be equipped with properly operating and maintained mufflers and other state required noise attenuation devices to further minimize impacts. With implementation of mitigation measure NOI-1 a less than significant noise impact would result from construction activities.

The Project would not result in off-site mobile noise impacts, since it is not considered a trip generating land use project and the traffic would not increase with implementation of the Project. In addition, the Project is anticipated to result in beneficial long-term noise effects, as it would result in reduced motorized vehicle trips and improve connectivity in the Project area for alternative modes of transportation. Although the Project may result in a nominal number of trips associated with occasional maintenance, the impact of these trips would be negligible. The Project would not generate any stationary source noise impacts. Therefore, the Project, in combination with cumulative noise levels, would not be cumulatively considerable.

Traffic/Transportation

Other projects in the area may be under construction during the same timeframe as the Project. To the extent that construction periods overlap, there is a potential for cumulative local level traffic impacts from multiple project detours and lane reductions occurring simultaneously in and adjacent to the study area, potentially resulting in deterioration of traffic operations on area local roadways. The City Menifee and Hemet would coordinate the timing of project detours and lane closures for all projects in the area in order to minimize cumulative traffic impacts. With the minimization measures TRAFFIC-1 identified in Section 3.16.3, short-term impacts on traffic/transportation would be minimized and the Project would not contribute either directly or indirectly to a cumulatively considerable impact to this resource area.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. Based on the analysis of the above-listed topics, the Project would have potentially significant environmental effects related to air quality, biological resources, cultural resources, hazards/hazardous materials, noise, and transportation/traffic that could cause substantial adverse effects on human beings, either directly or indirectly. However, implementation of the mitigation measures for each of these resource topics would reduce Project-related potentially significant impacts to a less-than-significant level. Therefore, after implementation of the measures, the Project would result in a less-than-significant impact on human beings.

4.0 LIST OF PREPARERS

County of Riverside

Cathy Wampler, Engineering Project Manager
Frances Segovia, Senior Transportation Planner

POWER Engineers, Inc.

Court Morgan, Environmental Project Manager
Kim Quinn, Project Coordinator
David Barrackman, GIS Analyst
Heidi Horner, Technical Editor
Yvonne Ulloa, Word Processor/Document Production

Michael Baker International

Gary Warkentin, Project Manager
Randy Ratzlaff, Project Engineer
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Applied EarthWorks, Inc.

Joan George, Project Archaeologist

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APPENDIX A

CEQA ENVIRONMENTAL CHECKLIST FORM

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CEQA Environmental Checklist Form

1. **Project Title:** Salt Creek Trail Project

2. **Lead Agency Name and Address:** County of Riverside, 3525 14th Street, Riverside, CA 92501.

3. **Contact Person and Phone Number:** Frances Segovia, Senior Transportation Planner

4. **Project Location:** The Salt Creek Trail Project is located in two segments of the Salt Creek Trail. The western segment of the trail spans the City of Menifee from the intersection of Goetz Road the intersection of north of Newport Road to the intersection of Antelope Road and Aldergate Drive east of Interstate 215. The eastern segment of the trail spans the City of Hemet from the intersection of Sanderson Avenue and Domenigoni Parkway to the intersection of State Street and Chambers Street.

5. **Project Sponsor's Name and Address:** Same as Lead Agency

6. **General Plan Designation: N/A**

7. **Zoning: N/A**

8. **Description of Project (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)** The County of Riverside proposes to construct and operate two segments of the Salt Creek Trail, totaling approximately 7.9 miles which would contribute to the County's ultimate goal for an approximately 16 mile long multi-use trail connecting the cities of Hemet and Menifee. The western segment spans approximately 4.3 miles through the City of Menifee and the eastern segment spans approximately 3.6 miles through the City of Hemet.

9. **Surrounding Land Uses and Setting: Briefly describe the project's surroundings:** The proposed western and eastern segments of the trail generally follow existing drainage channel and roads. The area surrounding the western segment of the trail is highly urbanized, consisting of a mix residential, commercial, recreational, and public/institutional uses while the area surrounding the eastern segment of the trail includes residential, educational, recreational, and open space uses.

10. **Other Public Agencies Whose Approval is Required (e.g., permits, financing approval, or participation agreement.):** Implementation of the proposed Project would require the approval from the following agencies: United States Army Corps of Engineers, California Department of Fish and Wildlife, and the Santa Ana Regional Water Quality Control Board.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page A-3 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☐	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Tribal Cultural Resources	☐	Utilities/Service Systems
☐	Mandatory Findings of Significance				

DETERMINATION:

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, it is within the body of the environmental document itself. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

The checklist on the following pages indicates potential impacts that may result from the Salt Creek Trail Project. For each of the environmental factors, questions and supporting analysis, and documentation are provided in Chapter 3 of this Initial Study.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) 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 use?	☐	☐	☐	☒
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) 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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐
d) 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?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) 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?	☐	☐	☐	☒
e) 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, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) 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?	☐	☐	☒	☐
d) 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?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) 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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) 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?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES: Would the project:				
a) 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?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES:				
a) Would the project 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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒	☐	☐
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) 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?	☐	☒	☐	☐
c) 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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES: Would the project 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) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒
XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

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APPENDIX B

MITIGATION MONITORING AND REPORTING PROGRAM

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1.0 INTRODUCTION

The California Environmental Quality Act (CEQA) was amended in 1989 to add section 21081.6 to the Public Resources Code. Section 21081.6 (a) (1) states that *"the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."*

Furthermore, Section 21081.6 requires a public agency to adopt a mitigation monitoring and reporting program for assessing and ensuring compliance with any required mitigation measured identified for the proposed project. Section 21081.6 provides general guidelines in implementing mitigation monitoring and reporting programs and mandates that specific reporting and monitoring requirements be defined prior to the close of the public review period for the mitigated negative declaration.

The Mitigation Monitoring and Reporting Program (MMRP) table below lists those mitigation measures that may be included as conditions of approval for the proposed Salt Creek Trail Project. These measures correspond to those discussed in the Initial Study/Mitigated Negative Declaration. To ensure that the Project's mitigation measures would be properly implemented, a monitoring program has been developed that specifies the timing of and responsibility for monitoring each measure. The mitigation measures identified in the Initial Study/Mitigated Negative Declaration have been described in sufficient detail to provide the necessary information to identify the party or parties responsible for carrying out the mitigation. The County would have the primary responsibility for monitoring and reporting the implementation of the mitigation measures, as described.

Mitigation Monitoring and Reporting Program (MMRP)
Salt Creek Trail Project

No.	Section of the Initial Study	Mitigation Description	Timing	Enforcement	Responsible Party			
AIR QUALITY								
AQ-1	Section 3.1.3	Prior to approval of the Project plans and specifications, the Project Engineer shall confirm that the specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • Dust control of all of the Contractor's operations is required 24 hours per day, 7 days a week for the duration of the contract, and until the disturbed soil is permanently stabilized. The Contractor shall take every precaution to prevent emissions of fugitive dust from the Project site, from locations of stockpiled materials, from unpaved driving surfaces, from haul vehicles, from inactive construction areas, and from all other operations of the Contractor; • All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour; • Disturbed areas shall be replaced with ground cover, restored to a natural state similar to adjacent or nearby natural conditions, or paved immediately after construction is completed in the affected area; • On-site vehicle speed shall be limited to 15 miles per hour; • Visible dust beyond the Project limits which emanates from the Project shall be prevented to the maximum extent feasible;	During construction	County to verify site plans to ensure incorporation prior to construction. Site inspections during construction to ensure compliance with this measure.	County and Construction Contractor			

No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE: Initials	Date	Remarks
		• All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and • Reroute construction trucks away from congested streets or sensitive receptor areas.						
AQ-2	Section 3.1.3	During ground disturbance activities, the Construction Contractor shall comply with CARB's Airborne Toxic Control Measures (ATCM) addressing Naturally Occurring Asbestos (NOA) (Section 93105 and 93106 of Title 17 of the California Code of Regulations). These ATCMs regulate construction, grading, quarrying and surface mining operations, as well as surfacing applications. Per Section 93105, unless it can be shown that formations containing NOA would not be disturbed, an asbestos dust mitigation plan shall be prepared that includes dust suppression techniques to prevent asbestos dust. Asbestos dust suppression techniques include, but are not limited to track-out prevention and control measures, keeping active storage piles adequately wetted or covered with tarps, control for disturbed surface areas and storage piles, control for traffic on on-site unpaved roads, and staging areas, control for earthmoving activities, and recordkeeping and reporting requirements.	During construction	County to conduct site inspections to ensure compliance with this measure.	County and Construction Contractor			
BIOLOGICAL RESOURCES								
BIO-1	Section 3.4.3	A pre-construction clearance survey will be conducted within the Project area during the appropriate blooming season to determine if special-status plant species are present within the Project area. Surveys will provide 100 percent clearance of suitable habitat within the Project disturbance footprint for both the western and eastern segments of the trail. If special-status plant species are detected, the County will contact the Western Riverside County Regional Conservation Authority (RCA), USFWS, and CDFW to confirm appropriate measures are implemented to address the presence of special-status plant species.	Prior to construction	County to retain a qualified biologist to conduct pre-construction surveys during appropriate blooming season.	County and Qualified Biologist			
BIO-2	Section 3.4.3	Fugitive dust will be contained to the maximum extent	During construction	County to conduct	County and			

