

## 4. *Environmental Setting*

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### 4.1 *INTRODUCTION*

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, 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, from both a local and a regional perspective.” The environmental setting provides a set of baseline physical conditions from which the City, as lead agency, will determine the significance of environmental impacts of the Proposed Project. Because this is a Supplemental Environmental Impact Report (SEIR), the baseline used for the analyses in this Draft Supplemental EIR (DSEIR) is the 2004 Approved Project, as described in Chapter 2 of this DSEIR.

### 4.2 *REGIONAL ENVIRONMENTAL SETTING*

#### 4.2.1 *Regional Location*

The project site lies in northern Orange County, in the City of Anaheim (“City”) and Sphere-of-Influence (see Figure 3-1, *Regional Location Map*). A “Sphere of Influence” is defined as a planning boundary outside of an agency’s legal boundary (such as the city limit line) that designates the agency’s probable future boundary and service area. As such, it is included within the project boundary. Orange County is bordered by the Pacific Ocean to the west, Los Angeles County to the north and northwest, San Bernardino County to the northeast, Riverside County to the east, and San Diego County to the southeast. Orange County is comprised of approximately 798 square miles, stretching approximately 40 miles along the coast and extending inland approximately 20 miles.

The natural setting of Orange County provides a combination of mountains, hills, flatlands, and shorelines. Orange County lies predominantly on an alluvial plain, which is generally less than 300 feet in elevation in the west and central section. The western portion of the County is made up of a series of broad sloping plains (Downey and Tustin Plains) formed from alluvium transported from the mountains by the Santa Ana River, Santiago Creek, and other local streams. Several low-lying mesas interrupt the plain along the northern coast. Orange County is semi-enclosed by the Puente and Chino Hills to the north, the San Joaquin Hills to the south, and the Santiago Foothills and the Santa Ana Mountains to the east. The Puente and Chino Hills, which identify the northern limit of the plain, extend for 22 miles and reach a peak height of 7,780 feet. To the east and southeast of the plain are the Santa Ana Mountains, which have a peak height of 5,691 feet.

#### 4.2.2 *Regional Climate*

The climate of Orange County is generally temperate. The average monthly high temperatures range from about 52° Fahrenheit (F) in the coastal areas in January to 86°F in the inland areas of the coastal plain in August. The average annual rainfall across the County is 14 inches, with most rain typically occurring in the winter months. Rainfall also exhibits characteristically wide variations annually, from a low of 3.6 inches in 1961 to a high of 32.1 inches in 1940.

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### 4.2.3 Regional Planning Considerations

#### Air Quality Management Plan

An air basin generally has similar meteorological and geographic conditions throughout. California is geographically divided into 15 air basins, and the City is located in the South Coast Air Basin (SCAB). This air basin contains the largest urban area in the western United States. It is a 6,600-square-mile coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of the non-desert portions of San Bernardino, Los Angeles (non-Antelope Valley portion), and Riverside Counties, and all of Orange County.

The South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for SCAB, a comprehensive plan that includes control strategies for emissions from stationary and area sources, as well as from on-road and off-road mobile sources. Every three years since 1979, SCAQMD has prepared a new AQMP, with updates to the previous plan and a 20-year horizon. The most recent AQMP iteration was adopted by SCAQMD on December 7, 2012 (“2012 AQMP”). The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS) and updated emission inventory methodologies for various source categories. The 2012 AQMP included the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches.

The AQMP acts as local guidance related to California’s State Implementation Plan, which provides the framework for air quality basins to achieve attainment of the State and Federal ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas; areas that do not meet these standards are in nonattainment. Severity classifications for ozone nonattainment are marginal, moderate, serious, severe, and extreme. The Proposed Project’s consistency with the applicable policies and standards of the 2012 AQMP is analyzed in detail in Section 5.1, *Air Quality*, of this DSEIR.

#### Southern California Association of Governments

Orange County and the City are at the western edge of a six-county metropolitan region composed of Orange, Los Angeles, Ventura, Riverside, San Bernardino and Imperial Counties. SCAG is the federally recognized Metropolitan Planning Organization (MPO) for the region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and State law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the Southern California region’s MPO, SCAG cooperates with SCAQMD, the California Department of Transportation (“Caltrans”), and other agencies in preparing regional planning documents. Orange County and its jurisdictions constitute the Orange County Subregion of the SCAG region. The Orange County Subregion is governed by the Orange County Council of Governments (OCCOG). SCAG has developed a variety of plans to achieve specific regional objectives. The plans most applicable to the Proposed Project are discussed below.

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### *Regional Transportation Plan/Sustainable Communities Strategy*

On April 4, 2012, SCAG adopted the 2012 RTP/SCS to help coordinate development of the region's transportation improvements. The RTP/SCS is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP/SCS provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

The 2012 RTP/SCS integrates the Orange County SCS, which was adopted separately by the Orange County Council of Governments (OCCOG) and the Orange County Transportation Authority (OCTA) in 2011. The 2012 RTP/SCS sets forth a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The Orange County SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. However, the Orange County SCS does not require that local general plans, specific plans, or zoning be consistent with the Orange County SCS, but provides incentives for consistency for governments and developers.

The Proposed Project's consistency with the applicable 2012 RTP/SCS policies is analyzed in detail in Section 5.2, *Greenhouse Gas Emissions*, of this DSEIR.

