

**Initial Study/Mitigated Negative Declaration  
County of San Bernardino Department of Public Works**

**Santa Ana River Trail (SART) Phase IV, Reaches B & C  
Redlands, CA**

*Lead Agency:*



County of San Bernardino  
Department of Public Works  
825 E 3<sup>rd</sup> Street,  
San Bernardino CA 92415

***October 2018***

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## SECTION 1 - INTRODUCTION

### History

The Santa Ana River corridor extends over approximately 110 miles from the Pacific Ocean inland to the San Bernardino National Forest. Upon completion, the Santa Ana River Trail (SART) would be the “Crest to Coast” regional trail link connecting an area encompassing over four million residents in three counties (Orange, Riverside and San Bernardino). The Trail would provide safe use and enjoyment of open space, environmental education, and a transportation trail system. Portions of the Trail, particularly in Orange County, have been developed over the past 20 years; currently it is possible to travel from the Riverside/Orange County line to Huntington Beach on the SART.

The County of San Bernardino is responsible for the completion of approximately 20 miles of the SART. Development of the trail in San Bernardino County has been divided into four phases with several reaches in each phase to provide for construction as funding becomes available. Phase I and II extending from the Riverside/San Bernardino county line to approximately 50 feet westerly of La Cadena Drive in the City of Colton and from the terminus of Phase I to Waterman Avenue in the City of San Bernardino respectively have been constructed. It is anticipated that Phase III extending from the Phase II terminus to California Street in the City of Redlands will be constructed in 2019. Phase IV is the last and longest segment of the trail extending approximately 10 miles from California Street to Garnet Street in Redlands. For planning and analysis purposes, the Phase IV Section of the SART is divided into four major reaches as follows:

- Reach A – California Street to Orange Street
- Reach B – Orange Street to Judson Street
- Reach C – Judson Street to Opal Avenue
- Reach D – Opal Avenue to Garnet Street, including the Mentone Library Leg

Because of grant funding uncertainties this IS/MND focuses only on Reach B and Reach C.

### Purpose and Need

The purpose of the Project is to meet the identified need for a regional non-vehicular trail for the region’s residents. The Project consists of the design and construction of a bicycle trail, which is defined as a shared use path that is physically separated from any street or highway and may be used by pedestrians, bicyclists, skaters, wheelchair users, and joggers. The trail will provide safe contiguous use and enjoyment of open space, environmental education, and an alternative multi-use trail system for transportation. Currently, various segments of the SART have been constructed or approved and this proposed segment will extend the SART closer to the foothills.

Ultimately, the bikeway will enhance access to recreational opportunities in the region by: (a) providing neighborhood links to green space and natural areas; (b) providing connections with city urban trails that provide safe travel to parks, community recreation facilities, fairgrounds, urban lakes, amphitheaters, historic neighborhoods, and tourist attractions; and (c) providing direct access to San Bernardino National Forest camping and outdoor recreation areas. In conjunction with fulfilling basic non-motorized transportation purposes, the proposed Project will also meet the needs of individuals with disabilities; specifically, in an area where few trails fulfill the outdoor trail needs of these individuals. All the access ramps to the SART will be designed to comply with requirements of the Americans with Disabilities Act (ADA). The SART facilities will incorporate Caltrans Highway Design Manual, Chapter 1000, “Bikeway Planning and Design” to ensure that individual with disabilities will have both access and effective use of the SART facilities.

This Initial Study evaluates the County of San Bernardino Regional Parks Department (Regional Parks) and County of San Bernardino Department of Public Works (Public Works) proposed construction of an approximately 3.3-mile long section of the Santa Ana River Trail (SART) in the City of Redlands. The SART is a

regional recreational trail; segments of the trail within San Bernardino County have been constructed in various sections (phases) with projects named sequentially. The proposed section of the SART is SART Phase IV, Reaches B & C (Proposed Project); the trail would begin on the west side of Orange Street in the City of Redlands and terminate at Opal Avenue near the Redlands city limits. The westerly approximately one-third of the trail is proposed on the southern banks of the Santa Ana River, the remaining alignment is proposed on local streets within the City of Redlands. The Proposed Project would further establish SART in the region and improve regional connectivity with other segments along the trail.

Exhibit 1, *Regional Location*, shows the location of the trail segment within the larger region. Exhibit 2, Project Site and Vicinity, is an aerial photograph showing the extent of the trail segment along the Santa Ana River and neighboring streets within the City of Redlands.

## SECTION 2 - REGULATORY FRAMEWORK

The County of San Bernardino Department of Public Works (Public Works) has identified that the Santa Ana River Trail Phase IV, Reaches B & C Project meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a Project. CEQA Guidelines Section 15378 defines a Project as the following:

"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation and maintenance of the Santa Ana River Trail Phase IV, Reaches B & C Project (hereinafter referred to as the "Proposed Project"). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the County of San Bernardino Department of Public Works (Public Works) as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

### **Initial Study Organization**

The Initial Study is organized as follows:

**Introduction:** Provides the regulatory context for the review along a brief summary of the CEQA process.

**Project Information:** Provides fundamental Project information, such as the Project description, Project location and figures.

**Lead Agency Determination:** Identifies environmental factors potentially affected by the Project and identifies the Lead Agency's determination based on the initial evaluation.

**Mitigated Negative Declaration:** Prepared when a determination can be made that no significant environmental effects will occur because revisions to the Project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels.

**Evaluating Environmental Impacts:** Provides the parameters the District uses when determining level of impact.

**CEQA Checklist:** Provides an environmental checklist and accompanying analysis for responding to checklist questions.

**References:** Includes a list of references and various resources utilized in preparing the analysis.

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## SECTION 3 - DETAILED PROJECT DESCRIPTION

### **Project Background**

The County of San Bernardino Regional Parks Department (Regional Parks) with the assistance of the County of San Bernardino Department of Public Works (Public Works) proposes to construct an approximately 3.3-mile long section of the Santa Ana River Trail (SART) on the southern bank of the Santa Ana River and local streets within the City of Redlands (Exhibit 1). The SART is a regional recreational trail; segments of the trail within San Bernardino County have been constructed in various sections (phases) with projects named sequentially.

### **Project Location**

The proposed section of the SART is SART Phase IV, Reaches B & C; the trail would begin on the west side of Orange Street in the City of Redlands and terminate at Opal Avenue near the Redlands city limits (Exhibit 2).

### **Project Characteristics**

East of Orange Street the conceptual trail alignment overlaps a local trail known as the “Bluffs trail.” At River Bend Drive the alignment takes off from the river bluff and transitions on to the local city streets; the trail travels south on River Bend Drive, east on Pioneer Avenue, south on Dearborn Street, east on San Bernardino Avenue until it reaches Opal Avenue.

The trail segments on the river bluffs would consist of a Class 1, 10-foot wide asphalt/concrete trail and 2-foot graded shoulder on each side of the asphalt/concrete trail; on the public right-of-way the existing road surfaces would be widened where possible to accommodate a Class-2 dedicated bicycle lane and/or standard bicycle lane striping would be used to mark the alignment on the existing road surfaces (Class 3). Under existing conditions portions of Pioneer Avenue and San Bernardino Avenue do not have curb and gutter, where possible ultimate curb and gutter would be constructed as part of the Proposed Project.

In general, construction activities associated with development of the Proposed Project would include: earthwork including excavation and grading; construction of embankments and/or retaining walls; construction of storm drains, headwalls, and slope protection; construction of asphalt concrete dike, curb and gutter; installation of fencing, railing, access gates, trail delineators, and signage; painting of pavement striping and pavement markings; and, construction of appurtenant features. The subject segment of the SART includes one bridge over Orange Street in the City of Redlands.

Equipment staging and borrow/disposal during project construction may potentially occur at: (1) at various locations within the disturbed vacant lands on the north side of Riverview Drive; (2) on disturbed road shoulders and/or street right-of-way on the south side of Pioneer Avenue; (3) at the Redlands Sports Park paved parking lot; (4) on disturbed road shoulders and/or street right-of-way on the south side of San Bernardino Avenue; and, (5) on paved road shoulders and/or street right-of-way on the east side of Wabash Avenue.

