1.0 EXECUTIVE SUMMARY

1.1 GENERAL INTRODUCTION

The environmental impact report (EIR) process, as defined by the California Environmental Quality Act (CEQA), requires the preparation of an objective, full-disclosure document. This EIR provides a comprehensive evaluation of the reasonably anticipated scope of the Project and evaluates the potential impacts of its construction and long-term operation. It is intended to serve as an informational document for public agency decision makers and the general public regarding (1) the objectives and components of the Project; (2) any potentially significant environmental impacts (individual and cumulative) that may be associated with the planning, construction, and operation of the Project; and (3) appropriate and feasible mitigation measures and alternatives that may be adopted to reduce or eliminate these significant impacts. The Project's Mitigation Monitoring and Reporting Program (MMRP) is provided in Appendix 2.0-C of this Draft EIR.

This EIR provides project-level detail pursuant to Section 15161 of the State CEQA Guidelines, including specific infrastructure components needed to implement the Project, which state that a project EIR "examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation" (California Code of Regulations [CCR], Title 14, Section 15161).

1.2 PURPOSE AND SCOPE OF THIS ENVIRONMENTAL IMPACT REPORT

This EIR has been prepared to evaluate the potential environmental impacts associated with the construction and operation of the Centennial Project. This EIR has been prepared in conformance with the California Environmental Quality Act (CEQA; *California Public Resources Code* [PRC], Sections 21000 et seq.) and the State CEQA Guidelines (14 CCR Sections 15000 et seq.). This EIR addresses the potential environmental impacts associated with developing all of the land uses and implementing the associated actions identified in the Project's Conceptual Land Use Plan through buildout.

The scope of this EIR includes issues identified in consultation with the County during the Notice of Preparation (NOP) comment periods, as well as environmental issues raised by agencies and the general public in response to the scoping process and circulation of the NOP. The environmental topics to be addressed (with the respective EIR section numbers) include the following:

- Geotechnical (Section 5.1)
- Hydrology and Flood (Section 5.2)
- Hazards and Fire Safety (Section 5.3)
- Water Quality (Section 5.4)

- Land Resources (Agricultural, Forestry, and Mineral Resources) (Section 5.5)
- Cultural and Tribal Resources (Section 5.6)
- Biological Resources (Section 5.7)
- Land Use, Entitlements, and Planning (Section 5.8)
- Population, Housing, and Employment (Section 5.9)
- Traffic, Access, and Circulation (Section 5.10)
- Air Resources (Section 5.11)
- Noise (Section 5.12)
- Visual Resources (Section 5.13)
- Parks and Recreation (Section 5.14)
- Education (Section 5.15)
- Fire and Law Enforcement Services (Section 5.16)
- Other Public Services (Library, Solid Waste, and Other Public Facilities) (Section 5.17)
- Water Resources (Section 5.18)
- Wastewater Collection (Section 5.19)
- Dry Utilities (Electrical, Fossil Fuels [Natural Gas and Petroleum], Telephone, and Cable Service) (Section 5.20)
- Climate Change (Section 5.21)
- Growth-Inducing Impacts (Section 6.0)
- Cumulative Impacts (Section 7.0)
- Alternatives to the Proposed Project (Section 8.0)
- CEQA-Mandated Sections (Section 9.0)
- Document Preparers (Section 10.0)
- Acronyms (Section 11.0)
- Glossary (Section 12.0)

1.3 PROJECT SETTING

1.3.1 PROJECT LOCATION

The Project is proposed on approximately 12,323 acres (19.3 square miles) of land in the northwestern portion of the Antelope Valley in unincorporated Los Angeles County. The Project site is located approximately 35 miles north of the City of Santa Clarita in Los Angeles County; approximately 50 miles south of the City of Bakersfield in Kern County via State Route (SR) 99 and Interstate (I) 5; and approximately 36 and 43 miles west of the Cities of Lancaster and Palmdale, respectively, in Los Angeles County via SR-138. SR-138 runs through the southern portion of the Project site, which is located approximately one mile east of I-5, just south of the Kern County/Los Angeles County boundary in the vicinity of Quail Lake. The community of Gorman in Los Angeles County is adjacent to I-5 and is approximately four miles north of the I-5/SR-138 junction. The community of Neenach is located approximately 1.2 miles to the east of the Project boundary. The West Branch of the State Water Project's (SWP) California Aqueduct bisects the Project. The Project site's

physical setting is summarized below; refer to Section 3.0, Environmental Setting, for a detailed description of the Project site's existing setting.

1.3.2 PHYSICAL SETTING

The Tehachapi Mountains border the northern and western perimeter of the Project site, and the San Gabriel Mountains are located to the south of the Project site. The Project site's topography is comprised largely of low rolling hills, with areas of steeper slopes and higher elevations in the western and northwestern portions of the site. Elevations range from approximately 2,975 feet above mean sea level (msl) to approximately 3,635 feet above msl. The Project site has been primarily used for livestock grazing for more than 150 years. In addition to cattle grazing, the Tejon Ranch Company owns and cultivates approximately 1,000 acres in the eastern portion of the Project site. Existing development is limited to a few paved access roads to the California Aqueduct and through the site to the National Cement Plant, which is located approximately one mile north of the Project site. There are also unpaved ranch roads, fencing, stock ponds, and a few electrical transmission lines. Further details of the physical setting are described below; please refer to the topical analyses in Section 5.0 for a complete discussion of the existing setting.

Air Resources

The Project site is under the jurisdiction of two different air districts and lies within two different air basins. Approximately 91 percent of the site is within the boundaries of the Antelope Valley Air Quality Management District (AVAQMD), while approximately 9 percent of the southwest portion of the Project site is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The portion of the site under the jurisdiction of the AVAQMD lies within the Mojave Desert Air Basin (MDAB), while the portion of the Project site that is under the jurisdiction of the SCAQMD lies within the South Coast Air Basin (SoCAB).

Biological Resources

There are a variety of vegetation types on the Project site; however, the site is dominated by grasslands. There are also riparian and wetland vegetation types on site occurring in association with drainages, springs, and seeps. Oak woodland vegetation types are dominant in the westernmost and the southern portions of the Project area as a whole. Scrub vegetation types (primarily chaparral) are generally found in the western portion of the Project site on somewhat eroded, steep slopes. In the Project site's lower elevations, rabbitbrush scrub is present. There are a number of wildlife species, including invertebrates, amphibians, reptiles, birds, and mammals, that have been identified or that would be expected to occur on the Project site. A total of 42 special status wildlife species are known to occur or potentially occur in the Project region (defined as the western Antelope Valley and its associated watersheds); of these, 33 have at least some potential to occur, albeit low in many cases, or were observed by Biologists during the course of various field surveys conducted on the Project site. The Project site is not located within any U.S. Fish and Wildlife Service-designated or proposed Critical Habitat for any of State- and/or federally listed Endangered, Threatened, or Candidate Species. In addition to the special status species

designated by the State and federal resource agencies, the Los Angeles Audubon maintains a list of Sensitive Bird Species that they consider to be at risk of decline or extirpation in Los Angeles County. These species were also analyzed for potential to occur on the Project site.

Cultural and Tribal Resources

The Tejon Ranch region, including the Project site, was a contact point between five separate ethnolinguistic groups immediately prior to the arrival of European Americans in California, and the Tejon Ranch area became a multi-ethnic, post-Mission Period refuge for many Native Americans. Two of the three rock formations identified on the Project site are considered to be sensitive for the presence of fossil resources: the marine Late Miocene Quail Lake Formation and the Late Miocene Oso Canyon Formation.

Hydrology

The Project site is located primarily within the limits of the Antelope Valley Watershed. The Santa Clara River Watershed is the adjacent watershed to the southwest. Approximately 90 percent of the Project site is located within the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB), and approximately 10 percent is within the jurisdiction of the Los Angeles RWQCB. Local drainages on the Project site include Oso Canyon, Los Alamos Creek, Little Sycamore Canyon and Big Sycamore Canyon, Tentrock Canyon, Horsecamp Canyon, and Cow Spring Canyon.

1.4 PROJECT DESCRIPTION

The Project involves the development of a new community with residential, commercial, business park, recreational/entertainment, and institutional/civic uses. The Project includes open space, parks, schools, utilities, and infrastructure to support the proposed land uses and future residents.

1.4.3 LAND USE OVERVIEW

The Project site encompasses approximately 12,323 acres and would allow up to 19,333 dwelling units (du) on approximately 4,987 gross acres of land designated for residential uses. Other land uses include approximately 7,363,818 square feet (sf) of Business Park uses (office, research and development, and warehousing or light manufacturing uses) on approximately 597 gross acres and approximately 1,034,550 sf of Commercial uses on approximately 102 acres. Proposed Institutional/Civic land uses (such as schools for higher education, medical facilities, library, and other civic uses) encompass approximately 1,568,160 sf on approximately 110 acres. The primary entitlement action associated with the Project includes the adoption of the *Centennial Specific Plan* and, as described in Section 4.8, Intended Use of the EIR, additional entitlement actions include a Zone Change to Specific Plan; Amendment to the Highway Plan (Map 3.1 of the AVAP); Amendment to the Highway Plan Policy Map included in the General Plan; Development Agreement; Tentative Parcel Map; and a Conditional Use Permits (CUPs) for grading and for the approval of Project-related infrastructure. Project buildout would be implemented in

phases based on future market conditions over an approximate 20-year period through a series of future tract and parcel maps.

The Project includes the development of nine Villages that will each contain a mix of land uses that enable residents to live near schools, shopping, neighborhood businesses and services, civic buildings, medical facilities, and employment centers. The Project includes a mix of housing options within each Village, ranging from apartment homes close to Town Centers to single-family homes in lower-density areas. A full range of light industrial, business, and other commercial uses are planned that are intended to yield a broad range of employment opportunities, from retail services to large corporate employers. The opportunities for employment diversity increase the overall economic sustainability of the Project and the West EOA.

The Mixed-Use (MU) Overlay is an optional designation for uses within the Commercial areas. The MU Overlay is intended to allow for a combination of commercial, office and residential uses in either vertically or horizontally (uses side by side) integrated projects, as an optional land use in select commercial areas. The Project includes approximately 130,680 sf of Recreation/Entertainment Overlay uses (clubhouse, farmers market, childcare facilities, health clubs) on approximately 75 acres. Proposed sites for major Utility facilities that would serve the entire community (e.g., two wastewater reclamation facilities, water treatment facility, water bank, materials recovery facility) encompass approximately 191 acres. The School Overlay includes Kindergarten through 12th grade schools located on approximately 146 acres. Approximately 5,624 acres (approximately 45.6 percent) of the 12,323-acre Project site are proposed for Open Space for natural resource protection and greenways, and 163 acres are included in the Park Overlay for active and passive recreational use.

The Project also includes a vehicular and a non-vehicular circulation system. In support of the *Antelope Valley Area Plan's* (AVAP's) goal of reducing single-occupancy vehicle use, the Project includes alternatives to automobile travel (e.g., public transit, bicycle network, and pedestrian system) that would minimize traffic, pollution, and greenhouse gases. Efficient use of land and a balance of uses that result in a jobs/housing balance would reduce single-occupancy automobile travel and vehicle miles traveled. The Project provides for an integrated network of roadways and walking and biking trails to reduce automotive use and facilitate safe and efficient travel. An extensive network of sidewalks, greenway trails (approximately 13 miles), and community trails (approximately 60 miles) would link residential, schools, shopping, and employment areas.

The Project's Green Development Program encompasses a range of sustainable development practices that have been incorporated into the Project at all phases of site development (i.e., from land use planning to long-term resource conservation) and it encourages environmentally sustainable development in two ways. First, in addition to satisfying all mandatory measures of the California Green Building Standards (CALGreen) Code, all residential and non-residential development within the *Centennial Specific Plan* shall be required to satisfy the measures necessary to achieve CALGreen Tier 1 that are currently applicable at the time it is being developed. Second, this Green Development Program includes additional measures for Centennial that exceed applicable State, regional, and local requirements, including but not limited to exceeding 2016 CALGreen Tier 1 standards. With

this approach, Project development will meet and exceed the mandatory standards of the CALGreen Code, CALGreen Tier 1, and the requirements of the County's "Green Building Ordinances" that exist on the date of adoption of the *Centennial Specific Plan.*

In support of the AVAP's prioritization for the preservation of natural open space resources, development in areas of significant biological value would be minimized and there would be no disturbance or development within the designated Significant Ecological Area (SEA) on the Project site. Of the 12,323 acres within the Project site, approximately 5,624 acres would be included in the Open Space land use designation. Of the 5,624 acres of designated Open Space, approximately 5,116 acres (42 percent of the total Project site) are intended to (1) remain in their original natural condition; (2) be restored; and/or (3) be enhanced by weed abatement, fencing, and native species planting, among other means. Of this amount, approximately 3,865 acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries. The preservation also protects local wildlife movement on and off-site because these areas are positioned contiguous to off-site open space areas, thereby providing a larger total area of continuous preserved open space for local wildlife to use as habitat and for movement. No Project development would occur within SEA 17.

1.4.4 PUBLIC SERVICES AND INFRASTRUCTURE

The Project includes conceptual site locations for up to four new fire stations in the Project area. The number of on-site fire stations and their general locations were determined through preliminary consultation with the Los Angeles County Fire Department (LACFD). The Project would provide for one on-site Sheriff's station. Prior to development of this permanent Sheriff's station, the Los Angeles County Sheriff's Department (LASD) would operate a temporary station (e.g., store front station) in the first phase of Project development. This store front Sheriff station would be developed and fully operational prior to issuance of the first certificate of occupancy. To accommodate the demand for educational facilities created by future Centennial residents, the Project reserves sites through a "Schools" land use designation for five Kindergarten (K) through 8th grade schools, one K–5 school, and one high school. A library will also be developed in the Town Center.

The Project's Green Development Program requires reduced potable water consumption through the use of drought-tolerant or native plants in greenways, transition areas, and rights-of-way; low-flow showerheads, faucets and toilets; intelligent irrigation devices; and recycled water use primarily for landscape irrigation in residential common areas. Additionally, the Project's water resource management infrastructure for wastewater treatment, recycled water, flood control/drainage, water quality, hydromodification control, and sediment management are integrated to create a cohesive infrastructure system that minimizes the Project's effects on the environment.

The Project includes two wastewater reclamation facilities for the tertiary treatment of all wastewater generated by Project uses. This recycled water will be delivered throughout the Project site for non-potable uses (e.g., irrigation), thereby reducing the Project's demand for imported water and groundwater resources. The Project will also use its underground aquifers to bank imported water supplies available but not needed during average and wet years to provide for Project uses in dry years. The Project's flood control/drainage and water

quality facilities have been designed in such a way that they can increase groundwater recharge, thereby increasing the amount of groundwater available for Project uses and decreasing the Project's need for imported water resources. As a result of this integrated approach, the Project will be able to rely on its groundwater and wastewater resources, as well as its Green Development Program requirements, to reduce the demand for imported water from the State Water Project (SWP) that the Project would otherwise create, and will be more protective of its natural drainages and sensitive habitats.

A portion of the National Cement Plant Road within the Project boundaries is planned to be realigned through the Project site to access the SR-138 from the western side of Quail Lake rather than from its current connection on the east side of Quail Lake. This realignment serves the purpose of providing a shorter route of access for the cement trucks to the I-5; eliminates concrete truck travel over the bridge that crosses the West Branch of the Aqueduct; and eliminates cement truck traffic from traversing through one of the entrances to the Project site. In addition to the existing National Cement Plant Road bridge, the Project includes the construction of one new bridge over the West Branch of the Aqueduct.

1.4.5 OFF-SITE PROJECT FEATURES

The Project would require the implementation of off-site features consisting of roadway improvements and connections and upgrades to existing off-site utility systems. The Project involves five intersections with the SR-138. Two of these intersections are considered "off site", as they are not surrounded on both sides by the Project site. These two off-site intersections include the proposed realignment of the National Cement Plant Road at the western edge of Quail Lake and the intersection of 290th Street West with the SR-138. The construction of acceleration and deceleration lanes, turn pockets, and signalized traffic lights at each intersection would be required for Project implementation. Additionally, two underpasses and one overpass bridge crossing over SR-138 would be constructed to facilitate both pedestrian and bike access to employment centers.

Off-site groundwater wells are expected to be required within the existing Tejon Ranch Company (TRC) Water Bank in Kern County as a result of the Project; this water would require conveyance through the construction of new water pipelines from Kern County to the Project site. Connecting the TRC Water Bank wells to the Project site would require trenching for water pipelines to connect the wellheads to the "untreated wellhead pipelines" to be installed along 300th Street West and a crossing of the California Aqueduct. The Project would require four crossings of the California Aqueduct, including the wellhead pipeline that crosses the East Branch of the Aqueduct.

Project implementation would require the extension of off-site utilities to connections with on-site utilities. Electrical and telephone extensions would be constructed on the north side of SR-138 in the vicinity of Quail Lake. The new telephone extension would involve retrofitting and replacing the current overhead system that extends from the Frazier Park area to Gorman, and then to the site. Additionally, development of the Project could also impact off-site fiber-optic connections to the Litespan 2000 cabinet and require an upgrade of the existing Central Office facility to expand the Central Office's service capacity. However, AT&T's implementation of necessary expansion and upgrades would occur within existing

facility structures. A utility corridor would also be required within the 300th Street West right-of-way as it traverses both on and off the site. This would likely contain both wet and dry utilities, including but not limited to sewer, recycled, water, storm drain, electricity, cable television, and telephone.

Regarding electrical service, through coordination with Southern California Edison (SCE), two options were developed for bringing the additional capacity to service the western portion of the Project site: (1) reconfiguration of the existing Bailey Substation located off site along the property's western boundary and (2) upgrading the Gorman Substation and reconstructing the existing overhead transmission lines to handle the higher load. In either event, the improvements would occur entirely on lands owned by SCE, not on the Project site. No existing off-site facilities other than these would require upgrades or retrofitting to provide adequate electrical service to the Project site. At this time, upgrade of the Bailey Substation is considered the more likely solution; however, both options will continue to remain viable until later stages of the site development process subsequent to the CEQA process. If the Bailey Substation is upgraded, no upgrades to the Gorman Substation or other off-site facilities will be necessary to serve the first phase of Project implementation.

The initial natural gas facilities for the first phase of Project implementation would be provided by tapping into the existing high pressure gas main along Gorman Post Road west of the Project site. It would be necessary to construct a gas regulator station at this location for distributing pressure and/or extending a high pressure line to and within the Project site for the placement of a series of future regulator stations.

1.5 PROJECT OBJECTIVES

The Project demonstrates consistency with the *Antelope Valley Area Plan* (AVAP) through the Project Objectives, which have been identified for the Project.

1. Implement the Antelope Valley Area Plan (AVAP) by creating an environmentally and economically sustainable master-planned community on the Project site to help accommodate planned regional population and economic growth.

2. Design the Project to maximize efficient utilization of regional infrastructure while preserving hundreds of thousands of acres of contiguous natural open space and important biological resources.

3. Size the Project to include a broad range of employment, residential, institutional, and recreational land uses to encourage walkability and wellness, while reducing off-site employment-related commuter trips.

4. Ensure that all Project site infrastructure and public services are funded by the Project to avoid creating any financial obligations on existing residents and other taxpayers.

5. Integrate a multi-modal transportation network, renewable energy, water conservation, community wellness, and other green development features into the Project's design, build out, and ongoing operations.

1.6 SUMMARY OF THE ENVIRONMENTAL ANALYSIS

1.6.1 GEOTECHNICAL

With implementation of Project Design Feature (PDF) 1-1, the Project would not expose people or structures to potential substantial adverse effects (including the risk of injury or death) involving strong seismic ground shaking, seismic-related ground failure (e.g., liquefaction, settlement, lateral spreading), or location on an unstable geologic unit (e.g., collapse, expansive soils). The Project has been designed with a Geologic Safety Zone so that areas with potential geologic and seismic constraints are not developed with habitable structures and are planned so that buildings near faults have a minimum 100-foot setback in either direction from the fault line (PDF 1-1). Therefore, the Project would not expose people or structures to potential adverse effects (including the risk of injury or death) from surface rupture of a known earthquake fault with implementation of PDF 1-1. Additionally, in accordance with California Department of Education's Title 5 and current building codes, no sensitive uses (i.e., schools, hospitals, or public assembly sites) would be located on sites presenting a significant geotechnical hazard, as determined by the site-specific geological and soils engineering study. Therefore, there would be less than significant impacts related to fault rupture, seismic ground shaking, and ground failure with implementation of PDF 1-1.

Development of the Project may require localized blasting associated with excavation on site, and this would have the potential to result in geotechnical instability. However, with implementation of MM 12-7 from Section 5.12, Noise, potential impacts would be reduced to a less than significant level.

There would be less than significant impacts associated with off-site Project features since no off-site features would include habitable structures and since all off-site features would be required to comply with County and State geotechnical review and building code requirements as applied to the Project.

Development of the Project would result in less than significant impacts related to erosion or loss of topsoil with compliance with County subdivision specifications; County building code requirements; the Project's Hillside Grading Guidelines, and existing and future tract map-level geotechnical recommendations for the Project.

1.6.2 HYDROLOGY AND FLOOD

The proposed Project has been designed to meet or exceed County MS4 Permit, LID Standards Manual and LID requirements hydromodification and hydrology (flood control) requirements for new development. The Project incorporates MMs 2-1 and 2-2 that require Project compliance with hydromodification and flood-control performance standards be confirmed in a Drainage System Engineering and Planning Report submitted to the County during the review and approval of each Project tract map. Project runoff will not exceed the planned storm drain capacity and will not require construction of additional drainage facilities not considered in this EIR and that could have significant environmental effects.

As required by MM 2-3, portions of the Project site along the northern and eastern site boundaries located within a 100-year floodplain will be subject to a Specific Plan Floodplain Safety Overlay that precludes habitable residential, commercial, school and institutional structures in the floodplain. All applications for Project tract maps that would locate any structures not precluded by the Floodplain Safety Overlay in the floodplain must include a Drainage System Engineering and Planning Report that provides a detailed description of the floodplain boundaries and a description of applicable flood protection measures. This report must demonstrate that, after construction, structure designs and floodplain flows will comply with all applicable FEMA and County of Los Angeles floodplain flood flow and development standards. If required, a conditional letter of map revision (CLOMR) from FEMA will be obtained prior to any construction within a mapped 100-year floodplain. There will be no housing development in on-site floodplains, and no significant impacts will occur from placing structures within a floodplain.

Potential mudflow impacts will be reduced to less than significant levels by capturing debris flows in on-site basins and engineered and natural stream channels and by minimizing disturbance in on-site locations with slopes in excess of 25 percent that could generate mudflows. Storm water basins will be managed to avoid potential mosquito-borne health vectors by implementing California Department of Public Health (CDPH) recommendations and fully discharging captured storm water within 96 hours. An integrated pest management program must be developed and confirmed during the County review and approval process for Project tract maps (see MM 4-2). The Project site is not subject to tsunamis, seiches or dam and levee failure inundation.

1.6.3 HAZARDS AND FIRE SAFETY

Hazards and Hazardous Materials

There would be less than significant impacts related to Valley Fever with implementation of MM 3-1 related to dust control during construction; MM 3-2 related to aiding the prevention of Valley Fever among construction workers; with PDF 3-1 related to resident notice of temporary Valley Fever risk during construction and other earth-moving activities; and implementation of Rule 403 dust-control measures.

There would be less than significant impacts related to environmental hazards, including hazardous materials from current or historic land uses with implementation of MM 3-4 related to historic dry well re-abandonment and MM 3-5 related to permanent closure of the abandoned mine/tunnel.

Operations at the Quail Lake Skypark Airport would not have a significant impact for any portion of the Project site. The Project would result in less than significant impacts related to impairment or interference with an emergency response or evacuation plan with implementation of MM 3-7, requiring preparation of an emergency response plan for the Project.

Fire Safety

With adherence to requirements for fuel modification zone management (MM 3-9) and emergency access (MM 3-7), the Project's potential impact related to wildfires would be less than significant. MM 3-9 requires property owner notification of their responsibilities for maintaining the fuel modification zone(s) on their property. The Project would not result in significant impacts related to proximity of a land use representing a potential fire hazard.

1.6.4 WATER QUALITY

The Project will implement site-design, source-control, Low Impact Development (LID), and hydromodification-control Best Management Practices (BMP) requirements. The Project's water quality performance standard is consistent with County requirements for new development and is incorporated in MM 4-1. With mitigation, the Project would not have a significant impact on surface water or groundwater quality. Developed area runoff constituent concentrations would be below all water quality objectives and criteria. Qualitatively assessed constituents in post-development runoff would not occur at levels that would exceed water quality standards or adversely affect beneficial uses of receiving surface or ground waters. Implementation of the planned BMPs in compliance with the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit, LID Ordinance, and LID Standards Manual would meet or exceed the requirements of the federal, State, and County standards for water quality. The two proposed wastewater reclamation facilities (WRFs) will produce recycled water treated to unrestricted reuse standards under Title 22 of the *California Code of Regulations.* The WRFs will be issued Waste Discharge Requirements (WDRs) by the Lahontan Regional Water Quality Control Board (RWQCB) and will be operated in accordance with the WDRs to protect surface and groundwater quality and designated beneficial uses. MM 19-5 in Section 5.19, Wastewater Collection, requires that WRF compliance with Title 22 and WDR requirements be confirmed in documentation submitted to the County prior to the issuance of building permits for Project development.

1.6.5 LAND RESOURCES

The Project will result in the conversion of approximately 642 acres of on-site Prime Farmland. The Project site is identified as being within the West Economic Opportunity Area (EOA), one of three EOAs established by the AVAP. The EIR for the AVAP considered the impacts of converting a total of 6,169 acres of Important Farmland and concluded that the conversion would be a significant and unavoidable impact (DRP 2014). Although the Project is consistent with the AVAP's land use policy, the Project would not result in any new impacts to agricultural lands, and the Project would allow for continued grazing activity and small-scale agriculture and agriculture-related uses (PDF 5-1), because the Project is directly facilitating the conversion of 642 acres of Prime Farmland to non-agricultural uses, it is considered a significant impact of the Project. For the same reasons as described in the AVAP EIR, there is no feasible mitigation to reduce this impact to a less than significant level and, therefore would be a significant unavoidable impact of the Project.

The adoption of the Project will require a discretionary zone change to be made by the County that is consistent with, and would help implement, the AVAP—specifically the Rural

Preservation Strategy and associated Policy LU 1.1—as it applies to the Project site. Also, there are no Williamson Act contracts on site, or within Los Angeles County (outside of Catalina Island). Therefore, there would be no conflict with applicable agricultural land use policies if the County adopts the Project.

The only agricultural zoning on the Project site is the A-1-2, Light Agriculture, zone located on the lands to the east of 300th Street West. This zoning allows tree crops as a permitted use. Although the remainder of the Project site is not zoned for agricultural uses under the AVAP, an approximate 13-acre area in the northwestern corner of the site is identified as containing montane hardwood resources, and approximately 883 acres in the southwestern and southeastern portions of the site are identified as containing primarily mixed chaparral (approximately 553 acres) as well as blue oak woodland, blue oak–foothill pine, juniper, and pinyon–juniper resources (approximately 330 acres) on maps prepared by the California Department of Fire and Forestry Protection's Fire and Resource Assessment Program (FRAP 2006). It is noted that the statewide mapping of forest and timber resources as part of the FRAP is separate from the vegetation mapping performed for the Project site, and is used herein solely for the determination of potential forest and timber resources. Finally, no part of the Project site is zoned as a Timberland Production Zone.

The Project site does not contain any trees listed as a "commercial species" for the applicable Southern Forest District as defined in the applicable regulations. Project implementation would not conflict with zoning for forest land or timberland as the Project site is not used for forest land or timberland resources and is not considered forest land or timberland by the County or the State. The Project will not conflict with zoning for timberland or a Timberland Production Zone, as the site has not been designated as such. There would be no impact to forest land and no mitigation is required.

Project implementation would not result in impacts related to the loss of known mineral resources because there are no known mineral resources on the Project site or in the areas where the off-site Project features would occur.

1.6.6 CULTURAL AND TRIBAL RESOURCES

California Register of Historical Resources (CRHR) cultural resources eligibility evaluations were completed in 2012 and 2015 for sites in areas where impacts associated with development were anticipated. Also, the County of Los Angeles, as Lead Agency, completed Native American consultation under Assembly Bill (AB) 52. The Fernandeño Tataviam Band of Mission Indians (Tataviam Tribe) and the Tejon Indian Tribe (Tejon Tribe) were contacted, consultation was initiated, and mitigation measures were agreed upon by all parties involved.