### 4.3 LOCAL ENVIRONMENTAL SETTING

#### Location and Land Use

Located in northeastern Orange County, the City and its Sphere-of-Influence lies approximately 35 miles southeast of downtown Los Angeles and seven miles north of Santa Ana. The City is surrounded by the Cities of Fullerton, Placentia, and Yorba Linda to the north; Riverside County to the east; the Cities of Orange, Garden Grove, Stanton, and unincorporated Orange County to the south; and, the Cities of Cypress and Buena Park to the west. The City encompasses over 32,000 acres of land, stretching nearly 20 miles along the State Route (SR) -91 Freeway, and includes another 2,431 acres of unincorporated land within its Sphere-of-Influence. In addition to SR-91, regional access to and from Anaheim is provided by the Interstate (I) -5, SR-57 and SR-55 Freeways; the SR-241; and Amtrak and Metrolink passenger train services at Angel Stadium and Anaheim Canyon Stations.

Anaheim is currently home to over 336,000 people, approximately 16,000 businesses, and over 4,600 acres of parks and open space. Over the next 20 years, the population is expected to grow to over 400,000. The City includes approximately 49.7 square miles. The City boundaries generally form an elongated irregularly shaped area, which extends approximately 16 miles east to west.

Major freeways traversing the City include the I-5 Freeway, which travels generally northwest to southeast; the SR-57 Freeway, which travels north and south through the central portion of the City; the SR-55 Freeway, which abuts the southern edge of the City at the western edge of the Hill and Canyon Area; the SR-91 Freeway, which travels east and west along the northern portion of the City; and, the SR-241, which travels north and south near the eastern edge of the City.

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### 4.4 ENVIRONMENTAL RESOURCES AND INFRASTRUCTURE

#### Aesthetics

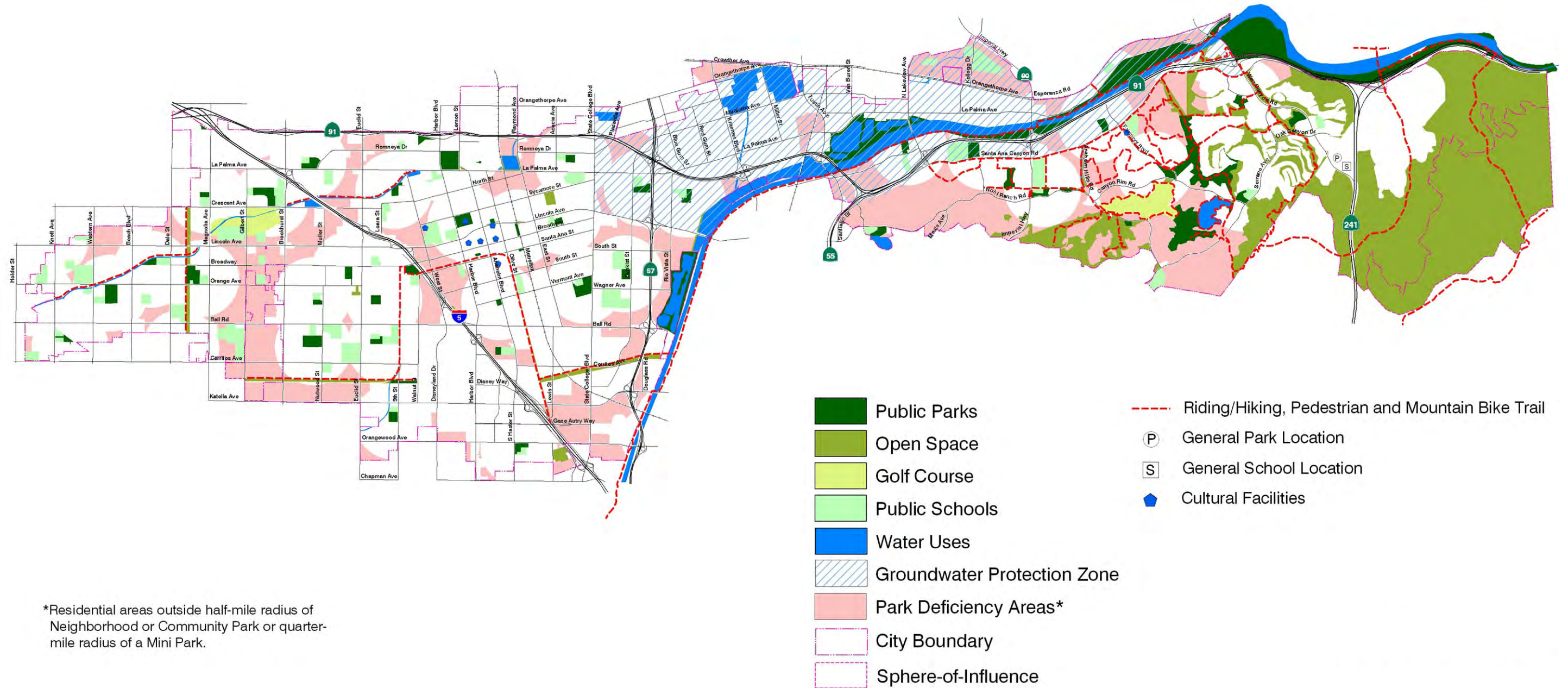
The City is already largely built-out. It contains nearly 1,500 acres of parks and open space (about five percent of its total land area) and another 11 percent in vacant land. The City's major open space features are located in the eastern part of the City within the Hill and Canyon Area. These include the Deer Canyon Preserve, the undeveloped Mountain Park Specific Plan area, and State-owned land adjacent to the Chino Hills State Park and the Cleveland National Forest, on the eastern edge of the City that provides a potential gateway and link for wildlife corridors, trails, and recreation uses. The other major open space resource is the Santa Ana River; the centerpiece of a 2,650-square mile watershed that involves major portions of three counties including Orange County, Riverside County, and San Bernardino County. The resource includes the Santa Ana River Trail, a designated national recreation trail that, when completed, will incorporate 110 miles of trail system from Big Bear Lake, high in the San Bernardino Mountains, to the mouth of the Santa Ana River, at the Pacific Ocean. It provides trails, bikeways, scenic views and other open space and recreational opportunities along its course.