No.	Section of the Initial Study	Title and Description	Timing of Implementation	Method of Implementation	Responsible Party	Verification of Compliance: Initial		
		possible via the use of an on-site water truck(s), and all construction equipment, if left on-site, be thoroughly cleaned of all weed seeds prior to entering the BSA.		site inspections to ensure compliance with this measure.	Construction Contractor			
BIO-3	Section 3.4.3	Within three days prior to ground disturbance, the construction area and adjacent areas within 500 feet of the Project footprint, would be surveyed by an Acceptable Biologist for burrows that could be used by burrowing owl. If a suitable burrowing owl burrow is observed, the biologist would determine if the burrow has recently been used or if an owl is present in the burrow. If the burrow is determined to be occupied, the burrow would be flagged and a 200-foot buffer during the non-breeding season and a 500-foot buffer during the breeding season or a buffer to the edge of the property boundary if less than 500 feet, would be established around the burrow. The buffer would be staked and flagged. No construction activities would be permitted within the buffer until the young are no longer dependent on the burrow. In coordination with CDFW, the no work buffer can be reduced depending on the behavior of the burrowing owls, topography, existing vegetation, human development, and land uses in an area. It is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest becomes inactive under natural conditions, construction activities may resume within the buffer area. If the burrow is unoccupied, the burrow would be made inaccessible to owls, and construction activities may proceed. If either a nesting or escape burrow is occupied, owls shall be relocated pursuant to accepted Wildlife Agency protocols. A burrow is assumed occupied if records indicate that, based on surveys conducted following protocol, at least one burrowing owl has been observed occupying a burrow on site	Prior to construction	County to retain qualified biologist to conduct burrowing owl survey.	County and Qualified Biologist			

No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	Verification of Compliance		
						Initials	Date	Remarks
		during the past three years. If there are no records for the site, surveys must be conducted to determine, prior to construction, if burrowing owls are present. Determination of the appropriate method of relocation, such as eviction/passive relocation or active relocation, shall be based on the specific site conditions (e.g., distance to nearest suitable habitat and presence of burrows within that habitat) in coordination with the CDFW. Active relocation and eviction/passive relocation require the preservation and maintenance of suitable burrowing owl habitat determined through coordination with the CDFW.						
BIO-4	Section 3.4.3	If construction activities cannot occur outside of the avian nesting season (generally February 1st to August 31st) a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. The construction area and adjacent areas within 500 feet of the Project footprint would be surveyed by an Acceptable Biologist. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 500-foot buffer around the active nest to ensure that nesting behavior is not adversely affected by the construction activity. The buffer would be staked and flagged and signed for exclusion of construction activity. No construction activities would be permitted within the buffer until the young are no longer dependent on the nest. In coordination with CDFW, the no work buffer can be reduced depending on the behavior of the Golden Eagle, Cooper's Hawk, Ferruginous Hawk, California Horned Lark, Vesper Sparrow, Yellow Warbler, and Least Bell's Vireo topography, existing vegetation, human development, and land uses in an area. It is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the	Outside of active breeding season / prior to construction	County to retain qualified biologist if construction occurs during breed season.	County and Qualified Biologist			

No.	Section of the Initial Study	Title and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE		
						Initial	Date	Remarks
		nest becomes inactive under natural conditions, construction activities may resume within the buffer area.						
BIO-5	Section 3.4.3	The Project has been designed to avoid direct construction impacts to special-status plant communities by staying within previously disturbed areas. Avoidance and minimization measures shall be included in the Project specifications for implementation during construction to further reduce the potential for any temporary, indirect impacts to occur to these communities during construction activities, including the following: • Trash and other debris shall be properly disposed of and not left on-site in areas where it could fall into protected habitat. • Project boundaries shall be clearly marked with fencing, or other suitable type of marking material as directed by a qualified biologist. Vehicles and other Project construction personnel shall stay within these delineated Project boundaries. • Sensitive areas (i.e., jurisdictional drainage features, Public/Quasi-Public Lands, southern cottonwood willow riparian forest) in proximity to the construction footprint shall be clearly marked, with fencing or other suitable type of marking material as directed by a qualified biologist, for awareness and avoidance. • Refueling, washing, or other vehicular maintenance activities shall occur a minimum of 100 feet away from riparian areas, including southern cottonwood willow riparian forest habitat. • Equipment would be maintained and checked at least on a daily basis for leaks. • All vehicles leaks or other hazardous material leaks shall be contained and cleaned up immediately. All contaminated soil shall be removed from the site and disposed of properly.	During construction	County to review plans to verify incorporation of this measure. County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			

No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	Verification of Compliance: Initials	Date	Remarks
BIO-6	Section 3.4.3	During soil excavation, grading, or other subsurface disturbance within 100 feet of conserved riparian/riverine habitat on-site, the construction contractor shall supervise provision and maintenance of all standard dust control best management practices (BMPs) to reduce fugitive dust emissions, including but not limited to the following actions: • Water any exposed soil areas a minimum of twice per day, or as allowed under any imposed drought restrictions. On windy days or when fugitive dust can be observed leaving the construction site, additional water shall be applied at a frequency to be determined by the on-site construction superintendent. • Pave, periodically water, or apply chemical stabilizer to construction access/egress points. • Minimize the amount of area disturbed by clearing, grading, earthmoving, or excavation operations at all times. • Operate all vehicles on graded areas at speeds less than 15 miles per hour. • Cover all stockpiles that would not be utilized within three days with plastic or equivalent material, to be determined by the on-site construction superintendent, or spray them with a non-toxic chemical stabilizer.	During construction	County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			
BIO-7	Section 3.4.3	The on-site construction contractor shall implement the following measures to minimize short-term noise levels caused by construction activities. Measures to reduce construction noise shall be included in contractor specifications and include, but not be limited to, the following: • Properly outfit and maintain construction equipment with manufacturer-recommended noise-reduction devices to minimize construction-generated noise. • Operate all diesel equipment with closed engine doors and equip with factory-recommended mufflers.	During construction	County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			

No.	Section of the Initial Study	Measure Description	Timing of Implementation	Monitoring of Implementation	Responsible Party	Verification		
		• Use electrical power, when feasible, to operate air compressors and similar power tools. • Employ additional noise attenuation techniques, as needed, to reduce excessive noise levels within conserved Riparian/ Riverine Habitat on-site, such as placement of temporary sound barriers or sound blankets at the top of slope adjacent to these areas. • Locate construction staging areas at least 100 feet from jurisdictional areas.						
BIO-8	Section 3.4.3	To avoid light spillover into the adjacent conserved riparian/riverine habitat on-site, any proposed lighting fixtures within 100 feet of these areas shall incorporate internal baffles to direct the light towards the ground and shall have a zero side-angle cut-off to the horizon. All lighting and fencing for infrastructure adjacent to jurisdictional areas shall be designed or reviewed by a qualified biologist to allow wildlife to move without hindrance.	During construction	County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			
BIO-9	Section 3.4.3	To address potential short-term impacts to water quality within the on-site drainages from construction runoff that may carry storm water pollutants, a Storm Water Pollution Prevention Program (SWPPP) shall be implemented by the construction contractor as required by the California General Construction Storm Water Permit pursuant the RWQCB regulations. The SWPPP shall identify BMPs related to the control of toxic substances, including construction fuels, oils, and other liquids. These BMPs would be implemented by the construction contractor prior to the start of any ground clearing activity, shall be subject to periodic inspections by the County and the Project's hydrological consultant, shall be maintained throughout the construction period and remain in place until all landscape and permanent BMPs are in place. BMPs shall be monitored and repaired if necessary to ensure maximum erosion, sediment, and pollution control. • The County shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting	During construction	County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			

						VERIFICATION OF COMPLIANCE		
		Timing and Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		(erosion control matting) or similar material, within and adjacent to CDFW jurisdictional areas. • All fiber roles[1], straw waddles, and/or hay bales utilized within and adjacent to the Project site shall be free of non-native plant materials. • Permittee shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws and it shall be the responsibility of Permittee to ensure compliance. • Water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities shall not be allowed to enter a lake, streambed, or flowing stream or be placed in locations that may be subjected to high storm flows. • Spoil sites shall not be located within a lake, streambed, or flowing stream or locations that may be subjected to high storm flows, where spoil shall be washed back into a lake, streambed, or flowing stream where it would impact streambed habitat and aquatic or riparian vegetation. • Raw cement/concrete or washings thereof, asphalt, paint, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering the waters of the State. These materials, placed within or where they may enter a lake, streambed, or flowing stream by Permittee or any party working under contract or with the permission of Permittee, shall be removed						

[1] Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.

						VERIFICATION OF COMPLIANCE		
Mitigation Number	Section Number	Mitigation Description	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		immediately. • No equipment maintenance shall be done within or near any lake, streambed, or flowing stream where petroleum products or other pollutants from the equipment may enter these areas under any flow. • No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any lake, streambed, or flowing stream.						
BIO-10	Section 3.4.3	The following measures shall also be incorporated into the construction documents and specifications, and implemented by the contractor, to avoid potential construction-related impacts to conserved riparian/riverine habitat outside of the approved disturbance limits: • Construction worker training shall be provided by a qualified biologist at the first on-site - construction meeting; • Project boundaries shall be clearly marked and / or signs shall be erected near the top of slope adjacent to conserved riparian/riverine habitat to prevent accidental/unauthorized intrusions during construction; • No equipment shall be operated in areas of flowing water; and • Staging areas for storage of materials and heavy equipment, and for fueling, cleaning, or maintenance of construction vehicles or equipment, shall be prohibited within 20 feet	During construction	County to review plans to verify incorporation of this measure. County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist, and Construction Contractor			

						VERIFICATION OF COMPLIANCE		
No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		from the top of slope adjacent to conserved riparian/riverine habitat.						
BIO-11	Section 3.4.3	The Project shall incorporate special edge treatments along the western segment of the trail between Normandy Road and Interstate 215 designed to minimize edge effects by providing a safe transition between developed areas and conserved riparian/riverine habitat as identified in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and which would be compatible with Project operation and the protection and sustainability of conserved areas. The following special edge treatments are applicable to the Project, and shall be implemented: a) The Project is required to stage construction vehicles and equipment outside of the limits of California Department of Fish and Wildlife jurisdictional streambed and riparian/riverine habitat, Public/Quasi Public lands, and MSHCP Conservation Areas to the maximum feasible distance; b) Silt fence shall be installed, demarcating the Project footprint, where the proposed trail will impact Salt Creek, Sun City Channel, Drainage 1, and Drainage 2 to ensure no additional impacts to the jurisdictional features occur; c) Construction-related noise shall not exceed residential noise standards as set forth in the City of Menifee Noise Ordinance; and d) Any manufactured slopes shall be kept within the boundaries of the Project footprint and not encroach into California Department of Fish and Wildlife (CDFW) jurisdictional streambed limits beyond the limits for which permit approval has been obtained from CDFW for the Project.	During construction	County and/or qualified biologist to conduct site inspections to ensure compliance with this measure.	County, Qualified Biologist and Construction Contractor			
BIO-12	Section 3.4.3	The Project will result in approximately 0.06 acre of permanent and 0.03 acre of temporary impacts to U.S. Army Corps of Engineers (Corps) and Regional Water Quality Control Board (RWQCB) non-wetland waters,	During construction	County and/or qualified biologist to conduct site inspections to	County, Qualified Biologist and Construction Contractor			

