Appendix N
Technical Memorandum
Applicable Regulations

Prepared by

1.0 APPLICABLE REGULATIONS

1.1 LAND USE AND PLANNING

1.1.1 Federal Policies and Regulations

Federal Emergency Management Agency

Flood zones are geographical areas that FEMA has defined according to varying levels of flood risk, and are shown on FIRM. High risk flood zones, labeled as Special Flood Hazard Area (SFHA) on FIRM, are areas subject to inundation by a 100-year flood event. The NFIP and participating communities require that development within floodplains does not exacerbate flooding in adjacent areas. A floodway and the adjacent land areas must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation. The participating communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations.

1.1.2 Local Policies and Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional governing body for the south coast region, which includes the counties of Orange, Los Angeles, Ventura, San Bernardino, Riverside, and Imperial. Regional associations of governments were created by the State to guide land use decisions that overlap multiple local jurisdictions by creating joint powers of agreement between these localities, and to provide policy guidance to the region. SCAG serves as southern California's forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG's responsibilities under federal law as a Metropolitan Planning Organization (MPO) include developing and adopting a long-range Regional Transportation Plan (RTP) every four years. The RTP serves as a basis for transportation decision making in the region. The RTP includes projections for overall growth and economic trends in the SCAG region to provide strategic direction for transportation investments during the applicable time period. The RTP involves the preparation of long-range transportation plans and development and adoption of transportation improvement programs that allocate State and Federal funds for highway, transit, and other surface transportation projects.

SCAG is also responsible for developing and approving a short-term component of the long-range RTP, known as the Regional Transportation Improvement Program (RTIP). The RTIP is updated every two years and is a plan which determines and prioritizes how much federal funding state and local agencies in the region receive in a five-year time span.

In developing the RTP and RTIP, SCAG is responsible for ensuring that the collection of projects included in these transportation plans helps the region maintain conformity to federal air quality standards as required by the federal Clean Air Act (CAA).

Under state law, SCAG as a Council of Governments (COG) is responsible for the development of a portion of the Air Quality Management Plan (AQMP) prepared by the South Coast Air Quality Management District (SCAQMD). SCAG is responsible for developing the demographic projections and the integrated land use, housing employment, transportation measures, and strategies portions of the AQMP every three years.

State law requires that SCAG develop a Regional Housing Needs Assessment (RHNA). The RHNA is generally developed every five years and is the starting point for the local Housing Element update process. SCAG determines each jurisdiction's fair share of the region's future housing needs, as determined by the State Department of Housing and Community Development (SCAG, 2008).

Pursuant to CEQA, SCAG undertakes the appropriate environmental review for the RTP and RTIP. In most cases, this involves the preparation of Program EIR and amendments thereto. In accordance with CEQA regulations and Presidential Executive Order 12372, SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of projects of regional significance for consistency with regional plans.

City of Anaheim General Plan

The City of Anaheim General Plan provides the overall vision and framework for future development of the City. The implementation of ARTIC upholds several citywide planning goals set forth to achieve the City's vision:

- Goal 3.1: Pursue land uses along major corridors that enhance the City's image and stimulate appropriate development at strategic locations;
- Goal 3.2: Maximize development opportunities along transportation routes;
- Goal 4.1: Promote development that integrates with and minimizes impacts to surrounding land uses;
- Goal 5.1: Create and enhance dynamic, identifiable places for the benefit of the City's residents, employees, and visitors;
- Goal 6.1: Enhance the quality of life and economic vitality in the City through strategic infill development and revitalization of existing development; and,
- Goal 7.1: Address the job-housing relationship by developing housing near job centers and transportation facilities.

One additional goal included in the City of Anaheim General Plan addresses the continued detailed planning of the Platinum Triangle, the area of the City where ARTIC is located. It identifies specific goals of the Platinum Triangle, including the advancement of ARTIC:

- Goal 15.1: Establish the Platinum Triangle as a thriving economic center that provides residence, visitors, and employees with a variety of housing, employment, shopping, and entertainment opportunities that are accessed by arterial highways, transit centers, and pedestrian promenades.

Policies of Goal 15.1 include:

- Continue more detailed planning efforts to guide the future development of the Platinum Triangle

- Encourage a regional inter-modal transportation hub in proximity to Angel Stadium.

- Encourage mixed-use projects integrating retail, office, and higher density residential land uses.

- Maximize views and recreational and development opportunities afforded by the area's proximity to the Santa Ana River.

The City of Anaheim General Plan also details specific land use designations for the City which include residential, commercial, office, mixed-use, industrial, institutional, schools, open space, parks, water and railroads. These land use designations are implemented through various implementing zones through Title 18 (Zoning Code) of the Anaheim Municipal Code. The Zoning Code is intended to promote growth of the City in an orderly manner, and to promote and protect the public health, safety, peace, comfort and general welfare in conformance with the General Plan.

The project site for ARTIC is designated by the General Plan for mixed use, west of SR-57 and institutional use, east of SR-57. Land designated as institutional is typically implemented by the SP (Semi-Public) Zone and includes uses such as transportation centers, government buildings, hospitals, libraries, and other similar facilities. Areas designated by the General Plan as mixed use are designed to function differently from typical patterns of individual segregated land uses. Uses and activities are designed together in an integrated fashion to create a dynamic urban environment that serves as the center of activity for the surrounding area. Mixed use areas encourage the use of transit services and other forms of transportation, including pedestrian and bicycle travel. The General Plan's mixed use land use designation is implemented within the Platinum Triangle by the Platinum Triangle Mixed Use (PTMU) Overlay Zone. The PTMU Overlay Zone provides an additional layer of opportunity for property owners in addition to property's underlying or base zone. The portion of the project site within the PTMU Overlay Zone is also within the PR (Public Recreational) Zone. The City's mixed use designation, as implemented by the PTMU Overlay Zone, allows property owners the flexibility to choose their path of development through either the existing zoning (i.e., for ARTIC, west of SR-57, the PR Zone), or through the PTMU Overlay Zone.

ARTIC meets the intent of the General Plan land use designations for the project site and will expand accessibility public transportation and integrate other major activity centers in the area, which all help achieve the City's vision for the Platinum Triangle.

The Platinum Triangle Master Land Use Plan

The Platinum Triangle is an 820-acre area located at the confluence of the I-5 and SR-57 freeways within the City of Anaheim, which generally surrounds and includes Angel Stadium, the Honda Center, and The Grove of Anaheim. Planning principles of the Platinum Triangle Master Land Use Plan vision include:

- Balance and integrate uses;
- Stimulate market driven development;
- Create a unique, integrated, walkable urban environment;
- Develop an overall urban design frame work;
- Reinforce transit oriented development opportunities;
- Maintain and enhance connectivity;
- Create great neighborhoods; and,
- Provide for installation and maintenance of public improvements.

The Platinum Triangle Master Land Use Plan encourages new development within the Platinum Triangle while providing the planning principles and details to carry out the City of Anaheim General Plan's vision for this area. The mixed use areas of the Platinum Triangle are divided into five mixed use districts: the Arena District, the Katella District, the Stadium District, the Gene Autry District, and the Gateway District. The majority of ARTIC is located northeast of the Stadium District, with the southern portion of the site extending into it. The portion of ARTIC that includes the Stadium Pavilion is considered part of the Stadium District under the Platinum Triangle Master Land Use Plan and PTMU Overlay Zone.

Development principles of the Stadium District include:

- Creating a sustainable balance between everyday land use/services and more intermittent special events activity;
- Separate major event circulation and parking from existing and future rail and bus facilities, office, retail, and residential uses;
- Provide an internal, pedestrian-scale, "promenade" street that allows walkable access to the transit stations and links the transit oriented development to the adjacent districts;
- Balance regional transit access and mixed use place-making to allow the maximum number of workers and residents to be within a five minute walking distance from the stations;

- Provide attractive urban streets lined with active ground floor uses and a scale of street width and building placement that creates security, a comfortable human scale and energizes ground floor retail and entertainment uses; and,

- Encourage a full compliment of uses, including corporate office, for sale residential, rental residential, local professional office, local support retail and community service to create activity 365 days a year.

The Platinum Triangle Master Land Use Plan includes a Landscape Concept Plan and cross sections for certain streets within the Platinum Triangle, including along both Katella Avenue and Douglass Road and setback areas adjacent to the Amtrak-Metrolink ROW.

Orange County Flood Control District

The Orange County Flood Control Act of 1927 created the OCFCD to provide for the control and conservation of flood and stormwaters, and to protect property and lives from flood damage. OCFCD works cooperatively with cities to reduce the potential for flooding within the County of Orange by constructing flood control facilities that provide 100-year flood event protection.

Orange County Department of Public Works Flood Control Division

The mission of the Orange County Department of Public Works (OCPW) Flood Control Division is to "protect Orange County areas from the threat and damage of flooding." ARTIC is bounded on its eastern border by the Santa Ana River, which is considered a potential flood hazard. The Santa Ana River Mainstem project is a project designed and implemented to provide flood protection for residences and business in the southern California communities of Orange, Riverside, and San Bernardino counties. All three counties coordinated with the USACE to design and construct the project. The section of the Santa Ana River that borders ARTIC is channelized. The channel levees serve to assist in the protection of the surrounding areas from flooding (OCPW Flood Control Division, 2010).

U.S. Army Corps of Engineers Santa Ana River Mainstem Project

The USACE's Santa Ana River Mainstem project is a project designed and implemented to provide flood protection for residences and business in the Southern California communities of Orange, Riverside, and San Bernardino counties. The USACE was consulted by all three counties to provide comments regarding project design and construction to ensure the flood control measures and structures are not impacted.