Aesthetic resources within the City are protected through implementation of the Green Element and Community Design Element of the City's General Plan. The purpose of the Green Element is to combine all of the City's open space, conservation, recreation and landscaping resources into one comprehensive, integrated document. Rather than separate these components, the Green Element recognizes their interrelationship and builds upon it with the inclusion of a Green Plan as seen in Figure 4-1. The objectives of the Green Element are to:

- Expand public parks and open space amenities;
- Improve the City's trail and bicycle network for local and regional connections;
- Beautify arterial corridors with landscape plans, edge treatments and gateways; and
- Use existing opportunities, such as easements, vacant land, and the Santa Ana River to expand accessible open space and recreation opportunities.

The Green Element uses a variety of open space opportunities and resources to create a unified vision for a more beautiful, healthy city. The Green Element considers not only existing parks and open space, but also potential recreational opportunities, such as schools, utility easements, water uses, and vacant land. It also identifies opportunities to enhance the appearance of existing areas through enhanced landscaping of Anaheim's corridors, community edges, and City entryways. The emphasis of the Green Element is not only to make spatial connections throughout the City through parks, trails, open space, and landscaping but also to create policy connections to help the City conserve its natural and cultural resources such as water, energy and historic districts.

2004 Approved Project Green Plan



\*Residential areas outside half-mile radius of Neighborhood or Community Park or quarter-mile radius of a Mini Park.



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The Community Design Element is not a required Element of the General Plan, but the City has long recognized the importance of community appearance and identity to its vitality, economic health and overall quality of life. Combined with the “Green Element” – which combines parks and recreation, open space, conservation, and public landscaping into a comprehensive plan to beautify the City - the Community Design Element provides policy guidance for the built environment. It supports the Land Use Element by providing design policies that complement the City’s diverse land uses, the Circulation Element by providing guidance for aesthetically enhancing arterial corridors, and the Economic Development Element by recognizing the relationship between quality design and economic viability, stability and growth.

### Air Quality and Greenhouse Gas Emissions

Pollutants originating in Orange County are transported by the daytime onshore air flow, where they react to form ozone some distance from where the primary pollutants are emitted. The SCAB is a “nonattainment” area for ozone (O<sub>3</sub>) and particulate matters (PM<sub>10</sub> and PM<sub>2.5</sub>) under both the federal and California ambient air quality standards (AAQS). In addition, the SCAB was proposed in 2010 to be designated as nonattainment for nitrogen oxides (NO<sub>x</sub>) (entire Basin) under the new California AAQS and lead (Pb) (Los Angeles County only) under the new federal AAQS. Nonattainment refers to the fact that the region exceeds the federal and State AAQS. (SCAQMD, 2007) An air quality analysis was performed for the Proposed Project and the results are discussed in Section 5.1, *Air Quality*, of this DSEIR.

California is the second largest emitter of greenhouse gases (GHG) in the United States, only surpassed by Texas, and is the tenth largest GHG emitter in the world (CEC 2005). However, because of more stringent air emission regulations, in 2001 California ranked fourth lowest in carbon emissions per capita and fifth lowest among states in carbon dioxide (CO<sub>2</sub>) emissions from fossil fuel consumption per unit of Gross State Product (total economic output of goods and services) (CEC 2006). In 2004, California produced 492 million metric tons of CO<sub>2</sub>-equivalent (“CO<sub>2</sub>e”) GHG emissions, of which 81 percent were CO<sub>2</sub> from the combustion of fossil fuels, 2.8 percent were from other sources of CO<sub>2</sub>, 5.7 percent were from methane, and 6.8 percent were from nitrous oxide (N<sub>2</sub>O) (CEC 2006). The remaining 2.9 percent of GHG emissions were from High Global Warming Potential gases, which include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF<sub>4</sub>) (CEC 2006).

CO<sub>2</sub> emissions from human activities make up 84 percent of the total GHG emissions (CEC 2006). California’s transportation sector is the single largest generator of GHG emissions, producing 40.7 percent of the state’s total emissions (CEC 2006). Electricity consumption is the second largest source, comprising 22.2 percent. While out-of-state electricity generation comprises 22 to 32 percent of California’s total electricity supply, it contributes 39 to 57 percent of the GHG emissions associated with electricity consumption in the state (CEC 2006). Industrial activities are California’s third largest source of GHG emissions, comprising 20.5 percent of state’s total emission (CEC 2006). Other major sources of GHG emissions include mineral production, waste combustion and land use, and forestry changes. Agriculture, forestry, commercial, and residential activities comprise the balance of California’s GHG emissions (CEC 2006).

A description of the Proposed Project’s air quality and greenhouse gas impacts as compared to the 2004 Approved Project is included in Section 5.1, *Air Quality*, and Section 5.2, *Greenhouse Gas Emissions*, of this DSEIR.

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### Biological Resources

The 2004 Certified EIR described the biological resources that exist within the City. The City is largely urbanized and is generally surrounded by other developed cities. In this portion of Orange County, there are few remaining areas of natural habitat. The developed areas of the City contain non-native species of plants and animals while the Hill and Canyon Area, located in the eastern portion of the City and Sphere-of-Influence, contains the majority of the City's remaining significant biological resources. The State of California purchased approximately 1,400 acres within Coal Canyon to provide a wildlife corridor between the Cleveland National Forest and the Chino Hills State Park. This land will be maintained in perpetuity as an open space wildlife corridor. The General Plan and Zoning Code reflect this use by designating this area for open space purposes. The other significant biological resource located in the City is the Santa Ana River.