CRHR-eligible resources in the development area (CA-LAN-3201, CA-LAN-3240 and CA-LAN-3242) were defined and MMs were developed to be implemented either prior to the issuance of grading permits (MMs 6-1, 6-2, and 6-3 which describe monitoring of grading, protection of CRHR-eligible sites, and data recovery/avoidance strategies respectively) or prior to the completion of construction activities (MM 6-4, which details an archaeological site protection program to be implemented during and after construction). Excavated finds shall

be offered to the County of Los Angeles and/or its designee (i.e., the Tejon Tribe) on a first refusal basis (MM 6-1 and 6-3); the Tejon Tribe can then make a determination whether the find is a significant tribal cultural resource and opt to accept the resource for curation in its facility). There are a total of 30 prehistoric archaeological sites within open space areas (i.e., areas outside the grading footprint). Of these, the CRHR eligibility of 18 of the 30 total sites has been determined, and 1 site (CA-LAN-3206) has been determined eligible and 17 sites have been determine ineligible. For the 12 remaining sites, it is assumed that the sites are historically significant until, and unless, evaluation proves otherwise. Long-term operation of the Project would result in potential indirect impacts to the 12 sites with unknown eligibility and the 1 site located in the open space areas that is known to be eligible (CA-LAN-3206). Therefore, MM 6-4 requires preparation of an Archaeological Resources Site-Protection Program aimed to protect and preserve identified archaeological resources that may be vulnerable to disturbance. With implementation of MMs 6-1 through 6-4, impacts to archaeological and tribal cultural resources would be reduced to a less than significant level.

The Paleo Environmental Associates report (2009) has classified rock units on the Project site according to their likelihood of containing resources of paleontological importance, and geologic evidence from adjacent areas with similar sedimentary formations indicates a high likelihood of encountering such resources during Project development. Impacts, should they occur, would be reduced to a level considered less than significant through the application of MMs 6-5 through 6-9.

There is no evidence for the presence of Native American burial sites and associated human remains within the Project area because none of the sites recorded and evaluated on the Project area were found to contain human remains, nor were there any data to suggest they were present. However, the presence of known cultural resources sites increases the likelihood that they may be present. MM 6-10 is provided to address these potential occurrences, should they be realized.

1.6.7 BIOLOGICAL RESOURCES

Development and implementation of the Project would result in significant direct and indirect impacts to special status plants; special status wildlife; nesting birds; native grasslands, wildflower fields, and other special status vegetation types; jurisdictional drainages, wetlands, and riparian vegetation; wildlife movement and wildlife habitat; and regulated oak trees. Some, but not all, of these impacts would be reduced to less than significant levels with implementation of the Project's MMs and Mitigation Monitoring and Reporting Program (MMRP).

Significant impacts to special status plants, special status wildlife, and nesting birds that would result from implementing the Project would be reduced to a level considered less than significant through implementation of MMs 7-1 through 7-9.

Significant impacts to native grasslands and wildflower fields and other special status vegetation types that would result from implementing the Project would be reduced to less than significant levels with implementation of MMs 7-10 and 7-11.

Significant impacts to jurisdictional drainages, wetlands, and riparian vegetation that would result from implementing the Project would be reduced to less than significant levels with implementation of MM 7-12, which states that all lost functional values shall be replaced; appropriate regulatory agency permits and/or agreements shall be obtained; and the mitigation measures stipulated in those permits/agreements shall be implemented.

Significant impacts to wildlife movement and general wildlife habitat that would result from implementing the Project would be reduced to less than significant levels with implementation of MM 7-13 through MM 7-18.

Significant impacts to oak tree resources that would result from implementing the Project would be reduced to less than significant levels with implementation of MM 7-11 and MMs 7-19 through 7-20, in accordance with the County of Los Angeles Oak Tree Ordinance and in compliance with the Los Angeles County Oak Woodlands Conservation Management Plan. For the impacts to oak woodlands, mitigation is proposed in accordance with these County documents and California State law by creating, enhancing, and/or restoring oak habitats and by preserving existing oak woodlands.

There would be no development within (including roads and fuel modification zones), and therefore no direct impacts on, Significant Ecological Areas (SEAs) or on any lands for which a habitat conservation plan (HCP) or a natural community conservation plan (NCCP) has been adopted as there are no HCPs or NCCPs for the Project site or off-site impact areas. To further ensure SEA impact avoidance, MM 7-21 is included, which prohibits fuel modification zones from encroaching on the adjacent SEA. The Project's designation of open space in the northwest portion of the site is consistent with the Tehachapi Upland Multiple Species Habitat Conservation Plan (TU MSHCP) located immediately adjacent to the north.

1.6.8 LAND USE, ENTITLEMENTS, AND PLANNING

The Project site is largely undeveloped, and there are no residential communities on or near the site, except for scattered residences to the east of the site, north of SR-138 and east of 290th Street West. The Project would not divide an established community.

The Project is consistent with the Los Angeles County General Plan 2035 and the AVAP (a component of the General Plan and the applicable Area Plan for the site). The Project would require a General Plan Amendment to incorporate the planned internal roadways into the AVAP Highway Plan. The AVAP designates the Project site as within the West Economic Opportunity Area (EOA); AVAP also requires approval of a Specific Plan for a new master planned community in this EOA. Further, the Land Use Map includes an SP overlay designation over the site. In compliance with applicable Specific Plan County requirements and state law, the Project Specific Plan includes the location of the project's internal circulation network of roadways. Some of these internal roadways that meet the criteria for being included in the Antelope Valley Area Plan Highway Plan (Map 3.1 of the Antelope Valley Area Plan, which includes major highways, secondary highways, limited secondary highways, parkways, and expressways). Amending Map 3.1 of the Antelope Valley Area Plan and the Highway Plan Policy Map included in the General Plan (Figure 7.3, Highway Plan Policy Map), require AVAP and General Plan amendments to fill in the required roadway

details within the Project site. This is consistent with AVAP's requirement for a Specific Plan for a new master planned community in this EOA. The Project remains consistent with the AVAP, which is part of the General Plan, and no text amendments to the AVAP or County General Plan are proposed.

The Project site would also require a zone change to Specific Plan, in accordance with the County's Zoning Ordinance (Title 22 of the County Code), to conform to the General Plan designation as well as the AVAP requirement that a Specific Plan be completed for development in the West EOA. Since a Specific Plan would be adopted for the site, the Project would be consistent with the County's Hillside Management Areas (HMA) Ordinance and since the Specific Plan includes measures to protect sensitive hillside areas as described in Section 3.3, Conceptual Grading Plan, and Appendix 1-B, Hillside Design Guidelines in the Specific Plan. However, proposed grading on the site would exceed 100,000 cubic yards and a CUP would be needed pursuant to Section 22.56.217 of the Los Angeles County Code. The Project also requires a CUP for approval of Project-related infrastructure.

The increase in housing and employment that would occur with Project implementation is consistent with the projections for the Project site included in the traffic analysis zones (TAZs)[1] and corresponding figures in the Southern California Association of Governments' (SCAG) 2012-2035 and 2016-2040 Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS). The resident population of the Project at buildout is 82.46 percent of the projected resident population of traffic analysis zone (TAZ) 20280000 and TAZ 20281000 by 2035, but exceeds the Southern California Association of Governments (SCAG) projections for 2040. The 2016 Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS) states that TAZ level data or any data at a geography smaller than the jurisdictional level is included in the draft growth forecasts for regional modeling purpose only, and is advisory and non-binding. As such, the exceedance of population growth projections at the Project site on a TAZ level is not considered a significant adverse impact. Land use impacts relative to the SCAG RTP/SCS would be less than significant and no mitigation is required.

The AVAP has been challenged in court, but no injunction against implementation of the plan has been sought or granted. The County's General Plan was adopted in October 2015, and was not challenged and is in effect. Consistent with land use law and CEQA requirements, these land use plans are being implemented and the EIRs prepared for each plan have been considered as part of this project EIR and each is incorporated by reference. This EIR does not tier from, nor is it legally reliant upon, the EIRs for either the AVAP or the General Plan. Should the approval and adoption of the AVAP or its accompanying EIR be invalidated pending further environmental and policy review, a possible judicial remedy could effectively revive the now-superseded former *Antelope Valley Areawide General Plan* (AVAGP), the earlier Area Plan for this area of Los Angeles County. In that case, the Project would require an AVAGP amendment in addition to a zone change to Specific Plan and other entitlements, including a Conditional Use Permit for development within a SEA. Upon approval of these AVAGP plan amendments, zone change, and other associated entitlements, the Project would have less than significant land use impacts.

1 SCAG divides the entire region into traffic analysis zones (TAZs) as a basic geographic unit for its growth projections.

1.6.9 POPULATION, HOUSING, AND EMPLOYMENT

Implementation of the Project would result in (1) the introduction of a maximum of 19,333 housing units; (2) the creation of an estimated 23,675 permanent jobs; and (3) a maximum resident population of approximately 57,150 persons at Project buildout, which is estimated to occur in 2035. As detailed below, the estimate of a buildout population of approximately 57,150 persons serves as a conservative estimate used for impact analysis, since the number of dwelling units constructed in each planning area are not likely to be at maximum densities but would vary within the density range. Similarly, household sizes may differ from the averages used and the resulting resident population would likely be less than 57,150 persons.

Under the *Centennial Specific Plan,* reconfiguring an existing single-family home to create a Living Suite is permissible and does not create a new dwelling unit. Without regard to whether a State density bonus is ever used on the Project site, the total number of dwelling units, inclusive of all product types, cannot exceed the number of dwelling units identified in Section 4.0, Project Description, and considered in this EIR absent further CEQA review.

While the Project would increase the resident population in the Antelope Valley, it would be located in an area designated for future development as an EOA, as discussed in the 2015 AVAP. The site is part of the West EOA, which is located along SR-138, near I-5, east and west of the California Aqueduct. Most of the land in the vicinity of the Project site is designated as Open Space in the AVAP and is expected to remain undeveloped. Development on approximately 4,109 acres in the immediate Project area designated for potential development (e.g., areas with Rural Land, Rural Commercial, and Rural Mixed Use designations) within this EOA may also occur, although no applications are pending. The land immediately to the west (Gorman Post Ranch) currently has a development application pending with the County of Los Angeles for future residential development, although it is not consistent with the 2015 AVAP.

As stated in Policies LU 1.1 and LU 1.2 of the AVAP, future development in the Antelope Valley shall be directed into rural town center areas and EOAs, while limiting development in rural preserve areas. Consistent with the AVAP and the intent of EOAs, the Project would accommodate growth in the Antelope Valley through new residential, commercial, and light industrial developments, while preserving the rural character and ecological resources of the surrounding areas. The site is also identified as a Future Rural Town Area, which would serve as a transition between rural town centers and rural preserve areas and where future development is anticipated. Thus, population growth associated with the Project is consistent with anticipated population increases under the AVAP.

SCAG projects that Los Angeles County will experience substantial growth between 2012 and 2040 (SCAG 2016c). The Project site is also located in traffic analysis zones (TAZs)[2] where future growth is expected (SCAG 2012c). Future growth in the County is expected to occur as infill development in urban centers, as well as new development on vacant lands. The Project would lead to growth in employment, housing, and population on largely vacant land.

2 SCAG divides the entire region into traffic analysis zones (TAZs) as a basic geographic unit for its growth projections.

The proposed Project is consistent with the household and employment projections for the area that includes the Project site in the SCAG's 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2012e) and 2016 RTP/SCS (SCAG 2016a), and the proposed Project is consistent with the demographic projections in the AVAP.

As discussed in Section 5.8, Land Use, Entitlement and Planning, and above in Section 1.6.8, the Project would promote sustainability consistent with regional goals. The Project would also contribute to meeting the State-mandated Regional Housing Needs Assessment (RHNA) housing production goals for the unincorporated areas of the County.

The AVAP intends to provide a jobs/housing ratio of 1.3 jobs per dwelling unit in the unincorporated area of the Antelope Valley within designated EOAs. The AVAP's Economic Development Element sets a strategy of designating areas for light and heavy industrial uses near major transportation corridors and/or a concentration of skilled labor force in EOAs. The Project would implement this strategy, and would provide an estimated jobs/housing ratio of 1.22, through the development of commercial and business park uses on the site, for use by high-tech manufacturing, transportation, and logistics companies. The Project would also include residential development to create a mixed use community within the West EOA, consistent with the AVAP's Land Use Policy Map.

In summary, implementation of the Project is considered growth accommodating rather than growth inducing at a regional level based on SCAG projections. Therefore, would be less than significant in relation to planned population, housing, and employment growth in the region. However, because the Project would substantially increase growth relative to the existing Project site conditions, this increase in population and housing on the Project site is considered significant. However, no mitigation would be appropriate since the Project is consistent with approved growth plans in the region. This represents a significant and unavoidable impact.

There would be less than significant impacts related to the potential displacement of people or housing units as a result of the Project since the majority of the Project site is undeveloped. An existing residence of a Tejon employee is located near the northern boundary of the Project site. This residence would be left in place until development occurs near this area, at which time a notice would be provided and displacement would be voluntary. The residence would then be demolished or relocated.

1.6.10 TRAFFIC, ACCESS, AND CIRCULATION

This section of the EIR analyzes traffic conditions with and without the Project in the near-term (under Existing conditions) and long-term cumulative (under 2035 conditions for Los Angeles County, and 2040 conditions for Kern County).

Potential traffic increases associated with Project implementation would affect traffic operations and levels of service at roadways internal to the site and at roadways and freeways serving the site. These impacts would be addressed by a range of on-site and off-site Project improvements and the implementation of PDFs and MMs. The PDFs and MMs

include new internal roads, improved intersection configurations, and the addition of traffic signals that have been incorporated into the Project and payment of fair share fees for needed freeway and expressway improvements, as identified below. With the incorporation of PDFs and the recommended MMs, Project impacts to traffic on SR-138, streets intersecting SR-138 in the Project vicinity, freeway mainline segments, freeway interchange ramps, and arterial roadway intersections will be less than significant.

The Project Applicant intends to implement and fund State transportation facility mitigation measures through a proposed Centennial Transportation Improvement Program (CTIP) agreement with the California Department of Transportation (Caltrans). The CTIP would provide funding contributions, phasing, guarantees of payments, and collection of third-party contributions for MM implementation. Alternatively, the Project will pay a fair share contribution towards the construction of transportation facilities that will mitigate for potential Project impacts. With these traffic mitigation measures, there will not be a significant Project or cumulative impact from Project traffic. The Project will also be in compliance with the Los Angeles County and Kern County Congestion Management Programs (CMPs). The Project will incorporate PDFs to reduce vehicle use and promote alternative transportation, including transit use, in compliance with applicable transportation plans, policies, and regulations. However, if Caltrans does not implement planned and required improvements on State facilities, the Project would contribute to significant unavoidable impacts since the County (as the Lead Agency) lacks jurisdiction and control over State highway facilities, and cannot mandate the construction of improvements to these facilities.

1.6.11 AIR RESOURCES

This section analyzes the temporary/construction-related and long-term/operational-related regional air quality emissions, local pollutant concentrations, and exposure of sensitive receptors to pollutants resulting from implementation of the Project. Analyses of health risks to sensitive receptors from toxic air contaminant emissions generated by stationary sources, minor sources, and by vehicles on SR-138 are provided. Odor impacts and consistency with air quality management plans are also analyzed.

The northern 91 percent of the Project site lies within the boundaries of the AVAQMD, while the remaining 9 percent lies within the SCAQMD.

The Project's construction emissions would exceed AVAQMD annual mass emissions thresholds for nitrogen oxides (NOx) and SCAQMD daily mass emissions thresholds for volatile organic compounds (VOCs) and NOx.

Implementation of MMs 11-2 and 11-3 would substantially reduce construction-related NOx and would also reduce VOC emissions, but the impact would remain significant and unavoidable after mitigation. Construction mass emissions of PM10, PM2.5, CO, and sulfur oxides (SOx) would be less than significant. During later phases of construction, concentrations of PM10 and PM2.5 from construction activities could exceed ambient air quality standards and potentially expose sensitive receptors in the completed area of the

development to substantial pollutant concentrations. This impact would be significant and unavoidable.

At buildout of the Project, in 2035, long-term operational emissions of VOC, NOx, CO, PM10, and PM2.5 would exceed AVAQMD and SCAQMD CEQA significance thresholds. The primary source of long-term emissions would be from vehicle operations. MMs 11-4, 11-5, and 11-6 would be implemented to reduce operational emissions; however, the impact would remain significant and unavoidable. It should be noted that the Project's proposed residential and non-residential uses have been planned for a balance between the number of jobs available and the number of on-site housing units in an effort to encourage local trip making. The Centennial Traffic Study located in Appendix 5.10-A of this EIR forecasts that around 48 percent of the daily trip generation will be internal to the Project site, while 52 percent will be external trips. The Project would require the establishment of a Transportation Management Association (TMA) that develops strategic linkages with other Antelope Valley/Santa Clarita Valley TMAs or like organizations in order to maximize transit efficiencies and services. The TMA would reduce dependence on the automobile and provide for a more efficient use of transportation resources among Project occupants, thereby reducing pollutant emissions.

The Project's stationary sources (natural gas-fired boilers, emergency generators, broilers, and small source particulate matter generators) would be limited in size and number by MM 11-1, which requires implementation of PDF 11-1. With these limits, stationary source emissions would not exceed ambient air quality standards or health risk (cancer and non-carcinogenic) standards, and the impacts would be less than significant.

The Project would not contribute to off-site traffic conditions that would violate ambient CO standards and would be less than significant.

MM 11-10 requires the implementation of PDF 11-6, which specifies that residences or other sensitive land uses shall not be built within 150 feet of SR-138. The analysis demonstrates that the incremental cancer risk and chronic non-cancer health risk to sensitive receptors beyond the 150-foot buffer would be less than significant. The analysis also indicates that health risks to existing residents adjacent to SR-138 in the Project vicinity would be less than significant with incorporation of MM 11-10.

There would be less than significant impacts related to potential offensive odors generated by the wastewater reclamation facilities (WRF) and, if built, a Materials Recovery Facility Solid Waste Transfer Facility (MRF/SWTF).

The Project would not conflict with AVAQMD and SCAQMD air quality management plans (AQMP) because the land uses, population, and vehicle travel elements of the Project are anticipated in SCAG's 2012–2035 RTP/SCS and 2016–2040 RTP/SCS, which are the basis for AQMP development. The impact would be less than significant.

1.6.12 NOISE

The Project would generate an estimated 75,908 external daily trips at buildout; these vehicles would primarily use SR-138, I-5, SR-14, and SR-99. The addition of Project traffic to existing traffic would increase the traffic volumes on these roadways and, therefore, the traffic noise at adjacent receptors. Traffic noise increases would exceed the 3 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) criterion at identified receptors on SR-138, between Gorman Post Road and Old Ridge Route Road, resulting in a significant impact. The impact would be considered significant and unavoidable because feasible mitigation to reduce these impacts is not within County jurisdiction.

Project-generated traffic would potentially expose people at proposed residential, hotel, school, and religious facilities on the Project site to noise levels in excess of the applicable State and County standards. The impact would be less than significant with implementation of MM 12-1, which would require the completion of an acoustical analysis that address each proposed residential, hotel, school, and place of worship that may be significantly affected by traffic noise to verify that the facilities include the appropriate noise-reduction features to meet interior and exterior noise standards.

The Project would include a number of land uses where installed equipment or activities may generate noise levels that could result in a significant impact at areas adjacent to or within the Project site. Maximum noise levels for these noise sources are prescribed by the County Code (i.e., the Noise Ordinance). The impact would be less than significant with implementation of MM 12-2, which would require the completion of an acoustical analysis for each proposed business park use, school, community use area, park and recreation area, transportation center, animal control facility, utility, commercial development, and manufacturing/industrial development to verify the facility has been properly designed to comply with the noise ordinance.

Construction of the Project and off-site Project features would increase the ambient noise levels in the Project vicinity above levels that exist without the Project. Noise from mobile equipment would be loudest during site preparation and grading activities. Because of the large size of the Project site and distance between grading activities and sensitive receptors, mobile equipment noise levels would not exceed County standards and would be less than significant. There is a potential for stationary construction equipment to generate noise exceeding the noise ordinance limit. MM 12-3 would be incorporated into the Project and would require stationary equipment to operate at a distance that is greater than 450 feet or to provide an enclosure or similar noise attenuation device to limit the average hourly daytime noise level to 60 dBA or less. With the incorporation of MM 12-3, the temporary increase in ambient noise levels due to on-site construction stationary sources would be less than significant. Blasting may be required in portions of the Project site during the construction period, but the noise impact would be less than significant with implementation of MM 12-7.

No pile driving is currently anticipated for the Project. However, if pile driving is required, there would be a potential significant impact. MM 12-4 would require a vibration analysis prior to any pile-driving activities to ensure that vibration impacts would not exceed County

standards and would be less than significant. The County vibration standard could also be exceeded if vibratory rollers, scrapers, and bulldozers operate near occupied residences. MM 12-5 restricts the use of this equipment and impacts would be less than significant with mitigation.

The Project would not expose persons to significant noise impacts from aviation activities from public airports, military overflights, Quail Lake Skypark, or the Fire Station 77 heliport.

1.6.13 VISUAL RESOURCES

The Project would result in significant and unavoidable impacts related to a change in visual character of the Project site, as experienced by viewers at public vantage points (primarily existing transportation thoroughfares including SR-138 and 300th Street West). The Project proposes to preserve many existing features to minimize the visual alteration of the site, as listed in PDFs 13-1 through 13-6, as required for implementation through MMs 7-12 (from Section 5.7, Biological Resources) and 13-1 through 13-3. These include retention of rock outcroppings visible from off-site areas; use of landform/contour grading; use of landscaping designs that are similar to the natural topography; preservation of open space; use of native and regionally appropriate plant species in public landscape areas; provision of development setbacks from natural areas; and inclusion of aesthetically pleasing and consistent Project signage and monumentation both internally and externally. However, even with these features, the overall change to the site resulting from grading and development of the Project would be a substantial visual impact that may be perceived by some as an impact for which no additional feasible mitigation exists, and would therefore remain significant and unavoidable.

Views from existing public regional trails and bikeways would be limited due to both the distance and the intervening topography between these routes and the Project site, and would result in a less than significant impact. It is anticipated that any structures that are proposed along the Pacific Crest Trail (PCT) realignment would be screened by a wall along the rear of the residences (see MM 13-4); additionally, a wide, thickly landscaped setback containing the conceptual PCT realignment would ensure that the urban uses in the foreground would have limited visibility and would therefore result in a less than significant impact with implementation of MM 13-4.

There are no State-designated scenic highways within 20 miles of the Project boundaries; SR-138 is not a State scenic highway, nor is it eligible for listing (Caltrans 2011). Thus, while there are features on and around the Project site that would be considered scenic by many, because these components of the overall visual character are not within the viewshed of a State-designated scenic highway, the proposed changes to the Project site would not result in impacts related to damaging scenic resources along a scenic highway.

The *Los Angeles County General Plan* does not identify any scenic highway near the site (DRP 2015c); however, the AVAP identifies Scenic Drives. I-5, Gorman Post Road, SR-138, Old Ridge Road (Highway N-2), and Three Points Road are designated in the AVAP as Scenic Drives on and near the site. However, the site is also within the West EOA and a Future Rural Town Area (DRP 2015a).

The Project would introduce new light sources as part of future development. The Project would include preparation of an Exterior Lighting (photometric) Plan, also referred to as "the Dark Sky Plan", to require outdoor lighting that minimizes glare and prevents light spillover beyond the Project site boundaries by using various techniques—which may include hooded street lights, directing light downward, and timers or sensors on lights—while maintaining consistency with County lighting and safety standards (MM 13-6). However, due to the existing low nighttime ambient light levels in the area, implementation of the Project would result in a significant and unavoidable impact by contributing a substantial new source of nighttime light and glare. In addition, because the Project site is currently undeveloped, new sources of daytime glare would be introduced and potential glare impacts would be greater than existing conditions; this would be considered a significant and unavoidable impact.

1.6.14 PARKS AND RECREATION

The Project would provide abundant and varied on-site recreational amenities in an area that currently has little local parkland, including public (i.e., State or federal owned or County-dedicated and maintained) and private (i.e., Homeowners Association or other privately maintained) parks and other recreation amenities. The Project would include approximately 163 acres of Park Overlay, which includes neighborhood parks, community parks, and community regional parks that would be dedicated to the County of Los Angeles in a developed condition.

Regarding County parkland requirements, based on consultation with the County Department of Parks and Recreation (DPR), the types and amounts of recreation amenities proposed on the Project site would meet and exceed the preliminary Parkland Dedication Ordinance/Quimby Act requirement of approximately 147 acres and the preliminary General Plan standard of approximately 195 acres. Specifically, in compliance with the Parkland Dedication Ordinance, (1) the quantity of public parks shall be provided consistent with the conditions of approval defined by the County for each tract map and (2) parkland would be dedicated to the County in a developed condition (see MM 14-3), providing for acreage equivalency credit. In compliance with the General Plan, the Project shall provide public and private recreation amenities that meet the General Plan parkland standard's acreage requirements, and each tract map submitted for the County DPR's review and clearance shall have a table with a breakdown of acreage per lot for the categories of parkland to be credited against both the Parkland Dedication Ordinance/Quimby Act requirement and the General Plan standard (see MMs 14-4 and 14-5). There would be less than significant impacts related to provision of parkland pursuant to State and County standards.

Although the Project would be expected to increase visitation to off-site federal, State, and County recreational facilities and trails in the Project area, it is not expected that increased visitation at any single facility would result in substantial physical deterioration or necessitate the construction or expansion of off-site recreational facilities. The Project would result in less than significant impacts related to recreational facilities built as part of the Project, and no construction or expansion of off-site federal, State, or County recreational facilities and trails are anticipated that would result in physical environmental impacts.

Finally, the Project would not interfere with, but would facilitate regional open space connectivity.

1.6.15 EDUCATION

The Project would increase the resident population of the area and would therefore result in the generation of new students. These new students would be served by one of the three respective school districts that encompass the Project site. The Project includes locations for one Kindergarten through 5th grade (K–5) school; five K–8 schools (MM 15-1); and one high school (MM 15-3). The designation of school sites allows the respective school districts to plan for the provision of school facilities to serve the Project as needed. In addition, the Project Applicant/Developer shall finalize and sign agreements with the school districts for a contribution to facilitate the financing, construction, and operation of new school facilities in the Project area, as an alternative to the payment of school impact fees and as allowed under Section 65996(b) of the *California Government Code*. The Project Applicant/Developer shall demonstrate to the County of Los Angeles Department of Regional Planning that they have complied with all applicable School Facilities and Funding Agreements with the school districts (MM 15-2). In addition, compliance with California Department of Education Title 5 requirements for school site selection and school design and construction would reduce impacts to public schools to a less than significant level.

Because school facilities would be centrally located within the planning areas on the Project site, a majority of the Project site would not require busing. It is anticipated that the first K–8 school (initially a K–12 facility) would be opened by the Gorman Joint School District at occupancy of the first residential units. The planned approach is to initially construct a K–12 campus in order to provide public school accommodations at all education levels at Project opening. As Project buildout occurs, this school would revert to a K–8 school when the high school is constructed. There would be no impacts related to school transportation and no mitigation would be required.

There would be no impacts to education services associated with the proposed off-site access roads, and utilities would not result in any uses or activities that would generate additional students or otherwise create an increased demand for schools.

1.6.16 FIRE AND LAW ENFORCEMENT SERVICES

The Project would result in the development of a maximum of 19,333 residential units, generating approximately 57,150 residents, and over 10.0 million square feet of non-residential development that would create approximately 23,675 jobs. This anticipated Project-related growth in population and employment would result in an increase in demand for fire and law enforcement services on the Project site.

Fire Services

Fire services and emergency response for fire incidents during the initial development phases of the Project would be provided from Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person engine company. This station

would serve the Project until such time that the 1,000th dwelling unit is built on the site (at which time the first on-site fire station would be operational) (see MM 16-3).

The Project includes conceptual site locations for up to four new fire stations on the Project site. These new fire stations are projected to provide an average five-minute response time for the first arriving unit for fire and eight minutes for the advanced life support (paramedic) unit on the site at Project buildout. This is consistent with the County of Los Angeles Fire Department's (LACFD's) goals for response times in urban areas. Ultimately, the LACFD would approve the final station site locations, and the Project Applicant/Developer would construct and equip the fire stations (MM 16-3). The LACFD has indicated that the proposed fire stations on the site would provide adequate fire service to the Project.

The Project Applicant/Developer would provide funding for the construction of fire protection facilities in accordance with the approved Project, in lieu of paying established developer fees at the time building permits are issued (MMs 16-1 through 16-3). Implementation of MMs 16-1 through 16-3 would provide for fire station sites and funding for fire protection services to serve the Project. Therefore, impacts on fire services would be reduced to a less than significant level.