1.2 AIR QUALITY

1.2.1 Federal Policies and Regulations

Clean Air Act

The CAA, enacted in 1970 and its subsequent amendments establishes the framework for modern air pollution control. The CAA directs the United States Environmental Protection Agency (USEPA) to establish ambient air standards for six pollutants: O3, CO, Pb, NO2, PM2.5 and PM10, and SO2. The standards are divided into primary and secondary standards. The primary standards are set to protect human health and the secondary standards are set to protect environmental values, such as plant and animal life.

The CAA requires states to submit a State Implementation Plan (SIP) for areas designated as nonattainment for federal air quality standards. The SIP is reviewed and approved by USEPA and must demonstrate how the federal standards will be achieved. Failure to submit a plan or secure approval could lead to denial of federal funding and permits.

New Source Performance Standards (NSPS) refer to technology-based standards that were developed for specific categories of stationary sources. These standards found in 40 Code of Federal Regulations (CFR) Part 60 are intended to promote use of the best air pollution control technologies by comparing available technologies based on cost of incremental pollution reduction and any other non-air quality, health, and environmental impact and energy requirements.

Transportation Conformity

The concept of transportation conformity was introduced in the 1977 amendments to the CAA, which includes a provision to ensure that transportation investments conform to the SIP in meeting the NAAQS. USEPA published a set of the Transportation Conformity Rule Amendments, amending the August 1997 regulations, in Federal Register Volume 69 No. 26 on July 1, 2004. The new amendments supplement the NAAQS by providing regulations for the 8-hour O3 and PM2.5. A March 2006 ruling establishes revised criteria for determining which transportation projects must be analyzed for local particle emissions impacts in PM2.5 and PM10 nonattainment and maintenance areas.

1.2.2 State Policies and Regulations

California Clean Air Act

The provisions contained in the California CAA are more stringent than the federal standards. The CAAQS are enforced by the California Air Resources Board (CARB) and local air pollution control districts. State standards are to be achieved through district-level air quality management plans that are incorporated into the SIP. The California CAA requires local and regional air pollution control districts that are not attaining one or more of the CAAQS, to expeditiously adopt plans specifically designed to attain these standards. Each plan must be designed to achieve an

annual five percent reduction in district-wide emissions of each non-attainment pollutant or its precursors.

Amendments to the California CAA impose additional requirements designed to ensure an improvement in air quality within the next five years. Local districts with moderate air pollution that did not achieve "transitional nonattainment" status by December 31, 1997 must implement the more stringent measures applicable to districts with serious air pollution.

Existing air quality conditions in ARTIC can be characterized in terms of the ambient air quality standards that California and the federal government have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values, such as protection of crops, protection of materials, or avoidance of nuisance conditions. Table 1.1-1 shows the 2010 national and California standards for relevant air pollutants.

Assembly Bill 2588 (1987)

Assembly Bill (AB) 2588, the Air Toxics "Hot Spots" Information and Assessment Act, requires stationary sources of air pollutants to periodically report the type and quantities of specified Toxic Air Contaminants (TACs) that are routinely or intermittently released. TACs, such as diesel particulate matter are air pollutants that are or may become harmful to human health or the environment.

The only device at ARTIC that will potentially be subject to AB 2588 is the emergency diesel generator. Since emissions from the emergency generator are below the applicable AB 2588 threshold of 10 tons per year, ARTIC will not be subject to AB 2588 requirements.

Table 1.1-1
National and California Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS [1] (ug/m^3)	NAAQS [2] (ug/m^3)	Most Stringent Standard (ug/m^3)
O_3	1-hour	90 ppb (180 ug/ m^3)	No separate standard	90 ppb
	8-hour	70 ppb (137 ug/ m^3)	75 ppb (147 ug/m^3)	70 ppb
PM_{10}	24-hour	50	150	50
	Annual	20	No separate standard	20
$PM_{2.5}$	24-hour	No separate standard	35	35
	Annual	12	15	12
CO	1-hour	23,000	35 ppm (40,000 ug/m^3)	23,000
	8-hour	10,000	9 ppm (10,000 ug/m^3)	10,000
NO_2	1-hour	339	0.100 ppm [3] (189 ug/m^3)	189
	Annual	57	0.053 ppm (100 ug/m^3)	57

Pollutant	Averaging Time	CAAQS [1] (ug/m^3)	NAAQS [2] (ug/m^3)	Most Stringent Standard (ug/m^3)
SO_2	1-hour	655	No separate standard	655
	3-hour	No separate standard	1,300	1,300
	24-hour	105	365	105
	Annual	No separate standard	80	80
Pb	30-day	1.5	No separate standard	1.5
	Quarterly	No separate standard	1.5	1.5
Sulfates	24-hour	25	No separate standard	25
Visibility Reducing Particulate	8-hour b_{ext}	<0.23 km^{-1}	No separate standard	<0.23 km^{-1}
Hydrogen sulfide	1-hour	42	No separate standard	42
Vinyl chloride	24-hour	26	No separate standard	26

Notes:

1. California standards for O_3, CO (except Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the CCR.
2. National standards (other than O_3, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the USEPA for further clarification and current federal policies.
3. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

ppb = parts per billion
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter
km = kilometer
Source: CARB, March 2010

California Air Resources Board

CARB identified diesel exhaust particulate as a TAC and approved a "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" in 2000. The goal of this Plan is to reduce diesel particulate matter emissions and the associated health risk by 75 percent by 2010 and 85 percent by 2020.

CARB has promulgated several regulations with the objective of reducing diesel particulate matter and other criteria pollutants from diesel equipment and commercial vehicles. Much of the equipment that will be used during the construction phase of ARTIC is diesel powered and will be governed by the Off-Road Diesel or the On-Road Heavy-Duty Diesel Vehicle regulations. Per these regulations, the equipment owner is responsible for managing this equipment such that emissions meet specified fleet averages required by CARB.

Regional Transportation Improvement Program

SCAG, as the MPO for southern California, is mandated to comply with federal and state transportation and air quality regulations. SCAG is a six-county region (Imperial, Los Angeles,

Orange, Riverside, San Bernardino, and Ventura) that contains four air basins that are administered by five air districts. ARTIC is included in SCAG's RTIP and its emissions have been accounted for in the regional emissions burden for the region.

Air Quality Management Planning

The AQMP was prepared by the SCAQMD Governing Board, CARB, SCAG, and the USEPA. The most recent adopted comprehensive plan is the 2007 AQMP. The 2007 AQMP proposes attainment demonstration of the federal PM2.5 standards through a more focused control of SOx, directly emitted PM2.5, and focused control of Nitrogen Oxides (NOX) and Volatile Organic Compounds (VOC) by 2015. The eight-hour O3 control strategy builds upon the PM2.5 strategy, augmented with additional NOX and VOC reductions to meet the standard by 2024, assuming an extended attainment date is obtained.

1.2.3 Local Policies and Regulations

New Source Review

The purpose of New Source Review is to prevent operational emissions from new, modified or relocated facilities from causing an exceedance in the region's attainment of the NAAQS. In SCAQMD, Regulation XIII, which implements New Source Review, governs projects that result in an emissions increase of any nonattainment air pollutant associated with a stationary source of emissions. If certain thresholds are exceeded, projects may be required to mitigate emissions using controls or obtain emission offsets.

For ARTIC, relocation of the station to a new location within the air district will primarily result in increases to air emissions associated with mobile sources, including ground and mass transit as well as passenger vehicle traffic to and from the facility. The only permitted source of emissions expected will be a 1,000 kW emergency backup generator with an USEPA Certified Tier 4 engine, whose planned operation typically will be one hour per month for maintenance and testing purposes.

City of Anaheim General Plan

The Green Element within the City of Anaheim General Plan combines all of the City's open space, conservation, recreation, and landscaping resources into one comprehensive, integrated document. The primary objectives 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 to expand accessible open space and recreation opportunities.

Conserving natural resources, including quality of air, is a key component of the Green Element. Goal 8.1 specifically aims at reducing locally generated emissions through improved traffic flows and construction management practices. Policy 1 and Policy 2 call for reducing vehicle emissions, regulating construction practices to minimize dust and particulate matter pollution.

Goal 11.1 encourages land planning and urban design that support alternatives to the private automobile, including transit-oriented development.

City of Anaheim Resolution 2006-187

Resolution 2006-187 (approved August 8, 2006) of the City Council authorizes and directs the City of Anaheim Public Utilities Department (PUD) to establish the Green Connection, a program that accommodates the principles of environmental soundness and sustainability. Resolution 2006-187 sets out a series of goals, including encouraging developers and builders in the City to receive LEED™ registration and certification, reaching a 20 percent reduction in energy use and a 15 percent reduction in water use by 2015, and replacing 10 percent of the City's light, non-emergency vehicles with low emission technologies.

1.3 NOISE

1.3.1 Federal Policies and Regulations

Noise Control Act of 1972 and Quiet Communities Act of 1978

The Noise Control Act of 1972 (42 U.S. Code [USC]) and the Quiet Communities Act of 1978 (42 USC 4913) were established by the USEPA to set performance standards for noise emissions from major sources, including transit sources. Though these acts are still in effect, their enforcement shifted to state and local governments in 1981.

Federal Railroad Administration

The FRA adopted the USEPA railroad noise standards as its noise regulations (49 CFR 11, part 210) for purposes of enforcement. These standards provide specific noise limits for stationary and moving locomotives, moving railroad cars, and associated railroad operations. These noise sources are evaluated using an A-weighted sound level at a specified measurement location.