No.	Section of the Initial Study	Text and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE: Initials	Date	Remarks
		and approximately 1.05 acres of permanent and 0.62 acre of temporary impacts to California Department of Fish and Wildlife (CDFW) jurisdictional streambed. Permanent impacts to regulated jurisdictional waters will be mitigated at a ratio of 3:1 and temporary impacts will be mitigated at a ratio of 2:1, for a total of 4.39 acres of compensatory mitigation to satisfy requirements related to impacts to waters subject to the jurisdiction of the Corps, RWQCB, and CDFW Compensatory mitigation will be implemented through restoration of a total of 4.39 acres of habitat on Assessor Parcel Number 310-240-012 owned by the Western Riverside Regional Conservation Authority (RCA). A Habitat Mitigation and Monitoring Plan (HMMP) will be prepared and approved by RCA, RWQCB, and CDFW prior to initiating Project construction – the HMMP will provide detailed direction regarding implementation and maintenance of the referenced compensatory mitigation as agreed upon by RCA, RWQCB, and CDFW. In addition, the riparian/riverine habitat that would be temporarily impacted by Project construction-related activities would be restored to current conditions as soon as possible after construction is completed. All plant species installed within the temporarily disturbed areas shall include only local California native seeds, and shall be typical of the existing native plant species present in the riparian/riverine areas within and adjacent to the Project site. It is recommended that plant material be installed between October 1 and April 30 to maximize the benefits of the winter rainy season.		ensure compliance with this measure.				
BIO-13	Section 3.4.3	A Worker Environmental Awareness Program shall be conducted prior to the start of construction, to educate construction personnel regarding existing on-site and surrounding biological resources, environmental laws and regulations governing those resources that must be complied with, and measures that must be implemented to protect these resources focusing on the avoidance and minimization of impacts to nesting birds during	Prior to construction	County to retain a qualified biologist to conduct training.	County and Qualified Biologist			

No.	Section of Initial Study	Task/Description	Timing of Implementation	Method of Monitoring	Responsible Party	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
		construction.						
CULTURAL / PALEONTOLOGICAL RESOURCES:								
CUL-1	Section 3.5.3	If archaeological resources are inadvertently encountered during construction, the County-appointed archaeological and/or Tribal monitor shall: • Halt all work within a 60-foot radius and shall immediately inform the Resident Engineer. • Following notification, the archaeologist will make a preliminary assessment of the discovery to determine whether the find is an isolated artifact or recent deposit. If the find is determined to be isolated or recent, construction will be allowed to resume. • Should the monitor(s) determine the discovery is potentially significant, the monitor(s) will evaluate the discovery and if necessary, formulate appropriate mitigation measures after consultation with the County. • If the discovery contains Native American archaeological resources, all Native American tribes and individuals who requested to be contacted, shall be contacted and informed of the discovery. The archaeological resource discovery, including human remains, shall not be disturbed (i.e., photographed, videoed, or moved) until fully assessed by the archaeological monitor and/or tribal monitor. Additionally, if prehistoric or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, construction personnel encountering the resource must halt within a 60-foot radius until the monitor(s) can evaluate the nature and significance of the find and formulate appropriate evaluation and/or mitigation measures.	During construction	The County-appointed archaeological and/or Tribal monitor will adhere to the requirements outlined in this measure should archaeological resources be inadvertently encountered during construction.	County-appointed archaeological and/or Tribal monitor			

						VERIFICATION OF COMPLIANCE		
No.	Section of the Initial Study	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		Should the deposit contain Native American resources, all interested Native American parties must be first consulted as to how the deposit and any associated artifacts and features should be treated. Once the County archaeologist and/or tribal monitor have determined that the archaeological deposit has been sufficiently documented, recovered/removed, and concluded that further construction activities would not impact additional archaeological deposits in the immediate area, construction activity can resume in that area.						
CUL-2	Section 3.5.3	If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall then make recommendations within 48 hours and engage in consultation with the property owner concerning the treatment of the remains as provided in Public Resource Code Section 5097.98.	During construction	The County-appointed archaeological and/or Tribal monitor will adhere to the requirements outlined in this measure should human remains be inadvertently encountered during construction.	County-appointed archaeological and/or Tribal monitor			
HAZARDS AND HAZARDOUS MATERIALS								
HAZ-1	Section 3.8.3	Should construction activities result in the disturbance of traffic striping materials (western segment only), the generated wastes shall be disposed of at an appropriate, permitted disposal facility as determined by a lead specialist. A Debris Containment Work Plan (DCWP) and a Lead Compliance Plan (LCP) would be prepared by the Contractor prior to site disturbance activities in order to address the special handling and/or waste management when existing traffic stripe/pavement marking are removed. The plans should be consistent with the California Department of	During construction	Should traffic striping materials be disturbed, a Debris Containment Work Plan and a Lead Compliance Plan will be prepared by the construction contractor.	County and Construction Contractor			

						VERIFICATION OF COMPLIANCE		
No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Comments
		Transportation standard provisions for the removal of existing traffic stripe/pavement marking.						
HAZ-2	Section 3.8.3	If unknown wastes or suspect materials are discovered during construction by the contractor that are believed to involve hazardous waste or materials, the contractor shall comply with the following: • Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area; • Notify the Riverside County Transportation Department Engineer; • Secure the area as directed by the County Engineer; and • Notify the Riverside County Department of Environmental Health's Hazardous Waste/Materials Coordinator (or other appropriate agency specified by the County Engineer). The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.	During construction	If unknown wastes are discovered during construction the contractor will follow the requirements identified in this measure.	County and Construction Contractor			
NOISE								
NOI-1	Section 3.12.3	Prior to initiation of construction, the County of Riverside shall ensure that the following measures are incorporated into construction contract documents: • All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices. • A construction notice shall be mailed to residents within a 150-foot radius of the Project and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints. • Construction haul routes shall be designed to avoid noise sensitive uses (e.g., residences, schools, etc.).	Prior to construction	County to verify site plans to ensure incorporation prior to construction. Site inspections during construction to ensure compliance with this measure.	County and Construction Contractor			

No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE: Initials	Date	Remarks
		• During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. • Construction equipment staging areas shall be located away from adjacent sensitive receptors.						
TRANSPORTATION/TRAFFIC								
TRAFFIC-1	Section 3.16.3	Prior to Project construction, RCTD shall incorporate special provisions for the Traffic Control System into the Project specifications. The Traffic Control System would detail requirements for the construction contractor including but not limited to the following: (1) prior to construction, detailed traffic control plans would be prepared by a registered civil engineer in the state of California and would be submitted by the contractor to RCTD for review and approval; (2) traffic control plans would be prepared in accordance with the California Manual of Uniform Traffic Control Devices (CA-MUTCD) and Work Area Traffic Control Handbook (WATCH); (3) traffic control measures would be implemented to maintain traffic flow for property owners, businesses, and emergency service providers by maintaining a minimum of one traffic lane open at all times, including the use of flagmen as required; (4) the contractor would be responsible for advanced notification and coordination with property owners; (5) the location of parking for construction workers during construction phases shall be on public streets or designated construction staging areas; (6) lane closures would require prior approval by the RCTD; (7) no detour would be permitted; and (8) daily working hours would be Monday through Friday, except County and City holidays, between the hours of 7am and 6pm unless otherwise approved by the RCTD.	Prior to construction	County will approve the Traffic Control Plan that addresses the requirements identified in this measure.	County and Construction Contractor			
TRIBAL CULTURAL RESOURCES								
TRBL-1	Section 3.17.3	Prior to ground disturbance work associated with the Project, the County shall notify the Pechanga Band of Luiseño Indians (Pechanga) of the Project grading schedule and coordinate with the Tribe to develop a	Prior to construction/ During construction	County to notify the Pechanga Tribe of Project grading schedule and	County and Native American Monitors			

						VERIFICATION OF COMPLIANCE		
No.	Section and Mitigation Shorthand	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		Tribal Cultural Resources Treatment and Monitoring Agreement. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground disturbing activities; Project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains on the site. A Tribal monitor(s) shall be present for all ground disturbing activities associated with construction of the eastern trail segment along State Street north of Hashmet Street. In addition, a Tribal monitor shall be present during all ground disturbing activities associated with construction of the western trail segment under the Interstate 215 freeway.		develop a Tribal Cultural Resources Treatment and Monitoring Agreement in coordination with Pechanga Tribe.				
TRBL-2	Section 3.17.3	**Archaeological Monitoring:** At least 30 days prior to any ground disturbing activities on the site taking place, the Riverside County Transportation Department shall retain a Secretary of Interior Standards qualified archaeological monitor and a tribal monitor from the Soboba Band of Luiseno Indians (Soboba) to monitor all sensitive areas within known cultural resource boundaries and areas where excavations are expected to exceed 12 inches in depth in an effort to identify any unknown archaeological resources. 1. The Project Archaeologist, in consultation with interested tribes, the and Riverside County Transportation Department, shall develop an Archaeological Monitoring Plan to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the Plan shall include: a) Project grading and development scheduling; b) The development of a schedule in coordination with the Riverside County Transportation Department and the Project	Prior to construction/ During construction	County to retain a Secretary of Interior Standards qualified archaeological monitor and a tribal monitor from the Soboba Band of Luiseno Indians, and also develop an Archaeological Monitoring Plan in coordination with the Soboba Band of Luiseno Indians, 30 days prior to ground disturbing activities on the site taking place.	County, Secretary of Interior Standards qualified archaeological monitor, and Soboba Band of Luiseno Indians tribal monitor.			