### **Project Timing**

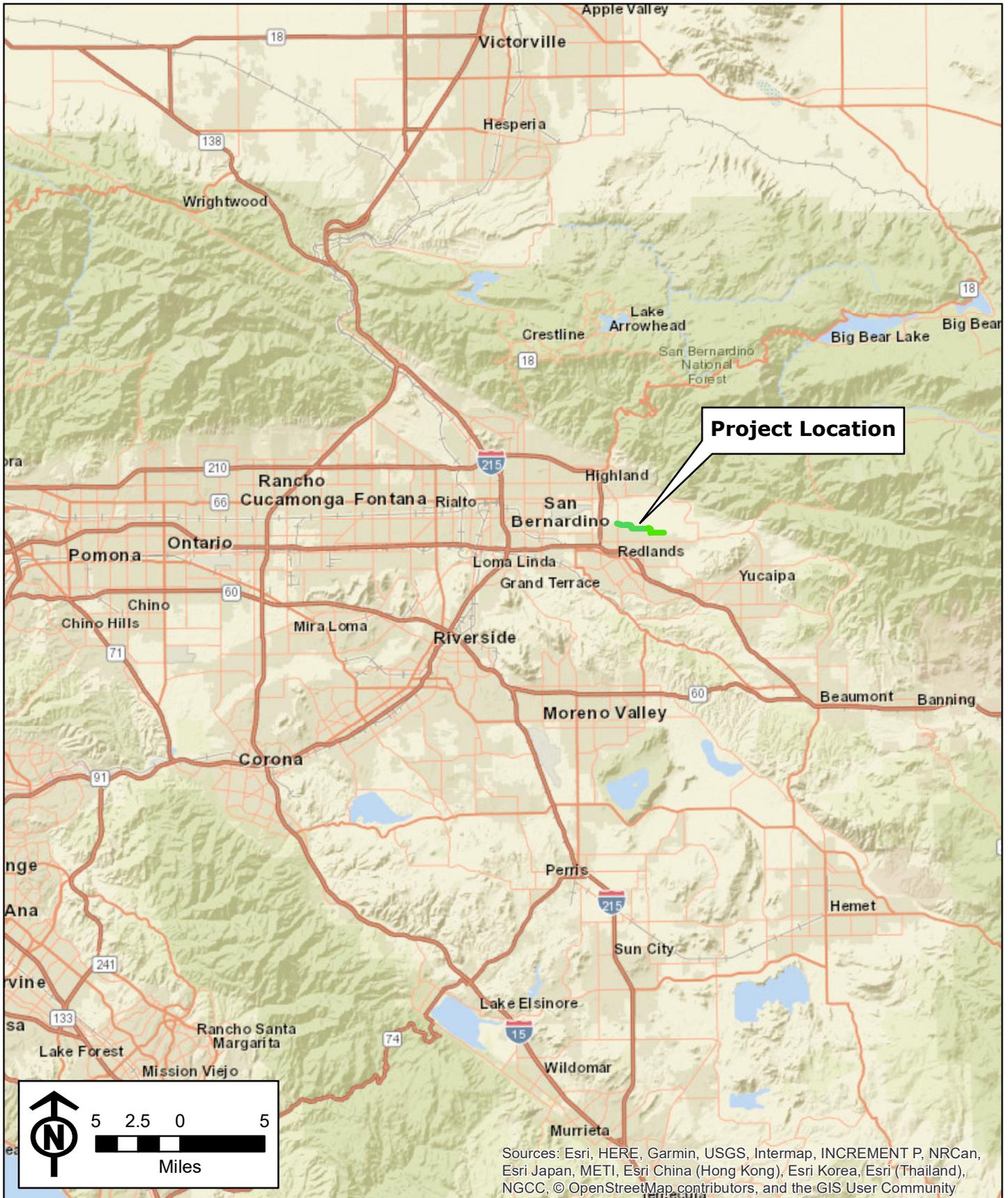
Construction would begin in 2020 and would take approximately six months to complete.

### **Regulatory Requirements, Permits, and Approvals**

As conceptualized, the alignment would require approvals from the City of Redlands to develop the trail on the City’s public right-of-way and may also require acquisition of right-of-way from private property owners.

Additionally, portions of the proposed trail alignment overlap or are located in close proximity to United States Fish and Wildlife Service (USFWS) designated critical habitat. SART Phase IV is included in the Upper Santa Ana Wash Land Management and Habitat Conservation Plan (Wash Plan). However, the Implementation Plan for the Wash Plan is currently being developed and final approvals from the regulatory agencies have not yet been secured; the status for implementation of the Wash Plan is not definitively known. Therefore, consultation with and USFWS is required to fulfill ESA requirements under Caltrans NEPA.

Figure 1  
(Regional Location Map)



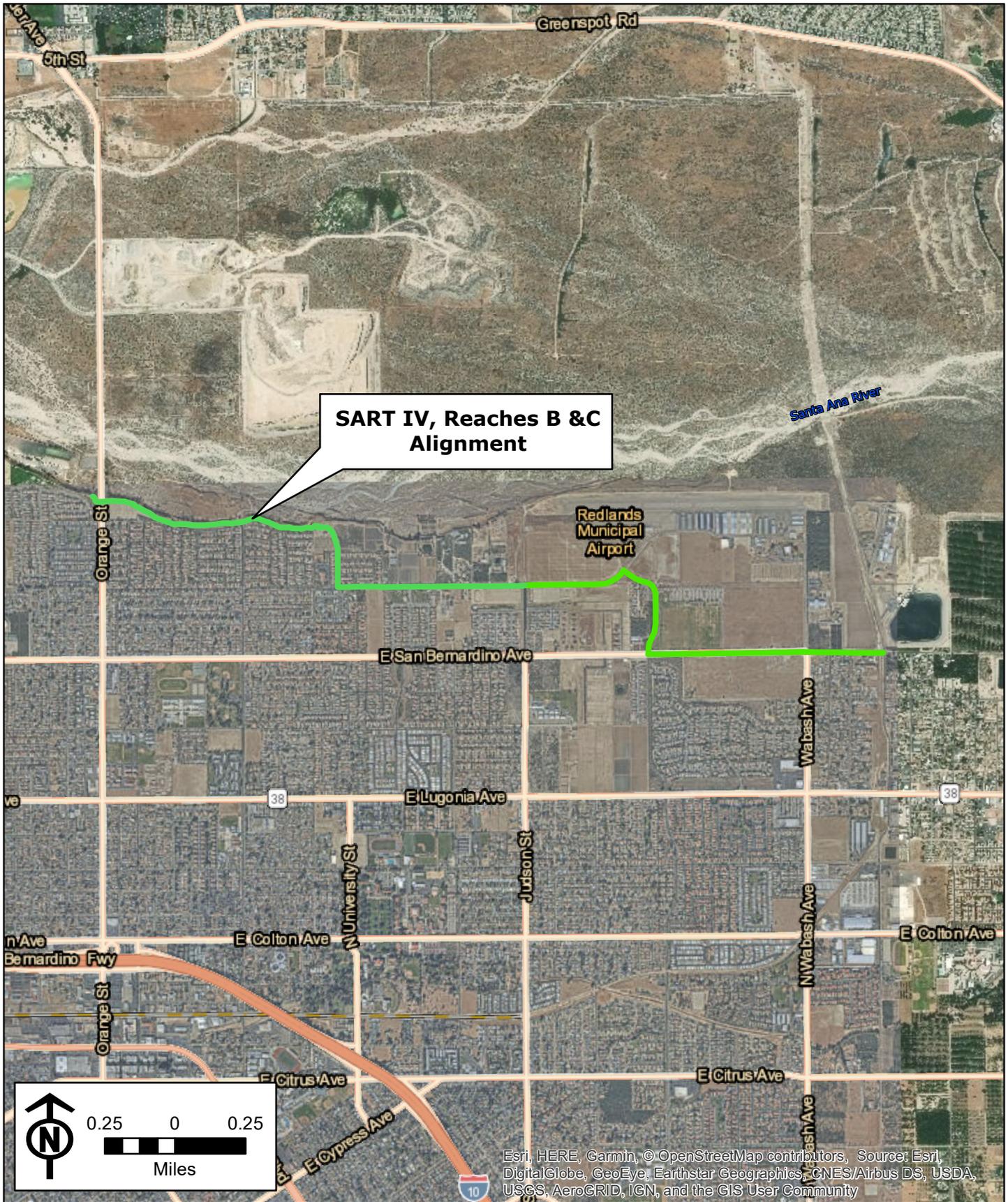
# REGIONAL LOCATION MAP

Santa Ana River Trail Phase IV, Reaches B and C  
Redlands, California

Figure 1

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Figure 2  
(Project Location Map)



## PROJECT LOCATION MAP

Santa Ana River Trail Phase IV, Reaches B and C  
Redlands, California

Figure 2

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## ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Santa Ana River Trail (SART) Phase IV, Reaches B and C
2. **Lead Agency Name:** County of San Bernardino Department of Public Works
- Address:** 825 East Third Street  
San Bernardino, California 92415
3. **Contact Person:** Michael Perry, Supervising Planner  
County of San Bernardino Department of Public Works  
Michael.Perry@dpw.sbcounty.gov
- Phone Number:** (909) 387-1864

4. **Project Location:***General Project Location*

The Proposed Project would be located along the southern bank of the Santa Ana River and along local streets in the City of Redlands, San Bernardino County. The proposed trail would begin on the west side of Orange Street in the City of Redlands and terminate at Opal Avenue near the Redlands city limits (Exhibit 2).

Topographic Quad (USGS 7.5"): Redlands

Topographic Quad Coordinates: 01S, 02W, Section 18; 01S, 03W, Section 13, 14, and 15

Latitude: 34.08083333" N, Longitude: 117.16083333" W

5. **Project Sponsor** County of San Bernardino Regional Parks Department  
**Name and Address:** 825 E 3<sup>rd</sup> Street,  
San Bernardino CA 92415
6. **General Plan/Zoning Designation:** Open Space; Street Right-of-Way; Agriculture
7. **Project Description Summary:**

**Project Background**

The County of San Bernardino Regional Parks Department (Regional Parks) with the assistance of the County of San Bernardino Department of Public Works (Public Works) proposes to construct an approximately 3.3-mile long section of the Santa Ana River Trail (SART) on the southern bank of the Santa Ana River and local streets within the City of Redlands (Exhibit 1). The SART is a regional recreational trail; segments of the trail within San Bernardino County have been constructed in various sections (phases) with projects named sequentially.

**Project Location**

The proposed section of the SART is SART Phase IV, Reaches B & C; the trail would begin on the west side of Orange Street in the City of Redlands and terminate at Opal Avenue near the Redlands city limits (Exhibit 2).

**Project Timing**

Construction would begin in 2020 and would take approximately six months to complete.

Details of the Project are further discussed in Section 3.

**8. Environmental/Existing Site Conditions:**

The project area includes the proposed trail alignment consisting of a 3.3-mile long section of the Santa Ana River Trail (SART) on the southern bank of the Santa Ana River and local streets from Orange Street (western limit) to Opal Avenue (eastern limit) within the City of Redlands. The project area is characterized by the southern bluffs of the Santa Ana River and developed urban area (street right-of-way) in the City of Redlands. Equipment staging and borrow/disposal during project construction may potentially occur at: (1) at various locations within the disturbed vacant lands on the north side of Riverview Drive; (2) on disturbed road shoulders and/or street right-of-way on the south side of Pioneer Avenue; (3) at the Redlands Sports Park paved parking lot; (4) on disturbed road shoulders and/or street right-of-way on the south side of San Bernardino Avenue; and, (5) on paved road shoulders and/or street right-of-way on the east side of Wabash Avenue.

Additionally, portions of the proposed trail alignment adjacent to the Santa Ana River overlap or are located in close proximity to United States Fish and Wildlife Service (USFWS) designated critical habitat.