Federal Transit Administration

The FTA provides capital assistance for a wide range of mass transit projects from new rail rapid transit systems to bus maintenance facilities and vehicle purchases. FTA's environmental impact regulations classify the most common projects according to the different levels of environmental analysis required, ranging from an EIS to little or no environmental documentation (categorical exclusion). FTA's environmental impact regulations are codified in Title 23, CFR, Part 771.

1.3.2 State Policies and Regulations

California Noise Control Act of 1973

The California Noise Control Act of 1973 (§46000 et seq.) was enacted to "establish and maintain a program on noise control." This act mirrors the federal Noise Control Act of 1972 and also delegates the enforcement of noise emission standards to local county and city agencies.

California Government Code Section 65302 (f)

California Government Code Section 65302 (f) states that general plans must include a noise element section which identifies and appraises noise problems in the community, and recognizes the guidelines established by the Office of Noise Control. The adopted noise element should serve as a guideline for compliance with the state's noise standards. The Office of Noise Control has prepared a land use compatibility chart for community noise (refer to Appendix D for the complete chart). It identifies normally acceptable, conditionally acceptable, and clearly unacceptable noise levels for various land uses. For example, the conditionally acceptable noise exposure level for sports arenas is 75 dBA. The normally acceptable noise exposure level for office buildings is 70 dBA and the normally acceptable noise exposure level for industrial and manufacturing land uses is 75 dBA.

1.3.3 Local Policies and Regulations

City of Anaheim General Plan

The intent of the Noise Element within the City of Anaheim General Plan is to set goals that limit and reduce the effects of noise intrusion and to set acceptable noise levels for varying types of land uses. The Noise Element indicates that exterior noise levels at residential locations should not exceed a CNEL of 65 dBA while interior levels shall not exceed a CNEL of 45 dBA in any habitable room. The City has adopted the California noise exterior and interior noise standards (refer to Appendix D for the complete table). For example, the conditionally acceptable noise exposure level for sports arenas is 75 dBA and the normally acceptable noise exposure level for office buildings is 70 dBA.

The Noise Element also contains goals and policies to guide land use planning and design, and govern transportation related and non-transportation related noise sources. Protecting sensitive land uses from excessive noise through planning and regulations (Goal 1.1), encouraging the reduction of noise from transportation-related noise sources (Goal 2.1), and prohibiting new industrial uses from exceeding commercial or residential stationary-source noise standards at the most proximate land uses (Policy 1 of Goal 3.1).

Anaheim Municipal Code

Stationary noise sources are governed by Chapter 6.70, Sound Pressure Levels, of the Anaheim Municipal Code. Section 6.70.010 states that "No person shall, within the City, create any sound, radiated for extended periods from any premises which produces a sound pressure level at any point on the property in excess of 60 dB (Re 0.0002 Microbar) read on the A-scale of a sound level meter. Readings shall be taken in accordance with the instrument manufacturer's instructions, using the slowest meter response."

The City restricts noise intensive construction activities to the hours specified under Chapter 6.70 of the Anaheim Municipal Code to minimize disturbance by construction noise (i.e., weekdays and Saturdays from 7 AM to 7 PM). These hours also apply to any servicing of equipment and to the delivery of materials to or from the site. Construction is not be allowed any time on Sundays

or federally recognized holidays. Chapter 6.70 allows the Director of Public Works or the Building Official to permit additional work hours if deemed necessary.

City of Orange General Plan

The Noise Element within the City of Orange General Plan lists maximum allowable noise exposure levels for a variety of land uses. In general, the exterior maximum allowable noise level is 65 dBA. The Noise Element states that an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following: (a) Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater; or (b) Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

1.4 TRANSPORTATION AND TRAFFIC

1.4.1 Southern California Area Governments

SCAG is the regional governing body for the south coast region, which includes the counties of Orange, Los Angeles, Ventura, San Bernardino, Riverside, and Imperial. Regional associations of governments were created by the state to guide land use decisions that overlap multiple local jurisdictions and to provide policy guidance to the region. The SCAG serves as southern California's forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG's responsibilities under federal law as a MPO include developing and adopting a long range RTP every four years. The RTP serves as a basis for transportation decision making in the region and involves the preparation of long range transportation plans and development. The RTP also provides for the adoption of transportation improvement programs that allocate state and federal funds for highway, transit, and other surface transportation projects. The RTP includes ARTIC as part of its guide to provide strategic direction and transportation investments during the applicable time period.

SCAG is responsible for developing and approving a short term component of the long range RTP, known as the RTIP. The RTIP is updated every two years and is used to determine and prioritize how much federal funding state and local agencies in the region receive in a five-year time span.

1.4.2 City of Anaheim General Plan

Goal 2.1 of the City of Anaheim General Plan Circulation Element is to maintain efficient traffic operations on city streets and a peak hour LOS not worse than D at street intersections. Goal 2.3 encourages improving regional access for City residents and workers by engaging in regional and inter-jurisdictional planning efforts, implementing state and regional growth management plans, and implementing public transportation services, including the development of ARTIC.

City of Orange General Plan

The Circulation and Mobility Plan within the City of Orange General Plan refers to the LOS levels discussed in the Orange County Management Program (City of Orange, 2010). The Circulation and Mobility Plan describes goals, policies, and implementation programs that seek to achieve a better balance between vehicular, pedestrian, and bicycle travel, and provides a wide range of viable transportation options to City of Orange residents. The specific issues discussed include: enhancing the local circulation system; maintaining the regional circulation system; maintaining a viable public transportation network; creating a comprehensive system of sidewalks, trails, and bikeways; providing adequate parking facilities; and improving circulation system aesthetics and safety.

1.5 AESTHETICS

1.5.1 Federal Policies and Regulations

National Scenic Byways Program

The Federal Highways Administration collaborated with several organizations to create a program for America's scenic highways, called the National Scenic Byways Program (USDOT, 2000). The US Secretary of Transportation identifies Caltrans as the California agency responsible for implementing the National Scenic Byways Program.

1.5.2 State Policies and Regulations

California Scenic Highways Program

In response to the National Scenic Byways Program, Caltrans established and implemented the California Scenic Highway Program to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment (Streets and Highways Code, §260 et seq).

Caltrans defines a State Scenic Highway as any freeway, highway, road, or other public ROW that "traverses an area of outstanding scenic quality, containing striking views, flora, geology, and other unique natural attributes" (Caltrans, 2009).

Caltrans also includes "scenic corridors" in the State Scenic Highway Program: "Scenic corridors consist of land that is visible from, adjacent to, and outside the highway ROW, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries" (Caltrans, 2009).

Once a highway has been designated a state or national scenic highway, or a scenic corridor, special consideration must be made whenever a project proposes to develop the surrounding area.

1.5.3 Local Policies and Regulations

City of Anaheim General Plan

Goal 8.1 in the Land Use Element of the City of Anaheim General Plan seeks to preserve natural, scenic, and recreational uses, while Goal 2.1, Goal 4.1, and the associated policies in the Green Element seek to preserve views of ridgelines, natural open space, and other scenic vistas (City of Anaheim, 2009). The Santa Ana River Trail, though not within City limits, is identified as open space in the City of Anaheim General Plan.

The Circulation Element defines Scenic Highways as "transportation corridors where visual intrusions will impact views of natural beauty from the highway" (City of Anaheim, 2009). Goal 4.1 specifically preserves uniquely scenic or special visual resource areas along highways and designated State scenic routes.

The Platinum Triangle Master Land Use Plan includes specific landscaping requirements that for certain areas of the Platinum Triangle, including along both Katella Avenue and Douglass Road.

City of Orange General Plan

Goal 5.0 in the City of Orange General Plan Open Space Element states that the City will protect, preserve, and enhance open space and aesthetic resources, including scenic highways and corridors (City of Orange, 2010). Trails are identified as open space land uses. The Land Use and Circulation Element also encourage the protection and enhancement of scenic vistas.

1.6 CULTURAL RESOURCES AND SECTION 106 COMPLIANCE

1.6.1 Federal Policies and Regulations

Antiquities Act of 1906

The Antiquities Act of 1906 (16 USC 431-433) was one of the first federal regulations to address the preservation of cultural resources. The Antiquities Act of 1906 prohibits the destruction of "any historic or prehistoric ruin or monument, or any object of antiquity" on Federal lands. Although neither the Antiquities Act nor its implementing regulations (43 CFR 3) specifically addresses paleontological resources, many federal agencies have interpreted "objects of antiquity" to include fossils.

National Natural Landmarks Program

The National Natural Landmarks (NNL) Program was established in 1962 under the authority of the Historic Sites Act of 1935, and is administered by the National Park Service. The goals of the NNL Program are:

- To encourage the preservation of sites illustrating the geological and ecological character of the US;

- To enhance the scientific and educational value of sites thus preserved; and

- To strengthen public appreciation of natural history, and to foster a greater concern for the conservation of the nation's natural heritage.

A National Natural Landmark is an area designated by the Secretary of the Interior as being of national significance to the US because it is an outstanding example(s) of major biological and geological features found within the boundaries of the US or its Territories or on the Outer Continental Shelf (36 CFR Part 62.2).

National significance describes an area that is one of the best examples of a biological community or geological feature within a natural region of the US, including terrestrial communities, landforms, geological features and processes, habitats of native plant and animal species, or fossil evidence of the development of life (36 CFR Part 62.2). All designated NNLs are listed on the National Registry of Natural Landmarks. Examples of paleontological NNLs in California include: Rancho La Brea in Los Angeles; Sharktooth Hill in Kern County; and Rainbow Basin in San Bernardino County.

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) states that cultural resources must be taken into consideration before construction can begin on any federally funded project. Section 106 uses the term "historic properties" to describe cultural resources.