Law Enforcement Services

The Project would also result in an increase in the demand for law enforcement services, including those provided by the Los Angeles County Sheriff's Department (Sheriff's Department or LASD) and the California Highway Patrol (CHP). The Project includes the construction of a Sheriff's station on the Project site (in the Business Park area north of SR-138). Prior to development of this permanent Sheriff's station, the LASD would operate out of a "store front" sub-station until the permanent station is required to be developed. This LASD "store front" sub-station would be properly outfitted in accordance with applicable occupancy requirements of the LASD for this type of facility, and would be fully operational prior to the issuance of the first occupancy permit (MMs 16-2 and 16-4) to ensure that response times to the site for emergency and non-emergency calls would be within the County guidelines.

The addition of the "store front" and permanent Sheriff's stations, payment of developer fees by the Project Applicant/Developer, if applicable (refer to MM 16-4) and revenues from taxes generated (for LASD) and vehicle registration fees (for CHP) would offset increased demands on the LASD and the CHP. Therefore, impacts on law enforcement services would be reduced to a less than significant level.

1.6.17 OTHER PUBLIC SERVICES

Library Services

The Project would create less than significant impacts to the existing County of Los Angeles Public Library ("County Library") facilities with the implementation of the recommended mitigation measures (MMs 17-1 through 17-8). The sizing, design and programming of the Permanent Facility, including the influence of technology on library services, will be agreed upon by representatives from County Library and the Project Applicant/Developer. Also, as

discussed in PDF 17-1, the Project would include internet and intranet infrastructure, to provide access to all readily available library resources.

Solid Waste Services

Implementation of the Project would generate solid wastes (including hazardous wastes) during construction and operation. Adopted plans and regulations to manage solid waste disposal and recycling efforts generally mandate actions by the State, County, and/or local municipality rather than individual project applicants. For the Project, the County of Los Angeles is the agency responsible for providing solid waste disposal facilities. As such, the significance of the Project's solid waste generation would be determined by the degree to which the Project's solid waste generation and management features affect the County's disposal facilities and programs designed to meet its goals and comply with waste management regulations.

While the Project incorporates a Solid Waste Management Plan (PDF 17-3, MM 17-10) to achieve a goal of diverting at least 75 percent of operational solid waste, permitted Class III landfill capacity cannot be guaranteed at the time of Project buildout and through the life of the Project, which are both beyond the LACDPW's 15-year planning horizon for solid waste disposal. Therefore, while the County is committed to handling all solid wastes generated in the County now and in the future, to be conservative, this EIR concludes that the Project buildout would result in a significant impact on the County's anticipated Class III landfill capacity. PDFs 17-2 and 17-3 and MMs 17-9 (construction waste) and 17-10 (operational waste) reflect all feasible measures to reduce and divert the Project's municipal solid waste generation. Therefore, the Project would result in significant and unavoidable impact related to municipal solid wastes during long-term operation of the Project.

Other Public Facilities

Implementation of the Project would require County services for the maintenance of on-site public roadways, parks, and other public infrastructure. In order to facilitate the maintenance of County-owned facilities that would be developed as part of the Project, land would be provided to the County for the development of two on-site maintenance yards for County of Los Angeles Departments of Public Works and Parks and Recreation. The County may also construct, equip, and operate a permanent new animal control facility adjacent to the maintenance yards, if such a permanent facility is needed in the Project area. Impacts on other public facilities would be less than significant.

1.6.18 WATER RESOURCES

A Water Supply Assessment (WSA) for the Project was approved by the Golden Valley Municipal Water District (GVMWD) in May 2011. The EIR's water supply analysis updates the information in the 2011 WSA to implement the recommendations in the peer review of the Project's water supply and demand assessment and to include the AVAP and General Plan updates and related CEQA water supply analyses; the Antelope Valley Integrated Regional Water Management Plan; the approved Judgment and Physical Solution for the Antelope Valley groundwater basin; the Antelope Valley – East Kern Water Agency 2015 Urban Water

Management Plan; the DCR; and State drought emergency and proposed permanent water conservation measures.

At buildout the Project is estimated to require 11,365 acre-feet per year (afy) of water for residential, commercial, landscaping and other purposes, of which 6,788 afy would be treated for potable use, and 4,577 afy would consist of recycled water treated in on-site WRFs to State standards under Title 22 of the CCR for unrestricted reuse. The Project's water supplies will sustainably meet buildout potable and recycled water demands and will maintain an average annual reserve supply of more than 79,000 af, or more than 11 years of full-buildout potable water demand. MM 18-1 and MM 18-2 ensure that Project's water efficiency will be achieved and that water supplies will be confirmed in reports that utilize on-site metering data after approximately 25 percent and 50 percent of the proposed Project has been built. If required, the Project Water Purveyor must identify and implement response measures that will ensure that available supplies will meet future demand. No subsequent development may occur until the County is satisfied that water supplies are sufficient to meet future demand.

1.6.19 WASTEWATER COLLECTION

The Project will include wastewater treatment and recycled water distribution facilities to minimize potable water demand. Two WRFs would be constructed to provide solids handling, biogas reuse, and recycled water treated to unrestricted reuse standards under Title 22 of the CCR. One WRF would be located west of the West Branch of the California Aqueduct (WRF West) and one would be located east of the Aqueduct (WRF East). Recycled water will be used for outdoor irrigation and indoor wastewater and cooling in the proposed business park. At full buildout, recycled water will meet approximately 40 percent of total Project's water demand.

Section 3.5 of the *Centennial Specific Plan* includes a Wastewater Management Plan (see also PDFs 19-1 through 19-3). The Wastewater Management Plan requirements and PDFs 19-1 through 19-3 have been incorporated in MMs 19-1, 19-2 and 19-3. These measures ensure that potential impacts related to wastewater treatment requirements and wastewater capacity will be less than significant.

1.6.20 DRY UTILITIES

The Project will result in the development of a maximum of 19,333 residential units. The new residential units will result in an increase in demand for dry utility services and facilities, including electricity (Southern California Edison [SCE]), fossil fuels (natural gas and petroleum), telephone (AT&T), and cable television (CATV)(CalNeva Broadband or other provider yet to be determined).

Direct and indirect impacts to dry utility services and facilities will be less than significant. Each affected utility has been consulted to determine whether there will be adequate energy supplies, communication services, and the infrastructure to serve the Project. In the case of cable television, since there is currently no provider, one local Cable Television company is willing and able to provide services to the Project site. With implementation of the planned

energy efficiency features and with upgrades to utility infrastructure near and within the Project site (as determined by each provider), there will be adequate energy and communication services for the Project in addition to the existing demand for these services.

There will be less than significant impacts associated with off-site features related to installation of infrastructure for electricity, natural gas, petroleum, telephone, cable television, and internet services. Any necessary off-site utility upgrades will occur within lands (easements) already owned by these respective utilities.

1.6.21 CLIMATE CHANGE

The quantification of greenhouse gas (GHG) emissions, as calculated through the California Emissions Estimator Model (CalEEMod) Version 2016.3.1, estimates that the Project at buildout in 2035 would have GHG emissions of approximately 244,379 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. This total includes amortized emissions from the construction period, the loss of carbon-sequestering vegetation, and the planting of carbon-sequestering trees.

For informational purposes only, Project GHG emissions would substantially exceed the AVAQMD's 100,000 $MTCO_2e$ per year project-level threshold. The Project's service population is estimated at 57,150 residents and 23,675 employees for a service population total of 80,825 at Project buildout. For informational purposes only, the Project's GHG efficiency would be 3.02, which would not exceed the SCAQMD-staff-proposed "plan-level" 4.1 GHG efficiency threshold, but would exceed the SCAQMD-staff-proposed "project-level" 3.0 GHG efficiency threshold.

The Project would be consistent with the *Los Angeles County Community Climate Action Plan 2020* (CCAP), SCAG's 2012–2035 and 2016–2040 RTP/SCS, and regulatory measures designed to reduce GHG emissions. Additionally, the Project is consistent with the SCAQMD's proposed draft efficiency threshold and the AVAP.

Based on the Project's consistency with the CCAP, SCAG's 2012–2035 and 2016–2040 RTP/SCS, and based on its compliance with applicable GHG-reducing regulatory measures, the Project could be found to have a less than significant impact on GHG. However, climate change is a global phenomenon and the significance of GHG emissions is more appropriately considered on a cumulative level. The Project's GHG emissions would contribute to the global inventory of GHGs. To date, the vast majority of other States and nations have not followed California's lead in mandating GHG emission reductions across a broad spectrum of economic sectors and have not enacted regulations similar to those adopted in California, which already has nearly the lowest level of GHG per capita of any state. The County of Los Angeles has no jurisdictional control or responsibility for GHG reductions in other parts of California, and certainly not in the context of global action. Moreover, due to the County's limited jurisdiction over many GHG reduction measures required in both the CCAP and the RTP/SCS, and with respect to the many GHG-reducing regulatory programs implemented at the State level, the County lacks the requisite level of jurisdiction and control to ensure that all such measures and programs will be fully implemented as planned by third party agencies and private parties. Therefore, because of the global context of GHG emissions which are

outside the County's jurisdiction and control, and because the of Project's forecasted GHG emission rate, the project's incremental contribution to the cumulative environmental impact related to GHG emissions is conservatively determined to be cumulatively considerable and this significant cumulative impact would be significant and unavoidable.

1.7 GROWTH-INDUCING IMPACTS

The Project is proposed in response to anticipated growth in the Northern Los Angeles County/Antelope Valley area, and Project development is consistent with the growth projections that have been adopted by SCAG for the Project area, the Antelope Valley, the North Los Angeles County Subregion, the County, and the region.

The Project is also consistent with the AVAP and proposes development in the West EOA, where the AVAP anticipates future development. The EIR (SCH No. 2014061043) for the AVAP fully evaluated the growth-inducing impacts of buildout of the unincorporated areas of the Antelope Valley, as allowed by the AVAP (LACDRP 2014). No changes to the AVAP are proposed by the Project that would affect population generation or otherwise lead to additional indirect growth, and no changes to the circumstances under which development would occur have occurred since the EIR for the AVAP was certified in June 2015. The only amendment to the AVAP proposed by the Project is the inclusion of the internal roadway network into the AVAP Highway Plan. The portion of the Project site that is located east of 300th Street West is designated as RL2 (1 DU/ 2 ac) in the AVAP; the Specific Plan designates this land as LDR (0-7 du / ac), but the AVAP allows for flexibility in land use adjustments.

Because the Project is consistent with the allowable land uses and development densities/intensities in the AVAP and since the EIR for the AVAP adequately analyzed the growth-inducing impacts of the AVAP, the Project would not have any growth-inducing impacts that were not previously analyzed in that certified EIR. As such, the Project would not be considered growth-inducing related to planned growth in the region. However, the existence of the Project makes it reasonably foreseeable that future unplanned development may occur along the eastern fringes of the Project site, where physical constraints to development are less than to the north and south, which could result in a significant impact on the environment on lands outside the West EOA. This would be considered a significant adverse indirect growth-inducing impact.

1.8 CUMULATIVE IMPACTS

The proposed Project's cumulative impact analysis includes the consideration of both regional growth projections (i.e., the "projection" approach) and proposed and approved development in the AVAP area, Santa Clarita Valley (SCV), southern Kern County (approximately south of Interstate [I] 5 and State Route [SR] 99) as well as the cities of Lancaster, Palmdale, and Santa Clarita (i.e., the "list" approach). Although there is expansive undeveloped land in the area surrounding the Project site, there is limited land proximate to the Project site that is available for future development. The majority of surrounding lands are subject to development constraints, such as permanent conservation, limited infrastructure, public ownership, and/or topography. This serves to minimize cumulative

impacts that are associated with proximity to other ongoing projects. Significant and unavoidable cumulative impacts were identified for biological resources (regional wildlife movement, loss of native perennial grasslands); land resources (in the form of a loss of Prime Farmland); traffic (mitigation measures are outside the control of the lead agency); air resources (emissions of O_3 and PM10); noise (traffic noise along segments of SR-138); visual resources (in the form of resulting in a significant change to long range views from public land, and light pollution or "sky glow"); solid waste (contribution to municipal solid waste disposal); water resources (water supplies); population, housing, and employment (substantial relative to existing conditions); and climate change (GHG-reduction measures outside the County beyond the control of the lead agency).

1.9 SUMMARY OF IMPACTS

Table 1-1, Centennial Specific Plan Impact Summary, below provides the significance finding, after implementation of PDFs and MMs, for each environmental topic, and associated significance thresholds, addressed in Section 5.0 of this EIR. Table 1-2, Centennial Specific Plan Mitigation Summary, following Table 1-1 provides the MMs recommended for the Centennial Project and reflects the Mitigation Monitoring and Reporting Program (MMRP) provided in Appendix 2.0-C of this EIR.

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
Geotechnical	
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault	Less Than Significant
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic groundshaking	Less Than Significant
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction and lateral spreading	Less Than Significant
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides	Less Than Significant
Result in substantial soil erosion or the loss of topsoil	Less Than Significant
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	Impact Mitigated to Less Than Significant
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property	Impact Mitigated to Less Than Significant
Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater	Impact Mitigated to Less Than Significant
Conflict with Hillside Management Area Ordinance or hillside design standards in the County General Plan Conservation and Open Space Element	Less Than Significant
Hydrology and Flood	

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site	Impact Mitigated to Less Than Significant
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	Impact Mitigated to Less Than Significant
Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff	Impact Mitigated to Less Than Significant
Conflict with the Los Angeles County Low Impact Development Ordinance	Impact Mitigated to Less Than Significant
Create drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Less Than Significant
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, or within a floodway or floodplain	Impact Mitigated to Less Than Significant
Place structures, which would impede or redirect flood flows, within a 100-year flood hazard area, floodway, or floodplain	Impact Mitigated to Less Than Significant
Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam	Impact Mitigated to Less Than Significant
Place structures in areas subject to inundation by seiche, tsunami, or mudflow	Impact Mitigated to Less Than Significant
Add water features or create conditions in which standing water can accumulate that could increase habitat for mosquitoes and other vectors that transmit diseases such as the West Nile virus and result in increased pesticide use	Impact Mitigated to Less Than Significant
Hazards and Fire Safety (Hazards and Hazardous Materials and Fire Safety)	
Hazards and Hazardous Materials	
Create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials	Impact Mitigated to Less Than Significant
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials or waste into the environment	Impact Mitigated to Less Than Significant
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of sensitive land uses	Impact Mitigated to Less Than Significant
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	Impact Mitigated to Less Than Significant
Result in a safety hazard for people residing or working in the project area for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport	Less Than Significant
Result in a safety hazard for people residing or working in the project area for a project within the vicinity of a private airstrip	Less Than Significant
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Impact Mitigated to Less Than Significant
Fire Safety	

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
Expose people or structures to a significant risk of loss, injury, or death involving fires due to be located in Very High Fire Hazard Severity Zone; in a high fire hazard area with inadequate access; in an area with inadequate water and pressure to meet fire flow standards; in proximity to land uses that have the potential for dangerous fire hazard	Impact Mitigated to Less Than Significant
Water Quality	
Violate any (surface water) water quality standards or waste discharge requirements	Impact Mitigated to Less Than Significant
Generate construction or post-construction runoff that would violate applicable stormwater NPDES permits or otherwise significantly affect surface water or groundwater quality	Impact Mitigated to Less Than Significant
Result in point or nonpoint source pollutant discharges into State Water Resources Control Board-designated Areas of Special Biological Significance	No Impact
Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)	Impact Mitigated to Less Than Significant
Otherwise substantially degrade water quality	Impact Mitigated to Less Than Significant
Land Resources (Agricultural, Forest and Mineral Resources)	
Agriculture and Forest Resources	
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland)to non-agricultural use	Significant and Unavoidable Impact
Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract	Less Than Significant
Conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production	No Impact
Result in the loss of forest land or conversion of forest land to non-forest use	No Impact
Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest land use	No Impact
Mineral Resources	
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	No Impact
Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact
Cultural and Tribal Resources	
Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines	Impact Mitigated to Less Than Significant
Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines	Impact Mitigated to Less Than Significant
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources	Impact Mitigated to Less Than Significant
Disturb any human remains, including those interred outside of formal cemeteries	Impact Mitigated to Less Than Significant
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural	Impact Mitigated to Less Than Significant

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Impact Mitigated to Less Than Significant
Biological Resources	
Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS	Impact Mitigated to Less Than Significant
Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS	Impact Mitigated to Less Than Significant
Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by §404 of the federal Clean Water Act or California Fish and Game code §1600 et seq. through direct removal, filling, hydrological interruption, or other means	Impact Mitigated to Less Than Significant
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	Impact Mitigated to Less Than Significant
Convert oak woodlands or otherwise contain oak or other unique native trees	Impact Mitigated to Less Than Significant
Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas, the Los Angeles County Oak Tree Ordinance, the Significant Ecological Areas (SEAs), and Sensitive Environmental Resource Areas (SERAs)	Impact Mitigated to Less Than Significant
Conflict with the provisions of an adopted state, regional, or local habitat conservation plan	No Impact
Land Use, Entitlements, and Planning	
Physically divide an established community	No Impact
Be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plans, local coastal plans, area plans, and community/neighborhood plans	Less Than Significant
Be inconsistent with the County zoning ordinance as applicable to the subject property	Less Than Significant
Conflict with Hillside Management criteria, Significant Ecological Areas conformance criteria, or other applicable land use criteria	Less Than Significant
Population, Housing, and Employment	

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
Induce substantial population growth in an area, either directly or indirectly	Significant and Unavoidable
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere	Less than significant
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere	Less Than Significant
Cumulatively exceed official regional or local population projections	Significant and Unavoidable
Traffic, Access, and Circulation	
Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system	Impact Mitigated to Less Than Significant/ Some Mitigation Outside Authority of Lead Agency
Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways	Impact Mitigated to Less Than Significant/ Some Mitigation Outside Authority of Lead Agency
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks	Less Than Significant
Substantially increase hazards due to a design feature or incompatible uses	Impact Mitigated to Less Than Significant
Result in inadequate emergency access	Impact Mitigated to Less Than Significant
Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities	No Impact
Air Resources	
Violate any air quality standard or contribute substantially to an existing or projected air quality violation	Significant and Unavoidable
Expose sensitive receptors to substantial pollutant concentrations	Significant and Unavoidable
Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)	Less Than Significant
Create objectionable odors affecting a substantial number of people	Less Than Significant
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard	Significant and Unavoidable
Noise	
Result in exposure of persons to, or generation of, noise in excess of standards established in the County General Plan or noise ordinance, or applicable standards of other agencies	Impact Mitigated to Less Than Significant
Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	Impact Mitigated to Less Than Significant
Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas	Significant and Unavoidable
Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems	Impact Mitigated to Less Than Significant
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels	No Impact

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels	Less Than Significant
Visual Resources	
Have a substantial adverse effect on a scenic vista	Significant and Unavoidable
Be visible from or will obstruct views from a regional riding or hiking trail	Less Than Significant
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	Less Than Significant
Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features	Significant and Unavoidable
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	Significant and Unavoidable
Parks and Recreation	
Increase the use of the existing neighborhood and regional parks or other recreational facilities such that a substantial physical deterioration of the facilities would occur or be accelerated	Less Than Significant
Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment	Less Than Significant
Interfere with regional open space connectivity	Less Than Significant
Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, in order to maintain acceptable service ratios, response times or other performance objectives for parks	Impact Mitigated to Less Than Significant
Education	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for any of the public services: schools	Impact Mitigated to Less Than Significant
Fire and Law Enforcement	
Fire Services	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need of new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: fire protection	Impact Mitigated to Less Than Significant
Law Enforcement Services	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need of new or physical altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: sheriff protection	Impact Mitigated to Less Than Significant
Other Public Services	
Library	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or	Impact Mitigated to Less Than Significant

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: libraries	
Solid Waste Management	
Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs	Significant and Unavoidable
Not comply with federal, state, and local statutes and regulations related to solid waste	Significant and Unavoidable
Other Public Facilities	
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: other public facilities	Less Than Significant
Water Resources	
Have insufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses	Impact Mitigated to Less Than Significant
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level	Less Than Significant
Wastewater	
Exceed wastewater treatment requirements of either the Los Angeles or Lahontan RWQCBs	Impact Mitigated to Less Than Significant
Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Less Than Significant
Dry Utilities	
Create electrical system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Impact Mitigated to Less Than Significant
Create energy utility (natural gas and petroleum) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Impact Mitigated to Less Than Significant
Create telephone service system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Impact Mitigated to Less Than Significant
Create cable services system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects	Impact Mitigated to Less Than Significant
Climate Change	
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment	Significant and Unavoidable
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	Significant and Unavoidable

TABLE 1-1
CENTENNIAL SPECIFIC PLAN IMPACT SUMMARY

Topic	Significance Finding
Growth-Inducing Impacts	
The Project would not be considered growth-inducing related to planned growth in the region. However, the existence of the Project makes it reasonably foreseeable that future unplanned development may occur along the eastern fringes of the Project site, where physical constraints to development are less than to the north and south, which could result in a significant impact on the environment on lands outside the West EOA. This would be considered a significant adverse indirect growth-inducing impact.	
Cumulative Impacts	
The following environmental factors would result in cumulatively significant and unavoidable impacts: • Land Resources (loss of Prime Farmland) • Biological Resources (regional wildlife movement, loss of native grasslands) • Population, Housing, and Employment (substantial relative to existing conditions) • Traffic, Access, and Circulation (without pending improvements by Caltrans) • Air Resources (construction and operational emissions in the AVAQMD and the SCAQMD) • Noise (traffic noise along segments of SR-138) • Visual Resources (change to long range views from public land and nighttime light and glare) • Solid Waste (contribution to municipal solid waste disposal) • Water Resources (water supplies) • Climate Change (greenhouse gas emissions)	
NPDES: National Pollutant Discharge Elimination System; CEQA: California Environmental Quality Act; CDFW: California Department of Fish and Wildlife; USFWS: U.S. Fish and Wildlife Service; SEAs: Significant Ecological Areas; SERAs: Sensitive Environmental Resource Areas; SCAQMD: South Coast Air Quality Management District; AVAQMD: Antelope Valley Air Quality Management District; RWQCB: Regional Water Quality Control Board; CATV: cable television; Caltrans: California Department of Transportation; SR: State Route	

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.2	**Hydrology and Flood**	**MM 2-1** The Project shall implement hydromodification control Best Management Practices (BMPs) that will meet the requirements of Section 8 – Hydromodification Impacts of the County LID Standards Manual, as confirmed by the County based on a Drainage System Engineering and Planning Report to be submitted with each Project tract map application. This Drainage System Engineering and Planning Report shall describe applicable hydromodification control BMPs and utilize approved Los Angeles County methods to demonstrate compliance with the County LID Standards Manual.
5.2	**Hydrology and Flood**	**MM 2-2** The Project shall implement hydrology and flood-control BMPs that will achieve the following hydrology and flood performance standards: *All project water conveyance facilities must be designed to provide capital flood protection. BMPs must be implemented to ensure that, for the capital storm event, there is no increase in peak discharge rates and no increase in runoff volume offsite compared with peak discharge rates and runoff volumes under existing, pre-development conditions. Compliance with the hydrology and flood performance standard shall be demonstrated by using a methodology approved Los Angeles County Department of Public Works for comparing project site pre- and post-development peak discharge rates and runoff volumes.* Compliance with the hydrology and flood performance standards shall be further confirmed by the County, based on a Drainage System Engineering and Planning Report submitted with each Project tract map application. The Drainage System Engineering and Planning Report shall describe applicable hydrology and flood-control BMPs and utilize approved Los Angeles County methodologies to demonstrate compliance with the hydrology and flood performance standards.
5.2	**Hydrology and Flood**	**MM 2-3** Each Tentative Map shall depict the 100-year floodplain mapped by the Federal Emergency Management Agency (FEMA). The placement of habitable residential, commercial, school and institutional buildings shall be precluded within any mapped 100-year floodplain. All applications for Project tract maps that would locate any structures within a mapped 100-year floodplain must include an engineering report that provides a detailed description of the floodplain boundaries and demonstrates that as-built conditions comply with all applicable FEMA requirements. If required, a conditional letter of map revision (CLOMR) shall be obtained from FEMA prior to construction within a mapped 100-year floodplain.
5.3	**Hazards and Fire Safety**	**MM 3-1** The Project Applicant/Developer shall employ a Dust-Control Supervisor who will be on the site within 30 minutes of the start of work taking place each morning; will have the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Antelope Valley Air Quality Management District (AVAQMD) Rule 403 and South Coast Air Quality Management District (SCAQMD) Rule 403 requirements; and will have completed the SCAQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class. Contact information for the Project's Dust Control Supervisor shall be posted on-site to ensure that the public has a means of providing complaints regarding fugitive dust. The Dust Control Supervisor shall be responsible for tracking complaints, conducting corrective action, as necessary, and for maintaining an up-to-date log of complaints and responses for periodic County review.

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#	Environmental Factor	Mitigation
5.3	**Hazards and Fire Safety**	**MM 3-3** The Project Applicant/Developer shall provide to each prospective property purchaser or tenant a notice and statement of acknowledgment that shall be executed (i.e., read and signed) by the prospective purchaser, lessee, or tenant that the property within Centennial may present a risk of exposure to Valley Fever spores during construction or other earth-moving activities. The form shall include strategies to reduce potential exposure to Valley Fever spores. The form and method of distribution of said notice and statement of acknowledgment shall be as approved by the County.
5.3	**Hazards and Fire Safety**	**MM 3-4** The Project Applicant/Developer shall coordinate with the California Department of Conservation, Division of Oil, Gas and Geological Resources (DOGGR) to facilitate re-abandonment of the two on-site historic dry oil wells in accordance with current DOGGR specifications. The Project Applicant/Developer shall present documentation to the County that it has complied with the DOGGR requirements for re-abandonment of the two on-site wells.
5.3	**Hazards and Fire Safety**	**MM 3-5** The Project Applicant/Developer shall provide documentation to the County that the abandoned mine shaft is permanently closed in accordance with applicable regulations, as directed by the California Department of Conservation Office of Mine Reclamation, to prevent future access and potential ground instability issues.
5.3	**Hazards and Fire Safety**	**MM 3-6** If unanticipated hazardous materials or waste is encountered during construction, all work in the immediate vicinity of the suspect hazardous material shall be halted and the applicable oversight agency(ies) shall be notified. The applicable agency(ies) are determined based on the type and extent of the material encountered, and may include the California Department of Toxic Substances Control (DTSC), the State Water Quality Control Board, and/or local agencies, such as the County of Los Angeles Fire Department. The Project Applicant/Developer shall coordinate with appropriate agency(ies) on the appropriate means to address the suspect hazardous material/waste. All environmental investigation and/or remediation shall be conducted under a Workplan approved by the primary oversight agency(ies) and construction in the affected area shall not proceed until clearance has been issued by the applicable agency(ies).
5.3	**Hazards and Fire Safety**	**MM 3-7** The Project Applicant/Developer shall prepare an Emergency Response Plan for the Project, which shall be updated as needed for each Tentative Map, and shall be submitted to the County for review and approval. The Project Applicant/Developer shall be responsible for distributing the current Emergency Response Plan to each purchaser or tenant of each property within Centennial, and shall distribute the Plan to all landowners through the Transportation Management Agency (TMA).
5.3	**Hazards and Fire Safety**	**MM 3-8** The Project Applicant/Developer shall prepare a Traffic Control Plan in accordance with the California Manual on Uniform Traffic Control Devices (MUTCD). The Traffic Control Plan shall be reviewed and approved by the California Department of Transportation (Caltrans), and all construction activities in the public right-of-way shall comply with the approved Traffic Control Plan to the satisfaction of Caltrans. Documentation of Caltrans approval shall be provided to the County for any Tentative Map involving construction within State Route 138 right-of-way.
5.3	**Hazards and Fire Safety**	**MM 3-9** The Project Applicant/Developer shall prepare a Fuel Modification Plan demonstrating compliance with the County Fire Code Title 32 and shall provide all new residents and business owners with recorded Covenants, Conditions, and Restrictions (CC&Rs) or disclosure statements that identify the responsibilities for maintaining the fuel modification zone(s) on their property, as defined in the approved Fuel Modification Plan. The CC&Rs or disclosure statements

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#	Environmental Factor	Mitigation
		prepared by the Project Applicant/Developer shall be submitted to the County to confirm that new property owners will be informed of their responsibilities for maintaining the fuel modification zone(s) on their property.
5.4	**Water Quality**	**MM 4-1** The Project shall implement Low Impact Development (LID) and water quality control Best Management Practices (BMPs) that will achieve the following LID performance standard: *LID BMPs shall be selected and sized to retain the volume of storm water runoff produced from the higher of the 85th percentile or ¾ inch, 24-hour storm depth as determined from the Los Angeles County 85th Percentile 24-hr Rainfall Isohyetal Map (February 2004) (LID design volume). When it has been demonstrated that 100 percent of the LID design volume cannot be feasibly infiltrated within the Project, then the volume shall be harvested and reused. If that volume cannot be harvested and reused within 96 hours, then biofiltration shall be provided for 1.5 times the portion of the LID design volume that is not retained. Runoff from roadways shall be retained or biofiltered in retention or biofiltration BMPs sized to capture the design storm volume or flow, per the guidance in the U.S. Environmental Protection Agency's (USEPA's) Managing Wet Weather with Green Infrastructure: Green Streets. LID BMPs may be parcel-based or regional facilities.* Compliance with the LID performance standards shall be confirmed by the County based on a Drainage System Engineering and Planning Report to be submitted with each Tentative Map application. The Report shall describe applicable water quality control and LID BMPs and shall utilize approved Los Angeles County methodologies to demonstrate compliance with the LID performance standards. To the extent feasible, incorporate permeable pavement, groundcovers, and/or other measures to increase infiltration.
5.4	**Water Quality**	**MM 4-2** The Project shall implement integrated pest management (IPM) and landscaping best management practices (BMPs) consistent with the integrated pest management and pesticide and fertilizer application guidelines established by the University of California Division of Agriculture and Natural Resources Statewide Integrated Pest Management Program. The IPM and landscaping BMPs shall be confirmed in a Landscaping Plan submitted to the County during the review and approval process for each tract map application. The BMPs shall include a Planting Plan that is consistent with the plant water use requirements of Section 3.3 of the *Centennial Specific Plan*; with procedures for removing non-native vegetation and planting native vegetation; with fertilizer guidelines; and with the IPM approach for preventing or suppressing pest problems (i.e., insects and diseases). This shall be done through a combination of techniques including using pest-resistant plants; using biological controls; incorporating cultural practices; including habitat modification; and judiciously using pesticides. The IPM and landscaping BMPs shall address the following: • Pest identification. • Practices to prevent pest incidence and to reduce pest buildup. • Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed. • Establishment of action thresholds that trigger control actions. • Pest-control methods (cultural, mechanical, environmental, biological, and appropriate pesticides).