**9. Surrounding land uses and setting (Briefly describe the project’s surroundings)**

The Proposed Project is located along the southern bluffs of the Santa Ana River and within the northern boundary of the Redlands city limits. As identified in the City of Redlands Zoning Map, zoning designations traversed by the trail and/or immediately adjacent to the alignment include: Open Space, Single Family Residential; Agriculture; and, Flood Plain (Redlands 2018).

**10. Lead Agency Discretionary Actions:**

Discretionary actions that may be taken by the Lead Agency include, but are not limited to, the following:

- Board of Supervisors, certification of environmental documentation

**11. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**

Federal Agencies:

- United States Fish and Wildlife Service

State Agencies

- California Department of Transportation (Caltrans)
- California State Coastal Conservancy

City/County Agencies

- City of Redlands

Financing Approval or Participation Agreements:

- Funding for the Proposed Project is provided by the Federal Highway Administration via the Active Transportation Program (ATP) administered by Caltrans. Matching funds may be provided by the California State Coastal Conservancy

**12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

*Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.*

In April 2018, the County of San Bernardino Department of Public Works Environmental Management Division mailed project notices to: Gabrieleño Band of Mission Indians – Kizh Nation; Morongo Band of Mission Indians; San Manuel Band of Mission Indians; and, Soboba Band of Luiseno Indians. The four Tribes expressed interest in the project and requested further consultation. Measures as recommended by the consulting Tribes have been incorporated into the Proposed Project in sections V and XVIII of this document.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

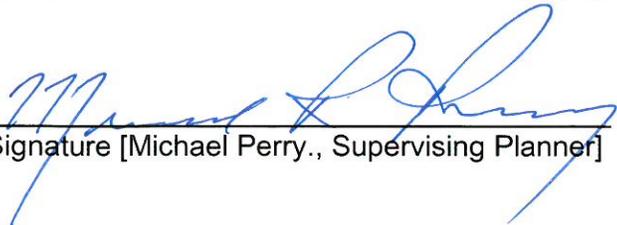
The environmental factors checked below, would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

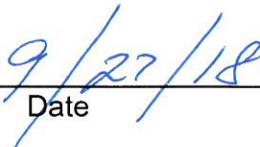
- Aesthetics
- Agriculture & Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology / Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology & Water Quality
- Land Use / Planning
- Mineral Resources
- Noise
- Population / Housing
- Public Services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

LEAD AGENCY DETERMINATION

On the basis of this Initial Study, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	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.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	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.
	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.

  
 Signature [Michael Perry., Supervising Planner]

  
 Date

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**I. AESTHETICS:**

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

**SUBSTANTIATION:** (Check  if project is located within a view-shed of any Scenic Route listed in the General Plan):

**Environmental Setting**

**Regional Setting**

The City of Redlands is located approximately 60 miles northeast of Los Angeles and 45 miles west of Palm Springs, nestled against the backdrop of the San Bernardino Mountains in San Bernardino County. The City of Redlands is bound by the Santa Ana River, the City of Highland, and the San Bernardino Mountains to the north, Crafton Hills and the City of Yucaipa to the east, the northern boundary of Riverside County to the south, and the cities of Loma Linda and San Bernardino to the west (City of Redlands 2017a).

**State Scenic Highways**

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. The Proposed Project is located approximately 1.6 miles north of Interstate 10 (I-10) and 1.0 miles east of State Route 210 (SR-210) which are not designated as state scenic highways by California Scenic Highway Mapping System (Caltrans 2018).

**Visual Setting**

The Proposed Project is located along the southern bluffs of the Santa Ana River and within the northern boundary of the Redlands city limits. This area is characterized by its backdrop mountain scenery with views of the San Bernardino Mountains and the Santa Ana River. As identified in the City of Redlands Zoning Map, zoning designations traversed by the trail and/or immediately adjacent to the alignment include: Open Space, Single Family Residential; Agriculture; and, Flood Plain (Redlands 2018).

**Impact Analysis**

a.) *Have a substantial adverse effect on a scenic vista?*

**No Impact.** The Proposed Project is surrounded by scenic views of the Santa Ana River and the foothills of the San Bernardino Mountains to the north. The objective of the Proposed Project is to provide regional connectivity along the SART, ultimately providing access to scenic vistas of the Santa Ana River Wash and San Bernardino Mountains through the completion of this phase of the SART. The Proposed Project proposes one pedestrian

bridge over Orange Street in the City of Redlands, a 10-foot wide asphalt/concrete trail with a 2-foot graded shoulder on each side of the asphalt/concrete trail from Orange Street to River Bend Drive; and a striped bicycle lane on the public right-of-way on Pioneer Avenue, Dearborn Street and San Bernardino Avenue. The existing road surface would be widened where possible to ultimate right-of-way and/or standard bicycle lane striping would be used to mark the alignment on the existing road surfaces. The City of Redlands General Plan Draft EIR Aesthetics element identifies the road segment of Pioneer Avenue (from River Bend Drive to Judson Street) within the project area for consideration as a scenic drive (City of Redlands 2017b). The above-mentioned project elements are not anticipated to affect the viewshed or scenic vista of the site and in turn would enhance accessibility for non-motorized users along Pioneer Avenue. No Impact would occur.

*b.) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact.** The Proposed Project is located approximately 1.6 miles north of Interstate 10 (I-10) and 1.0 miles east of State Route 210 (SR-210) which are not designated as state scenic highways by California Scenic Highway Mapping System (Caltrans 2018). The Proposed Project is not located within any designated highway, drive, or historic street as designated by the City of Redlands. As previously mentioned, the City of Redlands General Plan Draft EIR Aesthetics element has proposed the road segment of Pioneer Avenue (from River Bend Drive to Judson Street) within the project area for consideration as a scenic drive within the community, as neighborhood connector and recreational route for drivers and bike riders (City of Redlands 2017b). The Proposed Project would be consistent with this consideration as it would enhance the existing segment for use by bike riders. No Impact would occur.

*c.) Substantially degrade the existing visual character or quality of the site and its surroundings?*

**No Impact.** The project site is surrounded by the Santa Ana River Wash to the north, the foothills of the Bernardino Mountains beyond, and the continuation of the SART to the east and west. As described in the response to question I (a), the objective of the Proposed Project is to provide regional connectivity along the SART, ultimately providing access to scenic vistas of the Santa Ana River Wash and San Bernardino Mountains through the completion of this phase of the SART. The project area is characterized by the southern bluffs of the Santa Ana River Wash and developed urban area (street right-of-way) in the City of Redlands. These improvements would enhance the visual character of the site and would not substantially degrade the visual character or quality of its surroundings. No impact would occur.

*d.) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**No Impact.** The Proposed Project does not incorporate lighting. Therefore, no new sources of substantial light or glare, which would adversely affect day or nighttime view in the area, would result from the Proposed Project. No impact would occur.

**Mitigation Measures:**

None.

**Aesthetics Impact Conclusions:**

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

**II. AGRICULTURE AND FORESTRY RESOURCES:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<p><b>AGRICULTURE AND FORESTRY RESOURCES:</b>                      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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
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?			X	
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?			X	
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])?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?			X	

**SUBSTANTIATION:** (Check  if project is located in the Important Farmlands Overlay):

**Environmental Setting**

The Proposed Project is located along the southern bluffs of the Santa Ana River, along the northern boundary of the City of Redlands. The Proposed Project traverses or is immediately adjacent to property with the following zoning designations: Open Space; Single Family Residential; Agriculture; and, Flood Plain (Redlands 2018).

## Impact Analysis

- 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?*

**Less than Significant Impact.** The project site is located mostly on land that is designated as Open Space and within street right-of-way in the City of Redlands (Redlands 2018). According to the California Farmland Mapping and Monitoring Program (FMMP) Important Farmlands Map for San Bernardino County, the Proposed Project would be located within land designated as Grazing Land and along street right-of-way located adjacent to land designated as Other Land, Urban and Built-Up Land, Unique Farmland, Farmland of Statewide Importance, and Prime Farmland (CDC 2017). Proposed street widening to ultimate right-of-way on San Bernardino Avenue may require removal of orange trees on the north side of the street from Wabash Avenue to Opal Avenue in an area with a Unique Farmland designation (CDC 2017). The City of Redlands General Plan EIR identified potential impacts to up to 200 acres of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland designated under the FMMP program (Redlands 2017b). As described in the General Plan EIR, the affected farmland is mainly located where non-contiguous agricultural uses are interspersed with more intensive uses; the agricultural areas in the vicinity of Wabash Avenue are identified as a potential impact area. Policies in the General Plan provide a framework to ensure the continued existence of agricultural uses for as long as such use is financially feasible.

Although the project may require the removal of citrus trees, such trees would only be removed from locations within the limits of the City's ultimate road right-of-way at locations where the right-of-way is not built out to ultimate conditions. As such, the project would not impact private parcels with a FMMP designation of Unique Farmland, Farmland of Statewide Importance, or Prime Farmland by converting it to non-agricultural uses. A less than significant impact is anticipated.

- b) *Conflict with existing zoning for agricultural use or a Williamson Act contract?*

**Less than Significant Impact.** As stated in the response to question II (a), the project site is located mostly on land that is designated as Open Space and within street right-of-way in the City of Redlands (City of Redlands 2018). However, the trail alignment on San Bernardino Avenue is proposed adjacent to a Williamson Act parcel with portions of the parcel designated as Unique Farmland and Prime Farmland. Development of the project may require removal of citrus trees located within the undeveloped road right-of-way within the portion of the parcel designated as Unique Farmland.

The State of California has the following policies regarding public acquisition of and locating public improvements on lands in agricultural preserves and on lands under Williamson Act Contracts:

- Avoid locating federal, State, or local public improvements and improvements of public utilities, and the acquisition of land, in agricultural preserves.
- Locate public improvements that are in agricultural preserves on land other than land under Williamson Act contract.
- Any agency or entity proposing to locate such an improvement, in considering the relative costs of parcels of land and the development of improvements, give consideration to the value of the public land, particularly prime agricultural land, in an agricultural preserve.

