	No	Yes	SU
14.	Harbor Boulevard at Imperial Highway	La Habra/ Fullerton/ Caltrans	Yes	No	No	Yes	SU
15.	Beach Boulevard at Lambert Road	La Habra/ Caltrans	Yes	No	No	Yes	SU
16.	Idaho Street at Lambert Road	La Habra	Yes	Yes	Yes	No	SM

		Jurisdiction	Significant Impact?	Included in Fee Program?	Can La Habra Implement Mitigation?	Included in Fair Share?	Level of Significance
17.	Euclid Street at Lambert Road	La Habra	Yes	Yes	Yes	No	SM
18.	Harbor Boulevard at Lambert Road	La Habra	Yes	Yes	Yes	No	SM
19.	La Mirada Boulevard at Imperial Highway	La Mirada	Yes	Yes	Yes	No	SM
20.	Beach Blvd at La Mirada Blvd/Malvern Ave	Buena Park/ Caltrans	Yes	No	No	Yes	SU
21.	Beach Boulevard at La Habra Boulevard	La Habra/ Caltrans	No	--	--	--	LTS
22.	Valley View Avenue at Imperial Highway	La Mirada	Yes	No	No	Yes	SU
23.	Beach Boulevard at Artesia Boulevard	Buena Park/ Caltrans	Yes	No	No	Yes	SU
24.	Beach Boulevard at Commonwealth Avenue	Buena Park/ Caltrans	No	--	--	--	LTS
25.	I-5 NB Ramps at Auto Center Drive	Buena Park/ Caltrans	No	--	--	--	LTS
26.	Beach Boulevard at Auto Center Drive	Buena Park/ Caltrans	No	--	--	--	LTS
27.	Beach Boulevard at I-5 SB Ramps	Buena Park/ Caltrans	Yes	No	No	Yes	SU
28.	Beach Boulevard at Whittier Boulevard	La Habra/ Caltrans	No	--	--	--	LTS
29.	Hacienda Road at Whittier Boulevard	La Habra/ Caltrans	Yes	No	No	Yes	SU
30.	Walnut Street at Imperial Highway	La Habra/ Caltrans	Yes	No	No	Yes	SU
31.	Gilbert Street at Malvern Avenue	Fullerton	Yes	No	No	Yes	SU
32.	Euclid Street at Malvern Avenue	Fullerton	Yes	No	No	Yes	SU

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

e. 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. The resulting impact would be *significant and unavoidable*.

f. Greenhouse Gas Emissions

Impact GHG-1: Implementation of the proposed Rancho La Habra Specific Plan would result in a net increase in greenhouse gas (GHG) emissions of 6,037.55 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 $MTCO_2e$ per year. The impact would be *significant and unavoidable*.

g. Noise

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 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 unavoidable.*

7.2.2 PROJECT OBJECTIVES

The following identifies the objectives of the proposed project, including the underlying purpose of the project, 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, the City of La Habra, as well as those identified by the Specific Plan applicant, CalAtlantic Homes.

a. City of La Habra Project Objectives

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 the CEQA and local practices to implement CEQA.

b. Applicant's Project Objectives

The applicant, CalAtlantic Homes, has identified the following project objectives for the proposed Rancho La Habra development:

- Implement the City's Housing Element by providing a range of 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."[2]

[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."

7.3 DESCRIPTION OF ALTERNATIVES

7.3.1 ALTERNATIVES CARRIED FORWARD FOR ANALYSIS

CEQA Guidelines Section 15126.6(c) states:

> The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic Project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

In accordance with the general alternatives selection criteria discussed above, the following alternatives were selected for analysis in this EIR because either they are required under CEQA (e.g., no project alternative) or they would reduce or avoid significant effects of the proposed project while attaining most of its objectives. The alternatives carried forward for analysis are as follows:

- **Alternative 1: No Project – No Development**. The No Project – No Development Alternative assumes that the proposed Specific Plan would not be adopted and the existing Westridge Golf Club would continue to be open to the public for golf and related activities, including use of the driving range, pro shop, restaurant, and banquet facilities. No additional improvements or use of the site are included in this alternative. This alternative is intended to comply with CEQA Guidelines Section 15126.6(e), which requires the analysis of a "no project" alternative to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.
- **Alternative 2: No Project – General Plan Build-Out**. The No Project – General Plan Build-Out Alternative assumes that the proposed Specific Plan would not be adopted and the existing Westridge Golf Club would be redeveloped with other uses that are permitted by the La Habra General Plan, which allows for recreational uses on the project site. Whereas the No Project – No Development Alternative analyzes the potential impacts associated with the continuation of the existing golf course use, the No Project – General Plan Build-Out Alternative includes redevelopment of the Westridge Golf Club with public recreation. At its least intensive use, this alternative would provide for a nine-hole golf course, continued use of the clubhouse, trails, passive recreational areas, and a small number of ballfields along Beach Boulevard. At its most intensive, this alternative would allow redevelopment of the existing golf course into a commercial recreation complex with multiple athletic fields, primarily for soccer, lacrosse, and/or football. The facility would also include several outdoor tennis courts

and basketball courts, as well as a gymnasium for indoor basketball and other indoor sports.

This alternative is intended to provide for evaluation of potential development consistent with the site's current General Plan designation. This alternative is also intended to comply with CEQA Guidelines Section 15126.6(e), which provides for an EIR's no project alternative to analyze the impacts of what might reasonably be expected to occur in the foreseeable future, based on current plans and consistent with available infrastructure and community services, if the project were not approved.

- **Alternative 3: Golf Course and Hotel**. This alternative would include expanding the existing Westridge Golf Club to include a 114-room hotel north of the existing clubhouse and adjacent to the existing lower level parking lot to facilitate the creation of a "destination" golf course. Access to the hotel would be via La Habra Hills Drive. The five-level hotel would include a parking level that has 9 rooms, a basement level and garden level with 10 rooms each, a lobby level with 23 rooms, and two floors above the lobby with 31 rooms on each level. In addition to the 114 guest rooms, the hotel would also include three meeting/banquet rooms, a pool, and a small wedding pavilion. This alternative assumes that a General Plan Amendment and Change of Zone (La Habra Hills Specific Plan Amendment) would be approved to permit hotel development within the existing golf course, but that the proposed Rancho La Habra Specific Plan would not be approved to allow residential development within the project site. The intent of this alternative is to reduce significant unavoidable aesthetics impacts by preserving the existing golf course, and to reduce significant unavoidable traffic, air quality, greenhouse gas (GHG), and noise impacts by eliminating proposed new residential development.
- **Alternative 4: Residential/Nine-Hole Golf Course**. This alternative would result in the redevelopment of project site to include 314 dwelling units and a nine -hole golf course. This alternative would develop the portion of the existing golf course in the western part of the project site to include up to 120 single-family-detached dwelling units and 194 townhomes/condominiums located east of Beach Boulevard. No new commercial uses would be provided along Beach Boulevard. The lot sizes of single-family detached dwelling units in this alternative would be a minimum of 4,000 square feet (i.e., 50 feet by 80 feet). The density of the townhomes/condominiums would be 18-24 dwelling units per acre. The existing nine golf holes on the eastern portion of the golf course would remain as a nine-hole golf course. The golf course clubhouse and parking lot would remain in their current use and location. The driving range would be eliminated.

  This alternative assumes that a General Plan Amendment, amendment to the La Habra Hills Specific Plan, and a Change of Zone would be approved to allow residential development within the project site, and to increase the development yield of both the General Plan and the La Habra Hills Specific Plan[3]. The intent of this alternative is to

[3] The La Habra General Plan recognizes that the La Habra Hills Specific Plan is built out, and does not provide for any additional residential development beyond the 556 dwelling units that were constructed. Thus, Alternative 4 would require an amendment to increase the General Plan's development yield by 314 dwelling units. As discussed in the Project Description, the La Habra Hills Specific Plan was originally approved for 700 dwelling units, was built out with a total of 556 units, and subsequently amended to reflect 556 dwelling units as the

reduce significant unavoidable aesthetics impacts by preserving a portion of the existing golf course, and to reduce significant unavoidable traffic, air quality, GHG, and noise impacts by reducing the number of new residential units and eliminating commercial development.

- **Alternative 5: Reduced Density Residential/Nine-Hole Golf Course**. This reduced density alternative would result in the redevelopment of project site to include 144 dwelling units and a nine -hole golf course. This alternative would develop the portion of the existing golf course in the western part of the project site to include up to 144 townhomes/condominiums located east of Beach Boulevard. No new commercial uses would be provided along Beach Boulevard. The density of the townhomes/ condominiums would be 18 to24 dwelling units per acre. The existing nine holes on the eastern portion of the golf course would remain as a nine-hole golf course. The golf course clubhouse and parking lot would remain in their current location. The driving range would be eliminated. This alternative would further reduce the project's significant unavoidable impacts in comparison to Alternative 4. The Reduced Density Residential/Nine-Hole Golf Course Alternative would require a General Plan Amendment to modify the land use map, modify policies, and increase the overall development yield of the General Plan[4]. In addition, an amendment to the La Habra Hills Specific Plan would be required to modify the land use plan, increase development yield and discussion of the golf course to reflect a nine-hole facility, descriptions of the location of residential neighborhoods, and modify development statistics to reduce the amount of open space within the Specific Plan area.
- **Alternative 6: Reduced Density Single-Family Residential**. This reduced density alternative provides for redevelopment of the existing golf course into 269 single family residential lots covering the same development footprint as the proposed project. No attached housing or commercial uses would be provided. This alternative assumes approval of a General Plan Amendment and Change of Zone (La Habra Hills Specific Plan Amendment), along with the Rancho La Habra Specific Plan to allow development of 269 dwelling units and related recreational facilities within the project site.

  This alternative is intended to reduce traffic impacts. Therefore, the existing clubhouse would be closed along with the golf course, and onsite recreational amenities would be scaled to meet the needs of the onsite population. The intersection with the largest percentage decrease in performance due to traffic from the proposed Rancho La Habra Specific Plan would be Beach Boulevard at Rosecrans Avenue. At this intersection, the

maximum allowable buildout. Thus, the addition of 314 dwelling units to the La Habra Hills Specific Plan to accommodate Alternative 4 would require a Specific Plan amendment to allow for 870 dwelling units, reflecting the proposed 314 dwelling units to be constructed within the western portion of the golf course in this alternative.

[4] The La Habra General Plan recognizes that the La Habra Hills Specific Plan is built out, and does not provide for any additional residential development beyond the 556 dwelling units that were constructed. Thus, Alternative 5 would require an amendment to increase the General Plan's development yield by 144 dwelling units. As discussed in the Project Description, the La Habra Hills Specific Plan was originally approved for 700 dwelling units, was built out with a total of 556 units, and subsequently amended to reflect 556 dwelling units as the maximum allowable buildout. Thus, the addition of 144 dwelling units to the La Habra Hills Specific Plan to accommodate Alternative 5 would require a Specific Plan amendment to allow for 700 dwelling units, reflecting the proposed 144 dwelling units to be constructed within the western portion of the golf course in this alternative.

intersection capacity utilization (ICU) is projected to increase by 0.053, which exceeds the City of La Habra's significance threshold increase of 0.02. Therefore, this intersection was used to determine how many dwelling units could be constructed while achieving an ICU increase less than the City's threshold of 0.02. The result of this calculation was 269 dwelling units, which is the number included in this alternative.

7.3.2 ALTERNATIVES CONSIDERED BUT REJECTED

The following alternatives were considered, but rejected from further analysis for the reasons described below.

a. Off-Site Alternative

The purpose of the Off-Site Alternative is to evaluate whether moving the proposed project to an alternate location would minimize or avoid impacts. In certain cases, a proposed project is location-dependent. For example, a dam needs to be located next to a river. Therefore, an alternative location must remain along the river. In other cases, a proposed project is size-dependent. A project may require a certain amount of space to accomplish its objectives. Other projects are neither location- nor size-dependent.

In this case, the proposed project is size-dependent. To provide a range of housing types and sizes as well as extensive public park space and a new Community Center facility, the proposed project requires a property similar in size to the 151-acre project site. A search of the Multiple Listing Service (MLS) revealed that the largest property for sale in La Habra and within a 10-mile radius around La Habra is a 22-acre site in La Habra Heights, which is in a different city and is only a fraction of the size of the project site. In addition, the project applicant does not control any other property within a 10-mile radius around La Habra that could be developed as a residential planned community and meet the applicant's objectives for the project. Therefore, an off-site alternative has been eliminated from further evaluation.

b. Residential Development with Expanded Commercial Area

An alternative was considered that would include conversion of the existing golf course to 277 single-family detached dwelling units and up to 220,000 square feet of retail/commercial uses along Beach Boulevard and adjacent to the Westridge Plaza Shopping Center to the north. This alternative would also include recreation-related components, including conversion of the golf course clubhouse to a community center, a high turn-over restaurant, and 42.1 acres of passive park land.

While this alternative would result in fewer dwelling units and reduce significant unavoidable impacts related to population growth, significant unavoidable traffic, air quality, and GHG emissions would be greater than for the proposed project. This alternative was, therefore, eliminated from further evaluation.

7.4 ANALYSIS OF ALTERNATIVES

The following discussion evaluates and compares the impacts of each alternative considered by the Lead Agency with the impacts of the proposed Rancho La Habra Plan detailed in Chapter 3, *Environmental Setting, Impacts, and Mitigation*. The discussion also addresses the ability of each alternative to achieve the project objectives.

7.4.1 ALTERNATIVE 1: NO PROJECT – NO DEVELOPMENT

a. Impacts

Land Use and Planning

The existing golf course use is consistent with the La Habra General Plan and regional planning programs, and therefore the No Project – No Development Alternative would avoid several inconsistencies noted for the proposed project. The site in its current condition does not divide a community.

Population and Housing

The No Project – No Development Alternative would maintain the General Plan's existing projected build-out population and would thereby result in no impacts, avoiding the proposed project's significant unavoidable impact.

Aesthetic Resources

The No Project – No Development Alternative would retain the existing visual characteristics of the site and would result in no impacts, eliminating the proposed project's significant unavoidable visual character impact.

Biological Resources

By retaining existing conditions, the No Project – No Development Alternative would avoid ground-disturbing activities and retain biological resources in their current configuration, resulting in less impact than the proposed project.

Cultural Resources

Since the No Project – No Development Alternative would avoid earth movement, there would be no chance of discovering or disturbing buried cultural resources. Therefore, no impacts would result.