The Hill and Canyon Area is topographically complex with steep, wooded and forested canyons and intervening scrub and chaparral-covered ridges. Several blue line streams occur in this area of the City and Sphere-of-Influence. Significant portions of the Hill and Canyon Area are relatively undisturbed. The Hill and Canyon Area supports several habitat types considered sensitive by resource agencies, namely the California Department of Fish and Wildlife (CDFW), due to their scarcity and their ability to support a number of State and Federally-listed endangered, threatened, and rare vascular plants, as well as several sensitive bird and reptile species. Sensitive plant communities found within this area of the City and Sphere-of-Influence include coastal sage scrub communities, coast live oak communities (oak savannah and oak woodland), Tecate Cypress communities, nolina chaparral, needlegrass grassland, and riparian communities, as described below.

The Santa Ana River Watershed is the largest in Orange County, covering 153.2 square miles. The River begins almost 75 miles away in the San Bernardino Mountains, crossing central Orange County before emptying into the Pacific Ocean. The Orange County portion of the watershed includes portions of the Cities of Anaheim, Brea, Huntington Beach, Orange, Placentia, Santa Ana, Villa Park, and Yorba Linda. The River serves as the main tributary to the watershed with Santiago Creek being the largest tributary within Orange County. Portions of the River provide wetland and riparian habitat.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that biological resources impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Cultural and Paleontological Resources

#### *Historic Resources –City of Anaheim*

Historic resources are defined as buildings, structures, objects, sites and districts of significance in history, archaeology, architecture and culture. These resources are preserved because they provide a link to a region's past as well as a frame of reference for a community. Often these sites are a source of pride for a City.

#### *National Register*

The National Register recognizes resources of local, State, and national significance. The National Register lists eight properties within the City:

- Carnegie Library - 241 S. Anaheim Boulevard



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- Kraemer, Samuel Building (American Savings Bank/First National Bank) - 76 S. Claudina Street
- Kroger: Melrose District - roughly bounded by Lincoln Avenue, S. Kroger Street, W. Broadway, and S. Philadelphia Street
- Melrose-Backs Neighborhood Houses - 226 and 228 E. Adele Street and 303, 317, 317, and 321 N. Philadelphia Street
- Stanton, Philip Achley House - 2200 W. Sequoia Avenue
- Truxaw-Gervais House - 887 S. Anaheim Boulevard

The following buildings formerly on the National Register have been destroyed or demolished:

- Old Backs House - 215 N. Claudina Street
- Pickwick Hotel - 225 S. Anaheim Boulevard

### *California Register of Historic Places*

The State Historic Resources Commission has designed this program for use by State and local agencies, private groups and citizens to identify, evaluate, register and protect California's historical resources. The California Register is the authoritative guide to the State's significant historical and archaeological resources.

The California Register program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance, identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding, and affords certain protections under CEQA. Eight properties (those listed above on the National Register) are also registered on the California Register of Historic Places.

### *State Historical Landmarks*

Historical landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. The specific standards now in use were first applied in the designations of Landmark number 770. State historical landmarks are recommended by the State Historical Resources Commission to the Director of California State Parks for official designation. The nine-member commission is appointed by the governor and also reviews nominations for listing on the National Register of Historical Places. If a site is primarily of local interest, it may meet the criteria for the California Point of Historical Interest Program. The California Points of Historical Interest Program recognizes resources of local or countywide importance.

Two California historical landmarks listed with the Office of Historic Preservation currently exist within the City:

- No. 112 – North Gate of the City of Anaheim
- No. 201 – Pioneer House of the Mother Colony

The Anaheim Cemetery, located at 1400 E. Sycamore Street, is the oldest public cemetery in Orange County. Established in 1866 by the original Anaheim settlers, it is also the location of the first public

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mausoleum on the West Coast. The cemetery became Orange County Historic Site No. 49 in 2002, as designated by the Orange County Historical Commission in cooperation with the Orange County Board of Supervisors.

### *Anaheim Colony*

The Anaheim Colony Historic District was established on October 21, 1997 by Anaheim City Council Resolution No. 97R-194. More than 1,100 buildings are on the Qualified Historic Structures List and are deemed “contributors” to the District. These buildings were chosen either for their historic architectural character of a specific time period or for the histories of the people who once lived in them. The boundaries of the Anaheim Colony Historic District are North Street, South Street, East Street, and West Street.

In 1999, area residents published the Anaheim Colony Historic District Preservation Plan to promote the preservation and restoration of historic homes in the area. The Plan provides illustrations and guidelines to guide preservation and rehabilitation efforts that are compatible with the scale, style, and character of the historic homes and neighborhoods within the District. In May, 2010, the City of Anaheim adopted the Citywide Historic Preservation Plan, as a supplement to the Anaheim Colony Historic District Preservation Plan. The new Plan took 18 months to compile and looks at preserving significant structures not just in the established historic districts, but all throughout the City.

### *Archaeological Resources*

Archaeological sites are locations that contain significant evidence of human activity. Generally a site is defined by a significant accumulation or presence of one or more of the following: food remains, waste from the manufacturing of tools, tools, concentrations or alignments of stones, modification of rock surfaces, unusual discoloration or accumulation of soil, or human skeletal remains.

Archaeological sites are often located along creek areas, ridgelines, and vistas. Many of these types of landforms are located within the Hill and Canyon Area of the City and its Sphere-of-Influence, and one major cultural resource site (CA-Ora-303) has been identified and registered. This site was first recorded in 1970 and listed a series of small north-facing rockshelters adjacent to SR-91. The artifact assemblage was comprised of manos, hammerstones, choppers, lithic flakes, and some faunal bone.