An historic property is defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP), which is maintained by the Secretary of the Interior (16 USC 470).

National Register of Historic Places

The NRHP was established in 1966 as the official national listing of important cultural resources worthy of preservation. Authorized under the NHPA, NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate and protect significant cultural resources.

The criteria to determine the significance of a cultural resource is found in 36 CFR 60 of the NRHP.

"The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and:

- Criterion A: That are associated with events that have made a significant contribution to the broad patterns of our history; or

- Criterion B: That are associated with the lives of persons significant in our past; or

- Criterion C: 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

- Criterion D: That have yielded or may be likely to yield information important in prehistory or history."

1.6.2 State Policies and Regulations

California Environmental Quality Act

Under CEQA, cultural, paleontological, and geological resources are considered important components of the environment and should be preserved. Accordingly, CEQA requires that a proposed project first evaluate the significance of any cultural, paleontological, and geological resources located in the project area. If the project will have an impact on any significant resource, alternative plans or mitigation measures must be provided.

CEQA breaks down the meaning of cultural resources into two terms: "historical resources" and "archaeological resources."

The definition of a historical resource under CEQA is found in 14 CCR §15064.5. Historical resources are:

1. A resource listed in, or eligible for listing, in the California Register of Historical Resources (CRHR) (PRC §5024.1);

2. A resource included in a local register of historical resources, as defined in §5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements §5024.1(g);

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; and

4. A resource that is not listed, or eligible for listing, in the CRHR but that is deemed significant by the lead agency.

The definition of an archaeological resource includes any archaeological resources, not otherwise determined to be historical resources, that are "unique." A "unique" archaeological resource meets one of the following criteria (PRC §21083.2):

1. The resource contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;

2. The resource has a special and particular quality, such as being the oldest of its type or the best available example of its type; and

3. The resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

Under CEQA, a cultural resource shall be considered significant if the resource is 45 years old or older, possesses integrity of location, design, setting, materials, workmanship, feeling, and association, and meets the requirements for listing on the CRHR.

California Register of Historical Resources

The CRHR is the official state listing of important cultural resources that are worthy of preservation, and is maintained by the State Historic Preservation Office. Properties listed or eligible for listing on the NRHP are nominated and selected to be listed on the CRHR. Any resource eligible for the NRHP is also automatically eligible for CRHR (PRC §5020 *et seq*).

Similar to the NRHP, a cultural resource may be considered significant by CEQA if it meets the following criteria for listing on the CRHR (PRC § 5024.1):

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or

2. It is associated with the lives of persons important to California's past; or

3. It 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

4. Has yielded or may be likely to yield information important in prehistory or history.

California Health and Safety Code Quality Act

Human remains are sometimes associated with archaeological sites. According to CEQA, "archaeological sites known to contain human remains shall be treated in accordance with the provisions of the Health and Safety Code (§7050.5)." The protection of human remains is also ensured by California PRC §§ 5097.94, 5097.98, and 5097.97.

1.6.3 Local Policies and Regulations

City of Anaheim General Plan

There are no policies or goals within the City of Anaheim General Plan that call for the general protection of cultural or paleontological resources. However, according to the City of Anaheim General Plan Community Design Element, "The Big A" Scoreboard at Angel Stadium is considered an important landmark to the City (City of Anaheim, 2009). Additionally, Goal 14.1

and subsequent policies 1 through 7 promote the protection, preservation, and enhancement of the Anaheim Colony Historic District, an area in downtown Anaheim bounded by North Street, South Street, East Street, and West Street (approximately two miles northwest of ARTIC).

City of Orange General Plan

The City of Orange General Plan Historic Element includes three goals and implementation actions to protect historic resources within the City (2010). This element identifies areas within the City that are considered historically significant, encourages long term preservation of these neighborhoods, and promotes community awareness and education. Goal 6.0 in the Open Space Element calls for the preservation of archaeological and paleontological resources and requires developers to perform archaeological and paleontological surveys prior to grading (2010).

1.7 HAZARDS AND HAZARDOUS MATERIALS

1.7.1 Federal Policies and Regulations

Hazardous Materials Transportation Act of 1975

The Hazardous Materials Transportation Act is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, through air, or in pipelines. It includes provisions for material classification, packaging, marking, labeling, placecarding, and shipping documentation (49 USC 5101-5127).

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 as an amendment to the Solid Waste Disposal Act to address large volumes of municipal and industrial solid and hazardous waste being generated nationwide (42 USC 321). Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to RCRA created a national priority for waste minimization (40 CFR Parts 260-279). Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions (40 CFR Parts 239-258). Subtitle I requires monitoring and containment systems for Underground Storage Tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank (40 CFR Parts 280-282).

Toxic Substances Control Act of 1976

The Toxic Substances Control Act provides the USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from the Toxic Substances Control Act, including, among others, food, drugs, cosmetics and pesticides (15 USC §2601 et seq.).

Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The US Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) in 1980. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. Under CERCLA, the USEPA maintains a list, known as Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), of all contaminated sites in the nation that have to some extent or are currently undergoing clean-up activities. CERCLIS contains information on current hazardous waste sites, potential hazardous waste sites, and remedial activities. This includes sites that are on the National Priorities List (NPL) or being considered for the NPL. The Hazard Ranking System within the CERCLIS database is used to determine whether a site should be placed on the NPL for cleanup activities (42 USC 103).

Federal Hazard and Solid Waste Amendments

The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA. They specifically targeted waste minimization and phasing out land disposal of hazardous waste, and focused on corrective action for releases of hazardous waste. Other mandates included increased oversight and enforcement by the USEPA, more stringent hazardous waste management standards and practices, and a comprehensive underground storage tank program (Public Law 98-616, 98 Stat. 3221).

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) pertain primarily to emergency management of accidental releases. Passed by the US United States Congress in 1986, it requires formation of state and local emergency planning committees, which are responsible for collecting material handling and transportation data for use as a basis for planning. Chemical inventory data is made available to the community at large under the “right-to-know” provision of the law. In addition, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (42 USC 103).

Emergency Planning and Community Right-To-Know Act of 1986

The Emergency Planning & Community Right-to-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety in 1986, under Title III of SARA. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. To help EPCRA be put into action, Congress requires each state to appoint a State Emergency Response Commission. The State Emergency Response Commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. Fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers help make sure that all necessary elements of the planning process are represented (42 USC 116).

1.7.2 State Policies and Regulations

California Hazardous Waste Control Program

The Hazardous Waste Control Program (HWCP) is the primary hazardous waste statute in California. The HWCP implements RCRAs "cradle-to-grave" waste management system in California. HWCP specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. The HWCP exceeds federal requirements by mandating source reduction planning, and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates a number of types of wastes and waste management activities that are not covered by federal law with RCRA (Department of Toxic Substances Control [DTSC], 2009).

California Code of Regulations, Title 22, Division 4.5

Most state and federal regulations and requirements that apply to generators of hazardous waste are listed within Title 22 CCR Division 4.5. Title 22 contains the compliance requirements for hazardous waste generators, transporters, and treatment, storage, and disposal facilities. Because California is a fully authorized state according to RCRA, most RCRA regulations (those contained in 40 CFR 260 et seq.) have been duplicated and integrated into Title 22. The DTSC regulates hazardous waste more stringently than the USEPA. The integration of California and federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40 CFR 260. As with the California Health and Safety Code, Title 22 regulates a wider range of waste types and waste management activities than does the RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated Title 26 CCR 'Toxics'. California hazardous waste regulations are still commonly referred to as Title 22 (DTSC, 2009).

Aeronautics Law, State Aeronautics Act

The State Aeronautics Act created the requirement for an ALUC in each county and establishes statewide requirements for the conduct of airport land use compatibility planning. State statutes require that, once an ALUC has adopted or amended an airport land use compatibility plan, the county—where it has land use jurisdiction within the airport influence area—and any affected cities must update their General Plans and any applicable specific plans to be consistent with the ALUC's plan (California PUC, §21670). The California Airport Land Use Planning Handbook is published by the Caltrans Division of Aeronautics and its purpose is to support and amplify the State article (California PUC, §21670).

California PRC § 21081

The PRC § 21081.6 requires that public agencies adopt a reporting and monitoring program for the 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 code applies to both private and

public construction projects and is designed to ensure code compliance during project implementation and completion.

1.7.3 Local Policies and Regulations

City of Anaheim General Plan, Safety Element

The City has established goals and policies for safety items that should be considered when new development is designed. Specific policies have been adopted for urban and wildland fire hazards, hazardous materials and hazardous waste, and emergency preparedness.

Urban and Wildland Fire Hazards

Goal 2.1: Protect the lives and property of residents, business owners, and visitors from the hazards of urban and wildland fires.

Hazardous Materials and Hazardous Waste

Goal 4.1: Decrease the risk of exposure for life, property and the environment to hazardous materials and hazardous waste.

Emergency Preparedness

Goal 5.1: Minimize the risk to life and property through emergency preparedness and public awareness.

City of Anaheim Fire Department, Hazardous Materials Section

The City Fire Department's Hazardous Materials Section administers and implements a comprehensive hazardous materials management program within the City. The program has been set up as a Certified Unified Program Agency, authorized by the California Environmental Protection Agency since July 1, 2001. Elements of the program include Above Ground Storage Tanks, California Accidental Release Prevention, Hazardous Materials Inventory and Management/Release Response Plans (Hazardous Materials Business Plans), Hazardous Waste Generator and Onsite Treatment and Underground Storage Tanks (City of Anaheim, 2010).

Emergency Operations Plans

Emergency Operations Plans for the City and the County of Orange have been written to address the planned emergency responses associated with natural disasters and technological incidents. Each specifies its own level of response within their jurisdiction.