						VERIFICATION OF COMPLIANCE		
		Archeologist for designated Tribal Monitors from the Soboba during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Soboba's Tribal Monitors' authority to stop and redirect grading activities in coordination with all Project archaeologists; c) Plan for the controlled grading within 50 feet of the boundaries of CA-RIV-1162/H and CA-RIV-6875. Grading within 50-feet of these sites shall be conducted using controlled grading techniques. Large indiscriminate grading equipment shall not be used, and the controlled grading technique shall be reviewed by the Project Archaeologist, in consultation with the Soboba and the Riverside County Transportation Department. The archaeologist and the Soboba Tribal Monitors shall ensure that the grading efforts in these areas are conducted in a manner that allows for the identification of subsurface cultural resources. Any resources observed shall be addressed in accordance with the below-listed mitigation measure TRBL-4; d) The determination by the project archaeologist, Riverside County Transportation Department and Soboba Tribal Monitors as to which features of sites CA-RIV-1162/H, can be successfully relocated to locations onsite that will be mutually agreed upon. The relocated features will be placed in an area that will be preserved in perpetuity, so that no future disturbances will occur; and e) The protocols and stipulations that the Riverside County Transportation Department, the Soboba and Project						

No.	Location in the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE: Initials	Date	Remarks
		archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.						
TRBL-3	Section 3.17.3	**Prior to Construction Permit Issuance:** If there are any changes to Project site design and/or proposed grades, the Riverside County Transportation Department shall contact the Soboba to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the Riverside County Transportation Department and the Soboba to discuss the proposed changes and to review any new impacts and/or potential avoidance/preservation of the cultural resources on the Project. The Riverside County Transportation Department will make all attempts to avoid and/or preserve in place as many as possible of the cultural resources located on the Project site if the site design and/or proposed grades should be revised in consultation with the Riverside County Transportation Department. In specific circumstances where existing and/or new resources are determined to be unavoidable and/or unable to be preserved in place despite all feasible alternatives, the Riverside County Transportation Department shall make every effort to relocate the resource to a nearby open space or designated location on the property that is not subject to any future development, erosion or flooding.	Prior to construction	County to notify the Soboba Band of Luiseno Indians if there are any changes to the Project site design and/or proposed grades to coordinate regarding the proposed changes and to review any new impacts and/or potential avoidance/ preservation of the cultural resources on the Project.	County and Soboba Band of Luiseno Indians			
TRBL-4	Section 3.17.3	**Treatment and Disposition of Cultural Resources:** In the event that Native American cultural resources are inadvertently discovered during the course of grading for this Project, the following procedures will be carried out for treatment and disposition of the discoveries: 2. Temporary Curation and Storage: During the	During construction	The County-appointed archaeological and/or Tribal monitor will adhere to the requirements outlined in this measure should Native American cultural resources be inadvertently	County and Soboba Band of Luiseno Indians			

						VERIFICATION OF COMPLIANCE		
		Text and Description	Timing of Implementation	Method of Implementation	Responsible Party	Initials	Date	Remarks
		course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with Soboba Tribal monitor oversite of the process; and 3. Treatment and Final Disposition: The Riverside County Transportation Department shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Riverside County Transportation Department shall relinquish the artifacts through one or more of the following methods and provide evidence of same: a) Accommodate the process for on-site reburial of the discovered items with the Soboba. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed; b) A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation: c) For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of		encountered during construction.				

No.	Section of the Initial Study	Task and Description	Timing of Implementation	Method of Implementation	Responsible Party	VERIFICATION OF COMPLIANCE: Initials	Date	Remarks
		cultural materials, they shall be curated at the Western Science Center by default; and d) At the completion of grading, excavation and ground disturbing activities on the site a Phase IV Monitoring Report shall be submitted to the Riverside County Transportation Department documenting monitoring activities conducted by the project Archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the Riverside County Transportation Department, Eastern Information Center and the Soboba.						

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APPENDIX C

AIR QUALITY/GREENHOUSE GAS EMISSIONS INPUT/OUTPUT MODELING DATA

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Parenthetical CALEEMOD Assumptions
For: Salt Creek Trail
Date: January 2016

CONSTRUCTION

Grading 1 (2018 – 2019)

- 7,200 cubic yards of cut and 6,100 cubic yards of fill.
- 109 days.

Equipment:

Quantity	Type	Hours of Daily Operation
1	Grader	8
1	Roller	8

Grading 2 (2019)

- 3,800 cubic yards of cut and 5,800 cubic yards of fill.
- 109 days.

Equipment:

Quantity	Type	Hours of Daily Operation
1	Scraper	8

Paving (2018 – 2019)

- 218 days.

Equipment:

Quantity	Type	Hours of Daily Operation
1	Paving Equipment	8
2	Rollers	8
2	Tractors/Loaders/Backhoes	8

Salt Creek Trail Project

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	15.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proposed Project

Construction Phase - Proposed Schedule

Off-road Equipment - Proposed Construction Equipment

Off-road Equipment - Proposed Equipment

Grading - Proposed Cut and Fill Volumes

Grading 1 - Manifax Portion

Construction Off-road Equipment Mitigation - Per SCAQMD

Off-road Equipment - Proposed Equipment

Off-road Equipment - Proposed Equipment

Trips and VMT -

Table Name	Column Name	Default Value	New Value

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	NumDays	20.00	218.00
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseStartDate	3/1/2019	10/1/2018
tblConstructionPhase	PhaseStartDate	8/1/2019	3/1/2019
tblGrading	AcresOfGrading	54.50	8.25
tblGrading	AcresOfGrading	109.00	7.00
tblGrading	MaterialExported	0.00	6,100.00
tblGrading	MaterialExported	0.00	5,800.00
tblGrading	MaterialImported	0.00	7,200.00
tblGrading	MaterialImported	0.00	3,800.00
tblLandUse	LotAcreage	0.00	15.00
tblOffRoadEquipment	HorsePower	80.00	174.00
tblOffRoadEquipment	LoadFactor	0.38	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6190	28.8574	21.6762	0.0350	0.4516	1.5236	1.9752	0.1070	1.4017	1.5087	0.0000	3,454.6328	3,454.6328	0.8845	0.0000	3,473.2073
2019	2.3478	25.3507	21.3549	0.0363	0.5279	1.3235	1.8514	0.1257	1.2176	1.3434	0.0000	3,535.9951	3,535.9951	0.9820	0.0000	3,556.1971
Total	4.9668	54.2081	43.0311	0.0713	0.9794	2.8471	3.8266	0.2328	2.6194	2.8521	0.0000	6,990.6279	6,990.6279	1.8665	0.0000	7,029.4044

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6190	28.8574	21.6762	0.0350	0.4056	1.5236	1.9292	0.1020	1.4017	1.5038	0.0000	3,454.6328	3,454.6328	0.8846	0.0000	3,473.2073
2019	2.3478	25.3507	21.3549	0.0363	0.4819	1.3235	1.8054	0.1208	1.2176	1.3384	0.0000	3,535.9951	3,535.9951	0.9820	0.0000	3,556.1971
Total	4.9668	54.2081	43.0311	0.0713	0.8876	2.8471	3.7346	0.2228	2.6194	2.8422	0.0000	6,990.6279	6,990.6279	1.8665	0.0000	7,029.4044

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	9.36	0.00	2.40	4.27	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading 1	Grading	10/1/2018	2/28/2019	5	109	
2	Paving	Paving	10/1/2018	7/31/2019	5	218	
3	Grading 2	Grading	3/1/2019	7/31/2019	5	109	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading 1	Excavators	0	8.00	162	0.38
Grading 1	Graders	1	8.00	174	0.41
Grading 1	Rollers	1	8.00	174	0.41
Grading 1	Rubber Tired Dozers	0	8.00	255	0.40
Grading 1	Scrapers	0	8.00	361	0.48
Grading 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading 2	Excavators	0	8.00	162	0.38
Grading 2	Graders	0	8.00	174	0.41
Grading 2	Rubber Tired Dozers	0	8.00	255	0.40
Grading 2	Scrapers	1	8.00	361	0.48
Grading 2	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 1	2	5.00	0.00	712.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 2	1	3.00	0.00	573.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading 1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										lb/day					
Fugitive Dust					0.0803	0.0000	0.0803	8.6700e-003	0.0000	8.6700e-003			0.0000			0.0000
Off-Road	1.1659	12.3129	8.3779	0.0123		0.6524	0.6524		0.6002	0.6002		1,242.5664	1,242.5664	0.3868		1,250.8698
Total	1.1659	12.3129	8.3779	0.0123	0.0803	0.6524	0.7327	8.6700e-003	0.6002	0.6089		1,242.5664	1,242.5664	0.3868		1,250.8698

Unmitigated Construction Off-Site

Category	lb/day										lb/day					
Hauling	0.1091	1.5957	1.3779	4.8000e-003	0.1701	0.0256	0.1957	0.0450	0.0236	0.0686		469.0075	469.0075	3.5100e-003		469.0811
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0172	0.0234	0.2440	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6393	51.6393	2.6100e-003		51.6941
Total	0.1263	1.6191	1.6219	5.4800e-003	0.2260	0.0261	0.2521	0.0598	0.0240	0.0838		520.6467	520.6467	6.1200e-003		520.7752

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0343	0.0000	0.0343	3.7100e-003	0.0000	3.7100e-003			0.0000			0.0000
Off-Road	1.1659	12.3129	8.3779	0.0123		0.6524	0.6524		0.6002	0.6002	0.0000	1,242.5664	1,242.5664	0.3868		1,250.6898
Total	1.1659	12.3129	8.3779	0.0123	0.0343	0.6524	0.6867	3.7100e-003	0.6002	0.6039	0.0000	1,242.5664	1,242.5664	0.3868		1,250.6898