Based on the final design, construction of the trail may require the removal of existing citrus trees on the north side of San Bernardino Avenue from Wabash Avenue to Opal Avenue. Such trees would be removed only from locations within the limits of the City's ultimate road right-of-way at locations where the right-of-way is not built out to ultimate conditions. As such, the project would not remove trees from production from within the limits of the Williamson Act parcel.

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))?*

**No Impact.** As identified in the City of Redlands Zoning Map, zoning designations traversed by the trail and/or immediately adjacent to the alignment include: Open Space, Single Family Residential; Agriculture; and, Flood Plain (Redlands 2018). The project does not conflict with existing zoning of forest land, timberland, or timberland zone production; no impact would occur.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

**No Impact.** The Proposed Project would be located along the southern bluffs of the Santa Ana River and within street right-of-way in the City of Redlands and would not be located on forest land. Therefore, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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?*

**Less than Significant.** The Proposed Project would be located along the southern bluffs of the Santa Ana River and within street right-of-way in the City of Redlands. The project alignment is not currently used for agricultural purposes. Areas adjacent to the project site are currently active agricultural facilities. Some portions of the proposed street right-of-way alignment are not built out to ultimate right-of-way and citrus trees appear to be located within the limits of ultimate right-of-way. Based on the final design, construction of the roadway to ultimate right-of-way and striping of the bicycle trail may require the removal of some citrus trees. However, such trees would be located within the street ultimate right-of-way limits (outside of private parcels); therefore, the Proposed Project would not convert farmland or forest land to non-forest use.

**Mitigation Measures:**

None.

**Agriculture and Forestry Services Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

III. AIR QUALITY:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>AIR QUALITY:</b> 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:			X	
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
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)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

**SUBSTANTIATION:** (Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

**Environmental Setting**

Impacts to air quality are the result of the emission of criteria air pollutants. Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O<sub>3</sub>), coarse particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 1.

Pollutant	Major Man-Made Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO <sub>2</sub>	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.

<b>Pollutant</b>	<b>Major Man-Made Sources</b>	<b>Human Health &amp; Welfare Effects</b>
O <sub>3</sub>	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NO <sub>x</sub> ) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM <sub>10</sub> & PM <sub>2.5</sub>	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO <sub>2</sub>	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: CAPCOA 2011

Both the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas.

CARB divides the state into air basins that share similar meteorological and topographical features. The Project site lies in the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The San Bernardino County portion of SoCAB is designated as a nonattainment (out-of-compliance) area for state standards of ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The region is also designated as a nonattainment area for federal standards of ozone and PM<sub>2.5</sub> (CARB 2017).

A project specific Air Quality and Greenhouse Gas Assessment was prepared by ECORP Consulting, Inc. (ECORP 2018b). Subsequently, an emissions assessment update memo was prepared to address changes resulting from a realignment of the trail (ECORP 2018a). The findings of the Air Quality and Greenhouse Gas Assessment and of the subsequent memo are summarized in the impact analysis below.

### **Impact Analysis**

#### *a) Conflict with or obstruct implementation of the applicable air quality plan?*

**Less Than Significant.** As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria

pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's Air Quality Management Plan.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

### **Criterion 1:**

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

- a) *Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?*

As shown in Tables 2 and 5, the proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during construction. Furthermore, as previously described the Project would not generate quantifiable criteria emissions from Project operations. Therefore, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

- b) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

As shown in Table 2, the Project will not exceed the applicable SCAQMD regional thresholds for construction. Additionally, the Project will not generate quantifiable criteria emissions from Project operations. Since the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

### **Criterion 2:**

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented in its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

- a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?*

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Redlands, which encompasses the Project site: *Redlands General Plan*, SCAG's *Growth Management Chapter of the Regional*

*Comprehensive Plan and Guide (RCPG)*, and SCAG's 2016 *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. The RTP/SCS also provides socioeconomic forecast projections of regional population growth.

The proposed Project does not include development of new housing or employment centers, and would not induce population or employment growth. Therefore, the Project would not affect local plans for population growth. Therefore, the proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP.

*b) Would the project implement all feasible air quality mitigation measures?*

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed Project meets this consistency criterion.

*c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?*

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the City of Redlands General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The proposed Project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards as it is not projected to exceed SCAQMD regional thresholds. As a result, this impact is less than significant.

*b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

### **Project Construction-Generated Criteria Air Quality Emissions**

#### **Regional Construction Significance Analysis**

Construction-generated emissions are temporary and short term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive particulate matter emissions that affect local air quality at various times during construction. Effects would be variable depending on the

weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. For more information regarding the construction assumptions, including construction equipment and duration, used in this analysis refer to the Air Quality and Greenhouse Gas Assessment (ECORP 2018b).

Predicted maximum daily construction-generated emissions for the proposed Project are summarized in Table 2. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD’s thresholds of significance.

<b>Table 2. Construction-Related Emissions (Regional Significance Analysis)</b>						
<b>Construction Year</b>	<b>Maximum Pollutants (pounds per day)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
2020	18.27	97.11	97.53	0.22	9.95	5.46
<i>SCAQMD Regional Significance Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<b>Exceed SCAQMD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

*Source: ECORP Consulting, Inc. 2018a. Refer to Attachment A for Model Data Outputs.*

*Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.*

*Emission projections account for the import of 300 cubic yards of soil during site preparation and grading activities.*

As shown in **Table 2-2**, emissions generated during construction would not exceed the SCAQMD’s regional thresholds of significance. This would be considered a less than significant impact.

**EPA Conformity Determination Analysis**

General Conformity ensures that the actions taken by federal agencies do not interfere with a state’s plans to attain and maintain national standards for air quality.

Established under the Clean Air Act (section 176(c)(4)), the General Conformity rule plays an important role in helping states improve air quality in those areas that do not meet the National Ambient Air Quality Standards (NAAQS). Under the General Conformity rule, federal agencies must work with state and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. The overall purpose of the General Conformity rule is to ensure that:

- federal activities do not cause or contribute to new violations of NAAQS;
- actions do not worsen existing violations of the NAAQS; and
- attainment of the NAAQS is not delayed.

Predicted annual construction-generated emissions for the proposed Project are summarized in Table 3. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Conformity Determination thresholds.

<b>Table 3. Construction-Related Emissions (EPA Conformity Determination Analysis)</b>						
<b>Construction Year</b>	<b>Pollutant (tons per year)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
2020	0.67	5.36	4.77	0.01	0.50	0.29
<i>EPA Conformity Determination Thresholds (40 CFR 93.153)</i>	10	10	100	100	70	100
<b>Exceed EPA Conformity Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: ECORP Consulting, Inc. 2018b. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Emission projections account for the import of 300 cubic yards of soil during site preparation and grading activities and the hauling away of 508 tons of demolition material.

All criteria air pollutant thresholds are based on the County's "Extreme-Nonattainment" status for ozone, "Serious - Maintenance" status for carbon monoxide, "Attainment" status for sulfur dioxide, "Serious - Maintenance" status for PM<sub>10</sub>, and "Moderate - Nonattainment" status for PM<sub>2.5</sub>.

As shown in Table 3, projected emissions resulting from the Project fall below the EPA Conformity Determination thresholds. This would be considered a less than significant impact.

**Localized Construction Significance Analysis**

The nearest sensitive receptors to the Project site are the residences located approximately 25 feet from the proposed trail. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate source receptor area (SRA) for the localized significance thresholds is the East San Bernardino Valley source receptor area (SRA 35) as this source receptor area includes the Project site. The proposed Project would disturb approximately 43.41 acres during construction. As previously described, the SCAQMD has produced look-up tables for projects that disturb less than or equal to 5 acres daily. The SCAQMD has also issued guidance on applying the CalEEMod emissions software to LSTs for projects greater than 5

acres. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 4 is used to determine the maximum daily disturbed-acreage for comparison to LSTs.

<b>Table 4. Equipment-Specific Grading Rates</b>					
<b>Construction Phase</b>	<b>Equipment Type</b>	<b>Acres Graded/Disturbed per 8-Hour Day</b>	<b>Equipment Quantity</b>	<b>Operating Hours per Day</b>	<b>Acres Graded per Day</b>
Demolition	Crawler Tractors	0.5	0	8	0
	Graders	0.5	1	8	0.5
	Rubber Tired Dozers	0.5	1	8	0.5
	Scrapers	1.0	0	8	0
	<b>Total</b>				<b>1</b>
Site Preparation	Crawler Tractors	0.5	0	8	0
	Graders	0.5	2	8	1
	Rubber Tired Dozers	0.5	1	8	0.5
	Scrapers	1.0	0	8	0
	<b>Total</b>				<b>1.5</b>
Grading	Crawler Tractors	0.5	2	8	1
	Graders	0.5	2	8	1
	Rubber Tired Dozers	0.5	0	8	0
	Scrapers	1.0	2	8	2
	<b>Total</b>				<b>4</b>
Construction	Crawler Tractors	0.5	2	8	1
	Graders	0.5	2	8	1
	Rubber Tired Dozers	0.5	0	8	0
	Scrapers	1.0	2	8	2
	<b>Total</b>				<b>4</b>
Paving	Crawler Tractors	0.5	0	8	0
	Graders	0.5	1	8	0.5
	Rubber Tired Dozers	0.5	0	8	0
	Scrapers	1.0	2	8	2
	<b>Total</b>				<b>2.5</b>
Painting	Crawler Tractors	0.5	0	8	0
	Graders	0.5	0	8	0
	Rubber Tired Dozers	0.5	0	8	0
	Scrapers	1.0	0	8	0
	<b>Total</b>				<b>0</b>
<b>Maximum Total Acres Graded per Day</b>					<b>4</b>

As shown in Table 4, Project implementation could potentially disturb up to 4 acres daily during the grading and construction phases. Thus, the LST threshold value for a 4-acre construction were sourced from the LST lookup tables.