### *Paleontological Resources*

Paleontological sites are those areas that show evidence of pre-human activity. Often they are simply small outcroppings visible on the surface or sites encountered during grading. While the sites are important indications, it is the geologic formations that are the most important since they may contain important fossils. Maps for paleontology often show sensitive areas based on the underlying geologic formation.

Because most of the City is built-out, there are very few areas containing rock croppings. The Hill and Canyon Area contains sedimentary rocks ranging in age from Late Cretaceous to Middle Miocene. The oldest sedimentary rocks belong to the upper Cretaceous Holz Shale and the Schulz Ranch Member of the Williams Formation. These strata are confined to the southeastern corner of the Hill and Canyon Area and no fossils have been reported.

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The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that cultural and paleontological resource impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Geology and Soils

Figure 4-2, *Generalized Geologic Map*, illustrates landslides from referenced geologic maps, review of aerial photographs, and field reconnaissance. In areas of existing land development, the mapped landslides may have been removed, mitigated, or altered during the grading for land development.

The City is situated in the Peninsular Ranges Geomorphic Province. This geomorphic province encompasses an area that extends approximately 900 miles from the Transverse Ranges and the Los Angeles Basin, south to the southern tip of Baja California (Norris and Webb, 1990). The province varies in width from approximately 30 to 100 miles. In general, the province consists of a northwest-southeast oriented complex of blocks separated by similarly trending faults. The basement bedrock complex includes Jurassic age metavolcanic and metasedimentary rocks, and Cretaceous age igneous rocks of the Southern California batholith.

The City extends from the southerly portion of the Los Angeles Basin easterly into the northern portions of the Santa Ana Mountains. The western portions of the City are located within the Central Block of the Los Angeles Basin (Norris and Webb, 1990). The Central Block is characterized by thick layers of alluvium overlying predominantly sedimentary rock of Pleistocene through Cretaceous age. The depths to crystalline basement rocks are known from petroleum well logs and geophysical data. The total thickness of the sedimentary section is roughly 13,000 feet near the southern end of the Los Angeles Basin.

The eastern portions of the City and its Sphere-of-Influence extend along the Santa Ana River and the northern portions of the Santa Ana Mountains. The Santa Ana Mountains form a dominant feature of the northern Peninsular Ranges. The general cross section of the Santa Ana Mountains consists of an anticlinal fold across the Whittier-Elsinore fault zone. (Schoelhamer, et al., 1981) The crest of the fold parallels the mountain's ridgeline with a gently dipping southwestern flank and a steep, down-faulted northeastern limb. Additional intermediate folding has been superimposed on the major anticlinal feature. The Santa Ana River generally follows the axis of a syncline that plunges westerly. The southern flanks of the syncline form the Peralta Hills, which merge with the Santa Ana Mountains to the east. Tertiary through Cretaceous age sedimentary rock units are exposed in the hillside areas south of the river. The distribution of sedimentary rocks in the hillside areas of the City reflects the geologic structure of the syncline, as well as numerous discontinuous faults.

In general, younger rock units are exposed in the western and northwestern portions of the hillside areas becoming progressively older to the east and southeast. The Cretaceous age rock units are generally limited to the eastern portions of the City and its Sphere-of-Influence.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that geology and soils impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

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### Hazards and Hazardous Materials

#### *Hazardous Waste*

Hazardous waste is generated by a multitude of uses, including manufacturing and service industries, small businesses, agriculture, hospitals, schools and households. A material is hazardous when it exhibits corrosive, poisonous, flammable and/or reactive properties and has the potential to harm human health and/or the environment. Hazardous materials are generally used to produce products that enable our society to enjoy a higher standard of living. Hazardous materials are used in products (household cleaners, industrial solvents, paint, etc.) and in the manufacturing of products (e.g., television sets, newspapers, plastic products and computers). Hazardous wastes are the chemical remains of hazardous materials that have no further intended use and which need treatment and/or disposal. Storage, transport and disposal of these materials require careful and sound management practices. There are many regulatory requirements governing hazardous waste management, and they are constantly changing. Federal and State statutes as well as local ordinances and plans control the future course of hazardous waste management.