Traffic and Circulation

By retaining the existing golf course use, this alternative would not result in any traffic increases and thus would avoid the proposed project's significant unavoidable effects.

The No Project – No Development Alternative would generate less traffic than the proposed project would, as shown in **Table 7-2**. On a daily basis, the No Project – No Development Alternative would generate approximately 4,398 fewer daily vehicle trips than the proposed project. This alternative would generate fewer daily vehicle trips than the Reduced Density Single-Family Residential Alternative (Alternative 5), which was designed to avoid significant traffic impacts.

Table 7-2
Trip Generation Comparison: Proposed Project vs. No Project – No Development Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
No Project – No Development Alternative (Existing Golf Course)	58	33	91	104	134	238	2,530
Proposed Project							
Residential (422[5] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**133**	**271**	**404**	**279**	**128**	**407**	**4,398**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Air Quality

Since no earth movement or grading would occur, the No Project – No Development Alternative would avoid the construction emissions associated with the proposed project. Similarly, this alternative would have fewer long-term operational emissions than the proposed project, and would eliminate the proposed project's significant unavoidable air quality impact by maintaining consistency with the existing General Plan's build-out projection.

[5] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

Greenhouse Gas Emissions

Since no earth movement or grading would occur, the No Project – No Development Alternative would avoid the construction emissions associated with the proposed project. Similarly, this alternative would generate less traffic and less energy demand and have fewer long-term operational GHG emissions than the proposed project, eliminating the project's significant unavoidable GHG emissions impact.

Energy Resources

Since the No Project – No Development Alternative represents the existing condition, continued operation of the Westridge Golf Club under this alternative would have no impact on energy resources. This alternative would consume less energy than the proposed project.

Noise and Vibration

Since no earth movement or grading would occur, the No Project – No Development Alternative would avoid the construction noise associated with the proposed project and eliminate its significant unavoidable short-term noise impact. The No Project – No Development Alternative would also generate less traffic and less long-term operational noise than the proposed project.

Hazards and Hazardous Materials

The project site has approximately 430,000 cubic yards of total petroleum hydrocarbon (TPH)-contaminated soil that were buried as part of golf course construction consistent with regulations of the Orange County Health Care Agency. Because the existing placement of these soils meets applicable safety standards for the existing golf course use, the No Project – No Development Alternative would not move or disturb the TPH-contaminated soil. The proposed project would, however, be required to uncover the contaminated soils and place them in deep fills pursuant to the requirements of the Orange County Health Care Agency.

Hydrology and Water Quality

Runoff from the golf course currently flows off-site to storm drain facilities without treatment. Given the nature of the golf course use, the potential exists for storm water runoff to contain pesticides, nutrients from fertilizer, and oils/grease from the roadways, parking lot, and maintenance area. The proposed project would construct a parallel storm drain connection across Beach Boulevard by adding a second 48-inch pipe to prevent storm water from collecting on the golf course. The proposed project would also provide water treatment facilities consistent with current regulations, which are more restrictive than those in place when the golf course was constructed. Therefore, compared to the proposed project, the No Project – No Development Alternative would have greater hydrology and water quality impacts.

Geology, Soils, and Seismicity

The No Project – No Development Alternative would not require any earth movement, unlike the proposed project, which would require grading of the majority of the site and the installation of several retaining walls. The No Project – No Development Alternative also would not place additional people in a seismically active region. This alternative would therefore result in reduced impacts compared to the proposed project, although no significant geotechnical impacts were identified for the project.

Public Services

The No Project – No Development Alternative would not add housing or additional population, avoiding the increased demand on public services such as police, fire protection, and other services that would occur with the proposed project.

Recreational Resources

The No Project – No Development Alternative would retain the existing golf course, which represents a recreation amenity for the City. By comparison, the proposed project would remove the existing golf course and provide a greater level of recreational amenities than would be required by the City's General Plan and Municipal Code, including conversion of the existing clubhouse to a public Community Center.

Utilities, Service Systems, and Water Supply

The No Project – No Development Alternative would continue the existing golf course use, including its average annual consumption of approximately 276 acre-feet (AF) of potable water. This water consumption is approximately 35 percent higher than expected for the proposed project (175.2 acre-feet per year (AFY)). The No Project – No Development Alternative would place less demand on other utilities, such as electricity and natural gas, and would generate less sewage than would the proposed project; for these utilities, this alternative would therefore result in reduced impacts compared to the proposed project, although no significant impacts were identified for the project.

b. Ability to Achieve Project Objectives

City Objectives

By retaining the existing golf course use of the project site, the No Project – No Development Alternative would be consistent with the City's General Plan and would therefore achieve the City's project objective regarding General Plan consistency. The No Project – No Development Alternative would also achieve the City's project objectives in that it would minimize impacts related to future use of the project site.

Applicant Objectives

By retaining the existing golf course use, the No Project – No Development Alternative would not meet the applicant's objectives for the proposed project. Because the applicant's objectives emphasize providing a range of housing types and recreational opportunities as part of a residential project, reducing water consumption, and redeveloping the golf course for a "higher and better use," the applicant's objectives are achievable only through conversion of the existing golf course to residential use.

c. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The No Project – No Development Alternative would eliminate the significant unavoidable impacts associated with the proposed project in the following seven categories:

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).
- Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and GHG impacts).
- Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site).
- Traffic and Circulation (increased traffic exceeding established significance thresholds).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).
- Noise (construction noise).

7.4.2 ALTERNATIVE 2: NO PROJECT – GENERAL PLAN BUILD-OUT

a. Impacts

Land Use and Planning

The No Project – General Plan Build-Out Alternative would be consistent with existing land use regulations, including the La Habra General Plan, the La Habra Hills Specific Plan, and the RTP/SCS, eliminating significant unavoidable impacts of the proposed project. As noted in Section 3.2, *Land Use and Planning*, the proposed project would be inconsistent with the RTP/SCS and the City's General Plan and would require a General Plan Amendment.

Population and Housing

The No Project – General Plan Build-Out Alternative would not add housing or additional population, avoiding the significant unavoidable population and housing impacts of the proposed project.

Aesthetic Resources

With the No Project – General Plan Build-Out Alternative, the project site would generally remain in open space without structures. This alternative would therefore eliminate the proposed project's significant unavoidable impact related to the change in character of the site resulting from loss of the golf course, which is a major open space amenity. The ball fields that would be developed in this alternative would likely have night lighting. Such night lighting would replace the existing night-lighted golf course driving range and not constitute a significant impact, unless a substantially greater area than the existing driving range is provided with night lighting. Lighting from ball fields would be required to be directed downward, but could result in a halo effect similar to the existing driving range. However, the ball fields developed in the No Project – General Plan Build-Out Alternative would generally have a greater level of night-time lighting than would the proposed project.

Biological Resources

Depending on the ultimate configuration of recreational facilities, grading of the site for the No Project – General Plan Build-Out Alternative could encompass a similar area as that of the proposed project, resulting in similar biological resources impacts and mitigation measures.

Cultural Resources

Depending on the ultimate configuration of recreational facilities, grading of the site for the No Project – General Plan Build-Out Alternative could encompass a similar area as that of the proposed project, resulting in similar cultural resources impacts and mitigation measures.

Traffic and Circulation

Because site grading would be required, construction traffic impacts would be similar to those of the proposed project on a daily basis. The length of time for grading would be reduced due to a reduction in the amount of grading required. In addition, the length of time for post-grading construction of recreational amenities would be shorter than for the construction of residential dwelling units and commercial development for the proposed project.

The No Project – General Plan Build-Out Alternative would generate less traffic than would the proposed project. **Table 7-3** provides a trip generation comparison with the proposed project. The No Project – General Plan Build-Out Alternative would generate 5,049 fewer daily trips

than the proposed project. (The alternative would also generate 651 fewer daily trips than the existing golf course.) As such, this alternative would eliminate the significant unavoidable traffic impacts associated with the proposed project.

Table 7-3
Trip Generation Comparison: Proposed Project vs. No Project – General Plan Build-Out Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
No Project – General Plan Build-Out Alternative	23	19	42	281	221	428	1,879
Proposed Project							
Residential (422[6] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**168**	**285**	**453**	**102**	**41**	**217**	**5,049**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Should the ball fields proposed in the No Project – General Plan Build-Out Alternative be used for organized youth or adult sports tournaments, traffic generation could be higher for this alternative on event days. However, event day traffic would not likely exceed the daily traffic of the proposed project. In addition, tournaments, if held, would generally occur on weekends, when background traffic volumes are less than for weekday peak hour traffic.

Air Quality

Because the No Project – General Plan Build-Out Alternative would not increase population or housing, it would eliminate the proposed project's significant unavoidable air quality impact by retaining consistency with the existing General Plan build-out projection. The No Project - General Plan Build-Out Alternative would require earth movement to create flat pads large enough to accommodate sports fields. The amount of earthwork would likely be less than for the proposed project, however, because the TPH-contaminated soil would not likely need to be relocated, and no structures for human occupancy would be constructed, reducing the amount of over-excavation necessary to prepare the site to accommodate structures. The reduced amount of earthwork would reduce the number of construction days creating air pollutant emissions compared to the proposed project, although the amount of soil materials moved and

[6] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

criteria air pollutant emissions on a daily basis would not likely be reduced as compared to the proposed project.

The No Project – General Plan Build-Out Alternative would generate less traffic than the existing golf course and substantially less than the proposed project, reducing air pollutant emissions compared to the existing golf course use and the proposed project. This alternative would also eliminate air pollutant emissions associated with energy use from dwelling units included in the proposed project.

Greenhouse Gas Emissions

The No Project – General Plan Build-Out Alternative would require earth movement to create flat pads large enough to accommodate sports fields. The amount of earthwork would likely be less than for the proposed project, however, because the TPH-contaminated soil would not likely need to be relocated, and no structures for human occupancy would be constructed, reducing the amount of over-excavation necessary to prepare the site to accommodate structures. The reduced amount of earthwork would reduce the number of construction days creating GHG emissions, thus reducing total GHG emissions during construction compared to the proposed project, although the amount of soil materials moved and GHG emissions on a daily basis would not likely be reduced as compared to the proposed project.

The No Project – General Plan Build-Out Alternative would also generate less traffic than existing conditions and substantially less than the proposed project, which would result in fewer long-term emissions. Because the General Plan Built-Out Alternative would generate less traffic than existing conditions, less traffic than the proposed project, and would eliminate GHG emissions associated with energy use from proposed dwelling units, the No Project – General Plan Build-Out Alternative would eliminate the proposed project's significant unavoidable GHG impact.

Energy Resources

The No Project – General Plan Build-Out Alternative would consume less energy than the proposed project, since it would (1) generate substantially less traffic than the proposed project, and (2) not require energy for dwelling units or commercial uses, as would the proposed project.

Noise and Vibration

The No Project – General Plan Build-Out Alternative would require earth movement to create flat pads large enough to accommodate sports fields. The amount of earthwork would likely be less than for the proposed project, however, because the TPH-contaminated soil would not likely need to be relocated. The reduced amount of earthwork would reduce the number of

construction days generating noise, although the amount of soil materials moved and noise levels on a daily basis would not likely be reduced as compared to the proposed project.

The No Project – General Plan Build-Out Alternative would also generate less traffic than the proposed project, which would result in less long-term noise impact along area roadways. However, should the project site be used as a tournament venue, operational noise levels from large active crowds on tournament days (e.g., cheering from spectators, whistles from referees, horns to signal the end of the half or game, parking lot noise) would be greater than the on-site noise generation of the proposed project.

Hazards and Hazardous Materials

The project site has approximately 430,000 cubic yards of TPH-contaminated soil that were buried as part of golf course construction consistent with regulations of the Orange County Health Care Agency. Because the existing placement of these soils meets applicable safety standards for recreational use, the No Project – General Plan Build-Out Alternative would not move or disturb the TPH-contaminated soil. The proposed project would, however, be required to uncover the contaminated soils, and place them in deep fills pursuant to the requirements of the Orange County Health Care Agency.

Hydrology and Water Quality

Runoff from the golf course currently flows off-site to storm drain facilities without treatment. Given the nature of the golf course use, the potential exists for storm water runoff to contain pesticides, nutrients from fertilizer, and oils/grease from the roadways, parking lot, and maintenance area.

Even though the project site would retain pervious surfaces, under the No Project – General Plan Build-Out Alternative site grading would trigger the need for water quality treatment Best Management Practices (BMPs). This alternative would also provide storm water treatment facilities consistent with current regulations, which are more restrictive than those in place when the golf course was constructed. Because similar storm water treatment facilities would be required for the proposed project, water quality impacts of the No Project – General Plan Build-Out Alternative would be similar to those of the proposed project. Also, since a parallel 48-inch storm drain would not be constructed under this alternative as it would be with the proposed project, ponding of water within the project site would continue during large storm events, which would not occur with the proposed project. Since the project site would be maintained in open space use, such ponding under the No Project – General Plan Build-Out Alternative would not result in a significant impact.

Geology, Soils, and Seismicity

The No Project – General Plan Build-Out Alternative would require earth movement to create flat pads large enough to accommodate sports fields. The total amount of earthwork would likely be less than for the proposed project, however, because the TPH-contaminated soil would not likely need to be relocated, and over-excavation to create build pads for structures would not be required. The proposed recreational uses under this alternative would be subject to the same seismic and geologic hazards as the proposed project. However, because no structures for human occupancy would be included, impacts would be less under the No Project – General Plan Build-Out Alternative than they would be under the proposed project.

Public Services

The No Project – General Plan Build-Out Alternative would not result in an increase in permanent population on-site and would generate a similar amount of activity within the project site as does the existing golf course on a daily basis. Thus, this alternative would not generate a substantial need for increased public services on a daily basis, and there would be no need to expand existing public facilities as a result of the No Project – General Plan Build-Out Alternative. Should tournaments occur within the project site under this alternative, there could be an increased demand for police and fire protection services (crowd control and medical aid) as compared to the existing golf course use. Depending on the size and nature of such tournaments, the City would require that on-site security and medical personnel be present. Thus, should tournaments be held under this alternative, significant impacts on public services would not occur, and there would be no need to expand existing public facilities. Thus, similar to the proposed project, this alternative would not result in public services impacts.