The nearest sensitive receptors to the Project site are the residences located approximately 25 feet from the proposed trail. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Notwithstanding, the SCAQMD Methodology explicitly states: “It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.” Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

The SCAQMD’s methodology clearly states that “off-site mobile emissions from a project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod “on-site” emissions outputs were considered. Table 5, presents the results of localized emissions during the grading and construction phases, which are construction activities that disturbs the most acreage daily. The LSTs reflect a maximum disturbance of 4 acres daily at 25 meters for the proposed Project.

<b>Table 5. Construction-Related Emissions (Localized Significance Analysis)</b>				
<b>Activity</b>	<b>Pollutant (pounds per day)</b>			
	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Grading	80.46	50.72	4.97	3.29
Construction	94.73	65.52	4.12	3.82
<i>SCAQMD Localized Significance Threshold</i>	<i>236.67</i>	<i>1,774.67</i>	<i>11.67</i>	<i>7.67</i>
<b>Exceed SCAQMD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: ECORP Consulting, Inc. 2018b. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emission projections account for the import of 300 cubic yards of soil during site preparation and grading activities.

**Table 2-5** shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

**Project Operations Criteria Air Quality Emissions**

**Regional Operational Significance Analysis**

The proposed Project involves the construction of an approximately 3.3-mile-long section of the SART. The proposed Project will not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable air quality emissions from Project operations. The Project does not propose any buildings and therefore no permanent source or stationary source emissions. Once the Project is completed, there will be no resultant increase in automobile trips to the area because the recreational trail will not require daily visits. While it is anticipated that the Project would require intermittent maintenance, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Impacts in this regard would be less than significant.

**EPA Conformity Determination Analysis**

As described, the proposed Project will not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable air quality emissions from Project operations and would not exceed EPA Conformity Determination Thresholds.

### **Localized Operational Significance Analysis**

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed Project includes the construction of a 3.3-mile-long section of the SART. Therefore, in the case of the proposed Project, the operational phase LST protocol is not applied.

- 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)?*

**Less Than Significant.** The cumulative setting for air quality includes San Bernardino County portion of the SoCAB. The San Bernardino County portion of SoCAB is designated as a nonattainment area for state standards of ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The region is also designated as a nonattainment area for federal standards of ozone and PM<sub>2.5</sub> (CARB 2017). Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the San Bernardino County portion of SoCAB and associated growth and development anticipated in the region.

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the proposed Project is consistent with the 2016 AQMP, which is intended to bring the SoCAB into attainment for all criteria pollutants. In addition, the SCAQMD recommends that any given project's potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual Project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project would not exceed the applicable SCAQMD regional thresholds. As such, the Project will not result in a less than significant impact.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less than Significant.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

### **Construction-Generated Air Contaminants**

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous

activities. For construction activity, DPM is the primary TAC of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted the maximum construction-related emissions of exhaust  $PM_{2.5}$ , considered a surrogate for DPM, would be 3.88 pounds per day (ECORP 2018b) during construction activity ( $PM_{2.5}$  is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e.,  $PM_{2.5}$ ), according to CARB. Most  $PM_{2.5}$  derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) Furthermore, even during the most intense month of construction, emissions of DPM would be generated from different locations on the Project site, rather than a single location, because different types of construction activities (e.g., site preparation, grading, paving) would not occur at the same place at the same time.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or 9-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed Project. Consequently, an important consideration is the fact that construction of the proposed Project is anticipated to last less than a year. Therefore, considering the relatively low mass of DPM emissions that would be generated during even the most intense season of construction, the relatively short duration of construction activities (less than a year) required to develop the site, and the highly dispersive properties of DPM, construction-related TAC emissions would not expose sensitive receptors to substantial amounts of air toxics.

### ***Operational Air Contaminants***

The proposed Project involves the construction of an approximately 3.3-mile-long section of the SART. The proposed Project will not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable air toxic emissions from Project operations.

### ***Naturally Occurring Asbestos***

Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The proposed Project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (DOC 2000). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos.

### ***Carbon Monoxide Hot Spots***

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or

“hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Project vicinity have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The analysis prepared for CO attainment in the SCAQMD 1992 *Federal Attainment Plan for Carbon Monoxide* (1992 CO Plan) in Los Angeles County can be used to demonstrate the potential for CO exceedances. The SCAQMD CO hot spot analysis was conducted for four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the level of service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be level of service (LOS) E at peak morning traffic and LOS F at peak afternoon traffic (LOS E and F are the two least efficient traffic LOS ratings). Even with the inefficient LOS and volume of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

The Project is not anticipated to generate any trips. Because the proposed Project would not increase traffic volumes at any intersection to more than 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values.

e) *Create objectionable odors affecting a substantial number of people?*

**Less Than Significant.** Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

## **Construction**

During construction, the proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, under CEQA, construction odors would result in a less than significant impact related to odor emissions.

***Operations***

The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no operational odor impacts from the proposed Project.

**Mitigation Measures:**

None.

**Air Quality Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**IV. BIOLOGICAL RESOURCES:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>BIOLOGICAL RESOURCES:</b> 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 Wildlife or U.S. Fish and Wildlife Service?		X		
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 Wildlife or U.S. Fish and Wildlife Service?				X
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?				X
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?			X	

**SUBSTANTIATION:** ( Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database):

**Environmental Setting**

The Proposed Project is located within the Santa Ana River Watershed (HUC 18070203) and on the upper bluffs adjacent to the south side of the Santa Ana River. Topography is generally flat to gently rolling. Just north of the Project area, the bluffs of the river drop down steeply into the floodplain proper.

As recently as 50 years ago, most of the Project area vicinity consisted of a mixture of undeveloped areas and orchards. However, under current conditions the area is largely urbanized. Current land uses in the vicinity of the project are predominantly composed of residential areas and city streets, along with some partially developed bluffs adjacent to the Santa Ana River floodplain. The Redlands Municipal Airport is located north of the proposed trail alignment in the eastern portion. Some vacant lots are also located in the vicinity of the alignment near the airport. The Redlands Sports Complex occurs along Dearborn Street in the eastern portion of the alignment; three parking lots within the complex are proposed to be used as temporary laydown areas for

construction. The Santa Ana River floodplain and bluffs are located to the north of the alignment and consist of largely undeveloped and natural habitat areas.

A project specific Jurisdictional Delineation report and a Natural Environment Study (NES) report were prepared by ECORP Consulting Inc. (ECORP 2018c and 2018d). The findings of the reports are summarized within this section.

### **Impact Analysis**

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 Wildlife or U.S. Fish and Wildlife Service?*

**Less Than Significant with Mitigation Incorporated.** Reconnaissance-level surveys of the 3.3-mile-long alignment were conducted by biologist from ECORP Consulting, Inc. to identify plant communities and to assess the presence of suitable habitat for special-status plant and wildlife species. Vegetation communities were mapped and a jurisdictional delineation was also conducted. The Biological Study Area (BSA) comprised the project area of potential effect and a 150-foot buffer.

The NES literature search identified several special-status plant species and one vegetation community to have a potential to occur within the BSA. Based on subsequent field surveys and an evaluation of the BSA it was determined that the following plant species are not likely to occur within the BSA: San Diego ambrosia (*Ambrosia pumila*); and, Nevin's barberry (*Berberis nevinii*). Limited suitable habitat for the following species was identified: Riversidean alluvial fan sage scrub; Santa Ana River woolly star (*Eriastrum densifolium* ssp. *sanctorum*); slender-horned spineflower (*Dodecahema leptoceras*); Parry's spineflower (*Chorizanthe parryi* var. *parryi*); white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*); Mesa horkelia (*Horkelia cuneata* var. *leucotheca*); chaparral ragwort (*Senecio aphanactis*). BMPs and avoidance and minimization measures as recommended in the NES and listed below shall be incorporated into the project, therefore less than significant effects to these species are expected.

The NES literature search identified several special status wildlife species to have a potential to occur within the BSA. Based on subsequent field surveys and an evaluation by qualified biologists it was determined that the following wildlife species are not likely to occur within the BSA: Santa Ana sucker (*Catostomus santanae*); least Bell's vireo (*Vireo bellii pusillus*); and, Stephen's kangaroo rat (*Dipodomys stephensi*). Limited suitable habitat for the following species was identified: coastal California gnatcatcher (CAGN, *Polioptila californica californica*); San Bernardino kangaroo rat (SBKR, *Dipodomys merriami parvus*); California glossy snake (*Arizona elegans occidentalis*); Silvery legless lizard (*Aniella pulchra*); Red-diamond rattlesnake (*Crotalis ruber*); Cactus wren (*Campylorhynchus brunneicapillus*); Coast horned lizard (*Phrynosoma blainvillii*); Coast patch-nosed snake (*Salvadora hexalepis virgultea*); Burrowing owl (*Athene cunicularia*); Loggerhead shrike (*Lanius ludovicianus*); Pallid bat (*Antrozous pallidus*); Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*); Western mastiff bat (*Eumops perotis californicus*); San Diego black-tailed jackrabbit (*Lepus californicus bennettii*); San Diego desert woodrat (*Neotoma lepida intermedia*); Southern grasshopper mouse (*Onychomys torridus ramona*); and, Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). BMPs and avoidance and minimization measures as recommended in the NES and listed below shall be incorporated into the project, therefore less than significant effects to these species are expected.

Implementation of mitigation measure BIO-1 to Bio-25 below would minimize potential impacts to habitat and wildlife, including potentially occurring special status species, to a less than significant level.

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 Wildlife or U.S. Fish and Wildlife Service?*

**No Impact.** The NES and JD identified a single large cottonwood tree within the BSA. The cottonwood tree is located at the base of a stormwater drainage discharging into the Santa Ana River, outside of the Project's impact area but within the 150 buffer area. The cottonwood tree was mapped at the margins of disturbed habitat and Riversidean alluvial fan sage scrub in the NES. It was determined in the NES that the tree on its own does not provide the necessary structural elements for riparian habitat species; therefore, it was also determined that riparian habitat are absent from the BSA. The tree is located outside of the Project impact footprint. No impacts to riparian habitat are anticipated to occur.