#### *Airport/Heliport Hazards*

##### *Heliports*

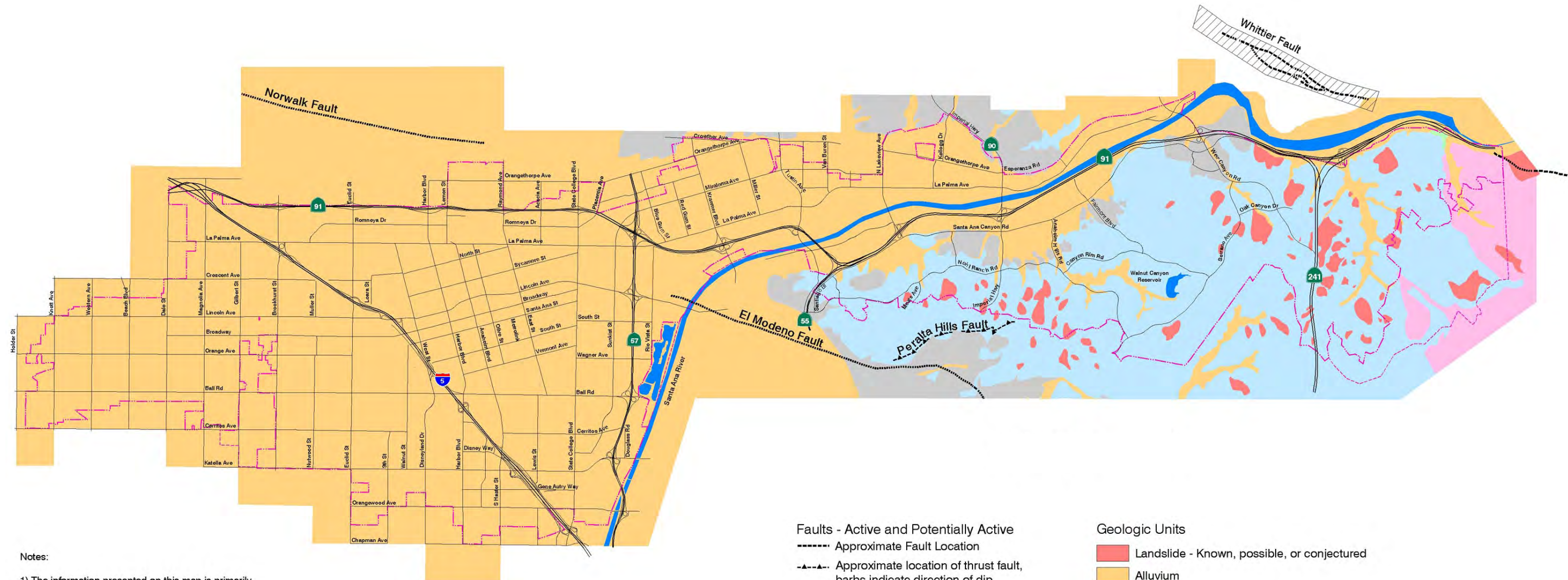
Five heliports within the City of Anaheim are utilized for helicopter take-off and landing. According to the Caltrans, Division of Aeronautics, the City contains five heliports. They are the two Anaheim Police Department (police use), Boeing Anaheim B/250 (corporate use), Northrop Anaheim Heliport (CN22) (corporate use), and North Net Fire Training Center (fire department use).

##### *Joint Forces Training Base, Los Alamitos*

The Joint Forces Training Base (JFTB), Los Alamitos, houses units of the California National Guard and Army Reserve. This base is located outside of the City limits, approximately one mile to the southwest. However, JFTB's Airport Land Use Plan extends into the City's corporate boundary. In addition, the base houses the Southern California Governor's Office of Emergency Services. The base contains two runways, ten taxiways and approximately 1,000,000 square feet of ramp space. The runways measure 8,000 and 5,900 feet in length and, along with an inactive north-south runway, comprise the primary operations area for transport of crews, supplies, equipment, and medical operations during emergency operations. JFTB is the only remaining military airfield in the Los Angeles and Orange County region.

Each year, JFTB supports 14,000 air-lifters, jets and other types of fixed wing aircraft flights and handles 4,800 radar helicopter approaches. Flight services include a Federal Aviation Administration (FAA) control tower, all-weather flight operations, fueling maintenance, crew briefing areas, weather information, flight safety, security and 24-hour crash rescue. The base serves an alternate site in the event of an emergency at Los Angeles International Airport.

# 2004 Approved Project Generalized Geologic Map



**Notes:**

- 1) The information presented on this map is primarily intended for planning purposes and should not be construed as definitive data for a specific site. The information presented is a collection of readily available data at the time of completion. Since much of the information was transferred from maps of differing scales and datums, the accuracy cannot be confirmed. All boundaries and fault locations should be considered approximate.
- 2) Date of compilation August 2001. By Ninyo & Moore.
- 3) Landslide areas depicted on this map are based on published geologic literature, aerial photograph review, and field reconnaissance of selected localities. In areas of existing development, landslides may have been removed, buried, stabilized, or otherwise altered.

**References:**

Geologic data compiled from various sources including: "Geologic Map of Orange County, California, Showing Mines and Mineral Deposits", CDMG Bulletin 204 (Morton, Miller, and Tan, 1981), "Geology of the Northern Santa Ana Mountains," USGS Professional Paper 420-D (Shoellhammer, Vedder, Yerkes, and Kinney, 1981).

- Faults - Active and Potentially Active**
- Approximate Fault Location
  - ▲-▲- Approximate location of thrust fault, barbs indicate direction of dip
  - ..... Concealed Fault
  - ▨ Alquist-Priolo Earthquake Fault Zone

- Geologic Units**
- Landslide - Known, possible, or conjectured
  - Alluvium
  - Terrace Deposits
  - Tertiary Age Sedimentary Deposits
  - Cretaceous/Jurassic Age Deposits
  - City Boundary
  - Sphere-of-Influence



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### *Fullerton Municipal Airport*

Fullerton Municipal Airport is a general aviation airport. The airport is located on the western edge of the City of Fullerton and borders on the City of Buena Park, approximately two miles north of Anaheim. It is bound by existing development on all sides, thus restricting the potential expansion of the airport. The field encompasses approximately 86 acres of land and includes one runway, several taxiways and large areas of paved aprons. The airport only serves general aviation aircraft capable of operating on a runway of less than 3,000 feet in length and having a strength capacity of 9,000 pounds (aircraft weight). Although this airport is located outside of the City limits, its Airport Land Use Plan extends into the City's corporate boundary.

Each year the airport handles about 175,000 aircraft take-offs and landings. The normal flight pattern includes an area approximately one mile north and parallel to the runway. Under moderate weekend conditions it would extend about 2.5 miles east of the airport, and on busier days the area is extended about three miles east of the airport. The airport currently provides approximately 600 based aircraft spaces and about 35 spaces for visiting aircraft, general aviation jet aircraft, and helicopters based at the airfield.

Airport operations are expected to remain at current levels, with minor variations in effect depending on weather conditions. Although internal improvements are planned, these are not expected to increase overall operations. There are no plans to expand visitor parking spaces or the airport itself.