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#	Environmental Factor	Mitigation
		• Pesticide management, which includes safety requirements (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation measures; groundwater and surface water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide applicators must be certified by the California Department of Pesticide Regulation).
5.6	**Cultural and Tribal Resources**	**MM 6-1** The Project Applicant/Developer shall retain a qualified Archaeologist who shall oversee archaeological monitoring of topsoil grading and removals (including clearing, grubbing, and trenching) in the immediate vicinity of the following 25 archaeological sites that are within the grading footprint and 1 site in the open space area that is immediately adjacent to the development impact area: CA-LAN-3201, CA-LAN-3202H, CA-LAN-3219H, CA-LAN-3227, CA-LAN-3230, CA-LAN-3232, CA-LAN-3233, CA-LAN-3234, CA-LAN-3236, CA-LAN-3237, CA-LAN-3238, CA-LAN-3239, CA-LAN-3240, CA-LAN-3241, CA-LAN-3242, CA-LAN-3243, CA-LAN-3244, CA-LAN-3245, CA-LAN-3246, CA-LAN-3247. CA-LAN-3248, CA-LAN-3250, CA-LAN-3251, CA-LAN-3252, CA-LAN-3253, and CA-LAN-3985H. CA-LAN-3227 is the site immediately adjacent to the grading footprint. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during topsoil grading and removals in the vicinity of the 26 above-listed archaeological sites. The Project Applicant/Developer shall provide written evidence to the County that a qualified Archaeologist has been retained; shall be present at the pre-grading meeting; shall establish procedures for archaeological resource surveillance, including coordination with representatives of the Tejon Indian Tribe on the location and schedule of Native American monitoring; and shall establish (in cooperation with the Project Applicant/Developer and/or County, as well as the Tejon Indian Tribe) procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of any artifacts found, as appropriate. The qualified Archaeologist shall develop and submit an Archaeological Resource Monitoring Plan to the County for sites in development areas. The qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be retained to attend pre-grade meetings and to monitor earth-moving activities, including clearing, grubbing and trenching, in the vicinity (i.e., the area of a site reasonably expected to contain archaeological resources plus a buffer of at least 10 meters [33 feet]) of any and/or all cultural resource sites. The Archaeologist and Native American monitor shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potentially significant archaeological resources are uncovered, a subsurface test and/or evaluation shall be performed to assess the discovery. Further subsurface investigation or data recovery shall be undertaken if the resource is determined unique or historically significant (i.e., important for its prehistoric or historic information) and therefore eligible for the California Register of Historical Resources (CRHR). The archaeological procedures shall be incorporated as a note on the Grading Plan cover sheet. If additional or unexpected archaeological features are discovered, the qualified Archaeologist shall report such findings in writing to the County and/or the Tejon Indian Tribe. If archaeological resources are found to be of possible significance, the qualified Archaeologist shall determine appropriate actions, in cooperation with the County and the Tejon Indian Tribe, for further exploration and/or salvage.

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#	Environmental Factor	Mitigation
		The Archaeologist shall submit a Follow-up Report to the County. The Follow-up Report shall include the period of inspection; an analysis of any artifacts found; and the present repository of the artifacts. Recovered finds shall be offered to the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. The Project Applicant/Developer shall retain a certified Archaeologist who will perform a Phase II subsurface test-level investigation and surface collection for archaeological resource sites of undetermined CRHR eligibility discovered during monitoring. A Phase II Test-level Report shall be completed that evaluates the sites; includes a discussion of the sites' significance (depth, nature, condition, and extent of the resources); and contains recommendations for final mitigation and cost estimates (if required) to fully mitigate significant impacts. Should the Phase II subsurface test-level investigation and surface collection determine the potential presence of significant subsurface resources, the site shall be mitigated to a less than significant level through the implementation of one of the mitigation options discussed below: a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s). Should boundary relocation be infeasible, a qualified Archaeologist shall be present in the vicinity of archaeological resources during grading and fuel modification brush clearance. (**NOTE**: confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the South Central Coastal Information Center (SCCIC) at California State, Fullerton. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Fencing shall be erected outside the sites to visually depict the areas to be avoided during construction. b. If it is determined that avoidance and/or preservation are not feasible, then prior to grading in the vicinity of archaeological resources, Phase III data recovery (salvage excavations) shall be conducted for these archaeological sites or any other sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites to a level considered less than significant and shall be performed in accordance with the standards of the State Historic Preservation Office (SHPO). Excavated assemblages shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts. Final mitigation

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#	Environmental Factor	Mitigation
		shall be carried out based upon the recommendations in the Phase II Test Level Report, and the County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.
5.6	**Cultural and Tribal Resources**	**MM 6-2** Archaeological sites CA-LAN-3201, CA-LAN-3206, CA-LAN-3227, CA-LAN-3240, and CA-LAN-3242 shall be surrounded with high visibility construction fencing with a buffer of approximately 50 feet around each site to ensure that the archaeological sites are completely avoided during construction-related activities. A qualified Archaeologist shall work with surveying teams and the Construction Supervisor to fence the area to be avoided prior to the commencement of grading.
5.6	**Cultural and Tribal Resources**	**MM 6-3** The Project Applicant/Developer shall retain a qualified Archaeologist to mitigate impacts to eligible archaeological sites within the development impact area. Additionally, and a Native American monitor representing the Tejon Indian Tribe shall be present during ground-disturbing activities (i.e, topsoil grading and removals) in the vicinity of the three below-listed archaeological sites. Impacts to these eligible sites (CA-LAN-3201, CA-LAN-3240, and CA-LAN-3242) shall be mitigated to a less than significant level through the implementation of one of the mitigation options described below. a. Relocation of grading boundaries and fuel modification zones to completely avoid disturbance to the site(s). Should boundary relocation be infeasible, a qualified Archaeologist and a Native American monitor representing the Tejon Indian Tribe shall be present in the vicinity of archaeological resources during grading and fuel modification brush clearance to monitor all activities and ensure that archaeological resources are not impacted. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) Fencing shall be erected outside the sites to visually depict the areas to be avoided during construction. Any temporary fencing materials (i.e., plastic web, chain link, etc.) placed during construction should not become permanent. Any permanent fencing erected to protect the sites should be visually pleasing and consistent with the overall aesthetic experience of the community of Centennial. b. If avoidance and/or preservation are not feasible, then prior to grading in the vicinity of archaeological resources, Phase III data recovery (salvage excavations) shall be conducted for these archaeological sites or any other sites within the potential impact area of development that cannot be avoided. (**NOTE:** confidential archaeological mapping is on file at the Natural History Museum of Los Angeles County and the SCCIC. Review of this material is restricted to qualified individuals and project proponents on a need to know basis.) The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and shall be performed in accordance with the standards of the SHPO. Excavated finds shall be offered to the County and/or the Tejon Indian Tribe on a first refusal basis. If the artifacts are refused, the Project Applicant/Developer may retain said finds if written assurance is provided that they will be properly preserved in Los Angeles County, unless (1) said finds are of special significance or (2) a museum in the County of Los Angeles indicates a desire to study and/or display them, in which case the items shall be donated to the County or its designee. If the Project Applicant/Developer provides no such assurance, the County shall retain the artifacts and shall be subject to the same stipulations set forth in this mitigation measure for disposition of artifacts.

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#	Environmental Factor	Mitigation
		Final mitigation shall be carried out based upon the recommendations in the Phase II Test-Level Report, and the County shall make a determination as to the site's disposition based on the recommendations of the qualified Archaeologist and the Native American monitor representing the Tejon Indian Tribe. Possible determinations include, but are not limited to, preservation, salvage, partial salvage, or no mitigation necessary.
5.6	**Cultural and Tribal Resources**	**MM 6-4** The Project Applicant/Developer shall develop and implement an Archaeological Resources Site-Protection Program aimed to protect and preserve identified archaeological resources vulnerable to disturbance. This program shall be prepared by the qualified Monitoring Archaeologist familiar with the resources present within the Project boundaries and approved by the County and shall include implementation of one or more of the following: a. Fencing and/or other access-restriction methods shall be placed around the archaeologically sensitive areas of the Project site to inhibit human access. This is especially applicable to site CA-LAN-3227. b. Non-invasive plant species with thorns (e.g., prickly pear cactus [*Opuntia* spp.]) or other deterrent characteristics shall be planted in areas close to known resources in order to discourage human presence; this is generally applicable to the majority of sites to be preserved in areas of native vegetation. c. Known resources shall be capped with a layer of chemically inactive soil/sediment, in consultation with a qualified Archaeologist. This is especially applicable to sites CA-LAN-3201, CA-LAN-3206, CA-LAN-3240, and CA-LAN-3242. The above-mentioned mitigation shall be implemented prior to the completion of construction activities and shall be overseen by the County and/or the Tejon Indian Tribe. The qualified Archaeologist shall prepare a written statement documenting appropriate site-protection measures. Additionally, a Native American monitor representing the Tejon Indian Tribe shall be present during all initial surface grubbing, initial ground surface grading, and any excavation greater than one-half foot in depth. For implementation of each tract map, if no subsurface Native American or archaeological remains are identified during that initial grading, continuous monitoring will no longer be required but the Native American monitor shall spot-check all additional subsurface excavations at least once a week for the duration of grading and excavation activities or until monitor deems site clear. The Project Archaeologist shall be responsible for coordinating the location and schedule of Native American monitors.
5.6	**Cultural and Tribal Resources**	**MM 6-5** For the exposed paleontological resources discovered during the Paleo Environmental Associates (PEA) 2009 study (as detailed in the document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California*) and any paleontological resources uncovered during grading or excavation activities in or out of the presence of a Monitor, grading activities will be stopped and diverted to a part of the site reasonably away from the find (highly dependent on the size and complexity of the resource), and a qualified Paleontologist shall (1) ascertain the significance of the resources; (2) establish protocol with the Project Applicant/Developer to protect (or mitigate impacts to) such resources; (3) ascertain the presence of additional resources; and (4) provide additional monitoring of the site, if the Monitor deems it appropriate.

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#	Environmental Factor	Mitigation
5.6	**Cultural and Tribal Resources**	**MM 6-6** A Paleontological Treatment and Monitoring Plan (PTMP) shall be developed by a qualified Paleontologist retained by the Project Applicant/Developer. The PTMP shall be reviewed and approved by the County. This plan shall include a protocol for examining, evaluating, and (if necessary) salvaging known fossil localities identified during the PEA (2009) study (as detailed in the document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California*); a grading observation schedule shall be maintained when grading occurs within sedimentary rock units so that the Paleontologist may identify and evaluate fossil resources within the Project site. This qualified Paleontologist shall be retained to attend pre-grade meetings and to monitor deep earth-moving activities (including grading, cutting, and trenching) at the site. Paleontological monitoring shall be conducted by a qualified Paleontologist during grading and other excavation work. Recommended hours for monitoring activities shall be established by the qualified Paleontologist and shall be outlined in the PTMP. It shall be the responsibility of the qualified Paleontologist to demonstrate, to the satisfaction of the County, the appropriate level of monitoring necessary based on the tentative map-level grading plans. The qualified Paleontologist shall carefully inspect PTMP-identified areas in order to assess the potential for significant fossil remains. If potential paleontological resources are uncovered, a subsurface evaluation will be performed to assess the discovery. Further subsurface investigation will be undertaken if the resource is determined unique or important for its paleontological information. Because of the potential for producing small fragments of vertebrate microfossils, the Paleontologist shall conduct reasonable, periodic screening of sands from cuts in these units. Such material may be removed in bulk and screened off site for further analysis.
5.6	**Cultural and Tribal Resources**	**MM 6-7** The qualified Paleontologist retained by the Project Applicant/Developer shall coordinate with appropriate construction contractor personnel to provide information concerning the protection of paleontological resources. Contractor personnel shall be informed that unauthorized fossil collecting is prohibited. The contractor's heavy equipment operators shall be briefed on procedures to be followed in the event that fossil remains and a fossil site are encountered during earth-moving activities (grading or blasting). The briefing shall be presented to new contractor personnel as necessary. Names and telephone numbers of the Monitor and other appropriate mitigation program personnel shall be provided to appropriate contractor personnel and to the County.
5.6	**Cultural and Tribal Resources**	**MM 6-8** The qualified Paleontologist shall initiate and coordinate recovery operations with the Project Applicant/Developer, and the County of Los Angeles for any significant fossil localities identified in the Paleo Environmental Associates 2009 document entitled *Paleontologic Resource Inventory and Impact Assessment Technical Report prepared in support of Centennial Specific Plan, western Antelope Valley, northern Los Angeles County, California* as well as if significant fossils are exposed during any Project-related grading pursuant to the PTMP. To initiate recovery operations, the Paleontologist shall be allowed to divert or direct grading in the area of exposure to facilitate evaluation and, if identified as potentially significant, to recover significant fossils. The qualified Paleontologist shall notify the Construction Foreman of the discovery of fossil resources and shall discuss recovery methods and the timeline needed to evaluate the find. If a fossil discovery occurs during grading operations when the Paleontologist is not present, grading shall be diverted a reasonable distance away from the area until the qualified Paleontologist can survey the area, conduct recovery operations, and make an assessment on the significance of the find.

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5.6	**Cultural and Tribal Resources**	**MM 6-9** A formal museum storage agreement shall be developed between the Project Paleontologist and an accredited institution. Any fossils and their contextual stratigraphic data that are collected during development shall be prepared and identified by a qualified Paleontologist. Excavated significant fossil finds shall be donated with funding for stabilization, identification, and curation on a first right-of-refusal basis to an appropriate, accredited institution that has a retrievable collection system and an educational and research interest in the materials (e.g., the Natural History Museum of Los Angeles County). A final report prepared by the qualified Paleontologist that details the discovery, recovery, laboratory analysis, and findings and disposition of specimens shall be submitted to the County.
5.6	**Cultural and Tribal Resources**	**MM 6-10** In accordance with *California Code of Regulations* (Title 14, Section 15064.5[e]), in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the Los Angeles County Coroner must be notified of the discovery (*California Health and Safety Code,* Section 7050.5) and all activities in the immediate area of the find or in any nearby area reasonably suspected to overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the Most Likely Descendent (MLD) of the deceased Native American. The designated MLD may make recommendations to the Project Applicant/Developer or the person responsible for the excavation work, for means of treating or reassignment of the human remains and any associated grave goods with appropriate dignity, as provided in *California Public Resources Code,* Section 5097.98. If any of the following occurs, the Project Applicant/Developer shall rebury the Native American remains and the associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: (1) the NAHC is unable to identify an MLD; (2) the MLD fails to make a recommendation within 48 hours of being notified of the discovery; or (3) the Project Applicant/Developer rejects the recommendation of the MLD and mediation by the NAHC fails to provide acceptable measures.
5.7	**Biological Resources**	**MM 7-1** Prior to issuance of grading permits in areas of the Project site that may disturb California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, or adobe yampah populations, focused surveys of mitigation lands shall have been completed to confirm compliance with the 2:1 mitigation ratio for the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah. Surveys will be conducted in accordance with current California Native Plant Society (CNPS) protocol and will occur during the appropriate time of year. The Survey Report shall be submitted to the County and the California Department of Fish and Wildlife (CDFW) for their review. In addition to rare plant species populations that have previously been found in the Mitigation Preserve, newly detected populations will be preserved and managed for long-term preservation. These populations will provide baseline information for management efforts described below and will provide information to help determine habitat suitability in areas where propagation of rare plants may be considered. The Project Applicant shall prepare and implement a Special Status Plant Species Restoration Plan covering the California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah that shall specify the following: (1) procedures for the collection and temporary storage of seed (all available seed from every impacted occurrence shall be collected); (2) planting procedures, including soil preparation and irrigation; (3) a schedule and action plan to maintain and monitor enhanced, restored, and/or created populations; (4) methods to control plant densities (of competing plants) to promote the establishment of California androsace, crownscale, round-

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#	Environmental Factor	Mitigation	
			leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah; and (5) a list of County-approved success criteria (e.g., germination rates, growth, plant cover) to compare to the density of existing populations. The Project Applicant shall develop the Special Status Plant Species Restoration Plan and the County shall approve it prior to any vegetation clearing or grading on the site. Adoption of this plan shall be used as the performance standard. An overview of the plan objectives is provided in the Biological Resource Mitigation Program to be submitted and approved by the County prior to issuance of grading permits. Prior to the commencement of vegetation clearing and/or grading activities, the Project Applicant shall contract a qualified firm to harvest California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah seeds from the impacted populations on the Project site. The seeds shall be collected in the manner and time described in the Special Status Plant Species Restoration Plan. The harvested seed shall be used for the enhancement, restoration, or creation of these species' populations to be preserved in open space areas on the Project site. Additionally, prior to implementation of the Plan, a focused survey for the special status species impacted (listed above) shall occur in the preserve areas to document existing populations. The previously documented populations of California androsace, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah occurring in the designated on-site mitigation areas (north of State Route [SR] 138 and south of SR-138), and Mitigation Areas 1, 2, 3 shall be preserved in perpetuity. These existing areas shall be enhanced, expanded, or restored or new areas shall be created in suitable habitat in order to compensate at a 2:1 ratio for the thousands of individual special status plants that will be lost due to the Project. Those portions of the crownscale and Mojave spineflower populations that are located within and along the western edge of the open space polygon located approximately 500 feet east of Cement Plant Road and approximately 650 feet north of the SR-138 shall be protected. No temporary or permanent disturbance (including fuel modification) shall occur in the identified occurrence points or polygons; these occurrence points or polygons shall be flagged by a qualified Biologist prior to the start of Project activities in the area. In addition, the post-construction hydrology that supports these protected populations shall be consistent with the pre-Project hydrologic condition. The supporting area consists of the adjacent slope, which drains to the protected plant populations and consists of approximately 300 feet to the north and north northwest. Planting of California androsace, crownscale, round-leaved filaree, Mojave spineflower, sylvan scorzonella, and adobe yampah shall be performed in accordance with the specifications in the Special Status Plant Species Restoration Plan, which will also indicate the target densities for each of these species so that the new populations will support at least as many individuals of each species as were impacted.
5.7	**Biological Resources**	**MM 7-2**	A pre-construction/grading survey of all areas proposed for construction/grading activities that contain potentially suitable habitat for silvery legless lizard, coast horned lizard, two-striped garter snake, and American badger shall be conducted by a qualified Biologist. Surveys will consist of 1 pass-through by a qualified Wildlife Biologist walking 50-meter belt transects across areas to be impacted while visually searching for the species listed above. Surveys will be conducted no more than three days prior to the disturbance of the surveyed area. If any of these species or other wildlife species that can be easily moved are observed within the construction/grading zone, the Biologist (who must have a valid California Scientific Collecting Permit) shall relocate them to a suitable area outside the construction zone. Suitable areas would include appropriate habitats within the proposed open space areas in the northwestern portion

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CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		of the Project site and would be identified in a Wildlife Relocation Plan (described below) prior to surveys but before construction begins. Areas adjacent to Quail Lake and on the Project site potentially supporting western pond turtle breeding habitat shall not be disturbed during the breeding season for the turtles (April through August). No Project activities shall occur within 300 feet from the edge of Quail Lake, due to potential for nesting in those areas. Pre-construction burrowing owl and Swainson's hawk surveys shall be conducted in all potentially suitable habitat areas prior to initial site preparation. Methods employed shall be consistent with standard and appropriate protocols for both species within the appropriate season of the year prior to construction. Burrowing owl pre-construction surveys shall be conducted prior to the start of construction/ground-breaking activities. Surveys will be conducted following the California Department of Fish and Wildlife's (CDFW's) 2012 burrowing owl survey protocol. These surveys shall be conducted weekly beginning 30 days prior to the start of construction with the final survey occurring 1 day prior to construction. If pre-construction surveys locate an active Swainson's hawk nest on the Project site, then no construction activities will occur within ½ mile of the nest between March 1 and September 15. Furthermore, a Swainson's hawk Monitoring and Mitigation Plan shall be prepared within 90 days after locating an active Swainson's hawk nest in consultation with the County and the CDFW. The Wildlife Relocation Plan shall describe: (1) all areas potentially suitable for receiving relocated animals and (2) methods that shall be used in the relocation process. Methods shall include appropriate species-specific handling techniques and appropriate hygienic methods to prevent the spread of pathogens. The Plan shall also identify thresholds for the number of individuals of each species that shall be allowed to be placed in any particular area. The Wildlife Relocation Plan shall be prepared by the Project Applicant/Developer and submitted to the CDFW prior to Project implementation. County and CDFW approval of the Plan shall indicate that the performance standards have been met. Although, implementation of the mitigation plan may have some impact on wildlife, it is expected to be negligible relative to the project as a whole and expected to me a net positive effect as required.
5.7	**Biological Resources**	**MM 7-3** For all grading and construction activities, the Project Applicant/Developer shall retain a qualified Biologist (with selection reviewed by the County) to ensure that incidental construction impacts on special status wildlife species are avoided or minimized. The Biologist shall relocate silvery legless lizard, coast horned lizard, two-striped garter snake, American badger, and any other special status wildlife species that can be moved which would otherwise be destroyed or adversely affected by construction and/or site-preparation activities. Responsibilities of the Construction Biological Monitor shall include: a. Attendance at the pre-construction meeting to ensure that timing and location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds). The meeting shall be conducted with the Contractor and other key construction personnel to describe the importance of restricting work to designated areas. b. Discussion with the Contractor of procedures to minimize harm/harassment of wildlife that may be encountered during construction.

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#	Environmental Factor	Mitigation
		c. Review/designation of the construction area with the Contractor in accordance with the Final Grading Plan. Haul roads, access roads, and on-site staging and storage areas shall be sited in grading areas to minimize degradation of habitat adjacent to these areas. If activities outside these limits are necessary, they shall be evaluated by the Biologist to ensure no special status species or habitats will be affected. d. A field review that is conducted to stake designated construction limits (to be set by the Surveyor). Any construction activity areas immediately adjacent to riparian areas or other special status resources (such as large trees or bird nests) may be flagged or temporarily fenced by the Monitor at his/her discretion. e. Periodic visits to the site during construction to coordinate and monitor compliance with the above provisions. f. Submittal of a brief report to the County and CDFW discussing any conflicts or errors resulting in impacts to special status resources within 48 hours of the incident. At the conclusion of construction of each planning area, submittal of a Final Report discussing the results of the activities and any recommendations for improving the process. Submission of this report shall be the performance standard. In addition, a Biological Monitor will be on site during all initial vegetation removal and will employ salvage methods to minimize direct impacts to common wildlife species. Where feasible, the biological monitor will attempt to ensure wildlife are out of potential direct impact. If a wildlife species is in harm's way and has not moved on its own, the Biologist will attempt to scare them away from the area. If wildlife does not move, and where feasible, the wildlife species will be relocated to suitable habitat.
5.7	**Biological Resources**	**MM 7-4** All open space preservation areas adjacent to active construction sites shall be denoted with fencing installed and maintained during construction to ensure that construction activities remain within the development footprint. Construction area temporary signage shall not have holes (or holes shall be covered or filled within the top four inches) to prevent raptor talon entanglement. Construction fencing and signage will be overseen by the Project Biologist.
5.7	**Biological Resources**	**MM 7-5** Within the year prior to, and within the appropriate season, focused surveys for the following special status species shall be repeated: arroyo toad, Tehachapi slender salamander, California red-legged frog (concurrent with two-striped garter snake and western pond turtle focused surveys), western spadefoot, mountain plover, southwestern willow flycatcher, and least Bell's vireo. Surveys shall be conducted in accordance with the approved CDFW or U.S. Fish and Wildlife Species (USFWS) protocol for that species.
5.7	**Biological Resources**	**MM 7-6** The Project Applicant/Developer shall retain a qualified Biologist with knowledge of California condors to monitor construction activities in the Project area. The resumes of the proposed Biologist(s) will be provided to the CDFW for concurrence. This Biologist(s) will be referred to as the "Authorized Biologist" hereinafter. During clearing and grubbing of construction areas, the Authorized Biologist shall be present at all times. During mass grading, construction sites shall be monitored on a daily basis, and the Authorized Biologist will have the authority to stop all activities until appropriate corrective measures have been completed. If condors are observed landing in the Project area, the Applicant shall avoid further construction within 500 feet of the sighting until the animals have left the area, or as otherwise authorized by CDFW and USFWS. All condor sightings in the Project area will be reported to CDFW and USFWS within 24 hours of the sighting.