1.8 UTILITIES AND SERVICE SYSTEMS

1.8.1 Federal Policies and Regulations

Clean Water Act (1987)

The CWA is the primary federal law governing water pollution (33 USC 1251-1376). The act established the goals of eliminating releases to water of high amounts of toxic substances, eliminating additional water pollution by 1985, and ensuring that surface waters will meet standards necessary for human sports and recreation by 1983. Under the CWA, the USEPA's Office of Waste Management works together with USEPA regions, states and tribes to regulate discharges into surface waters such as wetlands, lakes, rivers, estuaries, bays and oceans. Specifically, the Office of Waste Management focuses on control of water that is collected in discrete conveyances (also called point sources), including pipes, ditches, and sanitary or storm sewers (USEPA, 2009).

The Federal Water Pollution Control Act prohibits the discharge of any pollutant to navigable waters unless the discharge is authorized by a NPDES permit. The NPDES permit requirements were established in 1987, with the passage of the Water Quality Act. Since 1990, operators of stormwater systems have been required to develop a stormwater management program designed to prevent harmful pollutants from being washed away by stormwater runoff and discharged into local water bodies. In California, the SARWQCB administers the NPDES permitting program (SARWQCB, 2009).

United States Environmental Protection Agency

The USEPA defines solid waste as any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities (USEPA, 2009). Other wastes regulations are set forth in 40 CFR 273, including batteries, pesticides, and some conditionally exempt small quantity generators.

1.8.2 State Policies and Regulations

State of California Water Conservation in Landscaping Act (AB 1881)

The Water Conservation in Landscaping Act of 2006 (AB 1881) was adopted as a comprehensive set of 43 recommendations, basically making changes to the AB 325 of 1990 for water conservation in landscaping, and updating the Model Local Water Efficient Landscape Ordinance. Performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water will also be adopted by regulation.

Title 27 of the California Code of Regulations, Environmental Protection-Division 2, Solid Waste

Title 27 of the CCR addresses landfill closure standards and landfill-related public health and safety issues. Regulations for Title 27 have been set forth by the California Integrated Waste Management Board and the SWRCB.

Standard Urban Stormwater Mitigation Plan

On December 13, 2001, the SARWQCB issued a Municipal Stormwater NPDES (NPDES Permit No. CAS004001) that requires new development and redevelopment projects to incorporate stormwater mitigation measures.

Depending on the type of project, either a standard urban stormwater mitigation plan or a site-specific mitigation plan is required to reduce the quantity and improve the quality of rainfall runoff that leaves the site.

Water Supply Assessment, Senate Bill 610

Senate Bill (SB) 610 became effective January 1, 2002. The bill requires a city or county that determines that a project (as defined in Water Code Section 10912) is subject to CEQA to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment. The assessment is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.

California Integrated Waste Management Act, Assembly Bill 939

The California Integrated Waste Management Act (PRC §40000 et seq.) requires municipalities to divert 50 percent of their solid waste from landfills to recycling facilities by 2000.

1.8.3 Local Policies and Regulations

City of Anaheim Urban Water Management Plan

The City has prepared an urban water management plan (UWMP) to describe how water resources are used and to present strategies that will be used to meet the City's current and future water needs. To be consistent with the California Urban Water Management Planning Act, the City of Anaheim UWMP focuses primarily on water supply reliability and water use efficiency measures. The California Urban Water Management Planning Act requires water suppliers to develop water management plans every five years. The City most recently completed this five-year update in 2005. The 2005 UWMP was completed as an update to the 2000 UWMP to comply with the Urban Water Management Planning Act.

City of Anaheim General Plan

The Public Services and Facilities Element within the City of Anaheim General Plan lists several applicable goals and policies regarding utilities and service systems.

Electricity

Goal 3.1, Policy 2: Generate electricity in a manner that is reliable, cost-effective, and sustainable by ensuring that adequate electricity capacity exists for planned development.

Water System

Goal 4.1, Policy 2: Provide a water system that produces high quality water, sufficient water pressure, and necessary quantities of water to meet domestic demands by continuing to provide municipal water service that meets or exceeds state and federal health standards.

Sewer System

Goal 5.1, Policy 1: Provide a safe and effective sewer system that meets the needs of the City's residents, businesses, and visitors by ensuring that appropriate sewer system mitigation measures are identified and implemented in conjunction with new development based on the recommendations of prior sewer studies and/or future sewer studies that may be required by the City Engineer.

Storm Drain System

Goal 6.1, Policy 3: Maintain a storm drain system that will adequately protect and enhance the health, safety and general welfare of residents, visitors, employees, and their property by minimizing the amount of impervious surfaces in conjunction with new development.

Waste Management

Goal 7.1, Policy 1: Minimize, recycle, and dispose of solid and hazardous waste in an efficient and environmentally sound manner by ensuring that solid waste generated within the City is collected and transported in a cost-effective manner that protects the public health and safety.

Private Utilities

Goal 8.1: Coordinate with private utilities to provide adequate natural gas and communications infrastructure to existing and new development in a manner compatible with the surrounding community.

City of Orange General Plan

The goals and policies of the Infrastructure Element within the City of Orange General Plan address five key issues: (1) maintenance of the City of Orange's aging water, sewer, and storm

drain infrastructure; (2) provision of high-quality solid waste collection services and encouragement of recycling; (3) maintenance of ROW areas; (4) provision of adequate electricity, natural gas, telephone and data services, and other "dry" utilities; and (d) protection of lifeline infrastructure systems that meet the public health and safety needs of the City of Orange. These goals and policies include:

- Goal 1.0, Policy 1.1: Ensure water, sewer, and storm drain systems that meet the needs of residents and businesses by providing sufficient levels of water, sewer, and storm drain service;

- Goal 2.0, Policy 2.1: Reduce the amount of waste material entering regional landfills with an efficient and innovative waste management program by providing sufficient levels of solid waste service throughout the community; and

- Goal 4.0, Policy 4.2: Ensure adequate provision of electricity, natural gas, telephone and data services, and cable television by continuing to require utilities to be placed underground for new development.

Landscape Water Efficiency Ordinance

In September 2009, the California Department of Water Resources released an updated Model Water Efficient Landscape Ordinance to assist cities in reducing water waste in landscapes. In order to comply with the new requirement, the Anaheim City Council adopted the new Landscape Water Efficiency Ordinance (Chapter 10.19 of the Anaheim Municipal Code) in December 2009. This ordinance promotes the benefits of consistent landscape ordinances with neighboring local and regional agencies; establishes a structure for planning, designing, installing, and maintaining and managing water efficient landscapes in new construction and rehabilitation projects; and encourages the use of economic incentives that promote the efficient use of water.

1.9 SECTION 4(F) EVALUATION AND PARKLANDS

1.9.1 Federal Policies and Regulations

Department of Transportation Act of 1966 (49 USC 303)

Section 4(f) of the Department of Transportation Act of 1966 states that it is "the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." Section 4(f) applies only to the actions of agencies within the United States Department of Transportation (US DOT). ARTIC is a transportation project that is scheduled to receive federal funding, in part, through FTA. As the lead federal transportation agency, FTA must demonstrate compliance with Section 4(f).

Section 4(f) specifies that:

> "[t]he Secretary [of Transportation] may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:
>
> (1) there is no prudent and feasible alternative to using that land; and
>
> (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

National Trails System Act

The National Trails System Act was created to "provide for the ever-increasing outdoor recreation needs of an expanding population and to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation" (16 USC 1241.2). The national system of trails is comprised of the following four elements:

- National recreation trails, which provide a variety of outdoor recreation uses in or reasonably accessible to urban areas (16 USC 1241.4).
- National scenic trails, which provide maximum outdoor recreation potential and promote the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass (16 USC 1241.5).
- National historic trails, which follow as closely as possible and practicable the original trails or routes of travel of national historic significance. (16 USC 1241.5).
- Connecting or side trails, which provide additional points of public access to national recreation, national scenic or national historic trails or which will provide connections between such trails (16 USC 1241.6).

1.10 ENVIRONMENTAL JUSTICE AND SOCIOECONOMICS

1.10.1 Executive Order 12898

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that federal agencies examine the potential for their actions to adversely affect low-income or minority communities. This Executive Order directs that federal programs, policies, and activities do not deny or exclude populations from benefits, and that no discrimination occurs under such programs, policies, or activities because of a population's race or income status.

1.10.2 Council on Environmental Quality

The Council on Environmental Quality (CEQ) has oversight of the federal government's compliance with Executive Order 12898. In consultation with EPA and other affected agencies, CEQ developed Environmental Justice: Guidance under the National Environmental Policy Act, dated December 10, 1997.

1.11 RELOCATIONS AND ACQUISITIONS

1.11.1 Federal Policies and Regulations

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA) of 1970, as amended, effective February 3, 2005 provides for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and establishes uniform and equitable land acquisition policies for federal and federally assisted programs. This assistance will be provided to all displacees without regard to race, color, or national origin.

1.12 SAFETY AND SECURITY

1.12.1 Federal Railroad Administration

The Federal Railroad Safety Improvement Act of 2007 (Public Law No. 110-432) reauthorized the FRA to establish reforms to address railroad fatalities, injuries, hazardous materials releases, and hours of service. FRA regulations are found at 49 CFR Parts 200 through 268.

1.12.2 Federal Transit Administration

The FTA, through terms and conditions placed on its grants for major capital projects and urbanized area formula funding, provides financial and technical assistance to local public transit systems to ensure safety in their design, engineering, construction, and operation. The FTA is responsible for ensuring that grantees follow federal mandates, statutory, and administrative requirements. FTA regulations are found at 49 CFR Parts 601 to 665.