Recreational Resources

While the No Project – General Plan Build-Out Alternative would result in loss of the existing golf course, the golf course would be replaced with another major recreational amenity providing recreational opportunities. At its least intense potential use, this alternative would provide a more limited nine-hole golf course, trails, passive recreational areas, and a small number of ballfields along Beach Boulevard. At its most intensive, this alternative would replace the existing golf course with multiple athletic fields, outdoor tennis courts and basketball courts, and a gymnasium for indoor basketball and other sports activities. Thus, a broader array of recreational uses would be available to the public. While golfers would be less likely to use a nine-hole golf course compared to the existing traditional 18-hole course, other members of the public might be more likely to use the site's increased recreational amenities, passive parks, and trails.

Utilities, Service Systems, and Water Supply

The No Project – General Plan Build-Out Alternative would replace the existing golf course with largely outdoor recreational uses and some indoor recreational uses, depending on the final design of facilities. This alternative would therefore likely consume less water than the existing golf course does, since there would be an increase in area not requiring as intense irrigation as needed for an 18-hole golf course. However, because it is not likely that the land area devoted to uses that do not require irrigation would be large enough for this alternative to consume less water than the proposed project, this alternative would consume more water than the proposed project.

Because landscape (turf) irrigation would be the primary use of water under the No Project – General Plan Build-Out Alternative, sewage generation would likely be less than for the proposed project. In addition, solid waste generation would likely be less than for the proposed project, because this alternative would not involve residential or commercial use and would not have large crowds present on a daily basis.

b. Ability to Achieve Project Objectives

City Objectives

By retaining the recreational use of the project site, the No Project – General Plan Build-Out Alternative would be consistent with the City's General Plan and achieve the project objective regarding General Plan consistency. The No Project – General Plan Build-Out Alternative would also achieve the City's project objectives in that it would minimize impacts related to future use of the project site.

Applicant Objectives

By retaining recreational use of the project site, the No Project – General Plan Build-Out Alternative would not meet the applicant's objectives for the proposed project. Because the applicant's objectives emphasize providing a range of housing types and recreational opportunities as part of a residential project and redeveloping the golf course for a "higher and better use," the applicant's objectives are achievable only through conversion of the existing golf course to residential use.

c. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The No Project – General Plan Build-Out Alternative would eliminate the following significant unavoidable impacts associated with the proposed project:

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).

- Population and Housing (generation of population growth above existing General Plan buildout, reflected in significant traffic, air quality, and GHG impacts).
- Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site).
- Traffic and Circulation (increased traffic exceeding established significance thresholds).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).

By reducing the number of days required for site grading, the No Project – General Plan Build-Out Alternative would reduce the severity of, but not eliminate, the following significant unavoidable impact associated with the proposed project:

- Noise (construction noise).

7.4.3 ALTERNATIVE 3: GOLF COURSE AND HOTEL

a. Impacts

Land Use and Planning

Addition of a hotel as part of the Westridge Golf Club would not require a General Plan Amendment, since the hotel would be considered a part of the approved golf course operation consistent with the site's recreational "Open Space" designation. Thus, the Golf Course and Hotel Alternative would be consistent with the La Habra General Plan and the RTP/SCS, eliminating the significant unavoidable land use and planning impact of the proposed project.

Population and Housing

The Golf Course and Hotel Alternative would not add housing or a permanent resident population to the site. The hotel would add approximately 65 employees and a new transient population to the project site. This alternative would thus increase the number of employees within the site by less than the commercial center in the proposed project; the transient population at the hotel would be less than the permanent resident population in the proposed project. Because the Golf Course and Hotel Alternative would be consistent with the General Plan, it would eliminate the significant unavoidable population and housing impact of the proposed project.

Aesthetic Resources

The project site would primarily remain as a golf course; however, a new five-story structure would be located in the middle of the property, north of the clubhouse. At five stories, it would

be the tallest building in the surrounding area and widely visible from surrounding properties and streets. Because public viewpoints to the south are at a higher elevation that the project site, the single hotel structure would not substantially block views of scenic vistas. While a five-story hotel would change the visual character of the central portion of the project site, views of the project site would remain primarily open space in character. The Golf Course and Hotel Alternative would therefore not cause a significant aesthetics impact, unlike the proposed project, which would convert an extensive area to residential use, resulting in residential development becoming the predominant visual feature of the site. The Golf Course and Hotel Alternative would therefore eliminate the significant unavoidable impact of the proposed project.

Biological Resources

The addition of a hotel as part of the Golf Course and Hotel Alternative would avoid impacts on the most sensitive biological resources in the central and western portions of the project site, as would the proposed project. The Golf Course and Hotel Alternative would affect less habitat than the proposed project because it would require grading of a smaller area.

Cultural Resources

The project site has been highly disturbed, and the likelihood of uncovering cultural resources, either archaeological or paleontological, is low where the hotel would be located. Since the Golf Course and Hotel Alternative would require less earth movement than would the proposed project, the potential for discovering buried cultural resources would be less than for the proposed project, and impacts would be reduced.

Traffic and Circulation

Because site grading would be required for the proposed hotel, construction traffic impacts would be similar to those of the proposed project on a daily basis. The length of time for grading and building construction, would however, be shortened due to a smaller area requiring grading, and the requirement for construction of a single hotel facility, which would occur at a single time as compared to the phased construction of residential dwelling units and elimination of commercial development as would occur for the proposed project.

As shown in **Table 7-4**, the Golf Course and Hotel Alternative would generate 3,381 fewer daily trips than the proposed project. (The alternative would generate 1,017 more trips than the existing golf course, however.)

Table 7-4
Trip Generation Comparison: Proposed Project vs. Golf Course and Hotel Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Golf Course and Hotel Alternative	102	65	167	143	175	318	3,547
Proposed Project							
Residential (422[7] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**89**	**239**	**328**	**240**	**87**	**327**	**3,381**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Air Quality

The amount of earthwork under this alternative would be less than under the proposed project, because site grading would be limited to creating pads for the hotel and adjacent parking area and the TPH-contaminated soil would not need to be relocated, Because of the small area required to be graded under this alternative, both the number of construction days and the amount of daily air pollutant emissions would be reduced compared to the proposed project. There would, however, be a slight increase in construction-related traffic during site demolition activities since construction debris would be hauled off-site to a landfill, rather than being crushed for reuse within the project site.

The addition of a hotel would increase the amount of traffic generated within the project site compared to the existing golf course; however, the traffic volumes would be less than those of the proposed project. Therefore, the Golf Course and Hotel Alternative would have fewer long-term operational emissions than the proposed project.

Because the Golf Course and Hotel Alternative would be consistent with General Plan growth projections (and therefore the applicable Air Quality Management Plan whose growth projections are based on the General Plan), it would eliminate the significant unavoidable air quality impact of the proposed project.

[7] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

Greenhouse Gas Emissions

Compared to the proposed project, the Golf Course and Hotel Alternative would reduce construction emissions associated with grading the project site and building construction. There would, however, be a slight increase in construction-related traffic during site demolition activities, since construction debris would be hauled off-site to a landfill rather than being crushed for reuse within the project site.

The addition of a hotel would increase the amount of traffic generated within the project site compared to the existing golf course use; however, traffic volumes generated by this alternative would be less than those generated by the proposed project. Thus, the Golf Course and Hotel Alternative would have fewer long-term operational GHG emissions than the proposed project.

Energy Resources

The Golf Course and Hotel Alternative would consume less energy than the proposed project since it would (1) generate less traffic than the proposed project, and (2) not require energy for dwelling units, as the proposed project would.

Noise and Vibration

Construction noise under the Golf Course and Hotel Alternative would be limited to grading of pads for a new hotel and parking area north of the existing clubhouse. As such, the extent of daily activities and number of days required for site grading would be reduced compared to the proposed project. Because there would be substantially less construction debris created under this alternative, debris that is not recycled would be hauled to a local landfill, increasing traffic-related noise during construction in comparison to the proposed project. However, because construction debris would be hauled off-site, there would be no crushing operation included in this alternative, reducing on-site noise generation during demolition activities. The Golf Course and Hotel Alternative would also generate less operational traffic than the proposed project, which would result in less long-term noise impact along area roadways.

Hazards and Hazardous Materials

According to the Soil Management Plan approved by the Orange County Health Care Agency, the TPH-contaminated soils that were previously buried pursuant to the requirements of the Health Care Agency during construction of the golf course are located in the western portion of the project site. It is therefore unlikely that TPH-contaminated soils would be encountered during grading and construction for a hotel north of the existing clubhouse as part of the Golf Course and Hotel Alternative. Because new development would be limited to a hotel and parking area, long-term impacts related to hazards and hazardous materials would be similar to, but less than, those of the proposed project.

Hydrology and Water Quality

Runoff from the golf course currently flows off-site to storm drain facilities without treatment. Given the nature of the golf course use, the potential exists for storm water runoff to contain pesticides, nutrients from fertilizer, and oils/grease from the roadways, parking lot, and maintenance area. Under the Golf Course and Hotel Alternative, the new hotel and parking area would be provided with water treatment BMPs to address runoff from the hotel and associated parking area; however, runoff from the existing golf course could continue in its current condition. The Golf Course and Hotel Alternative would therefore have more impact on water quality than the proposed project, which would be required to provide water quality BMPs for runoff from the entire project site.

Also, since a parallel 48-inch storm drain would not be constructed under this alternative as it would be with the proposed project, ponding of water within the golf course would continue during large storm events, which would not occur with the proposed project. Since the golf course use would remain, such ponding under the Golf Course and Hotel Alternative would not result in a significant impact.

Geology, Soils, and Seismicity

The Golf Course and Hotel Alternative would require earth movement to create pads for a new hotel and parking area on the north side of the existing clubhouse. Construction of a five-story hotel under this alternative would require site preparation, including geotechnical stabilization, similar to the proposed project. In some instances, stabilizing a small site can be challenging. For example, because over-excavation and re-compaction over large areas would not occur, shoring or caissons for the hotel might be necessary depending on the structural foundation requirements. Geotechnical requirements would be similar for the Golf Course and Hotel Alternative and for the proposed project; however, site preparation and construction of the hotel could require additional shoring or caissons to meet site specific foundation requirements for the proposed five-story structure. While impacts related to the proposed hotel would be greater than for other structures within the project site, the alternative would have similar geotechnical impacts compared to the proposed project, since the impacts of the proposed hotel (which would be less than significant due to compliance with the California Building Code) would be offset since fewer structures for human occupancy would be constructed.

Public Services

The Golf Course and Hotel Alternative would not add housing or resident population to the site but would increase on-site employment with approximately 65 new jobs, which would be less than the commercial component of the proposed project. While the proposed project would not cause significant impacts, the Golf Course and Hotel Alternative would place less demand on public services such as police, fire protection, and other services than would the project.

Recreational Resources

The Golf Course and Hotel Alternative would retain the existing Westridge Golf Club, which represents an important open space and recreation amenity for the city. Addition of a hotel within the golf course site would not result in any adverse effects on recreational resources. However, this alternative would not provide other recreational amenities that are included in the proposed project. Although the proposed project would result in the loss of the existing golf course as an open space and recreation amenity for the City, it would provide 27.9 acres of public parks, 14.3 acres of open space in habitat conservation areas, trails, conversion of the existing clubhouse to a Community Center. While neither this alternative nor the proposed project would have any adverse effects on recreational resources pursuant to established CEQA thresholds, both would result in loss of the existing 18-hole golf course. While the Golf Course and Hotel Alternative would retain a nine-hole golf course, the project proposes to offset the loss of onsite golf activities with public park and open space areas.

Utilities, Service Systems, and Water Supply

The Golf Course and Hotel Alternative would retain the existing Westridge Golf Club, which currently uses approximately 276 AF of water annually. The addition of a hotel use would increase the amount of water use by approximately 13.9 AFY for guest rooms, dining facilities, laundry service, landscaping, and pool facilities, an *increase* of approximately 5 percent. By comparison, the proposed project would reduce annual water consumption by approximately 96 AF, a *reduction* of approximately 35 percent.

As indicated in Table 3.17-4 in Section 3.17, *Utilities, Service Systems, and Water Supply*, projected annual city-wide water demand for 2040 is 9,057 AF, and projected water supply for 2040 is 9,158 AFY. Thus, the City currently has adequate water supply for addition of a hotel to the existing golf course use of the project site, and water supply impacts would be less than significant. Impacts on other utilities (e.g., wastewater and solid waste) would be less for this alternative than for the proposed project.

b. Ability to Achieve Project Objectives

City Objectives

By retaining the existing golf course and adding a complementary use, the Golf Course and Hotel Alternative would be consistent with the City's General Plan and achieve the City's project objective regarding General Plan consistency. The Golf Course and Hotel Alternative would also achieve the City's project objectives in that it would minimize impacts related to future use of the project site.

Applicant Objectives

By retaining the existing golf course use of the project site, the Golf Course and Hotel Alternative would not meet the applicant's objectives for the proposed project. Because the applicant's objectives emphasize providing a range of housing types and recreational opportunities as part of a residential project, reducing water consumption, and redeveloping the golf course for a "higher and better use," the applicant's objectives are achievable only through conversion of the existing golf course to residential use.

c. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The Golf Course and Hotel Alternative would eliminate the following significant unavoidable impacts associated with the proposed project:

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).
- Population and Housing (generation of population growth above existing General Plan buildout, reflected in significant traffic, air quality, and GHG impacts).
- Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site).

The Golf Course and Hotel Alternative would reduce the severity of, but not eliminate, the following significant unavoidable impacts associated with the proposed project by reducing the extent of required site grading and reducing the amount of site development:

- Traffic and Circulation (increased traffic exceeding established significance thresholds).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).
- Noise (construction noise).

7.4.4 ALTERNATIVE 4: RESIDENTIAL/NINE-HOLE GOLF COURSE

a. Impacts

Land Use and Planning

By retaining a golf course use within the eastern portion of the project site and allowing for residential development in the western portion of the site, the Residential/Nine-Hole Golf Course Alternative would require a General Plan Amendment and an amendment to the La Habra Hills Specific Plan to achieve the City's objective for General Plan consistency. This

alternative would thus require similar discretionary land use approvals as the proposed project, including a General Plan Amendment (policies, land use map and increased General Plan buildout), Specific Plan Amendment (modify description of the golf course and open space and increase development yield), and Change of Zone. As noted above, this alternative would reduce the golf course approved in the La Habra Hills Specific Plan from an 18-hole to a 9-hole facility, and increase the overall build-out of the General Plan and the La Habra Hills Specific Plan.