### *Other Nearby Airports*

John Wayne Airport and Long Beach Airport are located approximately 20 miles from the City. The John Wayne Airport is home base for approximately 575 general aviation aircraft. General aviation activity accounts for approximately 80 percent of the total number of operations (takeoffs and landings). John Wayne Airport's general aviation facilities serve small private aircraft, corporate aircraft, and fixed base operations that provide fuel services, aircraft maintenance, flying lessons and other services.

Owned and operated by the City of Long Beach, the Long Beach Airport is situated halfway between the major business and tourism areas of both Orange and Los Angeles Counties. Long Beach Airport covers 1,166 acres and has five runways, the longest being 10,000 feet. It is a hub of corporate activity as well as being one of the world's busiest airports in terms of general aviation activity. Scheduled airlines also provide passenger and cargo service.

These airports have flight paths that fly over parts of the City. Whether the flights are in transit to another location, or are in approach for landing, they have the potential to create a hazard within the City should an accident occur.

### *Fire Hazards*

Fire hazards threaten lives, property, and natural resources, and impact vegetation and wildlife habitats.

The Hill and Canyon Area can be divided into two sections, developed and undeveloped, with each section maintaining its own fire hazard classification. The developed areas are generally classified as a "Special Protection Area" by the City of Anaheim Fire Department; the undeveloped areas are classified as a "Very High Fire Hazard Severity Zone." The majority of the areas designated as a "Very High Fire Hazard Severity Zone" are located east of SR-241.



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The current structural fire risk (the risk of a fire occurring within a structure) in the Hill and Canyon Area (developed portion) is estimated to be a low probability/moderate consequence event. Relatively few fires occur in well-maintained, upscale communities with mostly owner occupied homes having relatively few occupants compared to the size of the structure. When a fire does occur, it is usually confined to one room and does not spread beyond the structure of origin. A structure fire occurs approximately every five days.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that hazards and hazardous materials impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Hydrology and Water Quality

The City lies within Region 8 (Santa Ana) of the California Regional Water Quality Control Board (RWQCB) jurisdiction. Region 8 covers approximately 2,800 square miles and includes portions of Orange, San Bernardino, and Riverside Counties. The State Water Resources Control Board (the State Water Board) was created by the Legislature in 1967. The mission of the Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables the Water Board to provide comprehensive protection for California's waters.

The Santa Ana River is the main surface watercourse within the City. The Santa Ana River is the largest river within Region 8, at approximately 75 miles in length, and provides roughly 70 percent of the total groundwater recharge for the Santa Ana River basin. Water flow within the river is regulated by the Prado Dam, Seven Oaks Dam, and other flood-control facilities in the River and tributary area.

The Santa Ana River is also Orange County's main river system. The portion of the system within the City includes the area from just west of Imperial Highway to Ball Road. The river's unlined channel bottom along this stretch consists of permeable sandy material and is directly connected to previous alluvial materials that allow for the transfer of water into the underlying aquifers.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that hydrology and water quality impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Mineral Resources

Sand and gravel deposits in the City are a result of the Santa Ana River, which carries alluvial material derived from a large drainage basin that encompasses parts of the San Gabriel and San Bernardino Mountains. Much of the material has been funneled through Santa Ana Canyon and deposited in the Orange County Basin. Prado Dam now prevents alluvium from being transported through the Santa Ana Canyon. The coarser alluvial material that lies in Santa Ana Canyon and within a few miles of its mouth forms a sand and gravel deposit of economic significance.

According to the Mineral Resources and Mineral Hazards Mapping Program, parts of East Anaheim, The Canyon, and the Hill and Canyon Area are identified as being within a Mineral Resource Zone, Class 2 (MRZ-2). In addition, the City has three sites identified as containing mineral resources of regional significance within the Santa Ana River/Santiago Creek/Arroyo Trabuco/San Juan Creek/Temescal Valley areas of the Orange County-Temescal Valley Region, Orange, Riverside, and San Bernardino Counties.

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The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that mineral resources impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Noise

Like all highly urbanized areas, the City is subject to noise from a myriad of sources. The major source of noise is from mobile sources and most specifically, traffic traveling through the City on its various roadways and freeways. Aircraft also contribute to this noise. The City is not located within the 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) contours for any commercial or private airports, and fixed-wing aircraft are typically too high to add measurably to local noise. However, local helicopter air traffic is commonplace throughout the City and was noted in many instances during the field survey performed in drafting the General Plan Noise Element. In addition, both freight and commuter rail-traffic pass through the City and noise generated along these rail lines can be substantially higher than in areas that are located away from the tracks. Noise from trains and their associated horns and whistles are a particular concern to those residents that live along these railroad corridors.

The City also includes a variety of stationary noise sources. These are primarily associated with industrial land uses and for the most part are restricted to the appropriate areas. However, in some areas (e.g., along Orangethorpe Avenue and in central portions of the City) residential land uses abut industrial land uses and the sound of industrial processes is readily audible at exterior residential locations. Other sources of “stationary” noise are associated with the fireworks displays put on at Disneyland on a regular basis and special events at Angels Stadium. While the latter sources of noise are readily audible at proximate residential locations, they represent the existing setting. Furthermore, this noise is of short duration and as such, does not add substantially to the existing CNEL, which is based on a 24-hour, time-weighted average.

A discussion of existing noise conditions in the City and an analysis of the Proposed Project’s impacts on noise in the local environment as compared to the 2004 Approved Project are included in Section 5.3, *Noise* of this DSEIR.