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?*

**No Impact.** A jurisdictional delineation of the approximately 3.3-mile-long alignment was prepared by ECORP Consulting Inc. (ECORP 2018d). Six water features were identified within or in the vicinity of the approximately 43-acre delineation area – including the Santa Ana River and Judson channel located to the north of the proposed trail alignment (outside of the project impact footprint). Four (4) unnamed features were identified within the limits of the delineation area in areas that would be temporarily impacted by implementation of the proposed project. The features within the delineation area consist of artificial man-made drainage features consisting of cement-lined, manufactured channels, buried underground stormwater conduits and channels to convey stormwater from adjacent developed land uses and irrigation runoff. None of the identified features were determined to be USACE Jurisdictional as defined in 33 CFR Part 328.3.b. Mainly, the features “are stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.” Further, the features are not “located within a relocated tributary or excavated in a tributary.” The four features within the delineation area are also considered non-jurisdictional to the SWRCB under Section 401 of the Clean Water Act.

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?*

**Less Than Significant.** A wildlife movement corridor connects two blocks of native habitat; a wildlife corridor between such habitat blocks functions to allow for genetic exchange between populations. Movement corridors allow for dispersal of young, expanded foraging opportunities, and allow for animals to flee in the event of a fire or other large-scale disturbance. Viable connections between habitat areas effectively expand the usable areas for wildlife that use the habitats and corridors. The major regional blocks of habitat in the region of the Proposed Project include the San Gabriel Mountains, the San Bernardino Mountains, the Chino Hills, the Prado Basin, the Jurupa Hills, the San Timoteo Badlands, and the Crafton Hills. The upper Santa Ana River floodplain between Redlands and San Bernardino is also a major block of habitat. Wildlife movement connections between these features are generally limited by urbanization. Restrictions are minimized where these habitat blocks are closer to each other.

In general, residential and commercial development is present south of the western portion of the alignment and the Santa Ana River is located to the north. The segment of the trail along Pioneer Avenue is surrounded by residential development, agriculture, and vacant fields on the north and south side of the street. Agriculture and vacant fields also occur on the north and south side of San Bernardino Avenue. Urban developments are generally not conducive to wildlife travel between natural areas because of vehicular traffic, human presence, and the presence of noise and light. The vacant parcels of land may provide limited restricted movement, but are typically not utilized by wildlife due to lack of protective cover and proximity to development. There are some wildlife species that are well-adapted to urban environments and will thrive among residential and commercial developments, especially when in close proximity to vacant parcels. Most of the species that are commonly observed in urban environments do not have specific movement corridor requirements, instead they use non-specific movement patterns across these urban areas.

The Proposed Project would result in the development of a Class I bicycle trail on the river bluffs of the Santa Ana River from approximately Orange Street to River Bend Drive; the remaining portion of the alignment would consist of lane striping on local city streets. Implementation of the project would not result in a substantial physical change to the existing environment that would impact regional wildlife corridors or the non-specific movement patterns of wildlife adapted to urban environments.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Less Than Significant.** The Proposed trail alignment partially overlaps the “Emerald Necklace” as identified in the City of Redlands General Plan (Redlands 2017b). The Emerald Necklace is a series of green open space and park areas surrounding the city, joined together by a road and trail system. The Emerald Necklace route consists of an approximately 45-mile circuit around the city and is accessible by motorists and bicyclists and links a number of Redlands’ parks, trails, and open space areas including the San Timoteo Canyon, Live Oak Canyon, the Crafton groves, the Sports Parks, the Santa Ana River Wash, the Santa Ana River bluffs, Israel Beal Park; the East Valley Corridor Multi-Purpose Trail, and Heritage Park (Redlands 2017b). The proposed alignment is consistent with the City’s vision of the Emerald Necklace and with the related ordinances in the General Plan as they relate to the development of pedestrian and multi-use facilities.

Portions of the trail alignment traverse land uses designated as agricultural and developed with citrus groves; in some instances, construction of the trail may require the removal of citrus trees located within the limits of street’s ultimate right-of-way. In one instance; at the parcel located on the west side of Orange Street the proposed trail alignment will be located on the periphery of an enterprise citrus grove owned and operated by the City of Redlands Citrus Preservation Division of the Quality of Life Department.

Ornamental street trees and citrus trees in the public domain within the City are managed pursuant to City Municipal Code Chapter 12.52. The Proposed Project is subject to a plan review by the City of Redlands. If it is determined during its Plan Review of the final design that removal of a protected tree pursuant to City Municipal Code Chapter 12.52 will occur, permits and approvals would be required from the City as part of the project approval process. Compliance with the determinations of the plan review will ensure that the project would not conflict with local policies protecting trees within the City.

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?*

**No Impact.** Portions of the proposed trail alignment are located within the planning area of the Upper Santa Ana Wash Land Management and Habitat Conservation Plan (Wash Plan). However, the Implementation Plan for the Wash Plan is currently being developed and final approvals from the regulatory agencies have not yet been secured; the status for implementation of the Wash Plan is not definitively known. Therefore, while the NES analyzed potential project impacts to critical habitat and special status species for consistency with the Wash Plan draft documents. The project is proposed to proceed independent of the Wash Plan and a consultation with USFWS is required to fulfill federal Endangered Species Act requirements under the National Environmental Policy Act.

### **Mitigation Measures:**

#### **Pre-construction:**

*Final Design*

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- BIO-1 Barriers such as boulders, fences, and gates will be placed and maintained along work areas and trail boundaries to help prevent unauthorized activities, including dumping and off-road vehicle use. Such barriers shall be identified in the final project design.
  - BIO-2 Trail boundaries will be clearly identified to ensure that the public stays on the marked trail. Signs educating the public on the importance of staying on trails shall be posted in prominent areas.
  - BIO-3 Construction activity and access roads will be minimized to the maximum extent practicable. If impacts to jurisdictional features associated with access roads are subsequently identified in the final design; permit applications to the regulatory agencies will be submitted.
  - BIO-4 A Stormwater Pollution Prevention Plan (SWPPP) in accordance with the Department's National Pollutant Discharge Elimination System (NPDES) General Storm Water Discharges Associated with Construction Activity (General Permit No. CAS000003) will be developed to eliminate potential offsite sedimentation effects. BMPs within the SWPPP will minimize any potential for sedimentation resulting from the discharge of untreated stormwater from the Project entering the Santa Ana River during construction.

#### *Scheduling*

- BIO-5 Construction and maintenance activities resulting in the removal of RSS during the breeding season will be avoided if feasible during the CAGN breeding season (February 15 to August 30). If construction and maintenance activities must occur within 500 feet of potential CAGN habitat during the nesting season (February 15 to August 30), a biologist that holds a 10(a)(1)(A) permit to conduct surveys for CAGN will conduct pre-activity nesting bird surveys. The area to be disturbed and a 500-foot buffer will be surveyed for five (5) consecutive days to determine if CAGNs are nesting in or near the construction or operation activities. If CAGNs are nesting, a temporary ESA and 300-foot buffer will be established and maintained between the nearest activity and the nest location until nesting is completed. Noise within the buffer area will not exceed 60 dBA Leq. Daily noise monitoring reports will be prepared.
- BIO-6 Prior to ground disturbance in potentially suitable woolly star and/or spineflower habitat, surveys will be conducted if the area has not been surveyed within the last 5 years to determine if the plant is present. Surveys will be conducted in accordance with the CDFW protocols for surveying special-status plant populations.
- BIO-7 If woolly star and/or spineflower is detected during the pre-project survey, seeds will be collected at the appropriate time for the species prior to ground disturbance. Seed collection and storage will be by an entity that has a Memorandum of Understanding with the USFWS to process and handle the seeds of endangered plant taxa. In areas of temporary impacts, the seed will be replanted in the temporarily disturbed area. The seed planting time and location for seeds collected from permanent impact areas will be at the discretion of the County.

#### *Prior to Ground Disturbance*

- BIO-8 If construction-related activities are to occur during the nesting season (February 1 through September 15), a qualified biologist will conduct a preconstruction survey of the proposed construction area and adjacent habitat in the near vicinity. The preconstruction survey will commence no more than 72 hours prior to the onset of construction. If an active nest is observed,

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an appropriate buffer will be established until nesting is complete, as determined by a qualified biologist/biological monitor.

- BIO-9 A pre-clearance sweep shall be conducted by a qualified biologist immediately prior to initial removal of RSS – *Encelia farinosa* dominant habitat to detect and flush any potentially occurring special-status species.
- BIO-10 Qualified biologists, botanists, and/or biological monitors will be retained to ensure compliance with protective measures for special-status species. They will be required for monitoring any construction activities that may result in impacts to special-status species if determined applicable based on the results of the pre-construction surveys.
- BIO-11 All workers will receive environmental awareness training. The training will be developed in consultation with a qualified biologist and consist of an onsite or training center presentation for which supporting materials will be provided. Training will provide information about the special-status species potentially occurring on site and an explanation of the purpose and function of the avoidance and minimization measures and the possible penalties for not adhering to them.

**During construction:**

- BIO-12 The limits of construction will be marked, fenced, and maintained as necessary until work is completed.
- BIO-13 Personnel will strictly limit their activities, vehicles, equipment, and construction materials to the designated work area.
- BIO-14 Ingress and egress of construction equipment and personnel will be confined to designated access points. Cross-country travel by vehicles and equipment will be prohibited.
- BIO-15 At the Santa Ana River bluffs silt fencing or other sediment trapping materials will be installed at the downstream end of construction activity to minimize the transport of sediments off-site. Care will be exercised when removing silt fences, as feasible, to prevent debris or sediment from discharging into the floodplain.
- BIO-16 Erodible fill material will not be deposited into water courses. Brush, loose soils, or other similar debris material will not be stockpiled within or immediately adjacent to jurisdictional features.
- BIO-17 When construction activities will take place within 50 meters of known occurrences of woolly star and/or spineflower, a temporary fence will be erected to protect the specimens. A qualified botanist and/or biological monitor will monitor construction activities, maintain the markers limiting construction, and maintain a fence protecting the specimens to prevent accidental disturbance.
- BIO-18 A qualified biologist or biological monitor with SBKR expertise will be present when construction or ground-disturbing activities that could result in take of SBKR occurs in, or within 100 meters of SBKR habitat which is classified as low, medium, or high habitat potential for SBKR.
- BIO-19 Equipment (e.g., passenger vehicles, trucks, and heavy equipment) will be cleaned prior to entering the worksite and between worksites to prevent the importation and spread of exotic plant species.