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1091	1.5957	1.3779	4.8000e-003	0.1701	0.0256	0.1957	0.0450	0.0236	0.0686		469.0075	469.0075	3.5100e-003		469.0811
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0172	0.0234	0.2440	6.6000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		51.6393	51.6393	2.6100e-003		51.6941

Total	0.1263	1.6191	1.6219	5.4600e-003	0.2260	0.0261	0.2521	0.0598	0.0240	0.0838		520.6467	520.6467	6.1200e-003		520.7782

3.2 Grading 1 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0803	0.0000	0.0803	8.6700e-003	0.0000	8.6700e-003			0.0000			0.0000
Off-Road	1.0565	10.9628	8.2896	0.0123		0.5793	0.5793		0.5330	0.5330		1,222.3567	1,222.3567	0.3867		1,230.4782
Total	1.0565	10.9628	8.2896	0.0123	0.0803	0.5793	0.5896	8.6700e-003	0.5330	0.5417		1,222.3567	1,222.3567	0.3867		1,230.4782

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1060	1.4917	1.3551	4.7900e-003	0.2464	0.0256	0.2720	0.0637	0.0236	0.0873		459.8631	459.8631	3.4900e-003		459.9363
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0215	0.2238	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		49.6733	49.6733	2.4400e-003		49.7247
Total	0.1218	1.5131	1.5787	5.4500e-003	0.3023	0.0261	0.3284	0.0786	0.0240	0.1026		509.5364	509.5364	5.9300e-003		509.6610

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0343	0.0000	0.0343	3.7100e-003	0.0000	3.7100e-003			0.0000			0.0000
Off-Road	1.0565	10.9628	8.2896	0.0123		0.5793	0.5793		0.5330	0.5330	0.0000	1,222.3567	1,222.3567	0.3867		1,230.4782
Total	1.0565	10.9628	8.2896	0.0123	0.0343	0.5793	0.6137	3.7100e-003	0.5330	0.5367	0.0000	1,222.3567	1,222.3567	0.3867		1,230.4782

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1060	1.4917	1.3551	4.7900e-003	0.2464	0.0256	0.2720	0.0637	0.0236	0.0873		459.8631	459.8631	3.4900e-003		459.9363
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0215	0.2236	6.6000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		49.6733	49.6733	2.4400e-003		49.7247
Total	0.1218	1.5131	1.5787	5.4500e-003	0.3023	0.0261	0.3284	0.0785	0.0240	0.1025		509.5364	509.5364	5.9300e-003		509.6610

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765		1,557.1576	1,557.1576	0.4848		1,567.3376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765		1,557.1576	1,557.1576	0.4848		1,567.3376

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0809	0.6344	1.7200e-003	0.1463	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		134.2621	134.2621	6.7900e-003		134.4047
Total	0.0446	0.0809	0.6344	1.7200e-003	0.1463	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		134.2621	134.2621	6.7900e-003		134.4047

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765	0.0000	1,557.1576	1,557.1576	0.4848		1,567.3376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765	0.0000	1,557.1576	1,557.1576	0.4848		1,567.3376

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0446	0.0609	0.6344	1.7200e-003	0.1453	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		134.2621	134.2621	6.7900e-003		134.4047
Total	0.0446	0.0609	0.6344	1.7200e-003	0.1453	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		134.2621	134.2621	6.7900e-003		134.4047

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596		1,531.6596	1,531.6596	0.4846		1,541.8362
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596		1,531.6596	1,531.6596	0.4846		1,541.8362

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0410	0.0558	0.5814	1.7200e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		129.1507	129.1507	6.3600e-003		129.2842
Total	0.0410	0.0558	0.5814	1.7200e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		129.1507	129.1507	6.3600e-003		129.2842

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596	0.0000	1,531.8596	1,531.8596	0.4846		1,541.8362
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596	0.0000	1,531.8596	1,531.8596	0.4846		1,541.8362

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0410	0.0558	0.5814	1.7200e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		129.1507	129.1507	6.3600e-003		129.2842

Total	0.0410	0.0565	0.5814	1.7200e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		129.1607	129.1607	6.3600e-003		129.2842

3.4 Grading 2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0681	0.0000	0.0681	7.3500e-003	0.0000	7.3500e-003			0.0000			0.0000
Off-Road	1.0479	12.7027	7.9296	0.0149		0.4977	0.4977		0.4579	0.4579		1,475.2944	1,475.2944	0.4668		1,485.0965
Total	1.0479	12.7027	7.9296	0.0149	0.0681	0.4977	0.5658	7.3500e-003	0.4579	0.4653		1,475.2944	1,475.2944	0.4668		1,485.0965

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0853	1.2004	1.0905	3.8500e-003	0.0816	0.0206	0.1123	0.0251	0.0190	0.0441		370.0865	370.0865	2.8100e-003		370.1454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.4700e-003	0.0129	0.1342	4.0000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		29.8040	29.8040	1.4700e-003		29.8348
Total	0.0948	1.2133	1.2247	4.2500e-003	0.1252	0.0209	0.1460	0.0340	0.0192	0.0532		399.8905	399.8905	4.2800e-003		399.9802

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0291	0.0000	0.0291	3.1400e-003	0.0000	3.1400e-003			0.0000			0.0000
Off-Road	1.0475	12.7027	7.9286	0.0149		0.4977	0.4977		0.4579	0.4579	0.0000	1,475.2944	1,475.2944	0.4688		1,485.0965
Total	1.0475	12.7027	7.9286	0.0149	0.0291	0.4977	0.5269	3.1400e-003	0.4579	0.4611	0.0000	1,475.2944	1,475.2944	0.4688		1,485.0965

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0853	1.2004	1.0905	3.8500e-003	0.0916	0.0206	0.1123	0.0251	0.0190	0.0441		370.0885	370.0885	2.8100e-003		370.1454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.4700e-003	0.0129	0.1342	4.0000e-004	0.0335	2.8000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		29.8040	29.8040	1.4700e-003		29.8348
Total	0.0948	1.2133	1.2247	4.2500e-003	0.1252	0.0209	0.1460	0.0340	0.0192	0.0532		399.8905	399.8905	4.2800e-003		399.9802

Salt Creek Trail Project

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	15.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proposed Project

Construction Phase - Proposed Schedule

Off-road Equipment - Proposed Construction Equipment

Off-road Equipment - Proposed Equipment

Grading - Proposed Cut and Fill Volumes

Grading 1 = Modify Design

Construction Off-road Equipment Mitigation - Per SCAQMD

Off-road Equipment - Proposed Equipment

Off-road Equipment - Proposed Equipment

Trips and VMT -

Table Name	Column Name	Default Value	New Value

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	NumDays	20.00	218.00
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseStartDate	3/1/2019	10/1/2018
tblConstructionPhase	PhaseStartDate	8/1/2019	3/1/2019
tblGrading	AcresOfGrading	54.50	8.25
tblGrading	AcresOfGrading	109.00	7.00
tblGrading	MaterialExported	0.00	6,100.00
tblGrading	MaterialExported	0.00	5,800.00
tblGrading	MaterialImported	0.00	7,200.00
tblGrading	MaterialImported	0.00	3,800.00
tblLandUse	LotAcreage	0.00	15.00
tblOffRoadEquipment	HorsePower	80.00	174.00
tblOffRoadEquipment	LoadFactor	0.38	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6129	26.7943	21.5704	0.0352	0.4516	1.5238	1.9751	0.1070	1.4017	1.5087	0.0000	3,468.1172	3,468.1172	0.8845	0.0000	3,486.6907
2019	2.3422	25.3029	21.2448	0.0365	0.5279	1.3235	1.8513	0.1257	1.2176	1.3433	0.0000	3,547.4818	3,547.4818	0.9620	0.0000	3,567.6829
Total	4.9551	52.0973	42.8152	0.0717	0.9794	2.8470	3.8264	0.2328	2.6193	2.8520	0.0000	7,015.5990	7,015.5990	1.8464	0.0000	7,054.3736

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.6129	26.7943	21.5704	0.0352	0.4056	1.5238	1.9292	0.1020	1.4017	1.5037	0.0000	3,468.1172	3,468.1172	0.8845	0.0000	3,486.6907
2019	2.3422	25.3029	21.2448	0.0365	0.4819	1.3235	1.8054	0.1208	1.2176	1.3384	0.0000	3,547.4818	3,547.4818	0.9620	0.0000	3,567.6829
Total	4.9551	52.0973	42.8152	0.0717	0.8875	2.8470	3.7345	0.2228	2.6193	2.8421	0.0000	7,015.5990	7,015.5990	1.8464	0.0000	7,054.3736

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	9.38	0.00	2.40	4.27	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading 1	Grading	10/1/2018	2/28/2019	5	109	
2	Paving	Paving	10/1/2018	7/31/2019	5	218	
3	Grading 2	Grading	3/1/2019	7/31/2019	5	109	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading 1	Excavators	0	8.00	162	0.38
Grading 1	Graders	1	8.00	174	0.41
Grading 1	Rollers	1	8.00	174	0.41
Grading 1	Rubber Tired Dozers	0	8.00	255	0.40
Grading 1	Scrapers	0	8.00	361	0.48
Grading 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading 2	Excavators	0	8.00	162	0.38
Grading 2	Graders	0	8.00	174	0.41
Grading 2	Rubber Tired Dozers	0	8.00	255	0.40
Grading 2	Scrapers	1	8.00	361	0.48
Grading 2	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 1	2	5.00	0.00	712.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 2	1	3.00	0.00	573.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading 1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0803	0.0000	0.0803	8.6700e-003	0.0000	8.6700e-003			0.0000			0.0000
Off-Road	1.1659	12.3129	8.3779	0.0123		0.6524	0.6524		0.6002	0.6002		1,242.5664	1,242.5664	0.3868		1,250.6898
Total	1.1659	12.3129	8.3779	0.0123	0.0803	0.6524	0.7327	8.6700e-003	0.6002	0.6089		1,242.5664	1,242.5664	0.3868		1,250.6898