At 314 dwelling units, this alternative would be inconsistent with the same RTP/SCS and La Habra General Plan policies as the proposed project, even if the alternative would retain a portion of the golf course and propose fewer dwelling units.

Population and Housing

The development of 314 dwelling units associated with the Reduced Density Residential/Nine-Hole Golf Course Alternative would generate less population than the proposed project (402 dwelling units). This alternative would cause housing and population to exceed the existing General Plan's build-out projection, thereby resulting in a significant unavoidable impact. By reducing the project's proposed residential build-out, however, this alternative would reduce the population and housing impacts of the proposed project.

Aesthetic Resources

By retaining the eastern portion of the golf course for continued use, the amount of land converted from open space to residential use would be reduced in comparison to the proposed project. Although nine golf holes would be retained, with 314 dwelling units, housing would be the dominant visual feature over a large portion of the project site. By retaining a nine-hole golf course, the Residential/Nine-Hole Golf Course Alternative would therefore reduce but not eliminate the significant unavoidable aesthetics impacts of the proposed project.

Biological Resources

The limits of grading associated with the Residential/Nine-Hole Golf Course Alternative within the western portion of the site would be similar to the proposed project, resulting in similar impacts on sensitive biological resources within that area, such as coastal sage scrub. Both this alternative and the proposed project would avoid impacts on the central riparian drainage. This alternative would also avoid impacts on existing biological resources within the eastern portion of the project site, resulting in reduced impacts compared to the proposed project.

Cultural Resources

The project site has been highly disturbed, and the likelihood of uncovering cultural resources, either archaeological or paleontological, is low. Since the Residential/Nine-Hole Golf Course

Alternative would avoid earth movement on the eastern portion of the site, there would be less chance of discovering buried cultural resources compared to the proposed project.

Traffic and Circulation

Although site grading and building construction would be the same as for the proposed project on a daily basis, because of the need to export contaminated soils, construction traffic impacts would be slightly greater those of the proposed project on a daily basis. The length of time for grading and building construction, would however, be shortened due to a small area to be graded, a reduced number of residential dwelling units, and elimination of commercial development.

The Residential/Nine-Hole Golf Course Alternative would generate 2,571 fewer daily trips than the proposed project, as shown in **Table 7-5**. To reduce traffic, this alternative would not include commercial development or public use of on-site parks or a Community Center with its associated banquet and meeting facilities. This alternative would generate 1,827 more daily trips than the existing golf course, however.

As shown in **Table 7-5**, the Residential/Nine-Hole Golf Course Alternative would represent an approximately 47 percent reduction in trip generation during the PM peak hour and an approximately 55 percent reduction in trip generation during the AM peak hour. While this would substantially reduce the project's traffic impacts, it would not be sufficient to reduce impacts to less than significant at all intersections, including intersections outside of the City of La Habra's jurisdiction. Impacts would, therefore, remain significant and unavoidable under the Residential/Nine-Hole Golf Course Alternative.

Table 7-5
Trip Generation Comparison: Proposed Project vs. Residential/Nine-Hole Golf Course Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Residential/Nine-Hole Golf Course Alternative (314 dwelling units)	66	156	222	196	144	340	4,357
Proposed Project							
Residential (422[8] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**125**	**148**	**273**	**187**	**118**	**305**	**2,571**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Air Quality

The Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter the buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. If additional crushing or offsite expert of earth materials would be necessary, air quality impacts would be greater on a daily basis during grading activities than the proposed project. However, the amount of time required for grading would be reduced, reducing total emissions during construction. Therefore, the Residential/ Nine-Hole Golf Course Alternative would result in construction-related air quality impacts similar to those of the proposed project.

The development of 314 dwelling units and a nine-hole golf course would generate less traffic than the proposed project and would also consume less energy due to the reduced number of

[8] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

dwelling units compared to the proposed project. Therefore, long-term air emissions would be less for this alternative than for the proposed project.

Because development of 314 dwelling units would exceed the General Plan land use assumptions used in the South Coast Air Quality Management Plan, the Reduced Density Residential/Nine-Hole Golf Course Alternative would result in a significant unavoidable air quality impact. By reducing the number of dwelling units compared to the project, however, this alternative would reduce on-site population, and the significant unavoidable air quality impact would not be as great as with the proposed project.

Greenhouse Gas Emissions

The Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter the buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. If additional crushing or offsite expert of earth materials would be necessary, air quality impacts would be greater on a daily basis during grading activities than the proposed project. However, the amount of time required for grading would be reduced, reducing total emissions during construction. Therefore, the Residential/Nine-Hole Golf Course Alternative would result in GHG construction impacts similar to those of the proposed project.

The development of 314 dwelling units and a nine-hole golf course would generate less traffic than the proposed project, and would also consume less energy due to a reduced number of dwelling units as compared to the proposed project. Therefore, long-term air emissions would be less for this alternative than for the proposed project.

Energy Resources

The Residential/Nine-Hole Golf Course Alternative would consume less energy than the proposed project since it would (1) generate less traffic than the proposed project, (2) require less energy for dwelling units, and (3) eliminate energy demands of the commercial uses included in the proposed project. Energy consumption could be further reduced by reducing the residential build-out of this alternative to 144 dwelling units and amending the La Habra Hills Specific Plan to reduce the golf course from an 18-hole to a 9-hole facility.

Noise and Vibration

The Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter the buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. As a result, construction noise generated in the western portion of the project site would be similar to the proposed project, construction noise generated in the eastern portion of the project site would be substantially reduced, and on-road noise during construction would be increased with this alternative in comparison to the proposed project.

The development of 314 housing units and a nine-hole golf course would generate less traffic than the proposed project during project operations. Therefore, long-term noise impacts would be less under this alternative than under the proposed project.

Hazards and Hazardous Materials

The Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Therefore, the Residential/Nine-Hole Golf Course Alternative would result in an increase in hazards impacts related to the transport of hazardous materials compared to the proposed project. Because all such transport would be subject to local, state, and federal regulations designed to protect public health and safety, impacts of this alternative would be less than significant.

Hydrology and Water Quality

Runoff from the golf course currently flows off-site to storm drain facilities without treatment. Given the nature of the golf course use, the potential exists for storm water runoff to contain

pesticides, nutrients from fertilizer, and oils/grease from the roadways, parking lot, and maintenance area.

Even though the project site would retain pervious surfaces under the Residential/Nine-Hole Golf Course Alternative, site grading would trigger the need for water quality treatment BMPs. This alternative would also provide storm water treatment facilities consistent with current regulations, which are more restrictive than they were when the golf course was constructed. Because the required storm water treatment facilities would be similar to those required for the proposed project, water quality impacts of the Residential/Nine-Hole Golf Course Alternative would be similar to those of the proposed project. While this alternative would result in a smaller increase in pervious surfaces compared to the proposed project, construction of a parallel 48-inch storm drain across Beach Boulevard would be needed to address ponding of water within the project site during large storm events. Therefore, hydrology impacts of this alternative would be similar to those of the proposed project.

Geology, Soils, and Seismicity

The western portion of the site is more complicated geotechnically than the eastern portion. The far eastern portion of the site is located adjacent to a fault setback zone. However, with the Residential/Nine-Hole Golf Course Alternative, the fault zone would not be a concern because no structures would be constructed in that area. Grading in the western portion of the site would be similar to grading for the proposed project. Because there would be fewer dwelling units and people residing within the project site, and no dwelling units would be constructed adjacent to a fault setback zone, geotechnical impacts of the Residential/Nine-Hole Golf Course Alternative would be less than those of the proposed project.

Public Services

The development of 314 dwelling units associated with the Residential/Nine-Hole Golf Course Alternative would generate less population than the proposed project. While both this alternative and the proposed project would have less than significant impacts, public services impacts would be less for the Residential/Nine-Hole Golf Course Alternative than for the proposed project.

Recreational Resources

The Residential/Nine-Hole Golf Course Alternative would provide a nine-hole golf course, which represents a substantially less important recreational and open space amenity than does the existing 18-hole golf course. Despite the U.S. Golf Association's "Play Nine" initiative, nine-hole golf courses are not as popular as 18-hole courses. Because the eastern portion of the project site would remain in golf course use, trails and recreational amenities would be confined to the western portion of the project site. In addition, the existing clubhouse would not be converted to a Community Center, and other recreational amenities would be scaled down to

meet the needs created by the reduced amount of housing proposed in this alternative. Because recreational amenities would be scaled down to meet the recreational needs created by 314 dwelling units, the nine-hole golf course would be the primary recreational amenity available to the public under this alternative, and the result would be a less popular golf facility than the current 18-hole facility, but without the public parks and publicly accessible trails of the proposed project.

Utilities, Service Systems, and Water Supply

The existing golf course currently uses approximately 276 AF of water annually. A nine-hole golf course would reduce that consumption by approximately half[9] (138 AFY). The addition of 314 dwelling units with indoor and outdoor water demands would to the water demands of the existing golf course would result in a water demand of approximately 256 AFY, which is substantially greater than the water demand of the existing proposed project (175.2 AF). Because total water use for the Residential/Nine-Hole Golf Course Alternative would be slightly less than for the existing golf course, water supply impacts would be less than significant. This alternative would also reduce sewage and solid waste generation by approximately 35 percent compared to the proposed project.

b. Ability to Achieve Project Objectives

City Objectives

By retaining a golf course use within the eastern portion of the project site and allowing for development of 314 dwelling units in the western portion of the site, the Residential/Nine-Hole Golf Course Alternative would require a General Plan Amendment to achieve the City's objective for General Plan consistency. Because state law provides cities with the ability to amend their General Plans, and all feasible mitigation measures would be implemented for this alternative, the Residential/Nine-Hole Golf Course Alternative would meet City objectives.

Applicant Objectives

By providing a mix of single- and multi-family housing, the Residential/Nine-Hole Golf Course Alternative would meet the applicant's objectives of providing housing, although not to the same degree as the proposed project. This alternative would also meet the applicant's objective of providing public recreational amenities, although public recreational amenities in this alternative would consist of a nine-hole golf course rather than a community center along with public parks and trails. As a result, this alternative would achieve the applicant's recreation

[9] The nine-hole golf course proposed in this alternative would cover approximately half of the currently irrigated area of the current course. While the clubhouse would remain in operation and continue consuming water, landscaping associated with the existing driving range would be eliminated.

objectives to a lesser degree than the proposed project. This alternative would also meet the applicant's objectives related to protection of on-site natural habitat areas since it would retain the golf course within the eastern portion of the site and minimize impacts on coastal sage scrub habitat in the western portion of the site. The Residential/Nine-Hole Golf Course Alternative would reduce on-site water demand to a far lesser degree than would the proposed project, which would partially meet the applicant's objectives. Retaining a nine-hole golf course use within the project site and reducing the residential units to 314 dwelling units would be inconsistent with the applicant's economic objectives, but could partially meet the applicant's objective for a "higher and better use"[10] of the site.

c. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The Residential/Nine-Hole Golf Course Alternative would reduce but not eliminate the following significant unavoidable impacts associated with the proposed project:

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).
- Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and GHG impacts).
- Aesthetics (loss of a major open space resource resulting in a change in the character of the site).
- Traffic and Circulation (increased traffic exceeding established significance thresholds).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).
- Noise (construction noise).

7.4.5 ALTERNATIVE 5: REDUCED DENSITY RESIDENTIAL/NINE-HOLE GOLF COURSE

a. Impacts

Land Use and Planning

By retaining a golf course use within the eastern portion of the project site and allowing for residential development in the western portion of the site, the Reduced Density Residential/

[10] As previously noted, 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."

Nine-Hole Golf Course Alternative would require a General Plan Amendment and an amendment to the La Habra Hills Specific Plan to achieve the City's objective for General Plan consistency. This alternative would thus require similar discretionary land use approvals as the proposed project, including a General Plan Amendment, Specific Plan Amendment, and Change of Zone. As noted above, this alternative would reduce the golf course approved in the La Habra Hills Specific Plan from an 18-hole to a 9-hole facility, and increase the overall build-out of the Specific Plan by 144 dwelling units.

At 144 dwelling units, although this alternative would be inconsistent with the same RTP/SCS and La Habra General Plan policies as the proposed project, the severity of impacts related to these inconsistencies would be substantially reduced as compared to the proposed project.

Population and Housing

The development of 144 dwelling units associated with the Reduced Density Residential/Nine-Hole Golf Course Alternative would generate less population than the 402-dwelling unit proposed project, and would cause housing and population to exceed the existing General Plan's build-out projection, thereby resulting in a significant unavoidable impact. By reducing the proposed residential buildout to 144 residential dwelling units, and amending the La Hills Specific Plan to reduce the golf course from an 18-hole to a 9-hole facility, inconsistencies with the La Habra General Plan and the RTP/SCS would be substantially reduced in comparison to the proposed project.

Aesthetic Resources

By retaining the eastern portion of the golf course for continued use, the amount of land converted from open space to residential use would be reduced in comparison to the proposed project. Although nine golf holes would be retained, with 144 dwelling units, housing would be the dominant visual feature over a large portion of the project site. By retaining a nine-hole golf course and reducing the number of dwelling units, the Reduced Density Residential/Nine-Hole Golf Course Alternative would reduce but not eliminate the significant unavoidable aesthetics impacts of the proposed project.

Biological Resources

The limits of grading associated with the Reduced Density Residential/Nine-Hole Golf Course Alternative within the western portion of the site would be similar to the proposed project, resulting in similar impacts on sensitive biological resources within that area, such as coastal sage scrub. Both this alternative and the proposed project would avoid impacts on the central riparian drainage. This alternative would also avoid impacts on existing biological resources within the eastern portion of the project site, resulting in reduced impacts compared to the proposed project.

Cultural Resources

The project site has been highly disturbed, and the likelihood of uncovering cultural resources, either archaeological or paleontological, is low. Since the Reduced Density Residential/Nine-Hole Golf Course Alternative would avoid earth movement on the eastern portion of the site, there would be less chance of discovering buried cultural resources compared to the proposed project.

Traffic and Circulation

Although site grading and building construction would be the same as for the proposed project on a daily basis, because of the need to export contaminated soils, construction traffic impacts would be slightly greater those of the proposed project on a daily basis. The length of time for grading and building construction, would however, be shortened due to a small area to be graded, a reduced number of residential dwelling units, and elimination of commercial development.