1.13 ADA COMPLIANCE

1.13.1 Americans with Disabilities Act of 1990

The Americans with Disabilities Act (ADA) of 1990 (Public Law 101-336) prohibits discrimination on the basis of disability. The ADA has five titles that defines and prohibits discrimination on the basis of disability: Title I, Employment; Title II, Public Services; Title III, Public Accommodations and Services Operated by Private Entities; Title IV, Telecommunications; and Title V, Miscellaneous Provisions.

Title II (Public Services), Subpart B of the ADA establishes standards for state and local government transportation by intercity and commuter rail. In summary, at least one passenger car per train and stations must be readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs. ADA statutory requirements for Intercity and Commuter Rail Actions are found at 42 USC Section 12162 (DOJ, 2009).

The ADA required designated federal agencies to develop implementing regulations. The regulations detail a wide range of administrative and procedural requirements, including compliance with design and construction standards. On July 26, 1991, the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities" (ADAAG) were published in the Federal Register. The ADAAG contains minimum scoping and technical requirements during the design, construction, and alteration of buildings and facilities covered by Titles II and III of the ADA.. Section 10 of the ADAAG, published September 6, 1991 in the Federal Register (36 CFR 1191), applies to transportation facilities (i.e., stations, bus stops and pads, terminals, building, or other transportation facilities) (U.S. Access Board, 2002). The U.S. Department of Transportation (DOT) is responsible for the implementation of the Subpart B of Title II of ADA, and issued regulations implementing that subtitle (U.S. Department of Justice [DOJ], 1993). DOT has incorporated ADAAG into their ADA implementing regulations, thus making ADAAG the enforceable standard under Title II for the construction and alteration of transportation facilities covered by the ADA. The DOT Final Rule "Transportation Services for Individuals with Disabilities" (49 CFR Part 37, as amended) incorporates ADAAG, including Section 10 on transportation facilities and the vehicle guidelines as Appendix A (DOT, 2006). DOT vehicle standards are in "Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles" (49 CFR Part 38) (National Archives and Records Administration, 2010).

In addition to the DOT regulations and ADAAG, regulations implementing the transportation provisions of Titles II and III of the ADA published in the Federal Register on September 6, 1991 included: Architectural and Transportation Barriers Compliance Board "Americans with Disabilities Act Accessibility Guidelines for Transportation Vehicles" (36 CFR Part 1192), Final Guidelines, which are also known as "vehicle guidelines" or "ADAAG for vehicles" (United States Access Board, 2003).

1.13.2 The Rehabilitation Act of 1973

The Rehabilitation Act of 1973, and amendments, created and extended civil rights to people with disabilities similar to ADA. It applies to federal agencies and entities receiving federal funding. Under Section 504 of the Rehabilitation Act, disabled persons shall not be excluded from, denied the benefits of, or be subjected to discrimination for federally funded programs. DOT Section 504 regulations are found at 49 CFR Part 27 "Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance." The DOT Section 504 regulations have been amended to require compliance with the ADA.

1.13.3 Architectural Barriers Act of 1968

The ABA requires that buildings and facilities that are designed, constructed, or altered with federal funds, or leased by a federal agency, comply with federal standards for physical accessibility. ABA requirements are limited to architectural standards in new and altered buildings and in newly leased facilities (U.S. Department of Justice, 2005).

1.13.4 SCRRA Design Criteria Manual, 2003

The SCRRA Design Criteria Manual serves to define the procedures that govern the initiation, progress and execution of design work for the SCRRA. The basic requirement for railroad geometric design is to provide a track structure that is consistent with safe, regulatory compliant, economical and efficient train operation. SCRRA, as a commuter operation, places a high priority on passenger safety and on minimum travel times. The design, operation and maintenance of the Metrolink System are governed by FRA regulations and California Public Utilities Commission (CPUC) General Orders.

1.13.5 OCTA Bus Stop Safety and Design Guidelines

The purpose of the manual is to provide local jurisdictions with a set of suggested design criteria that should be considered when designing and planning transit facilities. These guidelines are provided by the OCTA as a resource to local jurisdictions in providing comfortable and convenient high quality facilities at bus stop location, while considering the operational need of the Authority, The requirements of the ADA, and public safety.

1.13.6 Amtrak Guidelines on Platform Design

The Amtrak Guidelines on Platform Design are based on the ADA and the current regulations promulgated under the ADA and to the extent consistent with that statutory and regulatory scheme, the best engineering practices of track and platform design at railroad stations. The guidelines are intended to provide assistance to entities inquiring about design parameters for platforms at Amtrak served stations.

California High-Speed Train Project Technical Memorandum Codes, Regulations, Design Standards and Guidelines TM.1.1.1

This technical memorandum identifies system-wide regulations, codes, and design standards to be incorporated, as applicable, into the design of the California High-speed Train Project (CHSTP). It is intended to be used by designers to ensure that the preliminary design addresses applicable design requirements. Regional and local regulation, codes and standards are to be identified and incorporated as applicable by designers. The technical memorandum serves as a basis for developing the CHSTP design manual and:

- Establishes a hierarchy for the application of design requirements
- Presents guidance for resolving conflicting design requirements

- References protocols to address design variance

1.13.7 2007 California Building Code

California Physical Access Laws are found in Title 24 of the California Building Standards Code, and are designed to comply with the requirements of the ADA and state statutes.

The 2007 California Building Code was adopted and approved by the California Building Standards Commission on January 30, 2007, and became effective in January 2008. The building standards adopted by the Commission for the 2007 California Building Code (Part 2 of Title 24) were based on the 2006 International Building Code.

California Government Code Sections 11135 through 11139.8 provides for protection from discrimination from any program or activity that is conducted, funded directly by, or receives any financial assistance from the state. This section brings into State law Title II of the ADA, which ensures accessibility to government programs; and Section 508 of the Rehabilitation Act, which ensures the accessibility of electronic and information technology. Access for persons with disabilities is also addressed under California Civil Code Section 54 et seq., which provides that "individuals with disabilities or medical conditions have the same right as the general public to the full and free use of the streets, highways, sidewalks, walkways, public buildings, medical facilities, including hospitals, clinics, and physicians' offices, public facilities, and other public places" (State of California, 2003).

The California DSA develops and maintains accessibility standards and codes utilized in public and private buildings throughout the California. The DSA California Access Compliance Reference Manual compiles California's Statutes, Title 24 Regulations, DSA Policies, DSA interpretation of regulations, and DSA checklists related to accessibility for persons with disabilities.

1.14 BIOLOGICAL RESOURCES

1.14.1 Federal Policies and Regulations

Federal Endangered Species Act (16 USC 1531-1544)

The ESA directs all federal agencies to participate in endangered species conservation. The federal ESA provides protection for endangered and threatened species, and requires conservation of designated species' critical habitats. An "endangered" species is a species in danger of extinction throughout all or a significant portion of its range. A "threatened" species is one that is likely to become "endangered" in the foreseeable future without further protection. Other special status species include "proposed," "candidate," and "species of concern." "Proposed" species are those that have been officially proposed in the Federal Register for listing as threatened or endangered. "Candidate" species are those for which sufficient information is available to propose listing as "endangered" or "threatened." "Species of concern" are species for which not enough scientific information has been gathered to support a listing proposal, but still may be

appropriate for listing in the future after further study. A "delisted" species is one whose population has reached its recovery goal is no longer in jeopardy.

The ESA is administered by the USFWS and the National Marine Fisheries Services (NMFS). Under the ESA, it is prohibited to take, harm, or harass species listed as threatened or endangered by the USFWS. A permit for taking a federally listed threatened or endangered species may be obtained either through Section 7 consultation (where the proposed action requires approval of a federal agency) or Section 10(a) (i.e., where the proposed non-federal action requires development of a HCP). Both cases require consultation with the USFWS and/or NMFS, which ultimately issues a final opinion determining whether the federally listed species will be adversely impacted by a proposed project. Under Section 4(d), an alternative permitting approach can be written by the Secretary of the Interior for use with federally threatened species.

Fish and Wildlife Coordination Act (16 USC 661-667E)

The Fish and Wildlife Coordination Act (1934), authorized the Secretaries of Agriculture and Commerce to assist and cooperate with Federal and State agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, and to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. Amendments to the Act require consultation with the USFWS, NMFS, and state agencies responsible for fish and wildlife resources for all proposed federal undertakings and non-federal actions needing a federal permit or license that will impound, divert, deepen, or otherwise control or modify a stream or water body; and to make mitigation and recommendations to the involved federal agency.

Migratory Bird Treaty Act (16 USC 703-712)

The Migratory Bird Treaty Act (MBTA) provides special protection for migratory families of birds (i.e., those avian species that winter south of the US but breed within the US) by regulating hunting and trade. The MBTA prohibits anyone to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). "Take" includes any disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young). Such activity may be punishable by fines and/or imprisonment. The use of families as opposed to individual species within the Act means that numerous non-migratory birds are extended protection under the MBTA. Most nesting birds are covered by the MBTA.

Clean Water Act (33 USC 1251-1376)

The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. There are numerous sections of the CWA that provide guidance related to implementation of this type of project.

Section 401 requires that an applicant for a Federal license or permit that allows activities resulting in discharge to jurisdictional waters (including wetland/riparian areas) of the US must obtain a state water quality certification that the discharge complies with other provisions of CWA. The RWQCBs administer the certification program in California.

Section 402 is regulated by the USEPA and establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into waters of the US. It establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program. The RWQCBs also administer the NPDES permits for construction activities and operations.