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.1041	1.5401	1.1904	4.8100e-003	0.1701	0.0256	0.1957	0.0450	0.0235	0.0685		470.1255	470.1255	3.4600e-003		470.1981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0169	0.0213	0.2667	7.1000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.0744	55.0744	2.6100e-003		55.1292
Total	0.1210	1.5616	1.4570	5.5200e-003	0.2260	0.0260	0.2520	0.0598	0.0239	0.0836		525.1998	525.1998	6.0700e-003		525.3273

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0343	0.0000	0.0343	3.7100e-003	0.0000	3.7100e-003			0.0000			0.0000
Off-Road	1.1659	12.3129	8.3779	0.0123		0.6524	0.6524		0.6002	0.6002	0.0000	1,242.5664	1,242.5664	0.3868		1,250.6898
Total	1.1659	12.3129	8.3779	0.0123	0.0343	0.6524	0.6867	3.7100e-003	0.6002	0.6039	0.0000	1,242.5664	1,242.5664	0.3868		1,250.6898

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1041	1.5401	1.1904	4.8100e-003	0.1701	0.0256	0.1957	0.0450	0.0235	0.0685		470.1255	470.1255	3.4600e-003		470.1981
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0169	0.0213	0.2667	7.1000e-004	0.0559	4.4000e-004	0.0563	0.0148	4.0000e-004	0.0152		55.0744	55.0744	2.6100e-003		55.1292

Total	0.1210	1.5815	1.4570	5.5200e-003	0.2260	0.0260	0.2520	0.0598	0.0239	0.0838		526.1998	526.1998	6.0700e-003		526.3273

3.2 Grading 1 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0803	0.0000	0.0803	8.6700e-003	0.0000	8.6700e-003			0.0000			0.0000
Off-Road	1.0586	10.9628	8.2898	0.0123		0.5793	0.5793		0.5330	0.5330		1,222.3587	1,222.3587	0.3887		1,230.4782
Total	1.0586	10.9628	8.2898	0.0123	0.0803	0.5793	0.6596	8.6700e-003	0.5330	0.5417		1,222.3587	1,222.3587	0.3887		1,230.4782

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1014	1.4399	1.1677	4.8000e-003	0.2464	0.0258	0.2720	0.0637	0.0235	0.0873		460.9630	460.9630	3.4400e-003		461.0352
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0155	0.0196	0.2451	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		52.9863	52.9863	2.4400e-003		53.0377
Total	0.1169	1.4594	1.4128	5.5100e-003	0.3023	0.0260	0.3283	0.0785	0.0239	0.1025		513.9493	513.9493	5.8800e-003		514.0728

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					0.0343	0.0000	0.0343	3.7100e-003	0.0000	3.7100e-003			0.0000			0.0000
Off-Road	1.0565	10.9628	8.2896	0.0123		0.5793	0.5793		0.5330	0.5330	0.0000	1,222.3567	1,222.3567	0.3867		1,230.4782
Total	1.0565	10.9628	8.2896	0.0123	0.0343	0.5793	0.6137	3.7100e-003	0.5330	0.5367	0.0000	1,222.3567	1,222.3567	0.3867		1,230.4782

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.1014	1.4399	1.1877	4.8000e-003	0.2464	0.0256	0.2720	0.0637	0.0235	0.0873		460.9630	460.9630	3.4400e-003		461.0352
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0155	0.0196	0.2451	7.1000e-004	0.0559	4.3000e-004	0.0563	0.0148	4.0000e-004	0.0152		52.9863	52.9863	2.4400e-003		53.0377
Total	0.1169	1.4594	1.4328	5.8100e-003	0.3023	0.0260	0.3283	0.0786	0.0239	0.1025		513.9493	513.9493	5.8800e-003		514.0728

3.3 Paving - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					

Off-Road	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765		1,557.1576	1,557.1576	0.4848		1,567.3376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765		1,557.1576	1,557.1576	0.4848		1,567.3376

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0439	0.0555	0.6934	1.8400e-003	0.1453	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		143.1934	143.1934	6.7900e-003		143.3360
Total	0.0439	0.0555	0.6934	1.8400e-003	0.1453	1.1400e-003	0.1465	0.0385	1.0500e-003	0.0396		143.1934	143.1934	6.7900e-003		143.3360

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765	0.0000	1,557.1576	1,557.1576	0.4848		1,567.3376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2822	12.8646	11.0421	0.0155		0.8440	0.8440		0.7765	0.7765	0.0000	1,557.1576	1,557.1576	0.4848		1,567.3376

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0439	0.0556	0.6934	1.8400e-003	0.1463	1.1400e-003	0.1466	0.0385	1.0500e-003	0.0396		143.1934	143.1934	6.7900e-003		143.3360
Total	0.0439	0.0556	0.6934	1.8400e-003	0.1463	1.1400e-003	0.1466	0.0385	1.0500e-003	0.0396		143.1934	143.1934	6.7900e-003		143.3360

3.3 Paving - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596		1,531.6596	1,531.6596	0.4846		1,541.8362
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596		1,531.6596	1,531.6596	0.4846		1,541.8362

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Total	0.0404	0.0609	0.6373	1.8400e-003	0.1463	1.1200e-003	0.1464	0.0386	1.0400e-003	0.0396		137.7644	137.7644	6.3600e-003		137.8978

3.4 Grading 2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0681	0.0000	0.0681	7.3500e-003	0.0000	7.3500e-003			0.0000			0.0000
Off-Road	1.0479	12.7027	7.9296	0.0149		0.4977	0.4977		0.4579	0.4579		1,475.2944	1,475.2944	0.4688		1,485.0965
Total	1.0479	12.7027	7.9296	0.0149	0.0681	0.4977	0.5658	7.3500e-003	0.4579	0.4653		1,475.2944	1,475.2944	0.4688		1,485.0965

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0816	1.1588	0.8397	3.8600e-003	0.0916	0.0208	0.1122	0.0251	0.0189	0.0440		370.9716	370.9716	2.7700e-003		371.0297
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.3200e-003	0.0117	0.1471	4.2000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.7918	31.7918	1.4700e-003		31.8226
Total	0.0909	1.1705	1.0868	4.2800e-003	0.1252	0.0209	0.1460	0.0340	0.0192	0.0532		402.7634	402.7634	4.2400e-003		402.8523

Mitigated Construction On-Site

Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0509	0.6373	1.8400e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		137.7644	137.7644	6.3600e-003		137.8979
Total	0.0404	0.0509	0.6373	1.8400e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		137.7644	137.7644	6.3600e-003		137.8979

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596	0.0000	1,531.6596	1,531.6596	0.4846		1,541.8362
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1284	11.3789	10.9051	0.0155		0.7170	0.7170		0.6596	0.6596	0.0000	1,531.6596	1,531.6596	0.4846		1,541.8362

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0404	0.0509	0.6373	1.8400e-003	0.1453	1.1200e-003	0.1464	0.0385	1.0400e-003	0.0396		137.7644	137.7644	6.3600e-003		137.8979

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0291	0.0000	0.0291	3.1400e-003	0.0000	3.1400e-003			0.0000			0.0000
Off-Road	1.0479	12.7027	7.9296	0.0149		0.4977	0.4977		0.4579	0.4579	0.0000	1,475.2944	1,475.2944	0.4668		1,485.0965
Total	1.0479	12.7027	7.9296	0.0149	0.0291	0.4977	0.5269	3.1400e-003	0.4579	0.4611	0.0000	1,475.2944	1,475.2944	0.4668		1,485.0965

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0816	1.1588	0.9397	3.8600e-003	0.0916	0.0206	0.1122	0.0251	0.0189	0.0440		370.9716	370.9716	2.7700e-003		371.0287
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.3200e-003	0.0117	0.1471	4.2000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.7918	31.7918	1.4700e-003		31.8226
Total	0.0909	1.1705	1.0868	4.2800e-003	0.1252	0.0209	0.1460	0.0340	0.0192	0.0532		402.7634	402.7634	4.2400e-003		402.8523

Salt Creek Trail Project

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	15.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Proposed Project

Construction Phase - Proposed Schedule

Off-road Equipment - Proposed Construction Equipment

Off-road Equipment - Proposed Equipment

Grading - Proposed Cut and Fill Volumes

Grading - Modified Portion

Construction Off-road Equipment Mitigation - Per SCAQMD

Off-road Equipment - Proposed Equipment

Off-road Equipment - Proposed Equipment

Trips and VMT -

Table Name	Column Name	Default Value	New Value

tblConstDustMitigation	CleanPavedRoadPercentReduction	0	26
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	NumDays	20.00	218.00
tblConstructionPhase	NumDays	30.00	109.00
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	12/31/2019	7/31/2019
tblConstructionPhase	PhaseStartDate	3/1/2019	10/1/2018
tblConstructionPhase	PhaseStartDate	8/1/2019	3/1/2019
tblGrading	AcresOfGrading	54.50	8.25
tblGrading	AcresOfGrading	109.00	7.00
tblGrading	MaterialExported	0.00	6,100.00
tblGrading	MaterialExported	0.00	5,800.00
tblGrading	MaterialImported	0.00	7,200.00
tblGrading	MaterialImported	0.00	3,800.00
tblLandUse	LotAcreage	0.00	15.00
tblOffRoadEquipment	HorsePower	80.00	174.00
tblOffRoadEquipment	LoadFactor	0.38	0.41
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2019

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0883	0.8873	0.7152	1.1600e-003	0.0164	0.0503	0.0667	3.6600e-003	0.0463	0.0499	0.0000	103.5279	103.5279	0.0265	0.0000	104.0840
2019	0.1762	1.8975	1.5838	2.7400e-003	0.0320	0.0959	0.1279	7.2300e-003	0.0882	0.0954	0.0000	241.2130	241.2130	0.0648	0.0000	242.5737
Total	0.2624	2.7848	2.2989	3.9000e-003	0.0484	0.1461	0.1946	0.0109	0.1345	0.1453	0.0000	344.7409	344.7409	0.0913	0.0000	346.6577