The Reduced Density Residential/Nine-Hole Golf Course Alternative would generate 2,571 fewer daily trips than the proposed project, as shown in **Table 7-6**. To reduce traffic, this alternative would not include commercial development or public use of on-site parks or a Community Center with its associated banquet and meeting facilities. This alternative would generate 1,827 more daily trips than the existing golf course, however.

As shown in **Table 7-6**, the Reduced Density Residential/Nine-Hole Golf Course Alternative would represent an approximately 72 percent reduction in trip generation during the PM peak hour and an approximately 76 percent reduction in trip generation during the AM peak hour. These reductions in peak hour traffic generation would reduce the proposed project's contributions to increased intersection capacity utilization (ICU) to below the significance threshold increase of 0.02, and impacts would be less than significant.

Table 7-6
Trip Generation Comparison: Proposed Project vs. Reduced Density Residential/ Nine-Hole Golf Course Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Reduced Density Residential/Nine-Hole Golf Course Alternative (144 dwelling units)	37	82	119	97	82	179	2,578
Proposed Project							
Residential (422[11] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**154**	**222**	**376**	**286**	**180**	**466**	**3,758**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

Air Quality

The Reduced Density Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. If additional crushing or offsite expert of earth materials would be necessary, air quality impacts would be greater on a daily basis during grading activities than for the proposed project. However, the amount of time required for grading would be reduced, reducing total emissions during construction. Therefore, the Reduced Density Residential/ Nine-Hole Golf Course Alternative would result in construction-related air quality impacts similar to those of the proposed project.

The development of 144 dwelling units and a nine-hole golf course would generate less traffic than the proposed project and would also consume less energy due to the reduced number of

[11] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

dwelling units compared to the proposed project. Therefore, long-term air emissions would be less for this alternative than for the proposed project.

Because development of 144 dwelling units would exceed the General Plan land use assumptions used in the South Coast Air Quality Management Plan, the Reduced Density Residential/Nine-Hole Golf Course Alternative would result in a significant unavoidable air quality impact. By reducing the number of dwelling units compared to the project, however, this alternative would reduce on-site population, and the significant unavoidable air quality impact would not be as great as for the proposed project.

Greenhouse Gas Emissions

The Reduced Density Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter the buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. Grading in the western portion of the site would also encounter buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. If additional crushing or offsite expert of earth materials would be necessary, air quality impacts would be greater on a daily basis during grading activities than for the proposed project. However, the amount of time required for grading would be reduced, reducing total emissions during construction. Therefore, the Reduced Density Residential/Nine-Hole Golf Course Alternative would result in construction-related GHG impacts similar to those of the proposed project.

The development of 144 dwelling units and a nine-hole golf course would generate less traffic than the proposed project and would also consume less energy due to the reduced number of dwelling units compared to the proposed project. Therefore, long-term GHG would be less for this alternative than for the proposed project. As shown in **Table 7-6**, this alternative would reduce daily traffic generation (and resulting transportation-based GHG emissions) by approximately 57 percent. This reduction, along with a greater than 50 percent reduction in the number of proposed dwelling units, elimination of the project's proposed commercial use, and the reduced use of a nine-hole golf course as compared to an 18-hole facility, would avoid the significant GHG emissions impact of the proposed project.

Because development of 144 dwelling units would be predicated on implementation of all feasible mitigation measures, the Reduced Density Residential/Nine-Hole Golf Course Alternative would be consistent with applicable policies, plans, and programs designed to reduce GHG emissions.

Energy Resources

The Reduced Density Residential/Nine-Hole Golf Course Alternative would consume less energy than the proposed project since it would (1) generate less traffic than the proposed project, (2) require less energy for dwelling units, and (3) eliminate energy demands of the commercial uses included in the proposed project.

Noise and Vibration

The Reduced Density Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Grading in the western portion of the site would also encounter the buried concrete debris from prior oil operations. The debris would either need to be crushed on-site or exported to a suitable landfill. As a result, construction noise generated in the western portion of the project site would be similar to the proposed project, construction noise generated in the eastern portion of the project site would be substantially reduced, and on-road noise during construction would be increased with this alternative in comparison to the proposed project.

Hazards and Hazardous Materials

The Reduced Density Residential/Nine-Hole Golf Course Alternative would require grading only the western half of the project site. This portion of the project site contains the TPH-contaminated soil from past oil operations that was buried pursuant to the requirements of the Orange County Health Care Agency as part of golf course construction. The TPH-contaminated soil would need to be removed; however, without grading the eastern portion of the site, there would be insufficient deep fills to place the contaminated soil. Therefore, unless the golf course was temporarily closed to allow for burying TPH-contaminated soil in the eastern portion of the site as was approved by the Orange County Health Care Agency for the proposed project, export of a portion of the TPH-contaminated soil would be necessary. Therefore, the Reduced Density Residential/Nine-Hole Golf Course Alternative would result in an increase in hazards

impacts related to the transport of hazardous materials compared to the proposed project. Because all such transport would be subject to local, state, and federal regulations designed to protect public health and safety, the hazards and hazardous materials impacts of this alternative would be less than significant.

Hydrology and Water Quality

Runoff from the golf course currently flows off-site to storm drain facilities without treatment. Given the nature of the golf course use, the potential exists for storm water runoff to contain pesticides, nutrients from fertilizer, and oils/grease from the roadways, parking lot, and maintenance area.

Even though the project site would retain pervious surfaces under the Reduced Density Residential/Nine-Hole Golf Course Alternative, site grading would trigger the need for water quality treatment BMPs. This alternative would also provide storm water treatment facilities consistent with current regulations, which are more restrictive than they were when the golf course was constructed. Because the required storm water treatment facilities would be similar to those required for the proposed project, water quality impacts of the Reduced Density Residential/Nine-Hole Golf Course Alternative would be similar to those of the proposed project. While this alternative would result in a smaller increase in pervious surfaces compared to the proposed project, construction of a parallel 48-inch storm drain across Beach Boulevard would be needed to address ponding of water within the project site during large storm events. Therefore, hydrology impacts of this alternative would be similar to those of the proposed project.

Geology, Soils, and Seismicity

The western portion of the site is more complicated geotechnically than the eastern portion. The far eastern portion of the site is located adjacent to a fault setback zone. However, with the Reduced Density Residential/Nine-Hole Golf Course Alternative, the fault zone would not be a concern because no structures would be constructed in that area. Grading in the western portion of the site would be similar to grading for the proposed project. Because there would be fewer dwelling units and people residing within the project site, and no dwelling units would be constructed adjacent to a fault setback zone, geotechnical impacts of the Reduced Density Residential/Nine-Hole Golf Course Alternative would be less than those of the proposed project.

Public Services

The development of 144 dwelling units associated with the Reduced Density Residential/Nine-Hole Golf Course Alternative would generate less population than the 402-dwelling unit proposed project, resulting in reduced demand for public services. The less than significant impacts of the proposed project would thus be reduced under this alternative.

Recreational Resources

The Reduced Density Residential/Nine-Hole Golf Course Alternative would provide a nine-hole golf course, which represents a substantially less important recreational and open space amenity than does the existing 18-hole golf course. Despite the U.S. Golf Association's "Play Nine" initiative, 9-hole golf courses are not as popular as 18-hole courses. Because the eastern portion of the project site would remain in golf course use, trails and recreational amenities would be confined to the western portion of the project site. In addition, the existing clubhouse would not be converted to a Community Center, and other recreational amenities would be scaled down to meet the needs created by the reduced amount of housing proposed in this alternative. Because recreational amenities would be scaled down to meet the recreational needs created by 144 dwelling units, the nine-hole golf course would be the primary recreational amenity available to the public under this alternative, and the result would be a less popular golf facility than the current 18-hole facility, but without the public parks and publicly accessible trails of the proposed project. While the recreational impacts of this alternative would be less than significant, they would be greater than for the proposed project.

Utilities, Service Systems, and Water Supply

The existing golf course currently uses approximately 276 AFY of water. A nine-hole golf course would reduce that consumption by approximately half. The addition of 314 dwelling units with indoor and outdoor water demands would proportionately reduce the water demands of the proposed project (175.2 AFY), resulting in a water demand of approximately 256 AFY, slightly less than the water demand of the existing 18-hole golf course. The Reduced Density Residential/Nine-Hole Golf Course Alternative would also reduce sewage and solid waste generation by approximately 35 percent compared to the proposed project.

The existing golf course currently uses approximately 276 AFY of water. A nine-hole golf course would reduce that consumption by approximately half[12] (138 AFY). The addition of 144 dwelling units with indoor and outdoor water demands would to the water demands of the existing golf course would result in a water demand of approximately 198 AFY, which is greater than the water demand of the existing proposed project (175.2 AF). Because total water use for the Residential/Nine-Hole Golf Course Alternative would be less than for the existing golf course, water supply impacts would be less than significant. This alternative would also reduce sewage and solid waste generation by approximately 35 percent compared to the proposed project

[12] The 9-hole golf course proposed in this alternative would cover approximately half of the currently irrigated area of the current course. While the clubhouse would remain in operation and continue consuming water, landscaping associated with the existing driving range would be eliminated.

b. Ability to Achieve Project Objectives

City Objectives

By retaining a nine-hole golf course use within the eastern portion of the project site and allowing for development of 144 dwelling units in the western portion of the site, the Reduced Density Residential/Nine-Hole Golf Course Alternative would require a General Plan Amendment to achieve the City's objective for General Plan consistency. Because state law provides cities with the ability to amend their General Plans, and all feasible mitigation measures would be implemented for this alternative, the Residential/Nine-Hole Golf Course Alternative would meet City objectives

Applicant Objectives

By providing a mix of single- and multi-family housing, the Reduced Density Residential/Nine-Hole Golf Course Alternative would meet the applicant's objective to provide housing, although to a far lesser degree than the proposed project. This alternative would also meet the applicant's objective of providing public park and recreational amenities. However, because the eastern portion of the existing golf course would remain and a nine-hole course, the existing clubhouse would not be converted to a Community Center, there would be no trails provided in the eastern portion of the project site, and public park area would be scaled down to meet the needs of a 144-dwelling unit community. As a result, this alternative would achieve the applicant's recreation objectives to a lesser degree than the proposed project. This alternative would also meet the applicant's objectives related to protection of on-site natural habitat areas since it would retain the golf course within the eastern portion of the site and minimize impacts on coastal sage scrub habitat in the western portion of the site. The Reduced Density Residential/Nine-Hole Golf Course Alternative would reduce on-site water demand, although not to the same degree as the proposed project, which would partially meet the applicant's objectives. Retaining a nine-hole golf course use within the project site and reducing the residential units to 144 dwelling units would be inconsistent with the applicant's economic objectives, but could partially meet the applicant's objective for a "higher and better use"[13] of the site.

c. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The Reduced Density Residential/Nine-Hole Golf Course Alternative would eliminate these significant unavoidable impacts if developed with 144 dwelling units:

[13] As previously noted, 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."

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).
- Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and GHG impacts).
- Traffic and Circulation (increased traffic exceeding established significance thresholds).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).

The Reduced Density Residential/Nine-Hole Golf Course Alternative would reduce but not eliminate the following significant unavoidable impacts associated with the proposed project:

- Aesthetics (loss of a major open space resource resulting in a change in the character of the site).
- Noise (construction noise).

7.4.6 ALTERNATIVE 6: REDUCED DENSITY SINGLE-FAMILY RESIDENTIAL

a. Impacts

Land Use and Planning

The Reduced Density Single-Family Residential Alternative would require the same land use entitlements as the proposed project, including a General Plan Amendment, amendment of the La Habra Hills Specific Plan, and a Change of Zone (new Specific Plan). The alternative would place a substantial amount of single-family housing in excess of the current General Plan's build-out in the same location as the proposed project, converting the existing Westridge Golf Club to a 269 single-family dwelling-unit residential community. This alternative would therefore result in similar inconsistencies with the RTP/SCS and the La Habra General Plan as described for the proposed project, although to a lesser degree due to a reduction in development intensity.

Population and Housing

The development of 269 dwelling units under the Reduced Density Single-Family Residential Alternative would generate less population than would the 402-dwelling unit proposed project. This alternative would cause housing and population to exceed the existing General Plan's build-out projection, thereby resulting in a significant unavoidable impact. By reducing the project's proposed residential build-out, however, this alternative would reduce the population and housing impacts of the proposed project.

Aesthetic Resources

The Reduced Density Single-Family Residential Alternative would convert the golf course to residential use and spread new housing over the same footprint as the proposed project, so that housing rather than open space would become the predominant visual feature of the project site. Existing scenic vistas would not be affected, but this alternative would result in 269 dwelling units, still spreading development over the same footprint as the proposed project. Should this alternative reduce the amount of housing proposed for the project site and cluster impact related to the visual character of the project site associated with the proposed project could be reduced. However, even with clustering of development, housing would remain the dominant visual feature on the project site, and impacts would remain significant and unavoidable.

Biological Resources

By converting the golf course and spreading new housing over the same footprint as the proposed project, this alternative would result in the same biological resources impacts and required mitigation as the proposed project.

Cultural Resources

By converting the golf course and spreading new housing over the same footprint as the proposed project, this alternative would result in the same cultural resources impacts and required mitigation as the proposed project.

Traffic and Circulation

Because site grading and building construction would be the same as for the proposed project on a daily basis, construction traffic impacts would be similar to those of the proposed project on a daily basis. The length of time for building construction, would however, be shortened due to a reduced number of residential dwelling units and elimination of commercial development.

The Reduced Density Single-Family Residential Alternative would generate 4,367 fewer daily trips than the proposed project, as shown in **Table 7-7**. To reduce traffic, this alternative would not include commercial development or public use of on-site parks or a Community Center with its associated banquet and meeting facilities.

As shown in **Table 7-7**, the Reduced Density Single-Family Residential Alternative would represent an approximately 58 percent reduction in trip generation during the pm peak hour and an approximately 50 percent reduction in trip generation during the am peak hour.

Table 7-7
Trip Generation Comparison: Proposed Project vs. Reduced Density Single-Family Residential Alternative

Land Use	Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Reduced Density Single-Family Residential Alternative	51	151	202	169	100	269	2,561
Proposed Project							
Residential (422[14] dwelling units)	64	209	273	226	127	353	3,479
Retail (20,000 square feet)	72	55	127	105	88	193	2,244
Recreation (Community Center and Park)	55	40	95	52	47	99	1,205
Total Proposed Project	191	304	495	383	262	645	6,928
Trip Reduction Provided by Alternative, Compared to Proposed Project	**140**	**153**	**293**	**214**	**162**	**376**	**4,367**

Source: Rancho La Habra Traffic Impact Analysis, 2017.