Section 404 establishes a permit program administered by the USACE regulating the discharge of dredge or fill material into waters of the US, including wetlands, and jurisdictional non-wetland waters. The USACE has permit authority derived from Section 404 of the CWA (33 CFR 320-330).

1.14.2 State Policies and Regulations

California Fish and Game Code, Section 1600 -1616

The CDFG Code 1600 requires that any person, state or local government agency or public utility proposing a project that may result in impacting a river, stream, or lake to notify the CDFG. In addition to protection of state listed species under CESA, the agency also has surface water jurisdiction to protect wildlife values and native plant resources associated with waters of the State. If CDFG determines that the project may adversely affect existing fish and wildlife resources, a Section 1602 Streambed Alteration Agreement may be required. Required conditions within the Streambed Alteration Agreement are intended to address potentially significant adverse impacts within CDFG jurisdictional limits.

California Fully Protected Animals

California first began to designate wildlife species as "fully protected" prior to the creation of the CESA. Lists of fully protected species were initially developed to protect those animals that were rare or facing possible extinction, including fish, mammals, amphibians and reptiles, and birds. Most of the "fully protected" species have been listed as threatened or endangered under CESA and/or the federal ESA. The Fully Protected Species Statute (CDFG Code Section 4700) states "fully protected 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."

California Endangered Species Act

The CESA states that "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, will lead to a threatened or endangered designation, will be protected or preserved." CESA mandates that state agencies should not approve projects that will jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that will avoid jeopardy. For projects that affect both a state- and federally listed species, compliance with the federal ESA will satisfy CESA if CDFG determines that the federal incidental take authorization is consistent with CESA under California Fish and Game Code Section 2080.1. For projects that will result in take of only a state-listed species, the project proponent must apply for a take permit under Section 2081 (b).

California Fish and Game Codes §§ 3503, 3503.3, 3505, 3800, 3801.6

These regulations protect all native birds, birds of prey, and all non-game birds including eggs and nests, that occur naturally within the state and are not already listed as full protected.

1.14.3 Local Policies and Regulations

The City does not have any additional ordinances or regulations pertaining to the protection of environmental resources other than requiring projects to comply with provisions of the MBTA, ESA, and the CESA for protection of federal and state listed species.

1.15 GEOLOGY AND SOILS

1.15.1 Federal Policies and Regulations

International Building Code/California Building Code

The Uniform Building Code (UBC) is now referenced as The International Building Code (IBC) and is published by the International Code Council, formally known as International Conference of Building Officials (ICBO). Revised editions of this code are published approximately every three years. The California Building Code (CBC) was approved and incorporated into the 2006 IBC in 2007. The regulatory environment for design and construction consists of building codes and standards covering local, state, federal, land use, and environmental regulations which are developed specifically for the purpose of regulating the life safety, health and welfare of the public. Once adopted, building codes become law (ICBO, 1997). The building code (which covers all new building construction, additions and renovations) is where the applicable seismic provisions are typically enforced. In addition to structural design requirements, the building code also covers fire resistance, disabled access and other life safety requirements (Fennie, 2005). A new version of the CBC will be effective January 1, 2011. This code will be based on the 2009 IBC.

National Engineering Handbook

The National Engineering Handbook (National Resources Conservation Service, 1983) Sections 2.0 and 3.0 provide standards for soil conservation during planning, design, and construction activities. ARTIC will need to conform to these standards during grading and construction to limit soil erosion. These measures will be defined and outlined in ARTIC's stormwater plan.

The Federal Water Pollution Control Act

The Federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act (CWA) following amendment in 1977, establishes requirements for discharges of stormwater or wastewater from any point source that will affect the beneficial uses of waters of the US (USEPA, 2009). The State Water Resources Control Board (SWRCB) adopted one statewide National Pollutant Discharge Elimination System (NPDES) General Permit that will apply to stormwater discharges associated with construction, industrial, and municipal activities. The

Regional Water Quality Control Board (RWQCB) is the administering agency for the NPDES permit program. The CWA's primary effect on soils within ARTIC consists of control of soil erosion and sedimentation during construction, including the preparation and execution of erosion and sedimentation control plans and measures for any soil disturbance during construction (SWRCB, 2009).

1.15.2 State Policies and Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (A-PA) was enacted in 1975 and amended in 1993. The intent of the A-PA was to provide policies and criteria to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of developments and structures for human occupancy across the trace of active faults. The A-PA only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. It is the intent of the A-PA to provide the citizens of the state with increased safety and to minimize the loss of life during and immediately following earthquakes (CGS, 2003).

Natural Hazards Disclosure Act

Natural Hazards Disclosure Act came into effect June 1, 1998 and requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more State-mapped hazard areas.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act was enacted by the California legislature in April 1997, primarily as a result of the Northridge earthquake of 1994. The Seismic Hazard Mapping Act requires the creation and publication of maps showing areas where earthquake induced liquefaction or landslides could occur (CGS, 2003). If a property is located in a Seismic Hazard Zone as shown on a map issued by the State Geologist, the seller or the seller's agent must disclose this fact to potential buyers (CGS, 2007).

Stormwater BMP Handbooks

The California Stormwater BMP Handbooks provide guidance to the stormwater community and were published by the Stormwater Quality Task Force in 1993. The Stormwater Quality Task Force became the California Stormwater Quality Association (CASQA) in 2002 and in 2003 CASQA published an updated and expanded set of four BMP Handbooks. These Handbooks reflect the current practices, standards, and significant amount of knowledge gained since the early 90s about the effectiveness of BMPs.

1.15.3 Local Policies and Regulations

Anaheim Municipal Code, Title 17

The Anaheim Municipal Code, Title 17, details land development and resources restrictions and codes, pertaining to grading, land development, public safety, and other related concerns.

City of Anaheim General Plan

The Safety Element of the General Plan has been written to establish the City's approach to ensure a safe environment for residents, visitors, and businesses. The Safety Element establishes goals, policies, and implements programs to guide this effort.

Several policies pertaining to landslides, subsidence, expansive and collapsible soils, and other potential hazards on the site are included in the City of Anaheim General Plan Safety Element, as noted below:

- Goal 1.1, Policy 3: Enforce requirements of the California Seismic Hazard mapping and A-PA when siting, evaluating, and constructing new projects within the City; and

- Goal 1.1, Policy 4: Require that engineered slopes be designed to resist earthquake-induced failure.

The City requires that all grading operations be conducted in conformance with the Anaheim Municipal Code, Title 17, as well as the most recent IBC. As part of hazard mitigation, the City also requires geologic and geotechnical investigations in areas of potential seismic or geologic hazards.

1.16 WATER QUALITY

1.16.1 Federal Policies and Regulations

Water Pollution Control Act

The federal Water Pollution Control Act (also known as the CWA) is the cornerstone of surface water quality protection in the US. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff (33 USC 1251 et seq.). These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters (USEPA, 2009).

According to CWA, the only way pollutants can be discharged into water is if authorized by a NPDES permit (USEPA, 2009). Originally, the NPDES permit focused on reducing pollutants from discharges from industrial process wastewater and municipal sewage treatment plants. In 1987, the CWA was amended to require the USEPA to regulate stormwater discharges through

the use of the NPDES stormwater permits. The NPDES permit program is administered by authorized states, including California.

Federal Emergency Management Agency

FEMA is an agency of the US Department of Homeland Security with the primary purpose to coordinate response to disasters that overwhelm the resources of local and state authorities (FEMA, 2009). President Carter's 1979 Executive Order merged various functions of disaster assistance and civil defense (previously handled by multiple agencies) under the direction of a single agency, FEMA. FEMA was created to coordinate the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror.

National Flood Insurance Program

Created in 1968, the NFIP is managed by the Federal Insurance and Mitigation Administration and the Mitigation Directorate, which are components of FEMA. NFIP is a federal insurance program under which flood-prone areas are identified and flood insurance is made available to residents of participating communities that agree to adopt and enforce floodplain management ordinances (FEMA, 2009). The goal of NFIP is to reduce the loss of life, damage to property and rising disaster relief costs in areas with high flood risks.

There are three components of NFIP:

(1) *Floodplain Management* - Floodplain management is the operation of a community program of corrective and preventative measures for reducing flood damage. These measures take a variety of forms and generally include requirements for zoning, subdivision or building, and special-purpose floodplain ordinances. As a component of floodplain management, the NFIP works to enforce no-build zones in known floodplains and relocate or elevate some at-risk structures so that development within floodplains will not exacerbate flooding in adjacent areas;

(2) *Flood Insurance* – Federal flood insurance options are made available to residents in communities that choose to adopt and enforce floodplain management ordinances. Flood insurance premium rates depend on what flood zone a resident is located in. Flood zones are geographical areas that FEMA has defined according to varying levels of flood risk, and are shown on FIRM maps; and

(3) *Flood Hazard Mapping* – Flood hazard maps, also known as FIRM, indicate areas with low, moderate, or high risk for flooding, and provide the data needed for floodplain management programs and to actuarially rate new construction for flood insurance. FIRMs specifically illustrate a community's floodplain boundaries, base flood elevations (BFE), and flood zones. Floodplain boundaries are the areas of land that could be impacted by flooding from a nearby body of water. BFE is the computed elevation (or height) to which floodwater is anticipated to rise during a 100-year flood event. A 100-year floodplain is not an area subject to floods every 100 years; instead, it is land bordering a river or channel that

can expect to be flooded in a storm that has a one-percent chance of occurring each year. 100-year flood events are used by the NFIP as the standard for floodplain management and to determine the need for and cost of flood insurance.