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#	Environmental Factor	Mitigation
		To further protect California condors potentially foraging in the Project area over the long term from negative interactions with humans and/or artificial structures, the Project Applicant/Developer shall remove dead cattle that are found or reported within 1,000 feet of the boundary of a residential or commercial development. Dead cattle shall be relocated to a predetermined location. The locations where carcasses shall be placed shall be a minimum of 1,000 feet from a development area boundary. Appropriate locations for transfer of carcasses include open grasslands and oak/grassland areas where condors can readily detect carcasses and easily land and take off without encountering physical obstacles such as powerlines and other utility structures. The proposed locations would be selected and approved by the CDFW and USFWS. Pursuant to this measure, a telephone number for reporting dead cattle shall be provided and actively maintained. Any cattle carcasses transferred to the relocation areas shall be reported to the USFWS Condor Group. All surfaces on new antennae and phone/utility towers shall be designed and operated with anti-perching devices in conformance with Avian Power Line Interaction Committee standards to deter California condors and other raptors from perching. During construction, the area shall be kept clean of debris (e.g., cable, trash, and construction materials). The Project Applicant/Developer shall collect all microtrash and litter (i.e., anything shiny, such as broken glass), vehicle fluids, and food waste from the Project area on a daily basis. Workers shall be trained on the issue of microtrash: what constitutes microtrash, its potential effects on California condors, and how to avoid the deposition of microtrash.
5.7	**Biological Resources**	**MM 7-7** The Project shall incorporate avoidance and additional open space buffer features for this tri-colored blackbird nesting area. Permanent impacts will be restricted to a distance of 400 feet from the nesting area. The nesting area will be delineated by a qualified Ornithologist based on all available data (three years of site-specific data shall be used). Temporary impacts (i.e., construction noise) within 400 feet shall be restricted to the non-breeding season. The breeding season for this species shall be considered April 1 through July 1. The Project shall include enhancement, restoration, and/or preservation of potentially suitable tricolored blackbird breeding and foraging habitat. Potentially suitable areas for enhancement and preservation include lower Oso Canyon in close proximity to Cement Plant Road, as well as any other created water bodies as part of the Project Drainage Plan, where feasible. Enhancement factors shall include the creation of bulrush marsh habitat or other substrate known to support breeding tricolored blackbirds; a persistent nearby standing water during the breeding season; and available adjacent foraging habitat with an appropriate food source.
5.7	**Biological Resources**	**MM 7-8** Project construction activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) shall occur outside of the avian breeding season, if feasible, which generally runs from February 1–August 31 (as early as January 1 for some raptors) to avoid take of birds or their eggs. "Take" means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (California Fish and Game Code, Section 86), and includes take of eggs or young resulting from disturbances that cause abandonment of active nests. Depending on the avian species present, a qualified Biologist may determine that a change in the breeding season dates is warranted. If avoidance of the avian breeding season is not feasible, a qualified Biologist with experience in conducting breeding bird surveys shall conduct weekly bird surveys beginning 30 days prior to the initiation of Project activities, to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas

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#	Environmental Factor	Mitigation
		allows) any other such habitat within 500 feet of the disturbance area. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days prior to the initiation of Project activities. If a protected native bird is found, the Project Applicant/Developer shall delay all Project activities within 300 feet of on- and off-site suitable nesting habitat (within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified Biologist could continue the surveys in order to locate any nests. If an active nest is located, Project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified Biological Monitor, must be postponed until the nest is vacated; the juveniles have fledged; and there is no evidence of a second attempt at nesting. Flagging, stakes, or construction fencing shall be used to demarcate the inside boundary of the buffer of 300 feet (or 500 feet) between the Project activities and the nest. Project personnel, including all contractors working on site, shall be instructed on the sensitivity of the area. The Project Applicant/Developer shall provide the Department of Regional Planning with the results of the recommended protective measures described above to document compliance with applicable State and federal laws pertaining to the protection of native birds. If the Biological Monitor determines that a narrower buffer between the Project activities and observed active nests is warranted, he/she shall submit a written explanation as to why (e.g., species-specific information; ambient conditions and birds' habituation to them; and the terrain, vegetation, and birds' lines of sight between the Project activities and the nest and foraging areas) to the Department of Regional Planning and, upon request, the CDFW. Based on the submitted information, the Department of Regional Planning (and the CDFW, if the CDFW requests) will determine whether to allow a narrower buffer. The Biological Monitor shall be present on site during all grubbing and clearing of vegetation to ensure that these activities remain within the Project footprint (i.e., outside the demarcated buffer); to ensure that the flagging/stakes/fencing is being maintained; and to minimize the likelihood that active nests are abandoned or fail due to Project activities. The Biological Monitor shall send weekly monitoring reports to the Department of Regional Planning during the grubbing and clearing of vegetation, and shall notify the Department of Regional Planning immediately if Project activities damage active avian nests.
5.7	**Biological Resources**	**MM 7-9** A qualified Biologist (retained by the Project Applicant/Developer with selection reviewed by the County) shall conduct a field survey no earlier than 20 days prior to any grading activity that would occur during the breeding season (i.e., April 1 through August 31) of native bat species that potentially utilize the site. This should be done to determine if active roosts of special status bats (such as pallid bat) are present in the applicable habitats on the site (e.g., woodlands). If active roosts are found, construction within 200 feet shall be postponed or halted until the roost is vacated and juveniles are self-sufficient, as determined by the Biologist.

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<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation</th></tr>
<tr><td>5.7</td><td>Biological Resources</td><td>MM 7-10 The Project Applicant/Developer shall preserve grasslands, including native perennial grassland and associated wildflower field vegetation types, at a minimum 2:1 ratio within the approximate 27,408-acre mitigation preserve (see Table A). The Project would impact 6,416 acres of grasslands; therefore, a total of 12,832 acres of grassland mitigation acreage is required to bring impacts to a less than significant level.

TABLE A
GRASSLAND MITIGATION ACREAGES
<table><tr><th>Mitigation Area</th><th>Grasslands</th><th>Total Acreage</th></tr><tr><td>On-site Unimpacted/SEA</td><td></td><td></td></tr><tr><td>On-site Unimpacted/SEA</td><td>1,989</td><td>3,861</td></tr><tr><td>Subtotal (Total On-Site Mitigation Area)_</td><td>1,989</td><td>3,861</td></tr><tr><td>Off-Site Open Space</td><td></td><td></td></tr><tr><td>Area 1</td><td>1,641</td><td>6,417</td></tr><tr><td>Area 2</td><td>1,602</td><td>2,556</td></tr><tr><td>Area 3</td><td>3,059</td><td>4,183</td></tr><tr><td>Area 4</td><td>4,429</td><td>7,319</td></tr><tr><td>Area 5</td><td>643</td><td>643</td></tr><tr><td>Area 6</td><td>1,012</td><td>2,429</td></tr><tr><td>Subtotal (Total Off-site Mitigation Area)_</td><td>12,386</td><td>23,547</td></tr><tr><td>Total Mitigation Area</td><td>14,375**</td><td>27,408</td></tr><tr><td colspan="3">SEA: Significant Ecological Area
**Goal for 2:1 Grassland Mitigation is 12,832 Acres</td></tr></table>
Mitigation for loss of those areas modeled as native perennial grassland will provide similar habitat quality as that which was lost. The result shall be native perennial grassland and wildflower field values that are equal to or greater than the overall ecological functions and values of those lost as a result of Project implementation. Preservation shall include dedication and long-term management working towards the goal of a self-sustaining system. Long-term management will include focused major problematic non-native species eradication (e.g., feral pigs) where feasible. Preservation will occur on open space lands on the Project site and on other lands within Tejon Ranch.</td></tr>
</table>

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#	Environmental Factor	Mitigation
		As outlined in Table A above, the 14,375 acres of grassland preservation will occur in open space areas on site and in the six other areas. A full description of these areas is in PDF 7-2. Many of these grassland areas have been part of the expansive grassland studies conducted for the Project over the course of several years. Detailed plot analysis and modeling show the high level of similarity between these preserved grasslands and the grasslands within the Project impact area. In addition, the grasslands are contiguous with other preserved open space in the region and support other important biological functions (e.g., drainages and local wildlife movement pathways). As a result, the preserved grassland is part of a more watershed-level preservation allowing for long-term sustainment and a total value that is greater than the sum of its parts. The preservation phasing through conservation easements shall be based on the percentage of total area of impact per phase of development, regardless of specific resource impacts. The specific location of the acreage to be dedicated within a particular phase will be chosen to maximize the replacement of resource values lost during that phase of construction while maintaining as much contiguous acreage as possible. In order to preserve an adequate quantity of grassland, lands outside the County of Los Angeles, within the County of Kern, would be used for mitigation. As each phase is proposed, a percentage of the mitigation preserve (which is equivalent to the percentage of that phase's impacts) shall be dedicated concurrent with the entitlement approval of that phase. The open space preserve, including the grasslands within it, shall be preserved in perpetuity to offset Project impacts on native grasslands and wildflower fields prior to issuance of a grading permit for the Project site. The phasing of mitigation has been previously described. The Native Perennial Grassland and Wildflower Field Mitigation Plan will sufficiently offset and fully mitigate the impacts on native grasslands and wildflower fields associated with the Project.
5.7	**Biological Resources**	**MM 7-11** This measure prescribes mitigation for other special status vegetation types including mixed oak woodland, oak trees, and other riparian and wetland vegetation types. Each of these three vegetation types is discussed separately (native grassland and wildflower fields are addressed in MM 7-10). *Mixed Oak Woodlands* The Project Applicant/Developer shall create mixed oak woodlands to achieve resulting vegetation/habitat values. Since there would be approximately 6.2 acres of oak woodland impacts, mitigation will result in the preservation of a minimum of 6.2 acres of mixed oak woodland and creation of a minimum of 6.2 acres of mixed oak woodland, which will include the establishment[3] of 322 oak trees completed as part of oak tree replacement in accordance with the County of Los Angeles oak tree permit requirements (see Oak Trees Section below). Oak trees established in created oak woodlands will be credited towards both oak woodland and oak tree mitigation requirements. If Project impacts are reduced through a reduction in Project disturbance limits in oak woodland areas, required mitigation acreage will be reduced accordingly. In accordance with mitigation options outlined in Section 21083.4 of the *California Public Resources Code* (PRC), replacement of oak woodlands shall consist of no greater than ½ of the oak woodland mitigation requirement. Therefore, half of the 6.2 oak woodland impact acreage will be mitigated via the alternate option of preservation. The

3 In Biology, "establish", in this sense, refers to vegetation (including seeds) that has been planted and is becoming a healthy, surviving plant with as much chance to survive as plants that have existed for a long period of time.

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#	Environmental Factor	Mitigation
		combined acreage of oak woodland preserved both on site (unimpacted/Significant Ecological Area [SEA]) and within the off-site mitigation areas is 3,102 acres and is expected to substantially exceed the required 50 percent of mitigation as preservation. Mitigation through creation is typically implemented on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. However, evidence of lack of naturally occurring recruitment on site indicates that the existing woodlands are likely to be eventually replaced by non-woodland vegetation. Based on the lack of naturally occurring replacement trees, it is anticipated that oak woodland planting is necessary to sustain the oak woodlands. Therefore, the goal of oak resource mitigation efforts will be to create and enhance oak woodlands. To maximize potential for success, oak woodlands will be created within and adjacent to the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas. Details of the oak woodland mitigation program are described below in items 1–10. 1. To mitigate for impacts to oak woodland and oak trees, site-specific native acorns will be collected. Acorns will be collected within the watershed area of the Project site to ensure that acorns collected are of a similar genetic stock to those existing on the site. Some acorns will be planted and maintained in containers, and others will be stored and planted directly on site within the Oak Mitigation Areas. 2. To maximize oak woodland biological values and the potential for long-term success, some locally collected oak acorns will be planted directly into the ground. These acorns will be planted in appropriate locations in the Oak Mitigation Areas. The locations identified for acorn planting will be reviewed by the County Forester. 3. Container plants will be propagated and maintained from locally collected acorns. In this way, more established container plants will be available for mitigation efforts, and they will contain the most suitable genetic variability appropriate for the region to increase mitigation success. The preferred method of propagation will include the establishment of a temporary nursery on the Project site. The nursery will include partial shade areas to reduce water loss and a constant water supply to supplement planted trees. Using the acorns collected from within the watershed area of the Project site, container plantings will be cultivated at this location. Development of trees on site will ensure that they are acclimated to the typical weather conditions at their eventual permanent location. If necessary, and in consultation with the County Forester, acorns collected from the site may be stored or propagated and maintained under contract with a reputable native plant nursery off site. 4. To provide overstory, midstory, and understory tree/plant coverage, some container plants and oak trees, grown from locally collected acorns, will be installed in addition to the application of native seed mixes. Since studies indicate that the younger the planting is, the more likely the chance is for successful establishment and long term viability4 locally collected acorns as well as locally collected, nursery-cultivated young oak trees (one-gallon or five-gallon containers of oaks) would be planted on site. 5. The Project Applicant/Developer will provide an annual report to the County that will include an accounting of each of the following in the mitigation areas: (a) the number of acorns planted; (b) the number of germinated acorns

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#	Environmental Factor	Mitigation
		(whether planted or natural) protected; (c) the number of new oak trees planted in mitigation areas, including the species of each tree planted; (d) the caliper of each new tree planted and/or protected; (e) the acreage of woodlands created and/or conserved in the mitigation areas. 6. Creation of structurally diverse oak woodland habitat within and contiguous to existing oak woodlands will be accomplished by planting locally collected oak acorns, plus yearly sowings of additional locally collected acorns, as well as, temporary irrigation, weed abatement, pest deterrence, and/or other maintenance tasks as needed to facilitate oak seedling germination and survival. 7. Prior to Project grading, locally collected acorns will be planted and grown. Once trees reach a diameter of one inch just above ground surface (i.e., basal height) within the Oak Tree/Oak Woodland Mitigation Areas, they will be appropriated as "mitigation trees" to be used for oak woodland and oak tree permit mitigation purposes with approval from the County Forester as part of the oak woodland and oak tree permit mitigation process and will be credited as a mitigation tree if the tree is determined to be healthy by the Los Angeles County Forester at the end of the monitoring period. 8. The required 12.4 acres of mixed oak woodland creation will occur within 473 acres of existing oak woodland (primary area) and 716 acres of adjacent low quality non-native grassland (secondary area, if needed) on the western portion of the Project site. Additional suitable areas may also be identified within reduced grading footprints following final detailed tract map production to the satisfaction of the County Forester. Mitigation planting areas will be refined within the proposed mitigation areas through a multi-variable query of existing Geographical Information System (GIS) data sets, and intensive field analysis to precisely identify suitable planting locations (e.g., localized soil types, microtopography). Created oak woodlands will have an approximate average density of 80 appropriately sized oak trees per acre at the end of the monitoring period (or other density as directed by the County Forester), while staying within the mitigation areas. The contiguity of the created woodland habitat within or adjacent to existing oak woodlands will be ecologically beneficial, and will also improve the logistics of restoration installation, maintenance, and monitoring, compared to a fragmented habitat creation program. These methods will help to ensure the success of created oak woodlands to replace the existing woodlands over time. 9. In order to implement the creation of habitat on the site and to ensure the persistence of the overall biological functions and values over time, the Project Applicant/Developer shall submit an Oak Woodland Habitat Mitigation Plan to the County for approval prior to the issuance of a grading permit for each tract map or combination of tract maps. The mitigation approach described in the Plan shall comply with Section 21083.4 of the *California Public Resources Code* (PRC), which was enacted by California Senate Bill (SB) 1334. County approval of the Plan shall be required prior to the initiation of any clearing or grading on the site that affects any oak woodland vegetation. The Oak Woodland Habitat Mitigation Plan shall be developed by a qualified Restoration Specialist, to be retained by the Project Applicant/Developer, and shall be subject to County approval. The objective of the Oak Woodland Habitat Mitigation Plan will be to preserve 6.2 acres of existing oak woodland and to create 6.2 acres of oak woodland. The Oak Woodland Habitat Mitigation Plan serves the purpose of satisfying the conditions of Section 21083.4 of the *California Public Resources Code*. 10. Implementation of the Oak Woodland Mitigation Plan will be the responsibility of the Project Applicant/Developer or its designated party; the Plan shall specify, the following:

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#	Environmental Factor	Mitigation
		a. **Personnel:** The responsibilities and qualifications of personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, County staff, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included. b. **Site Selection:** The mitigation site(s) will be determined in coordination with the Project Applicant/Developer and the County. The site(s) will be located in open space areas that will be managed in perpetuity through a conservation easement, open space dedication, performance bond, management at the Tejon Ranch Conservancy, or other method approved by the County. c. **Native Species Seed Collection, Site Preparation, and Planting Implementation:** Under the supervision of the County Forester, site preparation will include (i) protection of existing native species; (ii) trash and weed removal; (iii) native species salvage and reuse (i.e., duff); (iv) soil treatments (i.e., imprinting, and/or decompacting); (v) erosion-control measures (i.e., rice or willow wattles); (vi) native seed mix application; and (vii) procedures for native seed collection from the site, including acorns of native oak species. d. **Schedule:** Restoration/revegetation sites will be established between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the mitigation sites and will take place under the supervision of the County Forester. e. **Maintenance Plan and Guidelines:** The Maintenance Plan, to be approved by the County, will include (i) weed control; (ii) herbivory control (e.g., feral pigs); (iii) trash removal; (iv) irrigation system maintenance; (v) maintenance training; (vi) replacement planting; and (vii) a vehicle washing program to capture invasive propagules. The Maintenance Plan will also indicate who is responsible for each of these listed tasks. f. **Monitoring Plan:** The monitoring plan, to be approved by the County, will include (i) qualitative monitoring (i.e., photographs and general observations); (ii) yearly quantitative monitoring (i.e., randomly placed transects to assess vegetation type coverage and systematically assess all mitigation oak trees); (iii) performance criteria as approved by the County; and (iv) annual reports that will be submitted to the County for five consecutive years after initial planting (or longer if the County requires) and following plan approval. g. **Long-Term Preservation:** Long-term preservation of the mitigation site(s) will be outlined in the Restoration Plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation. h. **Growth/Vegetation Standards:** Growth/vegetation standards will be developed by a qualified Biologist in accordance with County and regulatory agency requirements. *Oak Trees* The mitigation approach for replacing lost oak trees shall comply with the County of Los Angeles Oak Tree Ordinance (CLAOTO) requirements. The goal of this program is to replace impacted oak trees at a ratio of 3:1 for non-heritage oaks and 10:1 for heritage oaks in accordance with the County's oak tree permit requirements. This would result in the

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#	Environmental Factor	Mitigation
		establishment of 322 oak trees. However, if Project impacts are reduced through a reduction in Project disturbance limits within oak woodland areas, required tree numbers will be reduced accordingly. Mitigation trees are typically planted on lands with minimal habitat value (e.g., ruderal vegetation, graded slopes) rather than in areas with a substantial component of existing native vegetation. To maximize potential for success, oak trees will be planted in the same areas where oak woodlands currently exist. This method will create future generations of oak trees and oak woodland on the site in these areas and will be done as described in Numbers 1–10 under the "Mixed Oak Woodlands" portion above. Additionally, quantitative tree monitoring data for all mitigation trees (whether for County of Los Angeles Oak Tree Ordinance [CLAOTO] mitigation or oak woodland mitigation) will be submitted to the County Forester yearly and, for convenience, will be included as an appendix to the annual report required in 10(f)(ii) above. *Other Riparian and Wetland* In addition, the Project Applicant/Developer shall create, enhance, and/or restore all impacted riparian and wetland vegetation types that are not considered jurisdictional by permitting resource agencies (i.e., those not mitigated through regulatory permit conditions) at a 1:1 ratio. This applies to areas mapped as alluvial scrub; riparian herb; rush riparian grassland; southern arroyo willow riparian; southern willow scrub; unvegetated wash; willow riparian forest; willow riparian woodland; alkali meadow; Baltic rush; and seeps and ephemeral ponds. These areas shall be included in the Streambed and Wetland Habitat Creation and Enhancement Plan discussed in MM 7-12, which shall be approved by the County prior to issuance of grading permits.
5.7	**Biological Resources**	**MM 7-12** Prior to any fill of or alteration to drainage tributaries, wetlands, and/or riparian vegetation on the Project site, the Project Applicant/Developer shall obtain the appropriate regulatory agency permits and/or agreements from the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the applicable Regional Water Quality Control Board (RWQCB). The Project Applicant/Developer shall comply with all mitigation measures specified in the regulatory agency permits and/or agreements. Pursuant to the permit requirements, the Project Applicant/Developer will develop a Storm Water Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices (BMPs) for reducing or eliminating construction-related pollutants in the site runoff. The Project is subject to the following Mitigation Performance Standards: As anticipated to be required by USACE, CDFW, and Regional Water Quality Control Board (RWQCB) regulatory permits, the Project Applicant/Developer shall create, enhance, and/or restore acreage to ensure that net habitat values are at least equal to those lost from Project implementation. Mitigation ratios are typically specified in the regulatory permits. However, if mitigation is conducted prior to impacts taking place, mitigation ratios can be pro-rated; this type of mitigation pro-rating allows time to evaluate if created, enhanced, and/or restored habitat values are at least equal to those that will eventually be lost from Project implementation. Under this scenario, it can be verified that the restoration/creation goals have been accomplished or are proceeding satisfactorily. The extent of drainages and wetlands that would be preserved under the Project will provide opportunities to expand and enhance the drainages, wetlands, and riparian vegetation on the Project site. As discussed previously, a wetland functional assessment of the drainages and other aquatic features in the Project site was conducted by Glenn Lukos Associates in 2006 and 2009 in order to characterize and evaluate the functions of the

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#	Environmental Factor	Mitigation
		site's drainages and riparian habitats (GLA 2009a). An update to that functional assessment was conducted in 2015 (BonTerra Psomas 2015a). Overall, aquatic resources on the site were evaluated in terms of Functional Capacity Units (FCU), which indicate more specifically the mitigation level necessary to restore riparian functions after Project implementation by providing a measure of the ability of a wetland area to perform typical wetland functions. The purpose of the mitigation is to replace lost habitat value, as measured in FCU rather than based on a standard acreage ratio. Mitigation will include a combination of on-site and off-site preservation of jurisdictional resources; on-site and off-site enhancement/restoration of preserved jurisdictional resources in order to increase overall functional capacity; and the creation (expansion) of riparian/wetland habitats along degraded drainages, including Oso Creek and two of its tributaries in addition to the three other drainages (including the main drainage located along and immediately north of State Route [SR] 138). The direct and indirect loss in on-site functional units will be mitigated through passive enhancement of open space areas, active enhancement of 6.5 acres of wetland, and creation of approximately 78.4 acres of wetland/riparian habitat (GLA 2009a). Following implementation of mitigation, the Project provides approximately 4,748.5 FCUs. Therefore, the proposed mitigation will result in a functional gain of 327.5 FCUs, thereby ensuring a net increase in functionality in the post-Project condition (GLA 2009a). In summary, implementation of the proposed jurisdictional resource mitigation will actually result in a net gain in the measurable functional capacity and therefore, the habitat values, of the on-site and off-site drainages and other aquatic features.[5] To implement the creation/restoration/enhancement of streambed/wetland habitats on the site, the Project Applicant/Developer shall develop a Streambed and Wetland Habitat Creation and Enhancement Plan commensurate with regulatory agency permits and/or agreements. The purpose of this plan is to demonstrate the feasibility of creating the required mitigation acreage and to ensure that the overall biological functions and values are increased. The plan shall be developed by a qualified Restoration Specialist and shall be submitted to the County for approval. The Streambed and Wetland Habitat Creation and Enhancement Plan shall specify the following: a. **Personnel:** Responsibilities and qualifications of the personnel required to implement and supervise the plan will be specified. The responsibilities of the Landowner, Specialists, and Maintenance Personnel that will supervise and implement the plan will also be included. b. **Site Selection:** The sites for mitigation will be determined through coordination between the Project Applicant/Developer, the USACE, the CDFW, the applicable RWQCB, and the County. c. **Site Preparation and Planting Implementation:** Site preparation will include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting and/or decompacting); (5) erosion-control measures (i.e., rice or willow wattles); (6) seed mix application and quantities; and (7) procedures for seed collection from existing habitat on the site. d. **Schedule:** Establishment of restoration/revegetation sites will be conducted between October 1 and January 30. Seeding and planting of container plants will take place immediately after preparation of the restoration sites.

5 For information about the functional values of the impacted jurisdictional resources and proposed mitigation areas, see GLA 2009b in Appendix 5.7-B.

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		e. **Maintenance Plan/Guidelines:** The maintenance plan will include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; (6) replacement planting; and (7) vehicle washing program to capture invasive propagules. f. **Monitoring Plan:** The monitoring plan will include (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) performance criteria, as approved by the USACE, the CDFW, and the applicable RWQCB; (4) biannual reports (i.e., two reports the first year) for the first year will be submitted to the USACE, the CDFW, the applicable RWQCB; and (5) annual reports, which will be submitted to all three agencies and the County for an additional four years after initial planting. The monitoring is planned for five years, but may be shorter or longer depending upon the performance of the mitigation sites. g. **Long-Term Preservation:** Long-term preservation of the mitigation sites will be outlined in the mitigation plan to ensure that they are not impacted by future development. An open space dedication, conservation easement, performance bond, management by the Tejon Ranch Conservancy, or other County-approved method will be used to ensure long-term preservation. h. **Performance Standards:** These will be developed by conducting a biological functions and values assessment (using an accepted method such as Hydrogeomorphic Modeling [HGM]) to establish a baseline for the overall biological value of the affected streambeds and riparian areas on the site. Revegetation will be considered successful at five years if the percent cover and species diversity of the restored and/or created habitat areas are similar to percent cover and species diversity of adjacent existing habitats, as determined by quantitative testing of existing, restored, and created habitat areas. Contingency measures shall also be described in the event that mitigation efforts are not successful. i. **Cattle Exclusion Methods*:*** Measures to exclude cattle from habitat creation areas and enhancement areas (where applicable) shall be identified and described. j. **Funding:** The funding source(s) for all proposed mitigation actions shall be identified. The Streambed and Wetland Habitat Creation and Enhancement Plan shall be subject to approval by the County, the USACE, the CDFW, and the applicable RWQCB for impacts within the respective jurisdictional areas of these agencies. If pro-rated mitigation ratios are used, it shall be demonstrated that the mitigation performance standards have been accomplished. The accomplishment shall be verified by the USACE, the CDFW, and the applicable RWQCB based on the performance standards established above prior to the County's issuance of a grading permit. Implementation of these mitigation measures may serve the dual purpose of satisfying the conditions (or a portion of the conditions) of the agreements/permits of the USACE, the CDFW, and the applicable RWQCB.
5.7	**Biological Resources**	**MM 7-13** The Project Applicant/Developer shall develop a Landscaping Plan for review and approval by the County Biologist, which includes a plant palette composed of non-invasive species that are adapted to the conditions found on the Project site and do not require high irrigation rates. The Landscaping Plan will also include a list of invasive plant species prohibited from being planted on the Project site. In addition, retail sales of these invasive plant species will be prohibited at any businesses (nurseries) located within the Project site. Landscape plans shall encourage planting of local natives typical of native vegetation within ten miles of the Project site.

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		The Homeowners Association shall supply future residents of the Project site with the list of invasive plant species from the Landscaping Plan that will be prohibited from being planted on the Project site and educational materials that emphasize the importance of adhering to the list. A list of local native plants shall be provided to homeowners.
5.7	**Biological Resources**	**MM 7-14** The designated SR-138 underpass shall be located where the highway crosses the Project's western border near the current intersection with Cement Plant Road. The width of the underpass shall be 100 feet and shall flare out on both sides of the highway to a 150-foot width in the Project open space adjacent to the highway. These specifications are expected to allow some local wildlife to safely pass between open space areas on opposite sides of the highway. In addition, a 50-foot open space buffer will be incorporated on the eastern and western sides of Cement Plant Road; this buffer shall be from the southern side of the bridge that spans the California Aqueduct to the nearest open space polygon that meets the property edge. The undeveloped 50-foot buffer shall run parallel with the Aqueduct along its southern bank. This buffer may be temporarily disturbed during construction, but shall be retained as greenspace to increase connectivity for local wildlife between open space areas and potential Aqueduct crossing locations.
5.7	**Biological Resources**	**MM 7-15** Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed by the Project Applicant/Developer in common areas (i.e., any area where public trash receptacles would be placed, such as parks, sidewalks, community centers, and walking trails) throughout the Project site. Documentation of the completion of this measure shall be submitted to the County prior to occupation of housing units. The Homeowners Association shall supply an educational pamphlet to future residents of the Project site regarding: the importance of not feeding wildlife; information stating that trash (containing food) and microtrash that could potentially attract condors should not be accessible to wildlife; the necessity of keeping the ground free of fallen fruit from trees; and instructions about not leaving pet food outside.
5.7	**Biological Resources**	**MM 7-16** All landscaping materials (including organic mulches) for common/public areas (i.e., parks and intervening unpaved areas which are not a part of any homeowner's parcel) shall be inspected and certified by landscape suppliers as being "free" of Argentine ants prior to planting. Additionally, container plants and other landscaping materials to be installed within common/public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of Argentine ants. Plants or other materials with Argentine ants shall be rejected. Upon initiating landscaping within a development area, quarterly monitoring shall be initiated for Argentine ants along the development/construction–open space interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Each site visit shall be followed up with a summary monitoring report sent electronically to Applicant indicating the status of the site. Monthly monitoring reports, as needed, shall be submitted to CDFG and the County of Los Angeles).