As noted above, the Reduced Density Single-Family Residential Alternative was designed to reduce traffic impacts. By reducing the proposed project's contribution of traffic at the intersection with the largest percentage decrease in performance due to project-related traffic (Beach Boulevard at Rosecrans Avenue), this alternative would reduce the proposed project's contributions to increased intersection capacity utilization (ICU) to below the City's significance threshold increase of 0.02, and impacts would be less than significant.

Air Quality

Grading and earthwork would be the same for the Reduced Density Single-Family Residential Alternative as for the proposed project, with the exception that since the clubhouse would be closed and recreational amenities would be scaled to meet the needs of onsite residents, the clubhouse and adjacent public space would be graded and developed for residential use. As a result, short-term construction emissions of criteria air pollutants would be greater on a daily basis than with the proposed project since a larger area would be graded than would be the case for the proposed project. Because this alternative would reduce the number of dwelling units, it would reduce project-related traffic and onsite energy use, thereby lessening long-term operational criteria air pollutant emissions compared to the proposed project.

[14] Subsequent to completion of the Rancho La Habra Traffic Impact Analysis (TIA), the proposed project was reduced in size from 422 to 402 dwelling units. The TIA therefore presents a worst case analysis of project impacts.

Greenhouse Gas Emissions

Grading and earthwork would be the same for the Reduced Density Single-Family Residential Alternative as for the proposed project, with the exception that since the clubhouse would be closed and recreational amenities would be scaled to meet the needs of onsite residents, the clubhouse and adjacent public space could be graded and developed for residential use. As a result, short-term construction GHG emissions would be greater than with the proposed project. Because this alternative would reduce the number of dwelling units, it would reduce project-related traffic and onsite energy use, thereby lessening long-term operational GHG emissions compared to the proposed project.

b. Energy Resources

Grading and earthwork would be the same for the Reduced Density Single-Family Residential Alternative as for the proposed project, with the exception that since the clubhouse would be closed and recreational amenities would be scaled to meet the needs of onsite residents, the clubhouse and adjacent public space would be graded and developed for residential use. As a result, energy consumption during construction would be greater (although still less than significant) than with the proposed project. Because this alternative would reduce the number of dwelling units, it would reduce project-related traffic and onsite energy use, thereby reducing energy consumption compared to the proposed project.

Noise and Vibration

Grading and earthwork would be the same for the Reduced Density Single-Family Alternative as for the proposed project, with the exception that since the clubhouse would be closed and recreational amenities would be scaled to meet the needs of onsite residents, the clubhouse and adjacent public space would be graded and developed for residential use. While construction noise would be the same as with the proposed project on a daily basis, demolition and grading of the existing clubhouse and adjacent public area could slightly extend the time required for grading in that portion of the site. However, by reducing the number of dwelling units, once grading (which is the noisiest construction activity) has been completed, the time required for housing construction would be reduced. Because the Reduced Density Single-Family Residential Alternative would reduce the number of dwelling units and eliminate commercial uses, this alternative would reduce project-related traffic, thereby reducing long-term noise impacts compared to the proposed project.

Hazards and Hazardous Materials

The Reduced Density Single-Family Residential Alternative would require similar site preparation and remedial grading as the proposed project, including removal and crushing of the buried construction waste from prior oil operations. Site preparation would also include

extraction and deep re-burial of the TPH-contaminated soil in accordance with Orange County Health Care Agency standards. Therefore, hazards and hazardous materials impacts would be the same as those of the proposed project.

Hydrology and Water Quality

The Reduced Density Single-Family Residential Alternative would be required to implement similar storm drain and water quality improvements as the proposed project, including construction of detention and water quality facilities. Because this alternative includes conversion of the golf course to residential use, there would be a substantial increase in on-site impervious surface area, requiring construction of detention basins and a new 48-inch storm drain across Beach Boulevard to address storm water runoff and existing ponding within the golf course. Thus, hydrology and water quality impacts would be the same as those of the proposed project.

Geology, Soils, and Seismicity

Grading and earthwork would be the same for the Reduced Density Single-Family Residential Alternative as for the proposed project, with the exception that since the clubhouse would be closed and recreational amenities would be scaled to meet the needs of onsite residents, the clubhouse and adjacent public space could be graded and developed for residential use. Although this alternative would result in some additional grading beyond that of the proposed project, impacts would remain less than significant since development would comply with all applicable geotechnical requirements along with Building Code compliance. However, since there are fewer dwelling units in this alternative compared to the proposed project, fewer people would be introduced at the site, and long-term geotechnical impacts related to the number of people exposed to potential hazards would be reduced in comparison to the proposed project; impacts for both this alternative and the proposed project would be less than significant.

Public Services

The development of 269 dwelling units associated with the Reduced Density Single-Family Residential Alternative would generate less population than the proposed project, resulting in reduced demand for public services compared to the proposed project.

Recreational Resources

The Reduced Density Single-Family Residential Alternative would result in the loss of the existing Westridge Golf Club as an open space and recreational resource for the community. While the provision of trails, as well as parks and recreation areas, would be scaled back to meet the needs of onsite residents, this alternative would also result in demolition of the existing clubhouse, rather than converting the clubhouse to a public Community Center. Thus, the

Reduced Density Single-Family Residential Alternative would provide no net public recreational benefit together than meeting the needs of onsite residents, whereas the proposed project would convert the existing golf course clubhouse into a public community center, and would provide trails and parks accessible to the general public. However, the applicable CEQA thresholds for recreation relate to (1) the potential for a proposed project to result in deterioration of existing recreational facilities, which would not occur since both the Reduced Density Single-Family Residential Alternative and the proposed project would meet the recreational needs of onsite residents, and (2) the physical effect of constructing recreational facilities, which would be less for this alternative than for the proposed project since the Reduced Density Single-Family Residential Alternative would have fewer recreational amenities constructed.

Utilities, Service Systems, and Water Supply

The existing golf course currently uses approximately 276 AFY of water. Conversion of the golf course to residential use (269 single-family dwelling units with no commercial development) would proportionately reduce the water demands of the proposed project (175.2 AFY), resulting in a water demand of approximately 100 AF. The Reduced Density Single-Family Residential Alternative would also reduce sewage and solid waste generation by approximately 45 percent compared to the proposed project.

c. Ability to Achieve Project Objectives

City Objectives

The Reduced Density Single-Family Residential Alternative would require the same approvals as would the proposed project: a General Plan Amendment, La Habra Hills Specific Plan Amendment, and a Change of Zone and new Specific Plan. Because state law provides cities with the ability to amend their General Plans, and all feasible mitigation measures would be implemented for this alternative, the Reduced Density Single-Family Residential Alternative would meet City objectives.

Applicant Objectives

While the Reduced Density Single-Family Residential Alternative would produce housing, it includes only single-family detached dwelling units and would not achieve the applicant's objective of providing a range of housing types.

This alternative would also meet the applicant's objective of providing park and recreational amenities for the proposed development, but would not provide recreational amenities for the overall La Habra community. However, because the existing clubhouse would not be converted to a Community Center, and trails and public park area would be scaled down proportionately,

this alternative would achieve the applicant's recreation objectives to a lesser degree than the proposed project. This alternative would also meet the applicant's objectives related to protection of on-site natural habitat areas since it would implement the same habitat preservation and enhancement measures as the proposed project. The Reduced Density Single-Family Residential Alternative would reduce on-site water demand to a greater degree than the proposed project, thereby meeting the applicant's objectives. Reducing the number of dwelling units and providing only single-family residential use could partially meet the applicant's objective for a "higher and better use"[15] of the site.

d. Ability to Reduce or Avoid Significant Impacts of Proposed Project

The Reduced Density Single-Family Residential Alternative would eliminate the following significant unavoidable impacts associated with the proposed project:

- Traffic and Circulation (increased traffic exceeding established significance thresholds).

The Reduced Density Single-Family Residential Alternative would reduce but not eliminate the following significant unavoidable impacts associated with the proposed project:

- Land Use and Planning (inconsistency with the RTP/SCS and the La Habra General Plan).
- Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and GHG impacts).
- Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan).
- GHG Emissions (annual emissions exceeding established significance thresholds).

The Reduced Density Single-Family Residential Alternative would neither eliminate nor reduce the following significant unavoidable impacts associated with the proposed project:

- Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site).
- Noise (construction noise).

7.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an EIR identify an environmentally superior alternative. If the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify

[15] As previously noted, 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."

an environmentally superior alternative from among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)).

The No Project – No Development Alternative would avoid all of the significant impacts of the proposed project, including inconsistency with the La Habra General Plan, providing for the continued use of the existing Westridge Golf Club. This alternative would also reduce all other environmental effects of the proposed Specific Plan with the exception of water use.

Of the other alternatives evaluated in this EIR, Alternative 4, the Reduced Density Residential/Nine-Hole Golf Course Alternative with 144 dwelling units, would be the environmentally superior alternative since it would avoid the significant impacts of the proposed project, reduce other impacts compared to the proposed project, meet City project objectives, and partially meet most applicant objectives (although to a lesser degree than the proposed project).

Table 7-8 compares the effects each of the six alternatives would have in relation to the six significant unavoidable impacts that would result from the proposed project.

Table 7-8
Comparison of Alternatives in Relation to Significant Unavoidable Impacts of the Proposed Project

Significant Unavoidable Impact of Proposed Project	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Land Use and Planning (inconsistency with the Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS] and the La Habra General Plan)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Population and Housing (generation of population growth above existing General Plan build-out, reflected in significant traffic, air quality, and GHG impacts)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Aesthetic Resources (loss of a major open space resource resulting in a change in the character of the site)	Avoid	Avoid	Avoid	Reduce	Reduce	Reduce
Traffic and Circulation (increased traffic exceeding established significance thresholds)	Avoid	Avoid	Reduce	Reduce	Reduce	Reduce
Air Quality (housing and population growth inconsistent with the current regional Air Quality Management Plan)	Avoid	Avoid	Reduce	Avoid	Reduce	Avoid
GHG Emissions (annual emissions exceeding established significance thresholds)	Avoid	Avoid	Reduce	Avoid	Reduce	Avoid
Noise (construction noise)	Avoid	Reduce	Reduce	Reduce	Reduce	Reduce

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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 Draft Environmental Impact Report (EIR) prepared by the City of La Habra to analyze impacts of proposed development associated with the proposed Rancho La Habra Specific Plan. As lead agency for the proposed development within the TOD Plan areas, 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), other 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 EIR); and
- Be approved by the lead agency at the same time as project entitlement action or approvals.