- BIO-20 No open trenches or holes (aggregate mining activities excepted) will be left overnight without covering, fencing, or providing escape ramps with a minimum 3:1 slope. If trenches are not covered, they will be inspected for trapped wildlife by a qualified biologist or biological monitor. Animals found will be captured and moved to the nearest safe location outside the construction area.
- BIO-21 No firearms or pets will be allowed at the work areas. Firearms carried by authorized security and law enforcement personnel are exempt.
- BIO-22 Litter control measures will be implemented. Trash and food items will be contained in closed containers and removed daily to reduce the attractiveness of the area to opportunistic predators.
- BIO-23 Dust will be controlled. If water trucks are to be used, pooling of water will be avoided to minimize the potential of attracting opportunistic predators.

**Post-construction:**

- BIO-24 Temporary impact areas in the RSS – *Encelia farinosa* dominant community will be restored with a native species palette that matches the surrounding native vegetation community.
- BIO-25 Areas impacted during construction that contain native vegetation will be restored after the Project is completed. This will include replanting with a plant palette composed of the native species found on site prior to the disturbance. Restoration will also include weed control. Restoration performance standards, and remediation measures, if necessary, will be developed by the County and reviewed and approved by the regulatory agencies.
- BIO-26 Should it be determined during the pre-construction surveys that coastal California gnatcatcher habitat will be impacted, in addition to restoration of the temporary impacts to native habitat, habitat shall be created at a 3:1 ratio.
- BIO-27 Mitigate temporary impacts and permanent impacts to suitable SBKR habitat through purchase of credits from an approved mitigation bank, payment to an in-lieu fee program, or another form of mitigation approved by the regulatory agencies.

**Biological Resources Impact Conclusions:**

With implementation of the above listed measures, less than significant impacts are anticipated.

**V. CULTURAL RESOURCES:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

**SUBSTANTIATION:** (Check if project is located in the Cultural  or Paleontologic  Resources overlays or cite results of cultural resource review)

**Environmental Setting**

A cultural study of the 3.3-mile-long alignment was completed by ECORP Consulting, Inc. (ECORP 2018e). The cultural study included a cultural resources records search, Sacred Lands File search, field survey, and California Register of Historical Resources (CRHR) evaluation. A Paleontological Identification Report of the Project area was completed by Cogstone (Cogstone 2018). The findings of the two reports are summarized in this section.

**Impact Analysis**

a) *Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?*

**Less Than Significant.** As reported in the project specific cultural resources study, no resources previously determined eligible or listed in the CRHR, no resources included in a local register of historical resources, and no resources identified as significant in a qualified historical resources survey were identified within the Project's defined Area of Potential Effect (APE) (ECORP 2018e). As a result of the archaeological field surveys, three potential cultural resources were identified within the APE but outside of the impact footprint. The resources included, a set of drainage features in North Redlands (drainage features), a set of irrigation features, and a stand pipe. The drainage features are associated with a large drainage system in northeast Redlands; the system as a whole extends beyond the limits of the Project's APE. The irrigation features and standpipe are associated with the historic citrus farming of the area. Per the CRHR eligibility criteria, resources identified during the field survey would be considered historical if they are "determined to be historically significant by the CEQA lead agency [CCR Title 14 §15064.5(a)].

Per CRHR the following criteria is considered in making a historical significance determination [CCR Title 14, §4852(b)]:

- Is it associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;
- Is it associated with the lives of persons important to local, California, or national history.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, §4852(c)]. Impacts to a resource are significant if the resource is demolished or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, §15064.5(a)].

The three resources were evaluated in accordance with the CRHR eligibility criteria. It was determined that the irrigation features and standpipe do not meet the eligibility criteria for the CRHR and therefore the resources are not historical resources as defined by CEQA. The drainage features throughout northeast Redlands have been determined locally significant by the City of Redlands and are considered to be a Historical Resource under CEQA. Although the drainage features are located outside of the Project's impact footprint, to ensure that impacts will be avoided measure CUL-1 will be implemented during project construction. With implantation of CUL-1 no impacts to historical resources as defined by CEQA are anticipated to occur.

*b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?*

**Less Than Significant with Mitigation Incorporated.** As reported in the project specific cultural resources study the majority of surface sediments within the project area consist of Holocene alluvial valley deposits. Holocene sediments are contemporaneous with pre-contact human occupation of the area. One pre-contact resource, a milling slick, and one multi-component site were identified in the records search radius; both sites were located more than 0.25 mile from the Project area. As reported in the cultural resources study, during the historic period, the majority of the Project Area was disturbed by the introduction of orange groves, streets, sidewalks, graded shoulders, and artificial landscaping. Given the types of disturbances present, it is reasonable to assume that disturbances may reach depths of up to three feet in developed portions of the Project Area. The field survey did not identify any pre-contact resources within the Project Area and, given the amount of disturbance within sediments of the Project Area, the likelihood of finding intact subsurface archaeological resources within the first few feet of sediment is low. With the exception to the excavations for the bridge footings near Orange Street, the majority of the excavation for the Project will take place entirely within the first two feet of sediment. Given the aforementioned disturbed nature of the sediments within the Project Area and the shallow planned excavations, the Project has a low potential to disturb significant subsurface archaeological deposits. Mitigation measures CUL-2 shall be implemented to ensure that impacts to inadvertent discoveries of subsurface resources is mitigated to a level less than significant.

*c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**No Impact.** The paleontological sensitive of the project area was studied and the findings reported in a project specific Paleontological Identification Report prepared by Cogstone (2018). Per the Paleontological Identification Report, the surface of the project is mapped as middle to late Holocene (less than 7,500 years old) wash and axial channel deposits. Results of the paleontological literature search indicate that that no fossils have been recorded within a 15 mile radius of the project and that fossils outside of that radius have been found in older sediment than those overlaid by this project. Based on the current design it is anticipated that maximum excavation depths would not exceed 5 feet. Therefore, the Paleontological Identification Report concludes the due to the young age of the sediment present on the project site combined with the results of the records search excavations associated with the proposed project (up to 5 feet) are unlikely to result in the recovery of fossils. No further paleontological studies were recommended.

*d) Disturb any human remains, including those interred outside of formal cemeteries?*

**Less Than Significant with Mitigation Incorporated.** No known human remains are present on the project site. If human remains are inadvertently uncovered during project activities, adherence to measure CUL-3 would reduce impacts to less than significant.

**Mitigation Measures:**

- CUL-1 To ensure the drainage features are not disturbed by construction, a temporary Environmentally Sensitive Area (ESA) be established around the resource site. The ESA will include temporary protective striping on E. Pioneer Avenue to protect the rock curbs associated with the drainage feature. This temporary striping will be placed at least one week prior to initiating construction, under the supervision of the Project Engineer and the Project Cultural Resources Specialist. The construction manager will be told that no construction activities can occur in the ESA protected by the temporary striping. A cultural resources monitor under the supervision of the Project Cultural Resources Specialist will conduct spot monitoring before, after, and at various times throughout Project construction to ensure the integrity of the temporary striping. The striping will be removed after the conclusion of construction activities.
- CUL-2 If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 60-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgement. The following notifications shall apply, depending on the nature of the find:
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
  - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the CEQA lead agency, and applicable land owner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be eligible for inclusion in the NRHP or CRHR. Work may not resume within the no-work radius until the lead agencies through consultation as appropriate, determine that the site either: 1) is not eligible for the NRHP or CRHR; or
- CUL-3 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within 60-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

**Cultural Resources Impact Conclusions:**

With implementation of the above listed measures, less than significant impacts are anticipated.

**VI. GEOLOGY AND SOILS:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>GEOLOGY AND SOILS:</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
<ul style="list-style-type: none"> <li>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.</li> </ul>			X	
<ul style="list-style-type: none"> <li>Strong seismic ground shaking?</li> </ul>			X	
<ul style="list-style-type: none"> <li>Seismic-related ground failure, including liquefaction?</li> </ul>			X	
<ul style="list-style-type: none"> <li>Landslides?</li> </ul>			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
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?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?			X	

**SUBSTANTIATION:** ( Check if project is located in the Geologic Hazards Overlay District):

**Environmental Setting**

The City of Redlands is located within the San Bernardino Valley just south of the San Bernardino Mountains. Geologically, the City is located north of the Peninsular Range geomorphic province, which is characterized by northwest trending mountains and valleys of granite and older metamorphic rocks (Redlands 2017b). The topography in the area generally slopes downward to the southwest (Redlands 2017b). The subject reach of the SART is located near the northern City boundary along the bluffs of the Santa Ana River and within local streets.

## **Impact Analysis**

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- *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.*
- *Strong seismic ground shaking?*
- *Seismic related ground failure, including liquefaction?*
- *Landslides?*

### **Less Than Significant.**

The City of Redlands is bounded to the northeast by the San Andreas Fault zone and to the southwest by the San Jacinto fault zone. It is traversed by the Crafton Hills fault zone through southern Redlands, Crafton, and Mentone. The San Andreas Fault zone is predicted to have the capacity to produce an earthquake with a maximum moment magnitude of 7.5. The San Jacinto fault is predicted to have the capacity to produce an earthquake with a maximum moment magnitude 6.7 (Redlands 2017b). The Proposed Project is located within the northern City limits; as such, the project site is subject to ground shaking and potential impacts related to ground shaking. As shown in Figures 3.6-2 to 3.3-4 the proposed alignment does not directly overly an Alquist-Priolo fault zone or a zone with an identified landslide susceptibility; the portion of the trail on the river bluffs is located within a zone with a high liquefaction susceptibility. Although the proposed recreational pedestrian/bicycle trail may be subject to risk related to ground shaking, such risk is not expected to be substantially adverse because trail use would be transitory and because the trail does not include structures that would encourage large densities of users to gather. A less than significant impact is anticipated.

b) *Result in substantial soil erosion or the loss of topsoil?*

**Less Than Significant Impact.** The proposed trail alignment is mostly sited on existing disturbed areas including existing road right of way. The western most limit of the trail is proposed on an existing open space area of the river bluffs. The area is identified as a future community park in the City of Redlands General Plan and under existing conditions supports dirt paths that generally overlap the proposed trail alignment (Redlands 2017b). During Trail construction, fugitive dust and soil erosion would be controlled through the use of Best Available Control Technologies until paved (refer to Section III Air Quality). A Water Quality Assessment Report (WQAR) was prepared for the subject project. Per the WQAR the project site and surrounding area are relatively flat and pervious. Potential for erosion and accretion due to the construction of the project was determined to be unlikely and negligible. The findings of the WQAR indicate that that Proposed Project has a low sediment risk, and low receiving water risk (Aguilar 2018).