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		Monitoring reports shall include remedial recommendations and issue resolution discussions when necessary. Monitoring and control of Argentine ants would occur for a 5-year period. After the first 5 years, the Homeowners Association or other entity will be responsible for controlling Argentine ants. Additionally, to further guard against Argentine ants, the Homeowners Association shall discourage irrigated landscape planting through distribution of educational information and other feasible methods to reduce the potential for importing Argentine ants. To preclude the invasion of Argentine ants into preserved populations of round leaved filaree and crownscale and their associated buffers, controls will be implemented using an integrated pest management (IPM) approach. The controls include (1) Providing "dry zones" between development and round leaved filaree and crownscale populations, where typical soil moistures are maintained at levels below about 10% soil saturation, which will deter the establishment of nesting colonies of ants; and providing dry zone buffers of sufficient width to reduce the potential for Argentine ant activity within core habitat areas; (2) Where feasible, and/or appropriate, dry areas such as parking lots and roadways shall be built adjacent to the boundaries of these populations; (3) designing adjacent areas to slope away from the preserved populations to avoid runoff entering the area; (4) Pedestrian pathways placed next to preserve populations shall consist of decomposed granite or other gravel to minimize the holding of moisture, thereby preventing establishment of suitable habitat for Argentine ant colonies; (5) Ensuring that landscape container plants installed within 200 feet of preserved populations are ant free prior to installation to reduce the chance of colonies establishing in areas close to the preserved populations; (6) Maintaining natural hydrological conditions in the preserved populations areas, including the buffers, through project design features for roadways, French drains, irrigation systems, underground utilities, drainage pipes and fencing, storm drains, and any other BMP measures that apply to surface water entering the preserved populations areas; (7) Using drought resistant plants in fuel modification zones and minimizing irrigation to the extent feasible.
5.7	**Biological Resources**	**MM 7-17** The Project Applicant/Developer shall implement a public awareness program (prior to the first occupancy permit) in an effort to restrict public access to the riparian and open space areas on the Project site to designated trails and to prevent unleashed domestic animals from entering these areas. This program shall include signs that identify the boundaries of ecologically sensitive areas; the use of temporary fencing around sensitive areas that appear to be receiving a high level of disturbance until the disturbance is reversed; and promotion of public education and awareness of such areas. The Project Applicant/Developer shall be responsible for the initial development of the public awareness program and installation of interpretive signs and fencing. The Homeowners Association, the Project Applicant/Developer, or an acceptable Land Manager/Agency (as approved by the County) shall be responsible for maintaining this program, including signs and fencing. Only passive recreational activities shall be permitted within the designated natural open space areas and shall be restricted to trails. Some areas may allow slightly greater impacts if designated as picnic and/or camping areas. All dogs shall be required to be leashed while in the designated natural open space areas. In addition, all dogs and cats shall be required to be neutered or spayed; all dogs shall be required to have a microchip; and potential owners shall show evidence prior to entry into the Centennial Development, as required by Los Angeles County Code (Section 10.20.350).

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5.7	**Biological Resources**	**MM 7-18** Common area landscaping and restoration methods shall follow protocols to reduce the potential for the introduction of pathogens and pests into the Project site and to reduce the spread of pathogens and pests outside the Project site (should they inadvertently be introduced). Protocols for reducing the potential for introduction of pathogens and pests into the site via plant foliage/soil from nurseries supplying the material shall include the following anti-contamination procedures: sanitizing all containers, tools, and footwear (boots, pots, clippers, soil scoops, shovels) in soil potting areas; sanitizing all transplanting and prep tables; sanitizing plant storage locations (e.g., benches); sanitizing plant transportation devices (e.g., carts); sanitizing floor surfaces where plants are stored on a regular basis; and using anti-splash watering methods for particularly susceptible plant species. Field installation crews shall sanitize all tools and footwear during landscaping and restoration activities prior to using them or entering the site and shall install plants in a way that minimizes conditions that support pathogens and pests (e.g., minimizing standing water). All plant materials brought onto the site will be inspected by landscape/restoration personnel familiar with signs of pathogen and pest infestation. Should pathogens or pests be detected, the infected material shall be bagged, secured, and disposed of off-site to a contained location. Long-term control methods shall include monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed; establishing action thresholds that trigger control actions; and implementing pest control methods—cultural, mechanical, environmental, and biological—and appropriate pesticides.
5.7	**Biological Resources**	**MM 7-19** Prior to vegetation clearing or grading, additional surveys shall be performed to confirm that all oak trees within the impact and buffer areas are recorded. The Project Applicant/Developer will be required to comply with all mitigation measures stipulated in the County-issued Oak Tree Permit pursuant to the County of Los Angeles Oak Tree Ordinance (CLAOTO) and the *County of Los Angeles Oak Woodlands Conservation Management Plan* (OWCMP). Trees would be planted pursuant to the Oak Woodland Restoration Plan discussed in MM 7-11.
5.7	**Biological Resources**	**MM 7-20** All oak tree driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed with temporary fencing for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (RPZ) (that area at least 15 feet from the trunk or half again as large as the distance from the trunk to the dripline, whichever is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Fence removal shall occur only after the Project Biologist confirms the health of preserved trees. All upslope grading and drainage shall be engineered to minimize resultant erosion, soil compaction, or drainage into preserved oak tree areas. Whenever possible, utilities shall be designed to avoid crossing under the canopies of preserved trees unless the utilities are installed by drilling under the root zones (where feasible) in order to avoid impacts associated with cutting roots. Feasibility of drilling under trees will be based on soil conditions. Utilities will be clustered whenever possible to lessen impacts to oak RPZs.

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5.7	**Biological Resources**	**MM 7-21** In order to ensure that no direct impacts to Significant Ecological Area (SEA) 17 occur, brush clearance zones shall be contained within the current Project impact boundary and no overlap with the adjacent SEA 17 shall occur. Vegetation management for fire abatement purposes is not authorized in SEA areas. An Implementation Plan, including fire risk abatement measures (including but not limited to vegetation management) required to comply with State and County fire prevention and response legal requirements, shall be submitted as part of the tentative tract map for portions of the Project site that border an SEA or mitigation preserve area. The Plan shall include this prohibition on vegetation clearance within these biologically sensitive areas.
5.7	**Biological Resources**	**MM 7-22** If a golf course is developed as part of Project implementation, the Project Applicant/Developer shall prepare a Golf Course Management Plan that requires any golf course developed on the site to be built and managed in accordance with the Audubon Cooperative Sanctuary Program for Golf Courses (or equivalent), which is a cooperative effort between the United States Golf Association and Audubon International that is designed to promote ecologically sound land management and to conserve natural resources.
5.10	**Traffic, Access and Circulation**	**MM 10-1** The Project shall provide internet infrastructure and a community intranet with access for homeowners associations; interest groups; local event scheduling; schools, library, carpool and transit services; and other on-site entertainment and amenities for residential land uses. The internet and intranet will reduce the need for people to use automobile travel to obtain the information that is provided by both. The intranet shall also provide education about greenhouse gas (GHG) emissions; GHG reduction opportunities; energy and water conservation opportunities; financial incentives (e.g., rebates and low-interest loans) for energy-efficiency improvements; and energy-efficiency technology systems, including those suitable for large commercial and industrial users.
5.10	**Traffic, Access and Circulation**	**MM 10-2** The Project Applicant/Developer shall submit a traffic study that addresses site access and local circulation in accordance with the County of Los Angeles Department of Public Works Traffic Impact Analysis Report Guidelines. The Project Applicant/Developer shall retain a Traffic Engineer or Civil Engineer licensed in the State of California to perform the traffic study to the satisfaction of the County.
5.10	**Traffic, Access and Circulation**	**MM 10-3** The Project Applicant/Developer shall seek to enter into a Centennial Transportation Improvement Program (CTIP) for Land Development Impacts to California State Transportation Facilities with Caltrans and shall comply with the terms the CTIP agreement if approved and implemented. Compliance with the CTIP shall constitute compliance with the mitigation measures for the Project's traffic impacts on the State highway system. Any required improvements that result from direct Project impacts (i.e. not from cumulative impacts), and are required on Caltrans-owned facilities, shall be implemented through a CTIP. Any required improvements that result from cumulative traffic impacts may be implemented through payment of fair share fees.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-4** The Project Applicant/Developer will work with the County and/or Caltrans to establish a Traffic Mitigation Fee Program or an assessment district (an example of such is the Bridge and Thoroughfare District pursuant to *California Government Code*, Sections 66484 et seq.) or other equivalent program. Such a program or assessment district will mitigate vehicular trips related to new development accessing the SR-138 corridor between I-5 and SR-14 by establishing a fair share contribution from such new development to ensure the SR-138 needed improvements are fully funded. These fees shall be used for the needed improvements and may include the cost of engineering, soils analysis, right-of-way acquisition, demolition, relocation, construction, inspection, and other related expenses.
5.10	**Traffic, Access and Circulation**	**MM 10-5** The Project Applicant/Developer shall submit Traffic Management Plans to the County for review and approval. The Traffic Management Plans shall describe traffic-control measures that shall be implemented to maintain traffic flow in all directions, including where utilities and other improvements are being implemented in existing roadways. The Traffic Management Plans shall identify the following: construction haul routes; duration and location of lane closures; location of parking for the public and construction workers during construction phases; use of flag persons; and any pedestrian-related impacts to sidewalks and intersection crossings. The Traffic Management Plan shall be implemented during all stages of Project construction that generate traffic impacts.
5.10	**Traffic, Access and Circulation**	**MM 10-6** *(Traffic Study MM-1)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP to improve SR-138 to a four lane expressway from I-5 to 190th Street West, with right-of-way reserved for a six-lane expressway between I-5 and 300th Street West, or comparable improvements consistent with the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-7** *(Traffic Study MM-2)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at Specific Plan Westerly Access and SR-138: • Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions. • Construct intersection to include: two NB left-turn lanes, three NB through lanes and one NB right-turn lane. • In the SB direction, construct two left turn lanes, three through lanes and one free-flow right-turn lane. • In the EB direction, construct three left-turn lanes and one right-turn lane. • In the WB direction, construct two left-turn lanes and a free-flow right-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-8** *(Traffic Study MM-3)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at Specific Plan Central Access and SR-138: • Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions. • In the NB and SB directions, construct two left-turn lanes, three through lanes and one right-turn lane. • In the EB direction, construct two left-turn lanes and one right-turn lane. • In the WB direction, construct two left-turn lanes and a free-flow right-turn lane. • Install traffic signal and include SB and NB right-turn overlap phasing. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-9** *(Traffic Study MM-4)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 300th Street West and SR-138: • Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions. • Construct two left-turn lanes and one right-turn lane in the EB direction and two left-turn lanes and dual right-turn lanes in the WB direction. • In the NB direction, construct two left-turn lanes, three through lanes, and one right-turn lane. • In the SB direction, construct two left turn lanes, three through lanes and one free-flow right-turn lane. • Install traffic signal and include WB right-turn overlap phasing. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-10** *(Traffic Study MM-5)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 290th Street West and SR-138: • Widen SR-138 to a four-lane highway from westerly project entrance to 290th Street West, with auxiliary lanes between intersections, resulting in three through lanes in the WB and EB directions. • Additional intersection improvements include: two EB left turn lanes, one WB right-turn lane, two SB left turn and two SB right-turn lanes. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).

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5.10	**Traffic, Access and Circulation**	**MM 10-11** *(Traffic Study MM-6)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at Margalo Drive and SR-138: • Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions. • Additional intersection improvements include: one EB left turn lane and one WB right-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-12** *(Traffic Study MM-7)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at Three Points and SR-138: • Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions. • Additional improvements include adding one NB left-turn lane and one SB left turn lane. Or contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-13** *(Traffic Study MM-8)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 245th Street West and SR-138: • Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions. • Additional improvements include adding one NB left-turn lane and one SB left turn lane and one dedicated EB right-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-14** *(Traffic Study MM-9)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 230th Street West and SR-138**:** • Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West. • Additional improvements include one SB left-turn lane, one SB right-turn lane and one EB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).

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5.10	**Traffic, Access and Circulation**	**MM 10-15** *(Traffic Study MM-10)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 190th Street West and SR-138: • Widen SR-138 to a four-lane highway from 290th Street West to 190th Street West with roadway augmentation at intersection, approximately ¼ mile in length for the west and east legs resulting in three through lanes in the WB and EB directions. • Additional improvements include adding one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left turn lane and one dedicated EB right-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-16** *(Traffic Study MM-11)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 170th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-17** *(Traffic Study MM-12)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 110th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include: one EB left-turn lane, one WB left-turn lane, two NB left-turn lanes, one SB left-turn lane and two SB right-turn lanes. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-18** *(Traffic Study MM-13)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 90th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include: one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane.

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#	Environmental Factor	Mitigation
		Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-19** *(Traffic Study MM-14)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 60th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include: one EB left-turn lane, one WB left-turn lane, one NB left-turn lane and one SB left-turn lane. • Install traffic signal. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-20** *(Traffic Study MM-15)* To mitigate the Project's impacts to SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for implementation of the following intersection improvements at 30th Street West and SR-138: • Roadway augmentation at intersection, approximately ¼ mile in length for the east and west legs, resulting in 2 through lanes in the WB and EB directions at the intersection. • Additional improvements include adding one EB left-turn lane and one WB left-turn lane. Or, contribute fair share to intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-21** *(Traffic Study MM-16)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of one auxiliary lane at the connector ramp from westbound SR-138 to southbound I-5 for existing plus Project conditions.
5.10	**Traffic, Access and Circulation**	**MM 10-22** *(Traffic Study MM-17 and MM-34)* To provide adequate capacity at The Old Road at I-5 SB Ramps/Sedona intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the addition of a second southbound left-turn lane from The Old Road to the I-5 Southbound On-Ramp.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-23** *(Traffic Study MM-18)* To mitigate the increase of side-street delay for the existing adjacent off-site areas and for planned on-site side streets along SR-138, the Project Applicant/Developer shall either (1) comply with the terms of the Centennial Transportation Improvement Program (CTIP) or (2) dedicate right-of-way within the project site at each site access location to accommodate the ultimate intersection or interchange configuration to be determined by the Northwest Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative) at the following SR-138 intersections: • Westerly Access • Central Access • 300th Street West • 290th Street West
5.10	**Traffic, Access and Circulation**	**MM 10-24** *(Traffic Study MM-19)* To provide adequate on- and off-site capacity, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the widening of SR-138, including: • Addition of an auxiliary lane in each direction (six lanes total) from I-5 to 300th Street West
5.10	**Traffic, Access and Circulation**	**MM 10-25** *(Traffic Study MM-20)* To provide adequate on- and off-site capacity, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the widening of SR-138, including: • Addition of an auxiliary lane in each direction (six lanes total) from 300th Street West to 245th Street West
5.10	**Traffic, Access and Circulation**	**MM 10-26** *(Traffic Study MM-21 and MM-26)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding towards RTP/SCS improvement projects on SR-58 between I-5 in Kern County and I-15 in San Bernardino County, as verified by the County in consultation with the Kern COG and Caltrans. Improvements could include development of a high capacity goods movement facility along the SR-58 and/or E-220 corridors.
5.10	**Traffic, Access and Circulation**	**MM 10-27** *(Traffic Study MM-22)* To provide adequate capacity on SR-138, the Project Applicant/Developer shall comply with the terms of the CTIP for the SR-138 improvements to a limited access facility with grade-separated interchanges, consistent with the County's analysis of the AVAP, or fair share participation and/or contribution to the SR-138 improvements (freeway/expressway or expressway/limited access conventional highway) being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-28** *(Traffic Study MM-23)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding towards the following planned improvements to I-5: • I-5 between Fort Tejon and Grapevine Road and between SR-138 and Lake Hughes Road interchanges: Strengthening and widening the inside and outside shoulders of I-5.

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#	Environmental Factor	Mitigation
.10	Traffic, Access and Circulation	**MM 10-29** *(Traffic Study MM-24)* The Project Applicant/Developer shall implement the Mobility Plan, included as Section 3.2 of the Specific Plan, which provides an extensive system of sidewalks, greenway trails, community trails, and two transit hubs to serve as alternative means of transportation on the Project site. The Mobility Plan also requires creation and ongoing operation of a Transportation Management Association (TMA) to implement ongoing transportation improvements and programs. The Project Applicant/Developer, through the required implementation of the Mobility Plan, shall: • Reinforce and serve the Land Use Plan; • Provide residents and employees with multiple modes of accessibility for internal and external trips by future residents and visitors; • Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies; • Provide residents and employees on the Project site with multiple modes of transportation; • Provides for 80 percent on average, but no less than 50 percent of residential units to be located within one-half mile of a Village center that includes retail and service uses; • Provide parks within a 5-minute walk (0.25 mile) of 80 percent of all residential units; • Require TMA implementation of combination of transit and transportation measures to reduce on-site single-occupancy automobile use by 30 percent in relation to standard ITE-generation rates for the overall Project; and • Require TMA implementation of a combination of measures to reduce off-site peak hour commutes to and from the Project site in single-occupancy automobiles by 20 percent. • Require TMA implementation of a program to coordinate with automotive dealers on the Project site to promote CNG, electric, and hybrid electric vehicles. • Require TMA oversight of requirement for service fleet vehicles for agencies or businesses located on-site to be alternative fuel vehicles to the maximum extent feasible, as determine by the Project Applicant/Developer. The Circulation Plan sets forth requirements for roadway classifications; intersection controls; and traffic calming measures. Where approved by the California Department of Transportation (Caltrans) and the County and where maintenance and durability costs are comparable to traditional materials, use "cool" pavement materials, which reduce heat island effect.
5.10	Traffic, Access and Circulation	**MM 10-30** *(Traffic Study MM-24)* Each component of the Mobility Plan incorporates Transportation Demand Management (TDM) features to reduce dependence on the automobile, provide for a more efficient use of transportation resources among Project occupants, and thereby reduce pollutant emissions. Related to this is the creation and ongoing operation of a Transportation Management Association (TMA) to fund and manage the operation of ongoing transportation programs, including but not limited to transit and on-demand services. The key TDM elements that are inherent in the overall Mobility Plan are: • Sidewalks, greenway trails, and community trails that link residential, schools, shopping, and employment

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#	Environmental Factor	Mitigation
		areas; • Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations; • Pedestrian environments incorporated with public streets; • Parking behind buildings to encourage walking in retail areas along street frontage; and • Parks within 0.25 mile of 80 percent of all residential units
5.10	**Traffic, Access and Circulation**	**MM 10-31** *(Traffic Study MM-25)* To provide adequate capacity to the I-5 mainline freeway, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding towards the following planned improvements to I-5: • I-5 between Lake Hughes and Parker: Addition of one auxiliary lane in each direction. • I-5 between Parker Road and SR-14: Addition of one HOV or HOT lane in each direction.
5.10	**Traffic, Access and Circulation**	**MM 10-32** *(Traffic Study MM-27)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of two auxiliary lanes at the connector ramp from westbound SR-138 to southbound I-5 for Year 2035 cumulative buildout conditions.
5.10	**Traffic, Access and Circulation**	**MM 10-33** *(Traffic Study MM-28)* To provide adequate capacity at the I-5/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the following ramp improvement at I-5/SR-138: • Addition of two auxiliary lanes at the connector ramp mainline before the northbound I-5 to eastbound SR-138 connector ramp
5.10	**Traffic, Access and Circulation**	**MM 10-34** *(Traffic Study MM-29)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138: • Construction of one auxiliary lane and a second off-ramp lane for the SR-14 northbound off ramp to SR-138.
5.10	**Traffic, Access and Circulation**	**MM 10-35** *(Traffic Study MM-30)* To provide adequate capacity at the SR-14/SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the following ramp improvement at SR-14/SR-138: • Construction of a second lane on the SR-14 southbound on-ramp from SR-138.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-36** *(Traffic Study MM-31)* To provide adequate capacity at the SR-14 SB Ramps and SR-138 interchange, the Project Applicant/Developer shall (1) comply with the terms of the CTIP for the reconfiguration of the interchange to include two eastbound through lanes and three westbound through lanes. In the southbound direction, add a second right-turn lane and install a traffic signal and include right-turn overlap phasing or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-37** *(Traffic Study MM-32)* To provide adequate capacity at SR-14 NB Ramps and SR-138 interchange, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP for the reconfiguration of the interchange to include two eastbound through lanes and two westbound through lanes and, in the northbound direction, add two left-turn lanes and a traffic signal or (2) contribute fair share funding for intersection improvements being advanced by Caltrans in the Northwest 138 Corridor Improvement Project (specific improvements pending Caltrans selection of a preferred alternative).
5.10	**Traffic, Access and Circulation**	**MM 10-38** *(Traffic Study MM-33)* To provide adequate capacity at Lake Hughes Road at I-5 NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the CTIP or (2) contribute fair share funding towards planned improvements to I-5 for the addition of one lane to the northbound off-ramp and restripe the configuration to include one left-turn, one shared left/right-turn lane, and one dedicated right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-39** *(Traffic Study MM-35)* To provide adequate capacity at the Magic Mountain Parkway at I-5 SB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the CTIP or (2) contribute fair share funding towards planned improvements to I-5 for the restriping of the southbound off-ramp to provide two left-turn lanes, one shared left-turn/through lane, and one right-turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-40** *(Traffic Study MM-36)* To provide adequate capacity at the Magic Mountain Parkway at I-5 NB Ramps intersection, the Project Applicant/Developer shall (1) comply with the terms of the CTIP or (2) contribute fair share funding towards planned improvements to I-5 for the conversion of the northbound shared through/right-turn lane to a shared left/through/right turn lane.
5.10	**Traffic, Access and Circulation**	**MM 10-41** *(Traffic Study MM-37)* To provide adequate capacity at the Valencia Boulevard at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the striping of a third westbound through lane.
5.10	**Traffic, Access and Circulation**	**MM 10-42** *(Traffic Study MM-38)* To provide adequate capacity at the Valencia Boulevard at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the traffic signal modification to add a northbound right-turn overlap phase.
5.10	**Traffic, Access and Circulation**	**MM 10-43** *(Traffic Study MM-39)* To provide adequate capacity at the McBean Parkway at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward the restriping of the dedicated westbound right-turn lane to a shared through/right-turn lane.

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#	Environmental Factor	Mitigation
5.10	**Traffic, Access and Circulation**	**MM 10-44** *(Traffic Study MM-40)* To provide adequate capacity at the Calgrove Boulevard at I-5 SB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward adding a second eastbound through lane and a de-facto right-turn lane and a second through lane in the westbound direction.
5.10	**Traffic, Access and Circulation**	**MM 10-45** *(Traffic Study MM-41)* To provide adequate capacity at the Calgrove Boulevard at I-5 NB Ramps intersection, the Project Applicant/Developer shall either (1) comply with the terms of the CTIP or (2) contribute fair share funding toward restriping to add a westbound de facto right-turn lane.
5.11	**Air Resources**	**MM 11-1** The Project's plans and specifications shall require stationary sources to comply with the parameters stated in Stationary Source Types, Size Limits, and Quantity Estimates, which is included as Attachment A to the Project's Mitigation Monitoring and Reporting Program. Should there be a need for a stationary source exceeding the prescribed limits, the Project Applicant/Developer shall apply for source-specific permit from the Antelope Valley Air Quality Management District (AVAQMD) or South Coast Air Quality Management District (SCAQMD), as applicable.
5.11	**Air Resources**	**MM 11-2** The Project's plans and specifications shall include the following measures to minimize nitrogen oxide (NOx) and volatile organic compound (VOC) emissions during construction: • All off-road diesel-powered construction equipment greater than 50 horsepower shall meet U.S. Environmental Protection Agency (USEPA) Tier 4 Final emission standards to the extent that the equipment is available. In addition, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by the California Air Resources Board (CARB). Any emissions-control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. If Tier 4 Final equipment is not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability. • Alternatively, construction equipment may be selected according to the Green Construction Policy used by the Los Angeles County Metropolitan Transportation Authority or the ports of Los Angeles/Long Beach. These policies include provisions to 'step down' from Tier 4 equipment to Tier 3 or Tier 2 if specified criteria are met. • Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export). If the Project Applicant/Developer determines that 2010 model year or newer diesel trucks cannot be obtained, trucks that meet USEPA 2007 model year NOx emissions requirements shall be required. If 2010 model year or

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		newer diesel trucks are not available, the Project Applicant/Developer shall provide the County with documentation showing the reasons for non-availability. • A copy of each unit's certified tier specification, BACT documentation, and CARB or District operating permit shall be provided to the County at the first occurrence of mobilization of each applicable unit of equipment. • Construction contractors shall ensure construction equipment is properly serviced and maintained to the manufacturer's standards. • Construction contractors shall limit non-essential idling of construction equipment to no more than five consecutive minutes.
5.11	**Air Resources**	**MM 11-3** The Project's plans and specifications shall prohibit wood-burning fireplaces as required by SCAQMD Rule 445 in single-family residences throughout the entire Project site, including at residences that are 3,000 or more feet above mean sea level at which the SCAQMD prohibition would otherwise not apply. Natural gas fireplaces shall be limited to a total of 13,954.
5.11	**Air Resources**	**MM 11-4** The Project's plans and specifications for non-residential buildings shall demonstrate that the following features have been incorporated into the building designs. Proof of compliance shall be provided to the County prior to the issuance of occupancy permits. • For buildings with over 10 tenant-occupants, changing/shower facilities shall be provided as specified in Section A5.106.4.3, Nonresidential Voluntary Measures, of the CALGreen Code as follows: for 11 to 100 tenant-occupants, one unisex shower; for 101 to 200 tenant-occupants, one shower per gender; and for over 200 tenant-occupants, one shower per gender for each 200 additional tenant-occupants. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code as follows: two for 10 to 15 spaces; four for 26 to 50 spaces; six for 51 to 75 spaces; nine for 76 to 100 spaces; eleven for 101 to 150 spaces; 18 for 151 to 200 spaces; and at least 10 percent of total for 201 and more spaces. • Facilities shall be installed to support future electric vehicle charging at each non-residential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3, Nonresidential Voluntary Measures (Tier 1), of the CALGreen Code. The facilities shall meet Section 406.9 (Electric Vehicle) of the *California Building Code* and as follows: **Single charging space requirements.** When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1. The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required.** When multiple charging spaces are required, plans shall include the location(s) and type of electrical vehicle supply equipment (EVSE), raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles (EV) at all designated EV charging spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at

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#	Environmental Factor	Mitigation
		its maximum operating ampacity. Provide raceways from the electrical service panel to the designated parking areas which are required to be installed at the time of construction.
5.11	**Air Resources**	**MM 11-5** The Project's plans and specifications for residential buildings shall demonstrate that the following features have been incorporated. • Visitor parking shall include preferentially located parking spaces for alternative-fueled vehicles. • Exterior electrical receptacles and natural gas or propane hookups. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code, as follows: **Short-term bicycle parking.** Provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for five percent of visitor motorized vehicle parking capacity within a minimum of one two-bike capacity rack. **Long-term bicycle parking for multifamily buildings.** Provide on-site bicycle parking for at least one bicycle per every two dwelling units. Acceptable parking facilities shall be conveniently reached from the street and may include, but not limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. 3. Lockable, permanently anchored bicycle lockers. **Long-term bicycle parking for hotel and motel buildings.** Provide one on-site bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently reached from the street and may include, but not be limited to: 1. Covered, lockable enclosures with permanently anchored racks for bicycles. 2. Lockable bicycle rooms with permanently anchored racks. **3.** Lockable, permanently anchored bicycle lockers.
5.11	**Air Resources**	**MM 11-6** The Project's plans and specifications for parking structures and parking lots with 20 or more parking spaces shall demonstrate that the following features have been incorporated into the parking facility. • The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles. • The parking facility shall include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated. The design and installation shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, of the CALGreen Code as follows: **Single charging space requirements.** When only a single charging space is required, install a listed raceway capable of accommodating a dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside

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#	Environmental Factor	Mitigation
		diameter). The raceway shall be securely fastened at the main service or subpanel and shall terminate in close proximity to the proposed location of the charging system into a listed cabinet, box or enclosure. **Multiple charging spaces required.** When multiple charging spaces are required, plans shall include the location(s) and type of electrical vehicle supply equipment (EVSE), raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to charge simultaneously all the electric vehicles at all designated EV charging spaces at their full rated amperage. Plan design shall be based on Level 2 EVSE at its maximum operating ampacity. Only underground raceways and related underground equipment are required to be installed at the time of construction. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code.
5.11	**Air Resources**	**MM 11-7** The Project's plans and specifications for business park or water reclamation facility land uses shall demonstrate that buffer areas adjacent to proposed business parks in compliance with the Air Quality Analysis for Stationary Sources Allowed by the Centennial Specific Plan, (see Appendix 5.11-B of this EIR) have been incorporated into the design plans. The buffer areas shall prohibit uses that are potential sources of toxic air contaminants and shall prohibit uses that include sensitive receptors, except as allowed through written evidence that the sensitive use would not be exposed to Toxic Air Contaminants with pollutant concentrations resulting in a cancer risk greater than or equal to 10 in 1 million for health risks and 1.0 for non-cancer chronic and acute hazard indices (HIs).
5.11	**Air Resources**	**MM 11-8** Prior to approval of any tract map that includes an air quality sensitive use (e.g., residence, school, hospital, daycare center) within a designated business park, the Project Applicant/Developer shall provide written evidence to the County that the sensitive use would not be exposed to Toxic Air Contaminants with pollutant concentrations resulting in a cancer risk greater than or equal to 10 in 1 million for health risks and 1.0 for non-cancer chronic and acute hazard indices (HIs).
5.11	**Air Resources**	**MM 11-9** The Project's plans and specifications shall demonstrate that all distribution centers are within the business park areas south of State Route (SR) 138 and are located at least 1,000 feet from existing sensitive receptors and lands designated for sensitive land uses. Distribution centers shall not be allowed in other areas within the Project site.
5.11	**Air Resources**	**MM 11-10** The Project's plans and specifications shall demonstrate that any land uses involving the public congregation of sensitive receptors (e.g. residential, schools, hospital, daycare center) are not within 150 feet of the near edge of the SR-138 traffic lanes.
5.11	**Air Resources**	**MM 11-11** Prior to the approval of any tract map that includes an air quality sensitive receptor (e.g. residential, day care, schools, hospital) located within 500 feet of the SR-138, the Project Applicant/Developer shall provide a dispersion analysis to calculate the health risks from vehicle emissions from SR-138. If the study concludes that health risks would be significant at the location of a proposed sensitive receptor, then effective design measures must be implemented into the structures to mitigate for interior air quality, such as ventilation systems that include MERV13 filters or equivalent protections against TACs from vehicle emissions. Confirmation of compliance shall be provided to the County prior to occupancy that include sensitive receptors within 500 feet of the SR-138.