An Environmental Impact Report (EIR) 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 EIR set forth measures to mitigate these impacts. It is the purpose of this MMRP to identify the implementation strategy for each mitigation measure to ensure that adopted mitigation measures are successfully implemented. Upon adoption of the MMRP by the La Habra City Council, the mitigation monitoring and reporting requirements set forth in this Chapter will become conditions of project approvals and permits. Therefore, in accordance with the aforementioned requirements, this Chapter of the Draft EIR lists each mitigation measure, describes the methods for implementation and verification for each measure, 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 for the proposed Specific Plan is listed, with 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-1a: In-Kind Replacement of Special-Status Species Habitat. Any special-status species habitat that cannot be avoided during site development shall be replaced in-kind. The applicant shall purchase credits at a U.S. Fish and Wildlife Service (USFWS)/California Department of Fish and Wildlife (CDFW) approved mitigation bank or fund the creation and preservation of habitat at an off-site location such as the West Coyote Hills to demonstrate a minimum replacement ratio of at least 1:1 and meets the state regulatory agency's performance standard of "no net loss" for direct loss of special-status species habitat within the development footprint. Compensation shall be detailed on an acreage-specific basis and shall include a habitat mitigation and monitoring plan, which shall be developed in coordination and compliance with state and federal regulatory agency performance standards of "no net loss." Evidence in the form of permit approvals and associated mitigation and monitoring plans that meet stated "no net loss" standards shall be provided to the City of La Habra for review and approval prior to initiation of site grading. At a minimum, such plans shall include: • Baseline information, including the findings and conclusions of the Biological Assessment prepared by the applicant and submitted to the USFWS and CDFW as part of the regulatory permitting process; • Anticipated habitat enhancement goals to be achieved through compensatory actions, including mitigation site location (on-site enhancement, restoration or off-site habitat creation); and • Measurable performance standards and criteria including but not limited to the overall amount of percent cover and species diversity for restoration or enhancement in the Specific Plan development footprint must meet state and federal regulatory resources agency approval, and must be provided for City review at the end of the 5-year monitoring period. Should the restoration or enhancement fail to meet success criteria as defined in the mitigation and monitoring plan required as	Sufficient credits shall be acquired via an agency-approved mitigation bank or banks, such that state and federal natural resource regulatory agencies can verify via the regulatory permitting process that there would be no net loss of special status species or their habitats as a result of implementation of the Specific Plan. Mitigation credits for coastal scrub and riparian habitat within an agency-approved mitigation bank shall meet the performance standard of no net loss of special-status species habitat through demonstration of in-kind replacement of at least a 1:1 replacement ratio, including long term monitoring, such that the provisions of **Mitigation Measure BIO-1a** pertaining to in-kind replacement have been satisfied.	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
part of the state and federal agency permitting process, the City would implement remedial restoration or enhancement efforts at the cost to the applicant. Contingency funds will be established and deposited in an escrow account with the City, to be refunded to the applicant at the time the resource agency performance criteria that is established as "no net loss" is met.			
Mitigation Measure BIO-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 and Landscaped Slopes*. Proposed enhancements to the riparian conservation area (i.e., removal of non-native invasive species, draining and re-lining of Ponds 1 and 2) and any tree trimming or tree removal in the landscaped slopes associated with fuel management activities 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 tree trimming or removal, or proposed riparian enhancement activities, are 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 pre-construction 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-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 maintained during grading and construction.	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
Mitigation Measure BIO-1c: Avoidance and Replacement of Special-Status Plants. Pre-construction botanical surveys for special-status plants shall be conducted within coastal sage scrub, mulefat scrub, and riparian woodland habitats in the development footprint during the appropriate flowering periods as identified in **Table 3.5-1a** of this EIR, which summarizes special-status plants with the potential to occur in the development footprint. Pre-construction botanical surveys of coastal sage scrub, mulefat scrub, and riparian woodland habitats shall be conducted in the spring season prior to initiation of grading. Compliance with survey dates and protocol survey methods included in **Table 3.5-1a**, or protocol current at the time of development, shall be demonstrated. If special-status plant species are found during pre-construction botanical surveys conducted during the appropriate survey period by a City-approved qualified botanist familiar with the species, **Mitigation Measure BIO-1a** will apply, including in-kind replacement and development of a mitigation and monitoring plan that would be provided, (along with monitoring reports prepared to meet rigorous regulatory standards applied by state and federal resources agencies), to the City as evidence that the mitigation measure has been successfully implemented.	Botanical surveys shall be conducted during the appropriate flowering period by a qualified botanist acceptable to the City. For any confirmed plant occurrences, in-kind replacement shall be provided pursuant to a detailed mitigation and monitoring plan developed in coordination with state and federal regulatory permitting process, as described in **Mitigation Measure BIO-1a**. Prior to implementing surveys, the applicant shall provide the resume of the qualified botanist familiar with the plant species in **Table 3.5-1a** to the City for review and approval.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure BIO-1d: Avoidance of Special-Status Bats in Coastal Sage Scrub and Riparian Woodland Habitats. Prior to direct removal of coastal sage and riparian woodland within the grading limits, and prior to tree trimming or tree removal activities for habitat enhancement proposed in the conservation areas and in the landscaped slopes subject to fuel management treatment, surveys shall be conducted for special-status bat species. At least 10 days before surveys begin, the applicant shall confer with CDFW to confirm current bat survey methodology. Surveys shall be conducted by a bat biologist familiar with the local bat species, and results of the surveys shall be summarized in a report to be provided to the City for review and approval. If individual roosting bats are detected, direct removal of habitat and proposed tree removal and tree trimming shall occur only after it has been confirmed that roosting bats have departed. If a confirmed bat roosting tree is lost, installation of bat roosting boxes in the vicinity of the cut tree shall be required.	A City-approved biologist shall be retained to conduct required studies and confirm that all stages of development meet the requirements set forth in **Mitigation Measure BIO-1d**.	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
Mitigation Measure BIO-1e: Finding and Relocating Western Pond Turtles. Pre-construction surveys to find western pond turtles that may occur in open water habitat in Ponds 1 through 3 within the development footprint shall be conducted 14 days prior to proposed fill and removal of Pond 3 and proposed draining and re-lining of Ponds 1 and 2. If the species is present in work areas, City-approved biologists shall capture turtles prior to construction activities and relocate them to nearby suitable habitat (the closest water body) out of harm's way (e.g., upstream or downstream from the work area). The applicant shall provide notification to CDFW regarding any relocation of western pond turtles in the development footprint.	A City-approved biologist shall be retained to conduct required studies and confirm that all stages of development meet the requirements set forth in **Mitigation Measure BIO-1e**.	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 BIO-1f: Setbacks and Erosion Protection for Coastal Sage Scrub and Riparian Woodland. All viewing areas, signage, benches, the amphitheater, or other park features shall be located at least 50 feet from the edge of coastal sage scrub and 50 feet from the edge of riparian woodland habitat conservation areas. Low fencing or vegetative plantings positioned to prevent trail or park users from encroaching upon coastal sage scrub or riparian woodland 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 or riparian woodland 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*). Posted park rules shall identify riparian woodland and coastal sage scrub habitats in the conservation areas, and shall state that encroachment onto riparian woodland or coastal sage scrub areas is	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
prohibited. Educational signage and other signs proposed in the upland or riparian conservation area shall be placed away from nesting habitat to avoid introducing perches for birds of prey near special-status species nesting. Public-access within upland and riparian conservation areas shall be restricted to approved trails, begin no earlier than 7:00 a.m., and conclude no later than 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.			
Mitigation Measure BIO-2a: Preventing Degradation of Natural Communities in Development Footprint. The applicant shall avoid or minimize adverse effects on sensitive natural communities in the Specific Plan development footprint. 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 Section 3.13, *Hydrology and Water Quality*, of this EIR 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
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	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.	Director of Community and Economic Development and Director of Public Works

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
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. • Phase grading operations to reduce disturbed areas and time of exposure. • Avoid excavation and grading during wet weather. • Limit on-site construction routes and stabilize construction entrance(s) and exit(s). channel runoff around the site and away from bodies of water. • 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. • Whenever practicable, provide native vegetation buffer areas to prevent pollutants from entering on-site and off-site water bodies, and substitute vegetation for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable. • 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.			

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
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 riparian and upland conservation areas and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City: • Installing silt fencing or vegetative plantings between sensitive natural communities and project parks, trails, kiosks, the Community Center, and the amphitheater. • Locating fueling stations or vehicle or equipment storage and maintenance away from potentially jurisdictional areas and features, and otherwise isolating construction work areas from any identified jurisdictional features including California Fish and Game Code Section 1602 jurisdictional areas. • Ensure on-going maintenance and management in perpetuity at no expense to the City for the upland and riparian conservation areas within 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 and riparian 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	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure BIO-2b: In-Kind Replacement of Sensitive Natural Communities. Where grading or removal of sensitive natural habitats cannot be avoided, compensation shall be provided to demonstrate that no net loss of sensitive natural communities would occur as a result of build-out of the Specific Plan.	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. 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**.	Prior to issuance of a grading permit	Director of Community and Economic Development
Mitigation Measure BIO-2c: 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 and riparian conservation areas 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: o To minimize the effect of night lighting on upland and riparian conservation area habitats within the project development footprint, the following shall apply to any proposed lighting	The Director of Community and Economic Development shall confirm that the requirements of **Mitigation Measure BIO-2c** have been met.	Prior to issuance of a grading permit.	Director of Community and Economic Development

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
adjacent within 150 feet of the upland or riparian conservation areas: – Low-intensity street lamps 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. o 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 red fox, raccoon, or opossums. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of this requirement. o An education program for residents and Community Center and trail users shall be developed, including posted interpretive signs and informational materials regarding the sensitive habitats and the dangers of unleashed domestic animals in this area. Such restrictions shall be monitored by a property owners' association that shall have the right to impose fines for violation of the pet policy. Such information shall be provided in the vicinity of proposed kiosks and wildlife viewing areas where public access is provided.			

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure BIO-2d: In-Kind Replacement of Jurisdictional Resources in Sensitive Habitats. Where direct removal of vegetation within Clean Water Act Sections 404 and 401 and California Fish and Game Code Section 1602 jurisdictional areas would occur, suitable habitat replacement shall be provided to meet the required performance standard of no net loss of sensitive habitats, including regulatory jurisdictional areas.	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
Mitigation Measure BIO-3: Implement Mitigation Measures BIO-2a through BIO-2d.	See Mitigation Measures BIO-2a through BIO-2d.	See Mitigation Measures BIO-2a through BIO-2d.	See Mitigation Measures BIO-2a through BIO-2d.
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 3.5-2** of this EIR. 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
Mitigation Measure BIO-4b: Maintenance of Vegetative Cover along Wildlife Movement Interface. Vegetation management in the fuel modification zone shall not reduce the overall amount of vegetative cover available for wildlife using the interface to move between the West Coyote Hills and the Specific Plan development footprint habitats**.**	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, demonstrating that no reduction in the overall amount of vegetative cover available for wildlife	Prior to issuance of a grading permit.	Director of Community and Economic Development

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
	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 EIR **Figure 3.5-2**.		
Mitigation Measure BIO-5: Replacement of Bird Nesting and Roosting Habitat. The Specific Plan landscape plan shall provide for replacement of bird nesting and roosting habitat lost during site development. Such replacement shall be in the form of landscaped slopes, street trees and plantings, enhancement of conservation areas, and vegetation in parks and adjacent to environmental education kiosks, the Community Center, and proposed trails. To replace nesting and roosting habitat for resident and migratory birds, the Specific Plan planting plan shall include native tree and shrub species. The landscape design and Specific Plan plant palette shall be prepared in coordination with a qualified biologist and shall be subject to approval by the City of La Habra Director of Community and Economic Development.	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
Cultural Resources			
Mitigation Measure CUL-2a: A qualified archaeologist shall be retained to conduct spot-checking of site grading activities and to respond on an as-needed basis to address unanticipated archaeological discoveries. In addition, a qualified Native American Monitor shall be present onsite during construction-related ground disturbance activities, including but not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, trenching, and vegetation removal. In the event that archaeological materials, including stone tools, shells, bones, glass shards, ceramics, or other materials older than 50 years in age, are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist approved by the City and a qualified Native American Monitor have assessed the discovery and appropriate treatment pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15064.5 is determined and implemented.	The applicant/developer shall retain a qualified archaeologist and a qualified Native American Monitor to implement the provisions of **Mitigation Measure CUL-2**, including conduct monitoring of site grading activities and responding on an as-needed basis to address unanticipated archaeological discoveries. In addition, any archaeological requirements established by the archaeologist or requirements established by the Native American Monitor evaluating the discovery shall be incorporated into development plans and included as conditions of approval.	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
If archaeological resources are found to be significant, the archaeologist and Native American Monitor shall determine, in consultation with the City and any local Native American groups expressing interest following notification by the City, appropriate avoidance measures or other appropriate mitigation. Pursuant to CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts on archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and any local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as a historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be treated in accordance with the provisions of Section 21083.2.			
Mitigation Measure CUL-2b: Prior to removal of any native vegetation from the project site, Native American monitors or representatives of the Gabrieleño Band of Mission Indians-Kizh Nation shall be invited to the project site to document and distinguish native vegetation that is preferred by the Tribe. All plants preferred by the Tribe that are proposed to be removed as part of site development shall be made available to the Tribe prior to their removal.	The applicant/developer shall provide written evidence of compliance with the provisions of **Mitigation Measure CUL-2b**.	Prior to the issuance of a grading permit and/or action that would permit site disturbance or removal of native vegetation (which-ever occurs first).	Director of Community and Economic Development or his/her designee.
Mitigation Measure CUL-4: The applicant/developer shall retain a County-certified paleontologist approved by the City to conduct full-time monitoring during all earth-moving activities involving previously undisturbed sediments of the La Habra and San Pedro Formations along with periodic paleontological spot checks within excavation areas mapped as Quaternary alluvium exceeding depths of 5 feet to determine if older, paleontologically sensitive sediments are present. If such older, paleontologically sensitive sediments are present, full-time monitoring shall be implemented.	The applicant/developer shall retain a County-certified paleontologist to implement the provisions of **Mitigation Measure CUL-4**. In addition, a paleontological resource monitoring plan shall be prepared for City review and approval, to be implemented as a condition of approval of the grading permit. The plan shall define the specific locations and construction activities requiring monitoring, procedures to	Prior to the issuance of a grading permit and/or action that would permit site disturbance in soils that were not disturbed by previous golf course construction.	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
If paleontological resources are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a County-certified paleontologist has assessed the discovery and appropriate treatment is determined and implemented.	follow for monitoring and fossil discovery, and a curation agreement with the John D. Cooper Archaeology and Paleontology Center. A report is to be prepared and published noting any findings discovered on the property. Any artifacts discovered shall be deposited in a location approved by the Director of Community Development.		
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, address the following: • Proposed construction phasing plan. • 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 utilize for the delivery of construction equipment (e.g., excavators, dozers, scrapers, backhoes, etc.) and materials (i.e., lumber, tiles, piping, windows, etc.) to access the site to Beach Boulevard and Imperial Highway (via La Habra Hills Drive)[1]. • Identify proposed construction related traffic controls and detours. • 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).	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.

[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
• Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets. • 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 which may have been spilled, tracked, or blown onto adjacent streets or areas. • Hauling or transport of oversize loads will be allowed between the hours of 9:00 am and 3:00 pm only, Monday through Friday, unless otherwise approved in writing by the City Engineer. • No hauling or transport shall be allowed during nighttime hours, weekends or Federal holidays. • Use of local and residential streets (other than La Habra Hills Drive to/from Imperial Highway for construction-related traffic shall be prohibited. • Haul trucks entering or exiting public streets shall at all times yield to public traffic. • 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. • All construction-related parking and staging of vehicles shall be kept off of the adjacent public roadways and will occur on-site. This Plan shall meet standards established in the current *California Manual on Uniform Traffic Control Device* as well as City of La Habra requirements.			
Mitigation Measure TRA-1.2a. The Applicant shall pay citywide traffic improvement fees as well as fair share impact fees for the intersection of Beach Boulevard at Imperial Highway.	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	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure TRA-1.2b. 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	The Director of Public Works shall confirm that: • The City of La Mirada has included improvements to the intersection for which fair share fees are to be paid in its Capital Improvements Program; or • If the City of La Mirada has not included improvements to the intersection 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 the City of La Mirada 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-1.3. 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 • Hacienda Road at Whittier Boulevard (within La Habra) • Walnut Street at Imperial Highway (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	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
	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-1.5: 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 • 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	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
	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-1.6a. The Applicant shall construct the recommended improvements set forth in the project traffic study for the intersection of La Habra Hills Drive and Imperial Highway.	Vesting Tentative Tract Map 17845 shall be conditioned upon provision of the recommended improvements set forth in the project traffic study for the intersection of La Habra Hills Drive and Imperial Highway. Improvements at this intersection shall be completed to the satisfaction of the City and Caltrans.	Prior to approval of Vesting Tentative Tract Map 17845. Prior to issuance of the first occupancy permit for residential or commercial use within the project site.	Director of Public Works or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure TRA-1.6b. 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 • Harbor Boulevard at Imperial Highway • 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. 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.	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
	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 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:	The Director of Public Works shall confirm that: • Caltrans has included improvements to the intersections for which fair share fees are to	Prior to the issuance of building permits for residential or	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
• Beach Boulevard and La Habra Boulevard • Euclid Street and Imperial Highway • Beach Boulevard and Lambert Road	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.	commercial structures	
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.	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.		
Air Quality			
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 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 (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
Greenhouse Gas Emissions			
Mitigation Measure GHG-1a: All structures shall be designed to be 20 percent more efficient than current (2017) Title 24 Standards, consistent with La Habra Climate Action Plan (CAP) Energy Reduction Measure R2-E1, New Construction Residential Energy Efficiency Requirements. Compliance with this requirement shall be achieved through incorporation of technologies listed in CAP Energy Reduction Measure R2-E1, such as installation of energy efficient appliances and lighting, as well as readily available light-colored pavements, natural shading, and other technologies.	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 any structure.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1b: Electrical vehicle charging stations shall be provided within the proposed commercial and multi-family development areas (CAP Measure R2-T3). The number and location of these stations shall be approved by the City.	Site plans for commercial and multi-family development areas shall include provision of electrical vehicle charging stations as required by this mitigation measure.	Prior to issuance of building permits for commercial or multi-family development.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1c: Single-family detached residential dwelling units shall be designed and constructed to accommodate the installation of solar panel systems, and solar panel systems shall be offered to initial buyers as an option (CAP Measure R2-E2).	Building permit applications shall include structural calculations demonstrating compliance with the energy reduction requirements set forth in this mitigation measure. The developer of single-family detached residential dwelling units shall offer installation of solar panels to initial buyers either as part of the basic sales price of homes or as an option.	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-1d: All enclosed residential garages shall be provided with 220-volt electrical wiring suitable for installation of electrical vehicle chargers.	Building permits applications for all enclosed garages shall include 220-volt electrical wiring suitable for installation of electrical vehicle chargers.	Prior to issuance of building permits for commercial or multi-family development.	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-1e: Multi-family detached residential structures shall have solar panel systems installed (CAP Measure R2-E2).	Building permits applications for multi-family residential structures shall include rooftop solar panels.	Prior to issuance of building permits for multi-family development.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1f: Commercial structures shall be designed and constructed to accommodate the installation of solar panel systems (CAP Measure R2-E6).	Building permit applications shall include structural 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.
Mitigation Measure GHG-1g: Outdoor electric outlets shall be provided in all residential and commercial development to facilitate use of electric landscape equipment (CAP Measure R2-A1).	Building permit applications for residential and commercial structures shall include outdoor electrical outlets meeting the requirements set forth in this mitigation measure.	Prior to issuance of building permits for residential and commercial structures.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GHG-1h: 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.
Mitigation Measure GHG-1i: 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	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure GHG-1j: Project development shall comply with the California Green Building Standards Code, including but not limited to requirements 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 (CAP Measure R3-W1).	Building permit applications shall include demonstration that the provisions of this mitigation measure will be implemented.	Prior to issuance of building permits.	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 noise barriers shall be constructed.	Director of Community and Economic Development or his/her designee.
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	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**	Prior to issuance of building permits for residences on Lots 2,	Director of Community and Economic