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0883	0.8873	0.7152	1.1600e-003	0.0139	0.0503	0.0642	3.3900e-003	0.0463	0.0497	0.0000	103.5278	103.5278	0.0265	0.0000	104.0839
2019	0.1762	1.8975	1.5838	2.7400e-003	0.0274	0.0959	0.1232	6.7300e-003	0.0882	0.0949	0.0000	241.2128	241.2128	0.0648	0.0000	242.5735
Total	0.2624	2.7848	2.2989	3.9000e-003	0.0413	0.1461	0.1874	0.0101	0.1345	0.1446	0.0000	344.7406	344.7406	0.0913	0.0000	346.6573

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	14.73	0.00	3.67	7.07	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading 1	Grading	10/1/2018	2/28/2019	5	109	
2	Paving	Paving	10/1/2018	7/31/2019	5	218	
3	Grading 2	Grading	3/1/2019	7/31/2019	5	109	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading 1	Excavators	0	8.00	162	0.38
Grading 1	Graders	1	8.00	174	0.41
Grading 1	Rollers	1	8.00	174	0.41
Grading 1	Rubber Tired Dozers	0	8.00	255	0.40
Grading 1	Scrapers	0	8.00	361	0.48
Grading 1	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading 2	Excavators	0	8.00	162	0.38
Grading 2	Graders	0	8.00	174	0.41
Grading 2	Rubber Tired Dozers	0	8.00	255	0.40
Grading 2	Scrapers	1	8.00	361	0.48
Grading 2	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading 1	2	5.00	0.00	712.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading 2	1	3.00	0.00	573.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading 1 - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.3700e-003	0.0000	4.3700e-003	4.7000e-004	0.0000	4.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0385	0.4063	0.2765	4.1000e-004		0.0215	0.0215		0.0198	0.0198	0.0000	37.1988	37.1988	0.0116	0.0000	37.4420
Total	0.0385	0.4063	0.2765	4.1000e-004	4.3700e-003	0.0215	0.0259	4.7000e-004	0.0198	0.0203	0.0000	37.1988	37.1988	0.0116	0.0000	37.4420

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5500e-003	0.0538	0.0446	1.6000e-004	5.5100e-003	8.5000e-004	6.3600e-003	1.4800e-003	7.8000e-004	2.2400e-003	0.0000	14.0601	14.0601	1.0000e-004	0.0000	14.0623
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	6.0000e-004	8.2600e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5701	1.5701	8.0000e-005	0.0000	1.5717
Total	4.0800e-003	0.0544	0.0528	1.8000e-004	7.3200e-003	8.6000e-004	8.1800e-003	1.9400e-003	7.9000e-004	2.7300e-003	0.0000	15.6302	15.6302	1.8000e-004	0.0000	15.6340

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8700e-003	0.0000	1.8700e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0385	0.4083	0.2765	4.1000e-004		0.0215	0.0215		0.0198	0.0198	0.0000	37.1988	37.1988	0.0116	0.0000	37.4420
Total	0.0385	0.4083	0.2765	4.1000e-004	1.8700e-003	0.0215	0.0234	2.0000e-004	0.0198	0.0200	0.0000	37.1988	37.1988	0.0116	0.0000	37.4420

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5500e-003	0.0538	0.0446	1.6000e-004	5.5100e-003	8.5000e-004	6.3600e-003	1.4800e-003	7.8000e-004	2.2400e-003	0.0000	14.0601	14.0601	1.0000e-004	0.0000	14.0623

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	8.0000e-004	8.2600e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5701	1.5701	8.0000e-005	0.0000	1.5717
Total	4.0800e-003	0.0844	0.0828	1.8000e-004	7.3200e-003	8.6000e-004	8.1800e-003	1.9400e-003	7.9000e-004	2.7300e-003	0.0000	16.6302	16.6302	1.8000e-004	0.0000	16.6340

3.2 Grading 1 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.3700e-003	0.0000	4.3700e-003	4.7000e-004	0.0000	4.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2357	0.1782	2.7000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	23.8414	23.8414	7.5400e-003	0.0000	23.9998
Total	0.0227	0.2357	0.1782	2.7000e-004	4.3700e-003	0.0125	0.0168	4.7000e-004	0.0115	0.0119	0.0000	23.8414	23.8414	7.5400e-003	0.0000	23.9998

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2500e-003	0.0328	0.0288	1.0000e-004	5.2000e-003	5.5000e-004	5.7500e-003	1.3500e-003	5.1000e-004	1.8500e-003	0.0000	8.9818	8.9818	7.0000e-005	0.0000	8.9833
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9840	0.9840	5.0000e-005	0.0000	0.9850
Total	2.5700e-003	0.0331	0.0338	1.1000e-004	6.3800e-003	5.6000e-004	6.9400e-003	1.6600e-003	5.2000e-004	2.1700e-003	0.0000	9.9658	9.9658	1.2000e-004	0.0000	9.9682

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.8700e-003	0.0000	1.8700e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2367	0.1782	2.7000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	23.8414	23.8414	7.5400e-003	0.0000	23.9998
Total	0.0227	0.2367	0.1782	2.7000e-004	1.8700e-003	0.0125	0.0143	2.0000e-004	0.0115	0.0117	0.0000	23.8414	23.8414	7.5400e-003	0.0000	23.9998

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2500e-003	0.0326	0.0286	1.0000e-004	5.2000e-003	5.5000e-004	5.7500e-003	1.3500e-003	5.1000e-004	1.8500e-003	0.0000	8.9818	8.9818	7.0000e-005	0.0000	8.9833
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.8000e-004	4.9300e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9840	0.9840	5.0000e-005	0.0000	0.9850
Total	2.5700e-003	0.0331	0.0335	1.1000e-004	6.3800e-003	5.6000e-004	6.9400e-003	1.6600e-003	5.2000e-004	2.1700e-003	0.0000	9.9658	9.9658	1.2000e-004	0.0000	9.9682

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr									MT/yr					
Off-Road	0.0423	0.4245	0.3644	5.1000e-004		0.0279	0.0279		0.0256	0.0256	0.0000	46.6168	46.6168	0.0145	0.0000	46.9215
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0423	0.4245	0.3644	5.1000e-004		0.0279	0.0279		0.0256	0.0256	0.0000	46.6168	46.6168	0.0145	0.0000	46.9215

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	2.0700e-003	0.0215	6.0000e-005	4.7100e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0821	4.0821	2.0000e-004	0.0000	4.0864
Total	1.3800e-003	2.0700e-003	0.0215	6.0000e-005	4.7100e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0821	4.0821	2.0000e-004	0.0000	4.0864

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0423	0.4245	0.3644	5.1000e-004		0.0279	0.0279		0.0256	0.0256	0.0000	46.6167	46.6167	0.0145	0.0000	46.9215
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	0.0423	0.4248	0.3644	5.1000e-004		0.0279	0.0279		0.0256	0.0256	0.0000	46.6167	46.6167	0.0145	0.0000	46.9215

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	2.0700e-003	0.0215	6.0000e-005	4.7100e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0821	4.0821	2.0000e-004	0.0000	4.0864
Total	1.3800e-003	2.0700e-003	0.0215	6.0000e-005	4.7100e-003	4.0000e-005	4.7400e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.0821	4.0821	2.0000e-004	0.0000	4.0864

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0858	0.8648	0.8288	1.1800e-003		0.0545	0.0545		0.0501	0.0501	0.0000	105.6019	105.6019	0.0334	0.0000	106.3035
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0858	0.8648	0.8288	1.1800e-003		0.0545	0.0545		0.0501	0.0501	0.0000	105.6019	105.6019	0.0334	0.0000	106.3035

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9300e-003	4.3700e-003	0.0453	1.3000e-004	0.0108	8.0000e-005	0.0109	2.8800e-003	8.0000e-005	2.9600e-003	0.0000	9.0434	9.0434	4.4000e-004	0.0000	9.0526
Total	2.9300e-003	4.3700e-003	0.0453	1.3000e-004	0.0108	8.0000e-005	0.0109	2.8800e-003	8.0000e-005	2.9600e-003	0.0000	9.0434	9.0434	4.4000e-004	0.0000	9.0526

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0858	0.9648	0.8288	1.1800e-003		0.0545	0.0545		0.0501	0.0501	0.0000	105.6017	105.6017	0.0334	0.0000	106.3034
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0858	0.9648	0.8288	1.1800e-003		0.0545	0.0545		0.0501	0.0501	0.0000	105.6017	105.6017	0.0334	0.0000	106.3034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9300e-003	4.3700e-003	0.0453	1.3000e-004	0.0108	8.0000e-005	0.0109	2.8800e-003	8.0000e-005	2.9600e-003	0.0000	9.0434	9.0434	4.4000e-004	0.0000	9.0526
Total	**2.9300e-003**	**4.3700e-003**	**0.0453**	**1.3000e-004**	**0.0108**	**8.0000e-005**	**0.0109**	**2.8800e-003**	**8.0000e-005**	**2.9600e-003**	**0.0000**	**9.0434**	**9.0434**	**4.4000e-004**	**0.0000**	**9.0526**

3.4 Grading 2 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.7100e-003	0.0000	3.7100e-003	4.0000e-004	0.0000	4.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0571	0.6923	0.4322	8.1000e-004		0.0271	0.0271		0.0250	0.0250	0.0000	72.9409	72.9409	0.0231	0.0000	73.4255
Total	**0.0571**	**0.6923**	**0.4322**	**8.1000e-004**	**3.7100e-003**	**0.0271**	**0.0308**	**4.0000e-004**	**0.0250**	**0.0254**	**0.0000**	**72.9409**	**72.9409**	**0.0231**	**0.0000**	**73.4255**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5900e-003	0.0665	0.0562	2.1000e-004	4.9100e-003	1.1200e-003	6.0400e-003	1.3500e-003	1.0300e-003	2.3800e-003	0.0000	18.3230	18.3230	1.4000e-004	0.0000	18.3259
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	7.2000e-004	7.5000e-003	2.0000e-005	1.7900e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4966	1.4966	7.0000e-005	0.0000	1.4981
Total	**5.0700e-003**	**0.0673**	**0.0637**	**2.3000e-004**	**6.7000e-003**	**1.1300e-003**	**7.8500e-003**	**1.8300e-003**	**1.0400e-003**	**2.8700e-003**	**0.0000**	**19.8196**	**19.8196**	**2.1000e-004**	**0.0000**	**19.8240**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0571	0.6923	0.4322	8.1000e-004		0.0271	0.0271		0.0250	0.0250	0.0000	72.9408	72.9408	0.0231	0.0000	73.4264
Total	0.0571	0.6923	0.4322	8.1000e-004	1.5900e-003	0.0271	0.0287	1.7000e-004	0.0250	0.0251	0.0000	72.9408	72.9408	0.0231	0.0000	73.4264