### Population and Housing

The Proposed Project involves the rezoning of Housing Opportunity Sites to be consistent with the land use designations identified for these sites in the 2004 Approved Project. The Buildout Statistical Summary for the 2004 Approved Project is shown in Table 4-1. The 2004 Approved Project provided additional housing opportunities within The Platinum Triangle and The Colony and Downtown Areas, which are high employment and activity centers. From a regional perspective, Orange County and the City have exhibited similar historic growth trends, with both County and City housing growth lagging population and employment growth. The 2004 Approved Project provided opportunities for more housing units to be developed within one of the State's largest employment concentrations. The close proximity of the future housing units and employment opportunities responds directly to the City's jobs/housing balance policies.

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Table 4-1  
Buildout Statistical Summary

	<i>SCAG 2035 Projections</i>	<i>2004 Approved Project</i>
Dwelling Units	124,700	126,570
Population	405,800	398,745
Employment	224,200	260,335
Jobs to Housing Ratio	1.80	2.06

Source: SCAG 2012 RTP/SCS, City of Anaheim, 2012

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that the population and housing impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Public Services and Utilities

The City is largely urbanized and is generally surrounded by other developed cities. All public services are currently available to serve existing residents and plans have been adopted to maintain adequate levels of service at buildout. Law enforcement is provided by the Anaheim Police Department. The Anaheim Police Department currently employs over 400 sworn officers and upwards of 170 civilian support staff. The Anaheim Fire Department operates 11 fire stations and employs a total of 278 safety and full-time personnel. The Anaheim City School District (ACSD), Anaheim Union High School District (AUHSD), Orange Unified School District (OUSD), Centralia School District, Magnolia School District, Savanna School District, Fullerton School District, Fullerton Joint Union School District, Placentia-Yorba Linda Unified School District, Garden Grove Unified School District, and Buena Park School District provide educational services to the City. Water, electrical and sewer service is also provided by the City. Potential impacts to public services and utilities related to the 2004 Approved Project were addressed in Section 5.11, *Police and Fire* and Section 5.13, *Public Services and Facilities* in the 2004 Certified EIR.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that the public services and utilities impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

### Transportation and Traffic

The primary circulation system in the City is the network of freeways and arterial highways and surface streets that serve the City. The network serves two distinct and equally important functions: mobility of persons and goods in and through the City, and access to adjacent areas. The design and operation of each street or arterial highway depends upon its designated role in the safe delivery of each of these functions. For example, the arterial highways are designed to carry large volumes of vehicles. Accordingly, they are designed for mobility, have more lanes, higher speed limits and fewer driveways. In contrast, residential street have fewer lanes, lower speed limits, and more driveways to provide access to fronting properties.

A classification system is used to identify each roadway in the City. The system provides a logical framework for the design and operation of the roadway system. Since some major thoroughfares in the City are part of a countywide arterial network, they must be coordinated with the Orange County Master Plan of Arterial Highways. The functional classification system allows residents and elected officials to identify preferred characteristics of each street. If characteristics of any street change from the functional classification, then actions can be taken to return the street to its originally intended use or change the designated classification in response to new development. The City also has an ordinance requiring the

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dedication of land and construction to complete the ultimate street right-of-way per the functional classification system.

A description of the existing traffic conditions and the Proposed Project's impacts on the traffic and circulation system as compared to the 2004 Approved Project is set forth in Section 5.4, *Transportation and Traffic*, of this DSEIR.

### Land Use and Planning

#### *City of Anaheim General Plan*

In May 2004, the Anaheim City Council adopted a comprehensive update of the City's General Plan and certified EIR No. 330 as the environmental documentation for the 2004 Approved Project. The General Plan is a document that represents the City's view of its future and is a blueprint for a city's growth and development. The City Council and the Planning Commission use the General Plan to help guide their land use decisions. The General Plan is divided into various topical sections, or Elements, that address a wide range of subjects and provide goals and policies that will guide future development in the City. There are no land use, goal or policy changes to the General Plan being made as part of the Proposed Project. Please refer to Section 3.3.1, *Project Background*, for a complete description of the City's adopted General Plan.

The Initial Study included as Appendix A of this DSEIR discusses why it was concluded that the land use and planning impacts of the Proposed Project did not need to be analyzed in detail in this DSEIR.

#### 4.6 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when a project's incremental effect is cumulatively considerable. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as that necessary for the proposed project alone. Section 15355 of the CEQA Guidelines defines cumulative impacts to be "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of the proposed project when added to effects of past projects, other current projects and probable future projects in the vicinity.

Section 15130 (b)(1) of the CEQA Guidelines states that the information utilized in an analysis of cumulative impacts should come from one of two methods, either:

- A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or
- B. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analysis contained in this DSEIR uses method B, as described above. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this DSEIR analyzes the environmental impacts of development in accordance with the City's adopted General Plan and associated Land Use Plan. As a result, this DSEIR addresses the cumulative impacts of development within the City and the larger

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Orange County region surrounding it, as appropriate. In most cases, the potential for cumulative impacts is contiguous with the City boundary, since the City is the service provider for various City services and public utilities. Potential cumulative impacts related to traffic, air quality, noise, and greenhouse gas emissions, which have the potential for impacts beyond the City boundary, have been addressed through use of a traffic model. The City utilizes a traffic model for purposes of forecasting cumulative growth within the City and regionally. Regional growth outside of the City has accounted for traffic, air quality, noise, and greenhouse gas impacts through use of this model, which is a socioeconomic traffic model that uses regional growth projections to calculate future traffic volumes. The growth projections adopted by the City and surrounding area are used for the cumulative impact analyses of this DSEIR. Please refer to Chapter 5, *Environmental Analysis*, of this DSEIR for a discussion of the cumulative impacts associated with development and growth within the City and region.