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5.12	**Noise**	**MM 12-1** For residences, hotels and motels, schools, and places of worship adjacent to a collector road with a buildout forecast of 10,000 average daily trips (ADT) or greater or any higher classification road, the Project Applicant/Developer shall submit to the County an Acoustical Study prepared in accordance with Section 1207.12 of the County Building Code. The Acoustical Study shall demonstrate that exterior noise levels at areas where residents would reasonably be expected to spend more than one hour (e.g., backyards) would not exceed 65 A-weighted decibels (dBA) Community Noise Level Equivalent Level (CNEL). The Acoustical Study shall also verify, before Certificate of Occupancy (CofO) issuance, that the buildings have been properly designed to comply with a CNEL requirement of 45 dBA for habitable interior living areas, classrooms, and rooms used for patient care and worship. The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the roadway; noise barriers; building orientation relative to the roadway; interior living space (bedroom, common area) orientation; sound-rated windows; upgraded exterior wall and/or roof construction; insulation batts; and forced air ventilation.
5.12	**Noise**	**MM 12-2** For each business park use, school, community use area, park and recreation area, animal control facility, utility, County maintenance facility, commercial development, or manufacturing/industrial development, the Project Applicant/Developer shall submit an Acoustical Study to verify that the Project has been properly designed to comply with the County of Los Angeles's Noise Ordinance standards at the nearby sensitive properties (both on and off site). The design features required to achieve the noise standard shall include one or more of the following elements, as verified by the Acoustical Study: building setbacks from the sensitive receptors; noise barriers; building orientation relative to the sensitive receptor; sound-rated windows; and upgraded exterior wall and/or roof construction.
5.12	**Noise**	**MM 12-3** To ensure that construction noise is minimized, in addition to meeting all requirements of Section 12.08 of the *County of Los Angeles Code,* the following measures shall be implemented during construction: • All construction equipment, including internal combustion engines and stationary equipment (used for construction purposes) shall be equipped with noise-reducing features such as, but not limited to, improved mufflers, intake silencers, ducts, engine enclosures, and acoustical shields or shrouds. • Stationary equipment (e.g., generators, air compressors, concrete pumps) located within 450 feet of residences or schools shall have noise abatement (e.g., engine enclosures or equipment placed behind barriers,) to limit the noise level at the sensitive receptor to an average sound level (L_{eq}) of 60 dBA or less. • Equipment and material staging areas and equipment maintenance areas shall be located at least 500 feet from sensitive noise receivers, if feasible.
5.12	**Noise**	**MM 12-4** The Project Applicant/Developer shall submit a vibration analysis to the County demonstrating that the pile installation has been designed to limit vibrations to 0.01 peak particle velocity (ppv) inch per second (in/sec) or less at occupied buildings. Design features may include alternate methods of installation that result in reduced vibrations such as pile driving cushions or jetting instead of drilling.

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5.12	**Noise**	**MM 12-5** For the Project site areas adjacent to 300th Street West, 290th Street West, and Malinda Avenue, the Project Applicant/Developer shall provide information to County demonstrating that plans and specifications require that (1) vibratory rollers shall not be used within 300 feet of occupied residences or that vibratory rollers used within 300 feet of occupied residences shall be operated in the static mode and (2) large bulldozers and scrapers shall not be operated within 150 feet of occupied residences. Alternatively, the Project Applicant/Developer shall provide information to County demonstrating that plans and specifications require that vibratory rollers, large bulldozers, large scrapers, and similar heavy equipment shall be operated to comply with the requirements of Section 12.08.560 of the County Code and that vibrations at residential properties would not exceed 0.01 inch per second (in/sec).
5.12	**Noise**	**MM 12-6** The Project Applicant/Developer shall provide to each prospective purchaser or tenant with a notice and statement of acknowledgment that shall be executed by the prospective purchaser, lessee, or tenant that the Centennial property will be undergoing continuing development and, depending on relative location, noise from construction activities may be heard. The form and method of distribution of said notice and statement of acknowledgment shall be as approved by the County. Subsequent to Project buildout, this mitigation measure would no longer apply.
5.12	**Noise**	**MM 12-7** In the event that blasting is necessary in order to fracture non-rippable rock, the Project Applicant/Developer shall prepare a Blasting Plan to be submitted and approved by the County of Los Angeles Fire Department in order to obtain a blasting permit; evidence of this approval shall be submitted to the County of Los Angeles Department of Regional Planning in order to obtain an Explosives Permit. The Blasting Plan shall be prepared in accordance with the United States Department of Interior, Office of Surface Mining (USOSM) standards and shall include, but not be limited to, the following: a. A pre-blast survey. b. The site and location of planned blasting and hours of operation (blasting to be conducted during the daylight hours only). c. Notification of blasting activities to all property owners within one-half mile of the blasting area. This notification shall describe the expected period and frequency that the blasting shall occur and give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory to the County of Los Angeles Department of Regional Planning. d. The types and amounts of explosives. e. Warning system information. f. Methods of transportation and handling of explosives. g. Minimum acceptable weather conditions. h. Procedures for handling, setting, wiring, and firing explosives. i. Procedures for clearing and controlling access to blast danger. j. Procedures for handling misfires and other unusual occurrences. k. An Emergency Action Plan.

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		l. Material safety data sheet for all explosives or other hazardous materials expected to be used. m. Procedures to ensure compliance with local, State and federal laws. n. Requirements and procedures for vibration monitoring near existing structures during blasting events.
5.13	**Visual Resources**	**MM 13-1** The Project's plans and specifications shall demonstrate the implementation of measures to preserve existing rock outcroppings that are visible from off-site locations along the SR-138. In addition, the County shall review all final development plans (e.g., landscape, lighting, architectural plans)—as provided by the Project Applicant/Developer—to ensure that the development standards for each land use have been implemented to minimize the visual alteration of the site and to create an aesthetically pleasing development.
5.13	**Visual Resources**	**MM 13-2** The Project shall implement the following components of the Green Development Program to minimize potentially adverse visual impacts: • Site the highest density residential uses in areas adjacent to commercial centers and permit residential uses in commercial centers through the Mixed Use Overlay to place larger populations within key centers, encouraging pedestrian activity and a reduction in vehicle trips. • Preserve oak woodlands, savannahs, and other sensitive habitat areas near Oso Canyon and at the foot of the San Gabriel Mountains southerly of SR-138. • Exterior lighting shall not cause unacceptable light trespass and shall be fully shielded. • Outdoor lighting shall be turned off using automatic control devices or systems between the hours of 10:00 PM and sunrise of the following day in commercial, business park, and mixed use areas, unless required by the County Building Code. If the property operates beyond 10:00 PM, then outdoor lighting shall be turned off 1 hour after the operation ends for the day. • Outdoor lighting for safety and security reasons is allowed after 10:00 PM only if fully shielded motion sensors are used to turn off lighting after 10:00 PM and the sensors turn the lighting off automatically no more than 10 minutes after the area is vacated or at least 50 percent of the total lumen levels are reduced or 50 percent of the total outdoor light fixtures are turned off between 10:00 PM and sunrise. • Outdoor lighting in residential and open space areas that are over 15 feet in height shall have an output no greater than 400 lumens. • The maximum height of outdoor lighting fixtures shall be: o 20 feet in Residential and Open Space areas o 30 feet in Commercial, Mixed Use, and Public areas o 35 feet in Business Park areas • Prohibit the use of outdoor lighting that includes drop-down lenses, mercury vapor lights, ultraviolet lights, search lights, laser lights and any outdoor lighting that flashes, blinks, alternates or moves unless mandated for health and safety reasons by a public agency. • Outdoor light fixtures in outdoor recreational areas shall be mounted, aimed, and fully shielded so that light

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		beams fall onto activity areas and no unacceptable light trespass occurs on surrounding areas or properties. Outdoor lighting shall only provide the minimum necessary to illuminate recreational activities areas and shall be no more than 75 feet high. Preferably, these fixtures shall also use high pressure sodium or metal halide lamps. • Outdoor advertising signs, business signs and roof and freestanding signs that are lighted shall be fully shielded. Externally mounted light fixtures shall be mounted on the top of the sign and shall be oriented downward. Externally mounted bulbs or lighting tubes for signs shall not be visible from adjoining properties or public rights-of-way, unless such bulbs or tubes are filled with neon, argon, krypton or other self-illuminating substance.
5.13	**Visual Resources**	**MM 13-3** The existing off-site 66 kV electric lines that extend from SR-138 beginning at approximately the Old Ridge Route to 290th Street West, shall be relocated south of the Business Park area or may be placed underground,.
5.13	**Visual Resources**	**MM 13-4** Structures proposed along the Pacific Crest National Scenic Trail (PCT) shall be screened by a block wall along the rear of the structures abutting the trail and a 34-foot-wide landscaped setback shall be provided that would contain the conceptual PCT realignment.
5.13	**Visual Resources**	**MM 13-5** Security lighting used for construction areas, equipment, and building materials staging areas shall be directed away from SR-138, 300th Street West, 290th Street West, and existing residences east of 300th Street West and east of 290th Street West and Malinda Avenue. Screening of construction security lighting at construction staging areas shall be implemented, as feasible. Construction equipment and materials staging areas shall be located as far as feasible from surrounding adjacent residences and lights shall be directed away from adjacent on-site residences that are occupied, as each development phase is built.
5.13	**Visual Resources**	**MM 13-6** An Exterior Lighting Plan shall be prepared in coordination with a qualified Biologist, be reviewed by an Electrical Engineer who is registered in the State of California, and then approved by the County prior to the submittal of each building permit. The Lighting Plan shall apply to all proposed structures and for development areas that border natural open space resources. The Lighting Plan shall be consistent with County Rural Outdoor Lighting District requirements for the Antelope Valley and shall provide guidelines for the outdoor lighting to be used throughout the Project site. Final lighting orientation and design shall be approved by the County. The Lighting Plan shall include, but not be limited to, the following: a. All lighting within 300 feet of natural open space areas shall only be implemented where needed for safety and shall be directed away from these areas and shielded so that light is not directed into open space and riparian areas. Where possible, these safety lights shall be motion sensor activated with infrared light sensors to prevent daytime lighting. b. Mercury vapor and halide lighting shall not be used on the perimeter of the developed areas or adjacent to designated open space.

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		c. Illumination levels should be compatible with the character and use of surrounding development as determined by national lighting organizations. The Illuminating Engineering Society of North America publishes recommendations for the lighting industry that include illumination levels for outdoor lighting. d. Low-pressure sodium lighting fixtures or flashing lights shall not be used except in emergency situations. e. Exterior lighting standards and fixtures shall be located and designed to minimize direct glare beyond the site boundaries. Lighting shall be fully shielded and directed downwards to confine light spread solely within necessary locations. Illumination or glare from the exterior lighting system onto adjacent properties or streets should be minimized. f. Security lighting fixtures shall not project above the roof line of the building on which they are mounted. g. Where applicable, time-control devices shall be utilized on exterior lighting sources. h. Street, parking lot, and structural lighting fixtures shall provide adequate illumination for safety and comfort of vehicular and pedestrian traffic while minimizing light spillover.
5.14	**Parks and Recreation**	**MM 14-1** The Project shall implement the following components of the Green Development Program to provide healthy outdoor parks and recreational resources on the Project site: • Provide a functional system of community trails, greenway trails, and natural corridors to serve as recreational opportunities and as alternative means of transportation to reduce vehicular traffic. • Provide "complete streets" throughout the community to provide alternative modes of transport (walking, biking, low-speed vehicles (LSVs) such as neighborhood electric scooters, bikes and other low-speed electric vehicles (NEVs). • Incorporate sidewalks (separated by a parkway from streets) and trees to be the main street elements to create a walking environment, promoting pedestrian activity. • Provide Class I – IV bike lanes throughout the Project to ensure a variety of alternative transportation options. • Provide permanently anchored bicycle racks within 200 feet of visitors' entrance of nonresidential buildings, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of two-bike capacity rack. • For new nonresidential buildings with over 10 tenant-occupants or for additions or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking spaces at a rate of 5 percent of tenant parking being added, with a minimum of one space. • For residential buildings, provide permanently anchored bicycle racks within 100 feet of the visitor's entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity with a minimum of one two-bike capacity rack. • Nonresidential buildings within the Business Park and Commercial areas with 75,000 or more square feet of gross floor area shall provide locker rooms and shower facilities. • For multifamily buildings, provide on-site bicycle parking for at least one bicycle per every two dwelling units

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		• Include planned green space, which are integrated pockets of open space (including greenways, tree stands, hillsides, and community parks) with minimal developed amenities. Planned green space reduces evapotranspiration; allows natural percolation of runoff from adjacent lands; reduces the heat island effect; and adds aesthetic value to a site. Planned green space can provide habitat as well as linkages to other habitat areas.
5.14	**Parks and Recreation**	**MM 14-2** The Project Applicant/Developer shall implement the Parks and Recreation Plan as set forth in Chapter 3.12 of the *Centennial Specific Plan* to provide visually appropriate parks and recreational amenities to the Project site.
5.14	**Parks and Recreation**	**MM 14-3** The Project Applicant/Developer shall construct 163 acres of parks consistent with the Park Overlay requirements of the Centennial Specific Plan, which includes acreage to meet the County's Parkland Dedication Ordinance requirements. In addition, the Project Applicant/Developer will fund the cost of constructing and equipping the public parks within the Project, pursuant to a park Development Agreement, a statutory Development Agreement pursuant to Section 65864 et seq. of the *California Government Code*, or other condition of approval. For purposes of this measure, and as applied to all future Tentative Maps, the County shall deem all parks that are 3.0 acres or more in size as public parks, so long as each park site meets County standards for site suitability. The Project shall provide public parks to be developed in accordance with the schematic designs approved by the County. Neighborhood and community parks shall contain various types of improvements that may include, but not be limited to, parking lot, walkways, plazas and other forms of hardscape, shade trellis, security lighting, trash enclosures, locking gates, fencing, open turf sports fields, basketball courts, multi-purpose ballfields, tennis courts, children's play areas, picnic areas (picnic tables with pads), shade structures/pavilions, restrooms with drinking fountains, recreation building, office and storage space/service yards, trees, landscaping (including plant material, grading, drainage, and irrigation), and park entry monuments.
5.14	**Parks and Recreation**	**MM 14-4** The Project shall provide public parkland in compliance with the County of Los Angeles Parkland Dedication Ordinance/Quimby Act, with all acreage figures stated as "net" (three percent slope, maximum). Additionally, public parks shall be dedicated to the County in a developed condition, in accordance with the schematic designs recommended by the County and/or as approved by the Regional Planning Commission and/or the County Board of Supervisors as part of approval of each tract map as each phase of development occurs throughout the Project site with amenities consistent with County-approved plans. Developed public parks shall also be credited with an equivalency acreage correlating with the current Representative Land Value for the applicable Park Planning Area (currently Park Planning Area 48). All public parks must comply with County's Park Design Guidelines and Standards, Public Parks.
5.14	**Parks and Recreation**	**MM 14-5** The Project shall provide public and private recreation amenities that equate to the acreage requirements of the County of Los Angeles General Plan local parkland standard (4 acres for every 1,000 persons in the unincorporated County). For purposes of monitoring compliance with the General Plan standard, whenever either a Tentative Map or a Final Map is submitted for the County's review and clearance, those maps shall have a table that provides a breakdown of acreage per lot for the following categories: (1) Public Park acreage (maximum slope 3 percent or less), ; (2) Public Park Acreage Equivalency (which shall be based upon estimated Public Park Improvement Values derived from Total Project Cost Estimates required at the time of map clearance and the Parkland Dedication Ordinance/Quimby Ordinance in effect at the time the map is submitted); (3) Private Park acreage, including pocket

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		parks; (4) Greenway and County multi-use (hiking, equestrian, and mountain biking) trail acreage; (5) Community Recreation Facility acreage; and (6) Private Recreation Facility acreage.
5.15	**Education**	**MM 15-1** The Project Applicant/Developer shall designate one K-5 and five K–8 school sites in the Project area in accordance with the conceptual land use plan or alternate location(s) that shall be agreed upon by the authorized school districts.
5.15	**Education**	**MM 15-2** The Project Applicant/Developer shall demonstrate to the County that they have an executed agreement with all school districts that operate within the boundaries of the Project site.
5.15	**Education**	**MM 15-3** The Project Applicant/Developer shall designate one high school site in the Project area in accordance with the conceptual land use plan or alternate location(s) that shall be agreed upon by the authorized school district.
5.16	**Fire and Law Enforcement Services**	**MM 16-1** At buildout, the Los Angeles County Fire Department (LACFD) fire stations shall be located such that response times to the Project site shall be 5 minutes or less for fire service responses and 8 minutes or less for the advanced life support (paramedic) unit responses within the Project site.
5.16	**Fire and Law Enforcement Services**	**MM 16-2** The Project Applicant/Developer shall pay developer fees in effect at the time of construction permit approval, in accordance with the LACFD Developer Fee Program until such time the Project Applicant/Developer has conveyed an approved, operational fire station to the LACFD. As an alternative to fee payment, the Developer Fee Program allows the LACFD and the Project Applicant/Developer to agree on a program whereby the Project Applicant/Developer would provide land and would construct and equip the fire stations required for the Project in exchange for a credit towards the Project's fee payments.
5.16	**Fire and Law Enforcement Services**	**MM 16-3** The Project Applicant/Developer shall provide land, convey title, and shall construct and equip, to the specifications and requirements of the LACFD, for up to four new Fire Stations to the LACFD. The approved final plans and specifications for the Project shall identify locations of the fire stations. The LACFD shall have final approval over the fire station site locations. The timing for the construction of the on-site fire stations shall be established by the LACFD dependent upon the phasing of development, with the first on-site fire station operational no later than the time the 1,000th dwelling unit is built on site.
5.16	**Fire and Law Enforcement Services**	**MM 16-4** The Project Applicant/Developer shall pay Law Enforcement Facilities Mitigation Fee (LEFMF) to the Los Angeles County Sheriff's Department (LASD) pursuant to the requirements established in County Ordinance No. 2008-0033. The amount of fees to be paid will be determined based on the established fee in Section 22.74.030 of the County Code. The Project incorporates a temporary "store front" sub-station, followed by construction of a permanent LASD Station included on the Project site, in lieu of a portion of the LEFMF, as allowed under Section 22.74.090 (Consideration in Lieu of Fee) of the County Code. Costs associated with the construction of the temporary "store front" sub-station and permanent LASD Station would be credited against the LEFMF. Prior to completion of the permanent LASD Station, the "store front" sub-station may be located on site in Village 1 on the north side of the SR-138. This temporary sub-station shall be properly outfitted in accordance with applicable occupancy requirements of the LASD for such "store front" facilities and shall be operational prior to the approval of the first certificate of occupancy for the first phase of Project development.

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		The Centennial Land Use Plan identifies a conceptual location for one LASD Station in the Business Park area on the Project site north of the SR-138. The permanent LASD Station shall be constructed immediately following completion of the first phase of development. The LASD shall have final approval over the temporary sub-station and permanent LASD Station site locations.
5.17	**Other Public Services**	**MM 17-1** The *Los Angeles County Code* (Chapter 22.72 of Title 22) ("Library Ordinance") imposes a Library Facilities Mitigation Fee on new residential development projects in the unincorporated areas of the County of Los Angeles served by the County Library (the "Library Facilities Mitigation Fee"). The Library Facilities Mitigation Fee that is in effect for the designated County Library planning area is charged upon approval of each residential building permit and is based on the estimated reasonable cost of providing the projected library facility needs in the applicable library planning area. The Project is located within Planning Area 2: Antelope Valley and, as of the date of this EIR, the Library Facilities Mitigation Fee is $844.00 per residential building permit (based upon the County Library's mitigation fee per building permit amount established on October 27, 1998, and last updated on July 1, 2015). The Project provides for the development of a maximum of 19,333 residential dwelling units. Based on the current fee, the total Library Facilities Mitigation Fee that would be due from the Project Applicant/Developer (or its successors in interest) is $16,317,052. Consistent with the Library Ordinance, the amount of the Library Facilities Mitigation Fee that shall apply to the Project shall be the fee payable on the date the County issues each building permit for a residential dwelling unit. The amount of the Library Facilities Mitigation Fee may be increased from time to time pursuant to Section 22.72.040 of the County Code and State law; provided, however, the Library Facilities Mitigation Fee applicable to residential dwellings within the Project shall be no more than the amount of the Library Facilities Mitigation Fee applicable to residential dwellings outside of the Project but within Planning Area 2. The aggregate Library Facilities Mitigation Fees payable for all of the residential dwelling units within the Project for which building permits have been issued shall be referred to herein as the "Project-Wide Fee Total." The ordinance allows that in lieu of the payment of Library Facilities Mitigation Fees, the Project Applicant/Developer shall fulfill the obligations required by the mitigation measures in this EIR, to satisfy the requirements of the Library Ordinance.
5.17	**Other Public Services**	**MM 17-2** Section 22.72.090 of the Library Ordinance permits the County Librarian to accept substitute consideration in lieu of the Library Facilities Mitigation Fee if the proposed substitute consideration (such as land, facility construction, and/or materials) (i) has a value that is equal to or greater than the applicable Library Facilities Mitigation Fee that is otherwise due; (ii) is in the form acceptable to the County Librarian; and (iii) is within the scope of the applicable library facilities project. Because the Library Facilities Mitigation Fee only allows for an incremental accumulation of funds for future library facilities as building permits are issued and fees are collected pursuant to Section 22.72.060 of the County of Los Angeles Code, the County Library will implement a strategy that will better serve the residents of Centennial by ensuring that the timing and scope of public library facilities will meet the demands of the community. Centennial desires to cooperate with the County Library in meeting its goals and also seeks certainty with respect to the amount and timing of the Project's financial commitment to the County Library. Therefore, the parties' objectives will be satisfied if, in lieu of the Project Applicant/Developer's payment of Library Facilities Mitigation Fees at the time residential building permits are pulled in accordance with Section 22.72.060 of the County Code, the Project Applicant/Developer will instead set aside the land and contribute the funds required to build and equip a turnkey Permanent Facility, all in accordance with the terms and conditions of the Development Agreement. As discussed in

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#	Environmental Factor	Mitigation
		MM 17-1, the Project Applicant/Developer's provision of such land and funding will, in accordance with the required mitigation measures, be credited against Library Facilities Mitigation Fees that would otherwise be due.
5.17	**Other Public Services**	**MM 17-3** The Project Applicant/Developer shall dedicate to the County Library up to 2.62 acres within Village 3 of the Project (the "Dedicated Land") for public library purposes or other location for the permanent facility mutually agreed upon by the County Librarian and the Project Applicant/Developer. The Project Applicant/Developer shall receive a credit against unpaid Library Facilities Mitigation Fees in an amount equal to the fair market value of all Dedicated Land as of the date of the dedication to the County of Los Angeles for County Library purposes. The Dedicated Land shall be conveyed to the County concurrently with the filing and recordation of the final map within which the Dedicated Land is located. If the County Library desires to increase the size of the Dedicated Land, it shall make such request of the Project Applicant/Developer no later than the date that the County approves the tentative map for the proposed subdivision in which the Dedicated Land is located. the Project Applicant/Developer agrees to increase the size of the Dedicated Land upon the County's request provided: (i) the County cooperates with the Project Applicant/Developer in any related land use boundary changes, transfers or conversions necessary to accommodate the larger library site, subject to the requirements of CEQA and (ii) the County either pays the fair market value for such land with either (A) U.S. funds or (B) a dollar-for-dollar credit against unpaid Library Facilities Mitigation Fees, so long as the Project-Wide Fee Total has not already been offset pursuant to MM 17-4 through MM 17-7. "Fair market value" for the land described in this paragraph shall be determined based on the value of such land had it been entitled for institutional office purposes and the property had a maximum floor area ratio (FAR) of 0.25. If the County Library at any time changes the use of the Dedicated Land from that of a County-owned public library facility, then the Dedicated Land will revert back to Centennial.
5.17	**Other Public Services**	**MM 17-4** The Project Applicant/Developer shall provide plans and specifications with a one or two-story, turn-key public library building (the "Permanent Facility") on the Dedicated Lands. The Permanent Facility may be constructed in phases. The size and scope of the Permanent Facility will be determined by the County Librarian in consultation with the Project Applicant/Developer provided, however, that the Project Applicant/Developer's maximum financial contribution shall not exceed the Project-Wide Fee Total, less any offsets pursuant to Mitigation Measures 17-4, 17-6, and 17-7 in this EIR. The sizing, design and programming of the Permanent Facility, including the influence of technology on library services, will be agreed upon by representatives from County Library and the Project Applicant/Developer. A report shall be prepared by an independent library consultant selected by the County Library that will solicit input from the community with respect to the types of library services desired at the Permanent Library Facility. The consultant's report shall be paid for by the Project Applicant/Developer and the Project Applicant/Developer shall receive a credit against the Project-Wide Fee Total for the Project Applicant/Developer's payment of such costs. The Permanent Facility and Permanent Library furniture, fixture, and equipment (FF&E, as defined below) will be substantially similar in quality and materials to the Quartz Hill branch of the County Library on November 2016. The design of the Permanent Library will be performed by an architect mutually selected by the Project Applicant/Developer and the County Librarian. The Permanent Facility must comply with all requirements of the County Library's Low Voltage Specifications in effect on the date the design contract for the Permanent Facility is fully executed. The County Library shall be responsible for all costs of design and construction of the Permanent Library in excess of the Project Applicant/Developer's Library Facilities Mitigation Fee obligations hereunder. If, after application of the fee credits

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		against Library Facilities Mitigation Fees to which the Project Applicant/Developer is entitled, there is insufficient funds to construct the Permanent Facility and purchase the Permanent Library FF&E, the Project Applicant/Developer shall not be required to fund construction of the Permanent Facility until additional and sufficient funds are authorized by the County to construct the Permanent Facility and to procure the Permanent Library FF&E. The Permanent Facility will be completed and operational on a date agreed to between the County Librarian and the Project Applicant, subject to force majeure and events within the control of the County (such as, for example, the County's failure to pay any funding shortfalls if credits against the Project-Wide Fee Total are exhausted). The size of the Permanent Facility will be proportionately reduced in size and materials if the County approves less than the 19,333 residential units proposed for the Centennial Project.
5.17	**Other Public Services**	**MM 17-5** The Project Applicant/Developer agrees to install furniture, fixtures and equipment ("Permanent Library FF&E") and purchase library materials in connection with the Permanent Facility, provided that the Project Applicant/Developer's financial contribution toward the cost of the Permanent Library FF&E and library materials shall not exceed the Project-Wide Fee Total when taken together with all other Project Applicant/Developer expenses then credited against the Project-Wide Fee Total. The County Library shall be responsible for all costs of Permanent Library FF&E and library materials in excess of the Project-Wide Fee Total. The Permanent Library FF&E specifications will be provided by the County Library. Any FF&E purchased shall remain the property of the County Library.
5.17	**Other Public Services**	**MM 17-6** The Project Applicant/Developer shall provide plans and specifications that demonstrate on-site parking for library patrons at a ratio of 4 parking spaces per 1,000 gross square feet of library space. The parking lot shall also include two spaces adjacent to the staff entrance of the library for County library service vehicles. Parking may be shared with adjacent uses with the consent of the County Library.
5.17	**Other Public Services**	**MM 17-7** If the Project Applicant/Developer has satisfied its obligations in Mitigation Measures 17-1 through 17-6, above, and the Project Applicant/Developer continues to pull building permits within the Project, then the Project Applicant/Developer (or its successors in interest) shall pay any Library Facilities Mitigation Fees still owing as construction permits are issued, which shall be expended by the County Library for the benefit of the Permanent Facility on library materials, FF&E, facility enhancements or library programs as determined by the County Librarian.
5.17	**Other Public Services**	**MM 17-8** No later than December 1 and July 1 of each calendar year, the Project Applicant/Developer shall deliver to the County Library a report in writing providing the number of residential building permits actually issued to date. Within 30 days from the date the report is received, the County Library will deliver, or cause to deliver, to the Project Applicant/Developer a report on the revised Project-Wide Fee Total.
5.17	**Other Public Services**	**MM 17-9** The Project Applicant/Developer shall be responsible for implementing the following construction waste reduction requirements to ensure that 100 percent of soil is diverted during grading activities, and that at least 70 percent of nonhazardous construction and demolition waste is diverted from landfill disposal. During all construction phases, wastes would be managed with the use of recycling bins for various debris materials which would be sent to existing recycling and/or processing facilities in accordance with all provisions of the County Construction and Demolition Debris Ordinance. This would include submitting and implementing a Recycling and Reuse Plan to Public Works in connection with obtaining a building or grading permit.