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.5900e-003	0.0685	0.0582	2.1000e-004	4.9100e-003	1.1200e-003	6.0400e-003	1.3500e-003	1.0300e-003	2.3800e-003	0.0000	18.3230	18.3230	1.4000e-004	0.0000	18.3269
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	7.2000e-004	7.5000e-003	2.0000e-005	1.7900e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4966	1.4966	7.0000e-005	0.0000	1.4981
Total	5.0700e-003	0.0873	0.0657	2.3000e-004	6.7000e-003	1.1300e-003	7.8500e-003	1.8300e-003	1.0400e-003	2.8700e-003	0.0000	19.8196	19.8196	2.1000e-004	0.0000	19.8249

APPENDIX D

POTENTIALLY OCCURRING SPECIAL-STATUS BIOLOGICAL RESOURCES

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Potentially Occurring Special-Status Biological Resources

SCIENTIFIC NAME / COMMON NAME	STATUS		HABITAT	OBSERVED ON SITE	POTENTIAL TO OCCUR
WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	Fed: CA:	None WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	**High.** There is foraging habitat throughout the BSA. This species is adapted to urban environments and occurs commonly. However, there is no suitable nesting habitat within the BSA.
Agelaius tricolor tricolored blackbird	Fed: CA:	None CSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [*Schoenoplectus* sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: CA:	None WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	**Presumed absent.** No suitable habitat is present within the BSA.

NAME	STATUS	HABITAT	OBSERVED ON SITE	POTENTIAL TO OCCUR
Ammodramus savannarum grasshopper sparrow	Fed: None CA: CSC	Occur in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	No	**Moderate.** There is suitable habitat for this species within the BSA, primarily in the eastern segment in the open space between Sanderson Avenue and Searl Parkway. However, there is no suitable habitat within the proposed project footprint.
Anaxyrus californicus arroyo toad	Fed: **END** CA: CSC	Inhabits washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, cottonwoods. Has extremely specialized habitat needs, which include exposed sandy streamsides with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Aquila chrysaetos golden eagle	Fed: None CA: FP, WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	**Moderate.** There is suitable foraging habitat within the BSA within the eastern segment. There is no suitable nesting habitat within the BSA. Was not observed during the 2016 surveys. Previously documented during the 2014/15 surveys by FirstCarbon.

SCIENTIFIC NAME COMMON NAME	STATUS		HABITAT	OBSERVED ON-SITE	POTENTIAL TO OCCUR
Artemisiospiza belli belli Bell's sage sparrow	Fed: CA:	None WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	**Low**. There is marginal habitat for this species within the BSA, primarily in the eastern segment in the open space between Sanderson Avenue and Searl Parkway. However, there is no suitable habitat within the proposed project footprint.
Aspidoscelis hyperythra orangethroat whiptail	Fed: CA:	None CSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	**Low**. There is marginal habitat for this species along the vegetated western end of the BSA.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	None None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	**Low**. There is marginal habitat for this species along the vegetated western end of the BSA.
Athene cunicularia burrowing owl	Fed: CA:	None CSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes (during First Carbon's 2015 focused survey, and during the Michael Bakers' 2016 sensitive plant surveys)	**Present**. There is suitable habitat within the non-native grassland habitats within the BSA. The pair of burrowing owls was observed on the northern side of Salt Creek along the existing dirt trail between the residential development to the north and Salt Creek to the south.
Bombus crotchii Crotch bumble bee	Fed: CA:	None None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed absent.** No suitable habitat is present within the BSA.

[illegible]	STATUS		HABITAT	OBSERVED ON SITE	POTENTIAL TO OCCUR
Branchinecta lynchi vernal pool fairy shrimp	Fed: CA:	THR None	Distributed from southern Oregon to southern California and associated with vernal pool habitats. Vernal pools are subject to seasonal variations such as duration of inundation and presence or absence of water at specific times of the year. Vernal pool fairy shrimp are dependent on the ecological characteristics of such variations.	No	**Presumed absent.** Soils within the project footprint have been highly disturbed and are no longer expected to support vernal pool habitat.
Buteo regalis ferruginous hawk	Fed: CA:	None WL	Found in open country, including dry prairie, sagebrush, and steppe-deserts with short vegetation. Often found on plowed fields and other cultivated lands.	No	**High.** There is suitable foraging habitat on the eastern end of the project site where there are large agricultural fields adjacent to the proposed trail. There is a previous record in one of these fields. There is no suitable nesting habitat within the BSA. Does not nest in the region.
Calypte costae Costa's hummingbird	Fed: CA:	None None	Found in desert riparian habitats as well as desert and arid scrub foothill habitats. Summers in southern California.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Chaetodipus californicus femoralis Dulzura pocket mouse	Fed: CA:	None CSC	Found most often in grass-chaparral edges, but may also be found in coastal scrub or other habitats, primarily in San Diego County.	No	**Low.** There is marginal habitat for this species on the eastern end of the BSA.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	None CSC	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Charina trivirgata rosy boa	Fed: CA:	None None	Ranges from southern California and western Arizona in the United states, southward to Baja California and western Sonora in Mexico. Species often inhabits rocky areas in coastal sage scrub, chaparral, and desert environments.	No	**Presumed absent.** No suitable habitat is present within the BSA.

SCIENTIFIC NAME COMMON NAME	STATUS	HABITAT	OBSERVED ON-SITE	POTENTIAL TO OCCUR
Chondestes grammacus lark sparrow	Fed: None CA: None	A common to fairly common resident in lowlands and foothills throughout much of California. Breeds only locally in southern deserts, but is somewhat more widespread in winter. Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Circus cyaneus northern harrier	Fed: None CA: CSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Moderate.** There is suitable foraging habitat along Salt Creek within the BSA, particularly between Goetz Road and Normandy Road. There is no suitable nesting habitat within the BSA.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: None	Prefers rocky areas in coastal sage and chaparral within granite or rocky outcrops. Occurs in coastal and cismontane southern California from interior Ventura Co. south.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Contopus cooperi olive-sided flycatcher	Fed: None CA: CSC	Migrates through coastal southern California. Nests in the mountains in mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine habitats. Most often found in tall montane coniferous forests overlooking open terrain.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Crotalus ruber red-diamond rattlesnake	Fed: None CA: CSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	**Presumed absent.** No suitable habitat is present within the BSA.

SCIENTIFIC NAME / COMMON NAME	STATUS		HABITAT	OBSERVED ON-SITE	POTENTIAL TO OCCUR
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: CA:	None None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: CA:	**END** CSC	Prefer alluvial scrub/coastal sage scrub habitats on gravelly and sandy soils adjoining river and stream terraces, and on alluvial fans; and rarely occur in dense vegetation or rocky washes.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Dipodomys stephensi Stephens' kangaroo rat	Fed: CA:	**END** **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	**Low.** There is marginal habitat for this species on the eastern end of the BSA.
Elanus leucurus white-tailed kite	Fed: CA:	None FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	**Moderate.** There is suitable foraging habitat along Salt Creek within the BSA between Goetz Road and Normandy Road. There is no suitable nesting habitat within the proposed project footprint.
Empidonax traillii willow flycatcher	Fed: CA:	None **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	**Moderate.** There is suitable migration stopover habitat along Salt Creek within the BSA between Goetz Road and Normandy Road. There is no suitable nesting habitat.
Empidonax traillii extimus southwestern willow flycatcher	Fed: CA:	**END** **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	**Moderate.** There is suitable migration stopover habitat along Salt Creek within the BSA between Goetz Road and Normandy Road. There is no suitable nesting habitat.

SCIENTIFIC NAME COMMON NAME	STATUS		HABITAT	OBSERVED ON-SITE	POTENTIAL TO OCCUR
Eremophila alpestris actia California horned lark	Fed: CA:	None WL	Occurs in short-grass prairie, mountain meadows, coastal plains, fallow grain fields, and alkali flats. Often found in disturbed grasslands.	No	**High**. There is suitable habitat throughout the undeveloped portions of the BSA.
Eumops perotis californicus western mastiff bat	Fed: CA:	None CSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	**Moderate**. There is suitable foraging habitat throughout the BSA, but limited if any roosting habitat.
Euphydryas editha quino quino checkerspot butterfly	Fed: CA:	**END** None	Found in the sand dunes of El Segundo. Requires coast buckwheat (*Eriogonum parviflorum*) for all of its life cycles and appears to depend on habitats containing loose sand.	No	**Presumed absent.** No suitable habitat is present within the BSA.
Falco mexicanus prairie falcon	Fed: CA:	None WL	Distributed from annual grasslands to alpine meadows, but associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Requires sheltered cliff ledges for cover and nests in a scrape on the ledge of a cliff overlooking a large, open area.	No	**Low**. There is suitable foraging habitat throughout the undeveloped portions of the BSA. There is no suitable nesting habitat.
Haliaeetus leucocephalus bald eagle	Fed: CA:	Delisted **END**	Found along the ocean shore, lake margins, and on rivers, where it both nests and winters, typically within one mile of water. Nests in large, old-growth, or dominant live trees with open branches, favoring ponderosa pines. Roosts communally in winter.	No	**Presumed absent.** No suitable habitat is present on-site.
Lanius ludovicianus loggerhead shrike	Fed: CA:	None CSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats.	No	**Low**. There is marginal habitat in the undeveloped portions of the BSA. There is no suitable nesting habitat.