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
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.	**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.	3, 11, 12, 28, 29, 239, 278, or 279.	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 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	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure NOI-4c: The construction contractor shall locate all stationary noise sources (e.g., generators, compressors, staging areas) as far from residential receptor locations as feasible.	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 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-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 NOI-4e: The construction contractor shall select and use quieter tools or construction methods whenever feasible. Examples of this 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	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Mitigation Measure NOI-4f: The construction contractor shall maximize the use of enclosures as feasible. This includes four-sided or full enclosures with a top for compressors and other stationary machinery. This also includes locating 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.
Hazards and Hazardous Materials			
Mitigation Measure HAZ-2.2: Excavation, handling, and placement of contaminated soils within the project site shall be undertaken so as to achieve a residential cleanup standard of an acceptable excess cancer risk (ECR) of 1 x 10^{-5} for construction workers, residents and workers within proposed uses on-site, and residents of adjacent neighborhoods.	The applicant shall have a human health risk assessment prepared confirming that the performance standard set forth in **Mitigation Measure HAZ-2.2** to protect construction workers, residents and workers within proposed uses on-site, and residents of adjacent neighborhoods will be achieved. The City shall review the human health risk assessment to confirm that the specified performance standard will be achieved, and also ensure that the requirements of the approved Soils Management Plan will be implemented during site grading.	Prior to issuance of grading permits.	Director of Community and Economic Development or his/her designee.
Hydrology and Water Quality			
Mitigation Measure HWQ-3: The applicant shall construct a 48-inch storm drain underneath Beach Boulevard parallel to the existing storm drain pipe that connects the on-site detention basin with the existing storm drain pipe on the west side of Beach Boulevard. The applicant shall perform the work using a jack and bore method to avoid impacts on traffic on Beach Boulevard. The applicant shall also obtain (1) approval from Caltrans to jack and bore underneath Beach Boulevard and, (2) to the extent necessary, a temporary construction easement from the Hillsborough	Constructing the 48-inch storm drain, obtaining required easements and encroachment permits, and recalculating detention basin capacity and related improvements to detention basin capacity, if needed, shall be made a condition of approval of Vesting Tentative Tract Map 17845.	Prior to approval of Vesting Tentative Tract Map 17845. The required storm drain shall be constructed to the satisfaction of the City prior to issuance	Director of Public Works or his/her designee.

Mitigation Measure	Implementation Action(s)	Action is to be Completed	Agency/Entity Responsible to Verify Compliance
Apartment complex on the west side of Beach Boulevard. Furthermore, the applicant shall recalculate the size of the detention basin, and if additional storage is necessary, the Applicant shall show underground buried stormwater storage adjacent to the detention basin shown on the Vesting Tentative Tract Map. The final hydraulic calculations document that existing off-site storm flows and the additional on-site storm flows would not exceed the design capacity of the existing and new storm drain pipes under Beach Boulevard. All final calculations and design plans shall be approved by the City of La Habra.		of the first certificate of occupancy for a structure that drain across Beach Boulevard through this pipe.	
Geology, Soils, and Seismicity			
Mitigation Measure GEO-1.1: A minimum 100-foot setback for all residential structures shall be maintained from any active fault or fault splay.	The setback requirement set forth in **Mitigation Measure GEO-1.1** shall be made a condition of approval of Vesting Tentative Tract Map 17845, and no permits for construction of a structure for human occupancy shall be granted, unless it is in compliance with this mitigation measure. To confirm compliance with **Mitigation Measure GEO-1.1**: • Prior to grading, the limits of the Earthquake Fault Zone shall be staked by the project surveyor. • During grading, the project geologist shall map exposed bedrock in all areas proposed for residential development to identify any potentially active faults and/or active fault splays. Additional grading below the planned 5- to 15-foot-deep cuts within this area shall be performed if required to expose bedrock for mapping purposes. • An assessment of fault activity shall be conducted on Lots 12, 28, and 29 at the	Prior to approval of Vesting Tentative Tract Map 17845 and prior to issuance of permits for structures for human occupancy.	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
	appropriate time, that shall consist of both removals to expose the surrounding bedrock and the excavation of one backhoe trench per lot, generally perpendicular to the length of the Earthquake Fault Zone. Each trench shall be excavated to a minimum of 5 feet deep to ensure a vertical observation surface for detailed mapping. If a fault is observed, it shall be evaluated for potential age of movement; in the event that no supporting age dating information is available, then structural fault setbacks shall apply to the three lots as appropriate. • The City's geotechnical reviewer shall be notified by the grading contractor to observe site grading within the Earthquake Fault Zone and confirm the geologic mapping. • The applicant shall provide confirmation for City review that the requirements of **Mitigation Measure GEO-1.1** and these implementation provisions are included in grading.		
Mitigation Measure GEO-1.3: Stiffened and/or post-tensioned slab foundations shall be used to support all new proposed development within the project site. Pre-soaking of the subgrade soils shall be required to reduce the potential impact of expansive soils.	The project geotechnical expert's recommendations, as approved by the City, shall be shown on final construction plans, and verified by the City as complete during field inspection.	Prior to issuance of a construction permit and verified by the City as complete during field inspection.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-1.4: Additional geogrid reinforcement length beyond local stability requirements to be determined by the MSE wall designer and approved by the City shall be required to provide adequate global stability factors of safety (greater than 1.5 and 1.1 for static and	The grading permit application for Lots 241 through 245 shall provide sufficient calculation to confirm that the proposed MSE wall located below Lots 241 through 245 has been designed so as to provide an adequate factor of safety.	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
pseudo-static [seismic] loading conditions, respectively, for the MSE wall located below Lots 241 through 245 of Vesting Tentative Tract Map 17845. Preliminary slope stability analysis set forth in the project geotechnical report indicates at least 6 layers of geogrid reinforcement lengths of 60 feet, with an allowable strength (after appropriate reduction factors are applied by the manufacturer) of approximately 3.5 kips per foot, spaced at a maximum vertical spacing of 2 feet, are required for adequate global factors of safety. Further refinement of the design for required global stability geogrid will occur during preparation of the 40-scale grading plan and with input from the MSE wall designer subject to approval of the City.			
Mitigation Measure GEO-3a: Removals of unsuitable fill material up to approximately 50 feet deep below existing grades shall be performed for the western portion of the project site and within several isolated small canyon areas at the eastern portion of the site, in accordance with recommendations of the Geotechnical Report.	The applicant shall retain a qualified geotechnical consultant, as approved by the City, to identify the precise locations and depths for removals of unsuitable fill materials. Such precise locations and depths of removals shall be noted on the final approved grading plans. The City shall confirm these locations have been precisely identified and noted on the final approved grading plans.	Prior to issuance of grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3b: As part of remedial grading, unsuitable soils shall be removed to competent soils, temporarily stockpiled (where necessary) and replaced as properly compacted fill. Prior to placement as compacted fill, significant organic materials or other unsuitable materials shall be removed and properly exported off-site.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3b**.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3c: Any concrete material from site demolition used in general fill shall be environmentally suitable and crushed such that it is no larger than 8 inches in maximum dimension and well blended (i.e., no nesting and voids) into site fills. Any concrete material placed in MSE wall backfill areas (refer to **Mitigation Measure GEO-3i**) shall be crushed to meet gradation requirements of aggregate base in accordance with the	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3c**.	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
last edition of the Greenbook: Standard Specifications for Public Works Construction. The actual depths and lateral extents of grading shall be determined by the geotechnical consultant, based on subsurface conditions encountered during grading.			
Mitigation Measure GEO-3d: Stabilization fill keyways shall be constructed for design cut slopes that are not undercut by remedial grading. Locations of the stabilization fill keyways shall be constructed in accordance with recommendations made in the Geotechnical Report, with final locations and design specifications made by the project's geotechnical consultant subject to review and approval by the City. Keyways shall be shown on the final grading plans. Design cut lots, or lots with less than 5 feet of design fill, shall be overexcavated a minimum of 5 feet below respective pad grades.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3d**.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3e: Proposed fill slopes shall be constructed at a slope ratio of 2:1 (horizontal to vertical) or flatter so as to achieve the factors of safety recommended in the Geotechnical Report.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3e**.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3f: Fills placed deeper than 40 feet below proposed grade shall be compacted to an increased minimum relative compaction of 93 percent relative compaction. Fill shall be moisture-conditioned to be between optimum moisture content and 2 percent over optimum moisture content, pursuant to ASTM D1557.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3f**.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3g: Settlement monuments shall be installed within four weeks after completion of grading within fill areas greater than approximately 40 feet below finish grade and where significant amounts of fill are placed over left-in-place alluvium. Settlement monuments shall be read by a licensed surveyor with an off-site benchmark. The survey readings shall be obtained four times in the first two months, twice in the third month, and then once a month unless otherwise requested by the geotechnical consultant. Shallow footings and slab-on-grade foundations shall be constructed after settlement monitoring data indicate future total settlements are within tolerable limits. Tolerable limits shall include a	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3g**.	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
determination by the project's geotechnical engineer, subject to review and approval by the City, that the surveyed areas would maintain a predicted 3 inches or less of settlement for the next 50 years. If a determination is made that tolerable limits are not met, either impacted areas shall be surcharged with additional fill material and surveyed for an additional three months to determine that tolerable limits are met, or construction shall be delayed until additional settlement monitoring determines that tolerable limits are met.			
Mitigation Measure GEO-3h: Additional geogrid reinforcement length (beyond local stability requirements) shall be required for adequate global stability factors of safety of the MSE retaining wall located at various areas throughout the site, as determined during final design and as approved by the City. Final design requirements including geogrid reinforcement length shall be determined by the MSE wall designer during preparation of the 40-scale grading plan and approved by the City based on the recommendation made in the Geotechnical Report. Geogrid reinforcement length requirements shall be noted on the final approved construction plans.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3h**.	Prior to issuance of a grading permit.	Director of Community and Economic Development or his/her designee.
Mitigation Measure GEO-3i: MSE walls and conventional retaining walls shall be backfilled with relatively sandy soils obtained from either on-site or off-site locations. Sandy soils shall comprise the geogrid zone required for local stability as determined by the MSE wall designer and approved by the City. For conventional retaining walls, the sandy import zone shall be a minimum of one-half the height of the retaining wall. These requirements shall be noted on the final approved construction plans.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3i**.	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
Mitigation Measure GEO-3j: Soil samples shall be collected and tested for presence of corrosive soils at the completion of rough grading. If corrosive soils are detected with (1) pH levels of 5.5 or less, (2) chloride concentration of 500 parts per million (ppm) or greater, or (3) sulfate concentration of 2,000 ppm or greater, specific remediation methods—such as increased compressive strength for structural concrete, decreased water-to-cement ratio for structural concrete and/or encapsulation of post-tensioned cables—shall be implemented as approved by the City. Specific remediation methods shall include one or more of the above-listed options as determined by the foundation design engineer and as approved by the City. If corrosive soils are not detected at levels described above, no mitigation shall be required.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-3j**. Recommendations as required shall be noted on grading plans and construction plans for underground utilities. If corrosive soils are not detected at levels described in **Mitigation Measure GEO-3j**, no mitigation shall be required.	Prior to issuance of a grading permit. Prior to issuance of permits for construction of underground utilities.	Director of Community and Economic Development or his/her designee. Director of Public Works or his/her designee.
Mitigation Measure GEO-4: Soil samples shall be collected and tested at the completion of rough grading to assess expansive soil conditions. Based on the test results, the project shall incorporate specific recommendations set forth by the foundation design engineer, subject to review and approval by the City, such as the use of stiffened and/or post-tensioned slab foundations, pre-soaking of the subgrade soils, and establishment of minimum setbacks for structures located near slopes.	The City shall verify that the grading plan implements the provisions of **Mitigation Measure GEO-4**. Recommendations as required shall be noted on grading plans and building construction plans.	Prior to issuance of a grading permit. Prior to issuance of building permits.	Director of Community and Economic Development or his/her designee.

CHAPTER 9 EIR PREPARERS

This Draft Environmental Impact Report (EIR) document was prepared by the City of La Habra with assistance from a consulting team of environmental planners, engineers, and scientists.

9.1 LEAD AGENCY

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