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5.17	**Other Public Services**	**MM 17-10** The Project shall incorporate the Solid Waste Management Plan (Section 3.7 of the Centennial Specific Plan) and the Property Owner/Developer shall be responsible for implementation of the following operational waste reduction requirements to ensure that at least 75 percent of operational waste is diverted from landfill disposal: • The Property Owner/Developer shall process an on-site contract with a waste management company and/or recyclers, and/or self-haul to waste and recycling facilities to properly recycle, divert, and dispose of solid waste generated on-site. Throughout the Project's operation, the waste hauler shall be required by contract to maintain records showing the diversion of not less than 75 percent of the operational waste generated by the Project. • The waste management contract will establish dedicated cans for green waste and a Green Waste Recycling Plan that must be adhered to by landscape maintenance companies as part of the CC&Rs. The CC&Rs will require the use of mulching mowers or mowers with mulching blades for common lawn area, use of California Air Resources Board- (CARB) approved or electric maintenance equipment; placing three to five inches of mulch in common areas' planting beds each year as part of the Landscape Maintenance Plan for all non-residential and multi-family buildings; and diverting organic wastes to a mulching and composting facility or anaerobic digestion facility. • The CC&Rs will require the Property Owner to recycle and divert from the waste bin, solids such as metal, glass, paper, plastic, cardboard, food and yard waste; and divert from the waste bin hazardous waste, electronic waste, and universal waste. Information on items prohibited from landfill disposal and on recycling and composting will be provided to Property Owners. • Household hazardous wastes and less commonly disposed materials (such as electronics and appliances) shall have seasonal pickup (at least two times a year) and residents would be notified of upcoming events. • Semi-annual "exchange days" shall be organized, publicized, and paid for by the Master Homeowners Association (HOA). • The Project Applicant/Master Developer shall set aside a minimum of 5 acres for a future Materials Recovery Facility/Transfer Station (MRF/TS) that includes a household hazardous waste permanent collection and reuse center and allows for mulching/composting operations. The site shall be located in a suitable location with the capacity to manage the nonhazardous solid waste and household hazardous waste generated by the Centennial Development Project at buildout. The Project Applicant/Master Developer shall prepare and grade the site, and install basic mainline infrastructure fronting the property prior to the issuance of any occupancy permits associated with the first phase of project implementation. The Master Developer shall continually encourage a waste management company to build these facilities on this build ready site. The CC&R for the future MRF/TS site shall require the land to be set aside for the MRF/TS in perpetuity. • The Smart Gardening Learning Center specifications will be provided by County Public Works. • Parking for the Learning Center and the MRF/TS may be shared with adjacent uses with the consent of the property owners and County Public Works.

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#	Environmental Factor	Mitigation
5.18	**Water Resources**	**MM 18-1** In addition to complying with the water efficiency and conservation set forth in Divisions 4.3 and 5.3 of the California Green Building Standards (CALGreen) Code or the County Green Building Standards Code, whichever are more stringent, the Project Applicant/Developer shall implement the measures listed below. **Meter Water Use.** Install, maintain, and monitor all non-construction potable and non-potable water use using appropriate metering equipment throughout the site. **Reduce Potable Water Use with On-Site Recycled Water.** Install, maintain, and operate on-site wastewater treatment and conveyance facilities that provide recycled water treated to California Title 22 unrestricted reuse standards from on-site wastewater. Recycled water shall be used to meet (i) 100 percent of commercial, business park, institutional, school, hotel, park, and slope irrigation demand and (ii) outdoor irrigation demand in 50 percent of the total very low and low density residential lot landscaped area. **Water Efficient Appliances**. Require installation of water-efficient major appliances (washers, dryers, dishwashers) in compliance with the California Appliance Efficiency Regulations, Energy Star®, or other applicable standards. **Water Efficient Irrigation**. Require the installation of irrigation equipment with a minimum 0.80 irrigation efficiency for all public and private park, recreation and entertainment land use, arterial roadway, and slope irrigation uses. Water Smart/Evapotranspiration-based controllers shall be used. Low water use plants and shrubs shall be used in all irrigated slope areas with an average plant factor of 0.2, as defined in the State Model Water Efficient Landscape Ordinance. **Water Budget Based Water Rates**. Require that the Project Water Purveyor implement water budget based rates in compliance with all applicable legal requirements and in a manner consistent with the use of such rates by other water districts in California (e.g., Irvine Ranch Water District). The water budget based rates shall incorporate and be designed to ensure that Project potable water use meets or exceeds the following standards and adjusted as may be required to meet more stringent standards that may be adopted by the State or Los Angeles County: 1. Indoor Water Use Standards (a) Residential indoor water use – 55 gallons per capita per day (b) Commercial indoor water use – 200 gallons per day per thousand square feet (c) Business Park indoor water use – 65 gallons per day per thousand square feet, including recycled water for commercial wastewater and cooling use except where prohibited by applicable law for particular types of areas or uses (e.g., employee cafeterias) (d) Institutional indoor water use – 50 gallons per day per thousand square feet (e) Hotel indoor water use – 125 gallons per day per room. 2. Outdoor Water Use Standards (a) Residential outdoor water use – 55 percent of the reference evapotranspiration rate for the Project site (b) Commercial, industrial, and institutional outdoor use – 45 percent of the reference evapotranspiration rate for the Project site

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.18	**Water Resources**	**MM 18-2** The Project Applicant/Developer shall submit to the County Water Use Reports prepared by a qualified specialist to the satisfaction of the County to verify that projected water use efficiencies are being achieved (1) at the end of the 5th year following first occupancy or occupancy of the 4,000th dwelling unit, whichever occurs later and (2) at the end of the 10th year following first occupancy or occupancy of the 10,000th dwelling unit, whichever occurs later. In the event that a Water Use Report indicates that consumption exceeds projected levels, response measures must be implemented to ensure that available supplies will be sufficient to meet future demand. No further development will be approved until additional measures are implemented to achieve the required efficiencies and/or provide additional water supplies, as confirmed by the Project Water Purveyor. No subsequent Tentative Maps shall be approved until the Project Water Purveyor has demonstrated to the satisfaction of the County that the implementation of specific water demand and supply response measures will ensure that available supplies will meet future Project demand.
5.19	**Wastewater Collection**	**MM 19-1** The Project Applicant/Developer shall provide documentation to the County that it has completed all required procedures and has paid all applicable fees associated with establishing the Project Water Purveyor, or an alternate qualified public utility district, as the operator of the WRFs.
5.19	**Wastewater Collection**	**MM 19-2** The Project Applicant/Developer shall demonstrate that the Project has either been annexed into an existing qualified public utility district (e.g. Golden Valley Municipal Water District) or that a new public utility district (e.g. Project Water Purveyor) has been created to serve the Project. The Project Water Purveyor or alternate qualified public utility district shall be responsible for the design, construction, and operation of the wastewater facilities, and shall ensure compliance with all applicable standards and regulations, including all Lahontan RWQCB and Title 22 requirements of the California Code of Regulations.
5.19	**Wastewater Collection**	**MM 19-3** The Project shall incorporate the Wastewater Management Plan (*Centennial Specific Plan*, Section 3.5), and the Project Applicant/Developer shall prepare a Facilities Report, a Pump Station Feasibility Report, and a Sewer Area Study consistent with County Policies and Requirements. .
5.19	**Wastewater Collection**	**MM 19-4** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF West shall serve the Project site west of the West Branch of the California Aqueduct. The facility shall be located on an approximate 3-acre site and shall treat an average flow of approximately 0.34 million gallon per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.19	**Wastewater Collection**	**MM 19-5** The Project Applicant/Developer shall provide the County with plans and specifications that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards that demonstrate that the WRF East shall serve the Project site east of the West Branch of the California Aqueduct. WRF East will be located near the northeasterly corner of the Project and shall treat an average flow of 4.28 million gallons per day. Biosolids shall be hauled to a suitable landfill or used for conversion into fertilizer products. Lined seasonal recycled water storage ponds shall be implemented as required to temporarily store recycled water during times of low demand. The ponds shall implement feasible and applicable wastewater treatment facility best management practices for mosquito and health vector recommended in the California Department of Public Health's 2012 *Best Management Practices for Mosquito Control in California: Recommendations of the California Department of Public Health and the Mosquito and Vector Control Association of California.*
5.20	**Dry Utilities**	**MM 20.2-1** The Project Applicant/Developer shall coordinate with Southern California Edison (SCE) to ensure that there are no prolonged disruptions to the existing transmission lines that extend through the Project study area and to coordinate in the design and implementation of future electrical service and facilities (e.g., transmission lines, access road) in the Project study area. This will ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of electrical system improvements are in accordance with all SCE requirements; and (3) the improvements are adequate to serve the proposed land uses and are available for the first occupied land uses.
5.20	**Dry Utilities**	**MM 20.2-2** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate a future substation shall be constructed in the eastern half of the Project site to serve Project development in the easterly portion of the Project site. To provide adequate capacity for electrical services for the Project, SCE would select one of the following two options to implement: (1) reconfigure the Bailey Substation or (2) upgrade the Gorman Substation and retrofit the existing overhead power lines. An electrical generation and distribution system shall be constructed as part of the main utility corridors for dry utilities. The timing of construction, as well as specific facility location and sizing, shall be coordinated with SCE.
5.20	**Dry Utilities**	**MM 20.3-1** The Project Applicant/Developer shall coordinate with the Southern California Gas Company (SoCalGas) in the design and implementation of future natural gas service and facilities in the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrade of these services would arise; (2) the nature, design, and timing of natural gas system improvements are in accordance with SoCalGas requirements; and (3) the improvements are adequate to serve the Project, to be in place for the first occupied land uses.
5.20	**Dry Utilities**	**MM 20.3-2** The Project Applicant/Developer shall install, bond for, or otherwise provide on-site natural gas facilities in coordination with SoCalGas.
5.20	**Dry Utilities**	**MM 20.3-3** An additional regulator station shall be constructed by SoCalGas to loop the distribution system for increased reliability. The timing for development of this station shall be determined by SoCalGas through an assessment of the system's operational needs. The timing for construction of this facility, as well as the specific location and sizing, shall be coordinated with SoCalGas.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.20	**Dry Utilities**	**MM 20.4-1** The Project Applicant/Developer shall coordinate with AT&T in the design and implementation of future telecommunications service and facilities within the Project study area to ensure that: (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of telecommunications system improvements are in accordance with AT&T requirements; and (3) the improvements are adequate to serve the proposed land uses.
5.20	**Dry Utilities**	**MM 20.5-1** The Project Applicant/Developer shall coordinate with the Cable Television Service Provider in the design and implementation of future communication service and facilities within the Project study area to ensure that (1) no prolonged service disruptions during the extension and upgrading of these services would arise; (2) the nature, design, and timing of cable system improvements are in accordance with the Cable Service Provider's requirements; and (3) the improvements are adequate to serve the proposed land uses. The cable service connections shall be available at the property lines.
5.21	**Climate Change**	**MM 21-1** The Project Applicant/Developer shall provide the County with plans and specifications that demonstrate 50 percent of the Project's anticipated electrical energy demand at buildout shall be satisfied from on-site renewable energy generation. "Anticipated electrical energy demand" shall be determined on the basis of the anticipated loads for each building as shown in the reports submitted at the time of building permit application pursuant to the Building Energy Efficiency Standards of Title 24. "On-site renewable energy generation" includes, but is not limited to, solar, wind, geothermal, biofuel and hydroelectric systems. These systems shall be installed in connection with the development of one or more of the following: residential units, nonresidential buildings, public buildings, or Specific Plan utility facilities located either within the Specific Plan area or within its immediate vicinity.
5.21	**Climate Change**	**MM 21-2** The Project's plans and specifications shall demonstrate compliance with California Green Building Standards (CALGreen) Code voluntary measure A4.203.1.2.1 Tier 1 for newly-constructed low-rise residential buildings. Therefore, the energy efficiency of these buildings would exceed 2016 Title 24 requirements by 15 percent. Low rise buildings are three stories or less. The Project shall incorporate the Green Development Program (*Centennial Specific Plan*, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as use of high performance glazing, radiant heat roof barriers, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, strategic placement of trees and other shading devices. All single-family homebuyers shall have the option to include a photovoltaic array system.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-3** The Project's plans and specifications shall demonstrate compliance with CALGreen voluntary measure A5.203.1.2.1 Tier 1 for nonresidential buildings (e.g. hotel, high-rise residential), thereby exceeding the 2016 Title 24 energy efficiency requirements for these buildings by 10 percent. The Project shall incorporate the Green Development Program (Centennial Specific Plan, Appendix 2A), and the Project Applicant/Developer shall be responsible for the implementation of this requirement, which may include energy reduction measures such as high performance glazing, radiant heat roof barriers, high-efficient HVAC with hot-gas reheat, insulation of all pipes, programmable thermostats, fluorescent and LED bulbs, solar access, sealed ducts, zero use of CFC refrigerants in commercial buildings, strategic placement of trees, and other shading devices. Commercial structures shall include passive solar design techniques, such as a north-south panel orientation on buildings, and shall install operable windows designed to maximize natural ventilation by opening into prevailing west winds at inlets and away outlets, thereby reducing use of interior climate controls.
5.21	**Climate Change**	**MM 21-4** The-Project Applicant/Developer shall require in contract specifications, that contractors limit construction equipment idling to 3 minutes and include a program to ensure that equipment operators comply with the 3-minute limit.
5.21	**Climate Change**	**MM 21-5** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that a minimum of 70 percent of public and community pools and spas shall be equipped with active solar heating systems where heating is necessary or desired. The Project Applicant/Developer shall provide the proposed plan for compliance with this provision prior to obtaining a permit for the pool.
5.21	**Climate Change**	**MM 21-6** Deeds, CC&Rs or similar legal documents shall contain the following requirement: The owners of all single-family and multi-family residential units shall be required, upon resale, to present to the buyer a written energy audit checklist prepared by a qualified third party at the time the seller provides the buyer with the Real Estate Transfer Disclosure Statement required by California Civil Code, Section 1102 et seq. The energy audit checklist shall certify that all HVAC systems, thermostats, appliances, windows and swimming pools (if applicable) are the same as those originally installed or, if changed, otherwise comply with Centennial's Green Development Program. All residential pool covers shall be removable, and shall not be automatic retractable covers. The CC&Rs of the master homeowners association or other applicable association shall require compliance with the provisions of this measure and shall provide notice to individual owners of the resale energy audit checklist requirement. The master homeowners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-7** Deeds, CC&Rs, or similar legal documents shall contain the following requirement: For nonresidential buildings, within ninety (90) days after the end of the first full calendar year following the issuance of the certificate of occupancy and within ninety (90) days after each five year period thereafter, the owner or tenant in possession thereof shall submit to the master commercial owners association or other applicable association a report prepared by the owner or a qualified, independent third party that evaluates whether all major building systems such as heat furnace, air conditioner, and other mechanical fixtures are working within the design standards established for each system. The master commercial owners association or other applicable association shall monitor compliance and provide the County with an annual report of compliance with this measure.
5.21	**Climate Change**	**MM 21-8** Energy efficient major appliances and HVAC systems that meet the more stringent of applicable California Energy Commission (CEC) requirements or ENERGY STAR requirements, or equivalent, shall be exclusively offered by residential builders. Major appliances subject to this requirement include dishwashers, clothes washers, refrigerators, and room air conditioners.
5.21	**Climate Change**	**MM 21-9** The Project Applicant/Developer shall provide plans and specifications to the County that have been prepared in accordance with the Project Water Purveyor or alternate qualified public utility district requirements and standards, demonstrating that the Project's wastewater reclamation facilities (WRFs) shall include equipment to capture and reuse biogas for energy production.
5.21	**Climate Change**	**MM 21-10** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential or multi-family buildings shall be constructed with recycled water infrastructure to serve common areas for these facilities, except where prohibited by law. To the extent recycled water is produced within the Project and available, recycled water shall be used for landscape irrigation within those common areas. Compliance with these measures shall be established prior to the of a construction permits for nonresidential and multi-family facilities and at the time of County approval of final landscaping plans submitted by the Project Applicant/Developer after final map recordation for homeowners association common areas. Covenants, conditions and restrictions (CC&Rs) shall require the owners of such common areas to maintain, repair and replace irrigation systems and plantings in accordance with County approved plans.
5.21	**Climate Change**	**MM 21-11** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that nonresidential building shall be constructed with indoor plumbing fixtures and fixture fittings that would reduce the overall use of potable water within the building by 12 percent, consistent with 2016 CALGreen Tier 1 nonresidential voluntary measures as prescribed in Section A5.303.2.3.1 of the code.
5.21	**Climate Change**	**MM 21-12** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that single or multi-family residential buildings shall be constructed with kitchen faucets and appliances that comply with 2016 CALGreen code residential voluntary measures specified in Sections A4.303.1 and A4.303.3 of the code.
5.21	**Climate Change**	**MM 21-13** The outdoor residential (single-family and multi-family) water budget for water budget based ratemaking shall be based on having no more than 25 percent turf grass allowed in landscaped areas of single-family detached residential front yards and multi-family residential common areas.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-14** Ten percent of all homes in Centennial communities that permit housing, with the exception of the lowest density area (Community 8-2) will be affordable, in conformance with the Affordable Housing Implementation Plan (see Appendix 3-H of the Centennial Specific Plan).
5.21	**Climate Change**	**MM 21-15** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that one 208/240 VAC receptacle that may be used for charging electric vehicles, shall be installed in each detached and attached single-family residence. The installation shall comply with requirements of the 2016 CALGreen Code Section 4.106.4.1, or the most applicable code at the time of construction.
5.21	**Climate Change**	**MM 21-16** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that "alternative energy fueling stations" shall be installed as follows. An "alternative energy vehicle fueling station" is a 208/240 VAC electrical vehicle charging station or a station providing another new or improved technology (e.g. compressed natural gas (CNG) and hydrogen fuel cell) that provides refueling for vehicles that do not use fossil fuel. An electric charging station shall allow for simultaneous charging of two electric vehicles. • Business Park and Institutional land use designations shall provide a minimum of one alternative energy vehicle fueling station on site for the first 50,000 square feet of usable floor space and additional alternative energy vehicle fueling stations for each additional 50,000 square feet of usable floor space thereafter. • Multi-family residential buildings of at least 20 residential units shall provide a minimum of one alternative energy vehicle fueling station for the first twenty (20) residential units and an additional alternative energy vehicle fueling station for each additional twenty (20) residential units thereafter. • The Town Center and each Village Center shall provide a minimum of one alternative energy vehicle charging station. • Designated Transit Hubs shall provide a minimum of one alternative energy vehicle charging station.
5.21	**Climate Change**	**MM 21-17** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs for non-residential buildings: • Bicycle parking spaces at a rate of 5 percent of minimum required vehicle parking spaces for nonresidential land uses. • Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1, Nonresidential Voluntary Measures, of the CALGreen Code.
5.21	**Climate Change**	**MM 21-18** The Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the building designs or specifications for multi-family residential buildings: • Visitor parking shall include preferentially located parking spaces for alternative-fueled vehicles. • Bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen Code or as required by County Code Section 22.52.1225B, whichever is more stringent.

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
5.21	**Climate Change**	**MM 21-19** For parking structures and parking lots with 20 or more parking spaces, the Project Applicant/Developer shall provide plans and specifications to the County demonstrating that the following features have been incorporated into the parking facility: • The parking facility shall include a minimum of five percent preferentially located parking spaces for alternative-fueled (electric, natural gas, or similar low-emitting technology) vehicles. • The parking facility shall include at least one electric vehicle charging station. Electrical lines shall be designed and sized to add additional charging stations for up to three percent of the total parking spaces when a demand is demonstrated. The design and installation shall be consistent with Section A4.106.8.2, Residential Voluntary Measures, of the CALGreen Code. • For residential parking facilities, bicycle parking shall be provided as specified in Section A4.106.9, Residential Voluntary Measures, of the CALGreen code or as required by County Code Section 22.52.1225B, whichever is more stringent.
5.21	**Climate Change**	**MM 21-20** The Project Applicant/Developer shall ensure that the implementation of the Green Development Program takes into account compliance with the following regulations. 1) Regulations that are quantified inputs into the CalEEMod analysis, resulting in GHG Reductions: a) Pavley Motor Vehicle Standards (AB 1493) b) Low Carbon Fuel Standard (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 7, Section 95480 et seq.) c) Title 24 (part 6 [Energy Code] and part 11 [CALGreen Code]) of the California Code of Regulations d) Renewable Portfolio Standard (SB X1 2 and SB 350) e) Solid Waste Diversion (AB 341) f) Statewide reduction in potable urban water usage of 25 percent relative to water use in 2013 (Executive Order B-29-15) g) Model Water Efficient Landscape Ordinance (MWELO) (California Code of Regulations, Title 23, Division 2, Chapter 2.7) h) Los Angeles Tree Planting Ordinance (Los Angeles County Code, Title 22, Division 1, Chapter 22, Part 20, Sections 22.52.2100 et seq.) i) Los Angeles County Green Building Standards Code (Los Angeles County Code, Title 31, Chapter 1, Sections 100 et seq.) j) California Water Code (California Code of Regulations, Division 6, Part 2.10, Sections 10910–10915) k) Los Angeles County Community Climate Action Plan 2) Regulations that are not quantified inputs into the CalEEMod analysis, but should be considered for incorporation as appropriate:

TABLE 1-2
CENTENNIAL SPECIFIC PLAN MITIGATION SUMMARY

#	Environmental Factor	Mitigation
		a) EPA and NHTSA GHG and CAFE standards for passenger cars, light-duty trucks, and medium-duty passenger vehicles (75 FR 25324–25728 and 77 FR 62624–63200) and for medium- and heavy-duty vehicles (76 FR 57106–57513) b) Cap-and-Trade Program for Electricity, Stationary Sources, and Fuels (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 5, Section 95801 et seq.) c) Advanced Clean Cars Program (California Code of Regulations, Title 13, Division 3, Chapter 1, Articles 1, 2, 6 (parts); Chapter 2, Articles 1, 2.1, 2.3, 2.4 (parts); Chapter 4.4 (parts); Chapter 8 (parts). d) Under Inflated Vehicle Tires (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 8, Section 95550 et seq.) e) Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 1, Section 95300 et seq.) f) Management of High Global Warming Potential Refrigerants for Stationary Sources (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5.1, Section 95380 et seq.) g) Small Containers of Automotive Refrigerant (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 10, Article 4, Subarticle 5, Section 95360 et seq.) h) High-Global Warming Potential Greenhouse Gases in Consumer Products (California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2) i) CALGreen Code as Adopted by the Building Standards Commission (California Code of Regulations, Title 24, Part 11 Emergency Building Standard DSA-SS EF-02/15) j) Natural Gas Cooking Stoves and Fireplaces (SCAQMD Rule 445)

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1.10 ALTERNATIVES

The Alternatives Section (Section 8.0) discusses the potential impacts of alternatives that have been created as alternate approaches to the proposed Project. Six of eight possible alternatives are discussed; they are: Alternative A, No Project Alternative; Alternative B, Previously Proposed Project Alternative; Alternative C, Additional Drainage Avoidance Alternative; Alternative D, Infrastructure Relocation Alternative; Alternative E, Density Clustering/East of Aqueduct Alternative; and Alternative F, Central EOA Development Alternative. Each Alternative has a description and a summary of the impacts of each. The Environmentally Superior Alternative, as determined in accordance with CEQA, is Alternative E, Density Clustering/East of Aqueduct Alternative.

1.11 AREAS OF CONTROVERSY

CEQA requires that areas of controversy and unresolved issues be identified up front as part of the EIR. As discussed previously, the scope of this EIR includes issues identified by agencies and the public in response to circulation of the NOP. The following are the primary issues that are unresolved or that involve an element of potential controversy:

- The scoping process identified the public's concern over availability of water supplies. The sources of water and the sufficiency of water supplies to serve the Project are discussed in Section 5.18 (Water Resources).
- Comments have been received during the scoping process indicating concern regarding creation of nighttime light pollution with Project implementation. Section 5.13 (Visual Resources), particularly the analysis of Threshold 13-5, addresses impacts related to daytime and nighttime light and glare sources associated with the Project.
- The scoping process identified the public's concern over preservation of open space. As a means of addressing this issue, the Project provides 12,323 acres in open space. In order to analyze potential impacts, land resource impacts are discussed in Section 5.5 (Land Resources), land use and planning impacts are discussed in Section 5.8 (Land Use, Entitlements and Planning), and aesthetic impacts are discussed in Section 5.13 (Visual Resources), among other sections.
- Comments have been received during the scoping process indicating that the proposed Project should not be approved because it impacts California condor habitat. EIR Section 5.7 (Biological Resources) analyzes this issue and demonstrates that the Project area is outside the designated critical habitat for the California condor.
- The Project proposes the development of 19,333 housing units on the Project site. The appropriateness of this amount of development in the proposed location has been questioned. EIR Section 5.9 analyzes the population, housing, and employment impacts that would result from the implementation of the proposed Project. Further, EIR Section 5.10 (Traffic, Access and Circulation), Section 5.11 (Air Resources), Section 5.17 (Other Public Services), and Section 5.18 (Water Resources), among others, analyze the infrastructure needed for the Project and impacts associated with developing the Project at the Project site. Section 5.7 (Biological Resources) analyzes the direct and

indirect impacts to local and regional biological resources and issues, including wildlife movement, with implementation of the Project.

- The *Centennial Specific Plan* proposes development adjacent to the San Andreas Significant Ecological Areas (SEA) designated by the County of Los Angeles, but would not impact the SEA. EIR Section 5.7 (Biological Resources), particularly the analysis of Threshold 7-5, addresses impacts to biological resources.
- SR-138 and I-5 are the main travel routes projected to be used by residents and employees within the Project. They are facilities under the control of Caltrans; therefore, the County does not have the authority to modify access to these highways. There is a concern that the additional traffic would impact the facilities in a manner that will affect existing and future travelers on the facilities. The Project includes a comprehensive mitigation program—including an agreement between the Project proponents, the County, and Caltrans—to mitigate the additional trips to a less than significant level. This issue is addressed in Section 5.10 (Traffic, Access, and Circulation).

1.12 REFERENCED DOCUMENTS AND AVAILABILITY OF STUDIES AND REPORTS

Copies of this Draft EIR, the technical appendices, and all cited or referenced studies or reports are available for review at the County of Los Angeles Department of Regional Planning located at 320 West Temple Street, Los Angeles, California. The EIR and technical appendices are also available for review on the Los Angeles County Department of Regional Planning website (www.planning.lacounty.gov) and as CDs in the following libraries:[6]

Lancaster Regional Library
601 West Lancaster Boulevard
Lancaster, California 93534

Castaic Library
27971 Sloan Canyon Road
Castaic, California 91384

Valencia Public Library
23743 West Valencia Boulevard

Santa Clarita, California 91355

Old Town Newhall Library
24500 Main Street
Santa Clarita, California 91321

Frazier Park Library
3732 Park Drive

Quartz Hill Library
42018 50th Street West
Quartz Hill, California 93536

Canyon County JoAnne Darcy Library
18601 Soledad Canyon Road
Santa Clarita, California 91351

San Fernando Library
217 North Maclay Avenue
San Fernando, California 91340

Bakersfield Library, Southwest Branch
8301 Ming Avenue
Bakersfield, California 93311

Stevenson Ranch Library
25950 The Old Road

6 Individuals or groups who would like a printed copy of the document can order directly from ARC at their own (nonrefundable) expense. Copies can be ordered from Kevin Oermann by phone at (949) 660-1150 ext. 154 or by email at kevin.oermann@e-arc.com.

Frazier Park, California 93225 Stevenson Ranch, CA 91381

1.13 REFERENCES

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