There are low, moderate, and high risk flood zone areas. Moderate to low risk areas include zones that are either outside the 100-year floodplain, areas that have a one percent annual chance where the average flood depth is less than one foot, or where the contributing drainage area is less than one square mile. Purchasing flood insurance is not required in these zones. High risk flood zones, labeled as SFHAs on FIRM, are areas subject to inundation by a 100-year flood event. It is mandatory that flood insurance be purchased within these zones (FEMA, 2009).

1.16.2 State Policies and Regulations

Porter-Cologne Water Quality Act

In 1969, the California Legislature enacted the Porter-Cologne Water Quality Act (Porter-Cologne Act) to preserve, enhance and restore the quality of the State's water resources (SWRCB, 2009). The Porter-Cologne Act establishes water quality policies, enforces water quality standards for surface and ground water, and regulates discharges of pollutants SWRCB, 2009). The Porter-Cologne Act establishes the SWRCB and nine RWQCBs as the principal state agencies with the responsibility for controlling water quality in California.

State Water Resources Control Board/Regional Water Quality Control Boards

The SWRCB has the ultimate authority over state water rights and water quality policy. Nine RWQCBs are also established to oversee water quality on a day-to-day basis at the local and regional level. The SWRCB and RWQCBs are responsible for ensuring implementation and compliance with the provisions of the CWA and Porter-Cologne Act. ARTIC is located within Region 8, the SARWQCB (SARWQCB, 2009).

Water Quality Objectives

RWQCBs are required to develop and periodically update a Water Quality Control Plan, also known as a Basin Plan (SWRCB, 2009). The Basin Plan establishes water quality objectives for the ground and surface waters of the region and includes an implementation plan describing the actions by the Regional Board and others that are necessary to achieve and maintain these water quality objectives. The Basin Plan designates the beneficial uses of receiving waters, including Reach 2 of the Santa Ana River to which the project site currently discharges, and specifies water quality objectives for these receiving waters in the County of Orange. Reach 2 of the Santa Ana River is not on the 2002 303(d) List of Impaired Water Bodies.

As defined in the Porter-Cologne Act, water quality objectives are the set limits or levels of chemical constituents allowable in water (SWRCB, 2009). The designation of water quality objectives must satisfy all of the applicable requirements of the Porter-Cologne Act and the CWA.

The RWQCB provides for the reasonable protection of beneficial uses, taking into account existing water quality, environmental and economic considerations.

Beneficial Uses

Beneficial uses are defined within the Basin Plan as the uses of water necessary for the survival or well being of man, plants, and wildlife (SARWQCB, 2008). These uses of water serve to promote the tangible and intangible economic, social, and environmental goals of man and are shown in Table 1.16-1 and Table 1.16-2.

Table 1.16-1
Surface Water Beneficial Uses within the Project Area

Basin	Hydrologic Unit	Beneficial Use							
		MUN	AGR	GWR	REC-1	REC-2	WARM	WILD	RARE
Lower Santa Ana River Basin									
Santa Ana River									
Reach 2 – 17th Street in Santa Ana to Prado Dam	**801.11 (Primary) 801.12 (Secondary)**	*****	**X**	**X**	**X**	**X**	**X**	**X**	**X**

Notes:
* Excepted from MUN
Source: SARWQCB, 2008

Table 1.16-2
Groundwater Beneficial Uses within the Project Area

Basin	Hydrologic Unit	Beneficial Use			
		MUN	AGR	IND	PROC
Lower Santa Ana River Basin					
Orange	**801.11 (Primary) 801.13, 801.14, 845.61, 845.63 (Secondary)**	**X**	**X**	**X**	**X**

Source: SARWQCB, 2008

Anti-degradation Policy

SARWQCB water quality objectives conform to USEPA regulations covering anti-degradation (40 CFR 131.12) and State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California.

The main objective of the anti-degradation policy is "Wherever the existing water quality of water is better than the quality of water established herein as objectives, such existing quality shall be maintained unless otherwise provided by the provisions of the SWRCB Resolution 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California", including any revisions thereto, or the Federal Anti-degradation Policy, (40 CFR 131.12). Applications for the anti-degradation provisions to the standard process requires supporting documentation and appropriate findings whenever a standard (water quality objective) is made less restrictive to accommodate the discharge of pollutants or other activities of man.

Resolution No. 68-16 establishes a general principle of non-degradation, with flexibility to allow some changes in water quality which is in the best interests of the State. Changes in water quality are allowed only where it is in the public interest and beneficial uses are not unreasonably affected. The terms and conditions of Resolution No. 68-16 serve as the general narrative water quality objective in all state water quality control plans.

Stormwater Pollution Prevention Plan

Projects that anticipate disturbing one or more acres of soil are required to obtain coverage under the CGP (SWRCB, 2009). 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.

This CGP requires the development and implementation of a site specific SWPPP. The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project.

The SWPPP must list BMPs that the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMP; and a sediment monitoring plan if the site discharges directly to a water body. Effective July 1, 2010, all dischargers are required to obtain coverage under the CGP Order 2009-0009-DWQ.

General MS4 Permit

ARTIC falls subject to the waste discharge requirements of the Municipal Permit (MS4 Permit) Order No. R8-2002-0010, NPDES No. CAS618030. The new development and component of the MS4 Permit is intended to ensure that combinations of the site planning, source control, and treatment control BMPs are implemented to protect the quality of receiving waters. Permittees must ensure that stormwater discharges from the MS4 shall neither cause nor contribute to the exceedance of water quality standards and objectives nor create conditions of nuisance in the receiving waters, and that the discharge of non-stormwater to the MS4 has been effectively addressed. The MS4 Permit requires that a Water Quality Management Plan (WQMP) be prepared for new development or significant redevelopment projects, and a SWPPP for all municipal construction projects with disturbed areas greater than one acre.

1.16.3 Local Policies and Regulations

Orange County Department of Public Works Flood Control Division

The mission of the OCPW Flood Control Division is to "protect Orange County areas from the threat and damage of flooding" (OCPW Flood Control Division, 2010). ARTIC is bounded on its eastern border by the Santa Ana River, which is considered a potential flood hazard. The Santa Ana River Mainstem project is a project designed and implemented to provide flood protection

for residences and business in the southern California communities of Orange, Riverside, and San Bernardino counties. All three counties, collectively, are working closely with the USACE to design and construct the project. The stretch of the Santa Ana River that borders ARTIC is channelized. The channel and levees serve to assist in the protection of the surrounding areas from flooding (OCPW Flood Control Division, 2010).

Orange County Flood Control District

The OCFCD to provide for the control and conservation of flood and stormwaters, and to protect property and lives from flood damage. Since then an infrastructure of flood control channels, dams, retarding basins and pump stations have been constructed. Since the creation of the NFIP, OCFCD has worked cooperatively with the County of Orange's cities to reduce the floodplain within the County of Orange by constructing flood control facilities that provide 100-year flood event protection. Such facilities typically traverse through the cities and ultimately outlet into the Pacific Ocean.

City of Anaheim General Plan

The City of Anaheim General Plan specifically details planning and precautions for flood control from the Santa Ana River (adjoining the site on the eastern boundary) in the Safety Element, water utilities and storm drain systems in the Public Services and Facilities Element, and water quality in the Green Element. The Land Use Element defines land use designations within the City, which include a designation for water use/waterways.

The City is required by the Santa Ana Region Municipal Permit to minimize short and long term impacts on receiving waters from new development and significant redevelopment to the maximum extent practicable. The City of Anaheim's General Plan provides a general overview of requirements for development/redevelopment within the City to ensure adequate watershed and water quality protection to receiving waters. The City's Local Implementation Plan (November 2003) requires new development and significant redevelopment projects within the City to address stormwater quality impacts through incorporation of permanent (post-construction) BMPs in project design and identified within a WQMP.

1.17 FLOODPLAINS

1.17.1 Federal Policies and Regulations

National Flood Insurance Program

The National Flood Insurance Program (NFIP) of 1968 is managed by the Federal Insurance and Mitigation Administration and the Mitigation Directorate, which are components of Federal Emergency Management Agency (FEMA). NFIP is a federal insurance program under which flood-prone areas are identified and flood insurance is made available to residents of participating communities that agree to adopt and enforce floodplain management ordinances (FEMA, 2009).

1.18 PALEONTOLOGICAL RESOURCES

1.18.1 Federal Policies and Regulations

Antiquities Act of 1906

The Antiquities Act of 1906 (16 United States Code [USC] 431-433) prohibits the destruction of "any historic or prehistoric ruin or monument, or any object of antiquity" on Federal lands. Although neither the Antiquities Act nor its implementing regulations (43 CFR Part 3) specifically addresses paleontological resources, many federal agencies have interpreted "objects of antiquity" to include fossils.

National Natural Landmarks Program

The National Natural Landmarks (NNL) Program was established in 1962 under the authority of the Historic Sites Act of 1935, and is administered by the National Park Service (NPS). The goals of the NNL Program are:

- To encourage the preservation of sites illustrating the geological and ecological character of the United States;
- To enhance the scientific and educational value of sites thus preserved; and
- To strengthen public appreciation of natural history, and to foster a greater concern for the conservation of the nation's natural heritage.

A National Natural Landmark is an area designated by the Secretary of the Interior as being of national significance to the United States because it is an outstanding example(s) of major biological and geological features found within the boundaries of the United States or its Territories or on the Outer Continental Shelf (36 CFR 62.2).

National significance describes an area that is one of the best examples of a biological community or geological feature within a natural region of the United States, including terrestrial communities, landforms, geological features and processes, habitats of native plant and animal species, or fossil evidence of the development of life (36 CFR 62.2). All designated National Natural Landmarks are listed on the National Registry of Natural Landmarks.