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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Less Than Significant.** The City of Redlands General Plan identifies a high liquefaction susceptibility within the Santa Ana River bluff area (Redlands 2017b). The proposed improvements at this location include a 10-foot wide asphalt/concrete trail and 2-foot graded shoulder on each side of the asphalt/concrete trail. Development

of the trail would require minimal earthwork and ground disturbance. It is not expected that development of the trail would result in instability of the river bluff.

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?*

**Less Than Significant.** Four different soil series occur on or in the immediate vicinity of the proposed trail alignment: Hanford, Pssaments and Fluvents, Soboba and Tujunga. A soil series is a group of soils with similar profiles (ECORP 2018d). These profiles include major horizons with similar thickness, arrangement, and other important characteristics. All of the soil series recorded are natural soil types, but there is the potential for presence of fill material derived from other sources within the many developed portions of the project area, as well as potential mixing of soil types along the surface horizons to some degree due to associated ground disturbance. There are two subtypes present for both the Soboba and Tujunga Series soils that are present. These subtypes represent slightly different soil textures, but generally do not affect other attributes.

The drainage classes of the soil series recorded within the project area are well drained to excessively drained, meaning that they are not generally very wet. Water is removed from the soil readily to rapidly and internal free water occurrence is rare. All of the recorded soils are alluvium derived from granite or are considered to be a sandy alluvium. Cobbles and coarse stones are common within the soils recorded within the project area. All of the soil types present contain moderate to rapid permeability with variable runoff potential. Soils from the Soboba Series have very slow runoff potential but rapid permeability, meaning that it is rare to see surface waters in these areas.

Expansive soils are clay-rich soils that expand when wet and shrink when they dry out. The Hanford, Pssaments and Fluvents, Soboba and Tujunga soils that occur at the project site are well drained to excessively drained and are derived from granite or sandy alluvium not clay. The soils do not exhibit the characteristic of expansive soils; a less than significant impact is anticipated.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** The Proposed Project does not include septic tanks or alternative wastewater disposal systems. No impact would occur.

**Mitigation Measure:**

None.

**Geology and Soils Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**VII. GREENHOUSE GAS EMISSIONS:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>GREENHOUSE GAS EMISSIONS:</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

**Background**

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (IPCC 2014).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH<sub>4</sub> traps over 25 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub> (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e), which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO<sub>2</sub>e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55

percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere (IPCC 2013).

The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board. On September 28, 2010, the SCAQMD recommended an interim screening level numeric bright-line threshold of 3,000 metric tons per year of CO<sub>2</sub>e and an efficiency-based threshold of 4.8 metric tons of CO<sub>2</sub>e per service population (project patrons plus employees) per year in 2020 and 3.0 metric tons of CO<sub>2</sub>e per service population per year in 2035. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist the SCAQMD’s efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the California Governor’s Office of Planning and Research (OPR), CARB, the Attorney General’s Office, a variety of city and county planning departments in Southern California, various utilities such as sanitation and power companies throughout the region, industry groups, and environmental and professional organizations. The screening-level numeric bright-line thresholds and efficiency-based thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners with regard to determining whether GHG emissions from a Proposed project are significant.

For the purposes of this evaluation, the Proposed Project is to be compared to the SCAQMD interim screening level numeric bright-line threshold of 3,000 metric tons of CO<sub>2</sub>e annually. In the case that the Proposed Project is estimated to exceed this screening threshold, it is then to be compared to the SCAQMD-recommended efficiency-based thresholds of 4.8 metric tons of CO<sub>2</sub>e per service population per year in 2020 and 3.0 metric tons of CO<sub>2</sub>e per service population per year in 2035.

**Impact Analysis**

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

**Less Than Significant.**

The proposed Project is compared to the SCAQMD interim screening level numeric bright-line threshold of 3,000 metric tons of CO<sub>2</sub>e annually. If it is determined that the proposed Project is estimated to exceed this screening threshold, it will then be compared to the SCAQMD-recommended efficiency-based threshold of 4.8 metric tons of CO<sub>2</sub>e per service population (Project employees + patrons + residents) per year in 2020, and 3.0 metric tons of CO<sub>2</sub>e per service population per year in 2035.

**Construction**

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Projected GHG emissions from construction have been quantified and amortized over the life of the Project (amortized over 30 years pursuant to SCAQMD guidance). Table 6 illustrates the specific construction-generated GHG emissions that would result from construction of the Project.

<b>Table 6. Construction-Related Greenhouse Gas Emissions</b>	
<b>Emissions Source</b>	<b>CO<sub>2</sub>e (Metric Tons/ Year)</b>
Year 2020	999
Construction Amortized over 30 Years	33
County of San Bernardino GHG Reduction Plan & SCAQMD Screening Threshold	3,000
<b>Exceed Thresholds?</b>	<b>No</b>

**Table 6. Construction-Related Greenhouse Gas Emissions**

Emissions Source	CO <sub>2</sub> e (Metric Tons/ Year)
------------------	---------------------------------------

Source: ECORP Consulting, Inc. 2018. Refer to **Attachment A** for Model Data Outputs.

Note: Emission projections account for the import of 300 cubic yards of soil during site preparation and grading activities and the hauling away of 508 tons of demolition material.

As shown in Table 6, Project construction would result in the generation of approximately 999 metric tons of CO<sub>2</sub>e over the course of construction. Amortized construction emissions equate to 33 CO<sub>2</sub>e per year. Neither value would exceed the SCAQMD’s interim screening level numeric bright-line threshold of 3,000 metric tons of CO<sub>2</sub>e annually. (Project emissions also do not exceed the County’s San Bernardino Greenhouse Gas Emissions Reduction Plan screening threshold of 3,000 CO<sub>2</sub>e per year). Therefore, the impact is less than significant.

**Operations**

In terms of operational GHG emissions, the proposed Project involves the construction of an approximately 3.3-mile-long section of the SART. The proposed Project will not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, will not generate quantifiable GHG emissions from Project operations. The Project does not propose any buildings and therefore no permanent source or stationary source emissions. Once the Project is completed, there will be no resultant increase in automobile trips to the area because the recreational trail will not require daily visits. While it is anticipated that the Project would require intermittent maintenance to be conducted by County public works staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Therefore, there is no operational impact.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Less Than Significant.**

**City of Redlands Climate Action Plan**

The Redlands Community Sustainability Plan (2011) is a strategic planning document that identifies sources of GHG emissions within the City’s boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic programs, policies, and projects to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The GHG-reduction strategies in the CAP build on inventory results and key opportunities prioritized by City staff and members of the public. The CAP strategies consist of strategies that identify the steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the CAP respond to the needs of development, avoiding unnecessary regulation, streamlining new development, and achieving more efficient use of resources.

Construction of the proposed Project would last approximately six months and construction-related GHG emissions would cease upon completion. The proposed Project would not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, would not generate quantifiable GHG emissions from Project operations. Thus, the Project is consistent with the GHG inventory and forecast in the Redlands CAP since it would not contribute to the generation of GHG emissions beyond that considered in the CAP. Furthermore, the trail would promote the use of alternative transportation, including walking and cycling, which would, in turn, reduce GHG emissions due to the reduced reliance on automobiles, a primary source of GHG emissions. More importantly, the Project directly implements CAP Goal LU3 and Policy LU3.3, which seeks to encourage non-motorized transportation and specifically complete the SART.

The Project is consistent with the City's CAP as it would not conflict with the CAP GHG inventory or forecast and serves to directly implement CAP Goals and Policies. No impact would occur.

***County of San Bernardino Greenhouse Gas Emissions Reduction Plan***

The County of San Bernardino GHG Reduction Plan (2011) establishes a GHG emissions reduction target for the year 2020 that is 15 percent below year 2007 emission levels. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve a more substantial long-term reduction in the post-2020 period. Achieving this level of emissions would ensure that the contribution to GHG emissions from activities covered by the GHG Reduction Plan would not be cumulatively considerable. As described in Chapter 4.0 of the GHG Plan, all new development under the jurisdiction of the County is required to quantify a project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance.

The County GHG Reduction Plan identifies a review standard of 3,000 metric tons of CO<sub>2</sub>e per year to identify and mitigate project emissions. Projects estimated to generate less than 3,000 metric tons of CO<sub>2</sub>e per year are considered less than significant. For projects exceeding 3,000 metric tons of CO<sub>2</sub>e per year, the developer may use the GHG Reduction Plan Screening Tables in the GHG Reduction Plan as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner 100 or more points on the Screening Tables are considered less than significant. (The point system was devised to ensure project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, would allow the County to meet its year 2020 target and support longer-term reductions in GHG emissions beyond year 2020.)

As shown in Table 6, above, the total amount of proposed GHG emissions would total 33 metric tons of CO<sub>2</sub>e per year, which does not exceed the County's 3,000 metric tons of CO<sub>2</sub>e per year screening threshold. Therefore, the Project does not conflict with the San Bernardino Greenhouse Gas Emissions Reduction Plan. No impact would occur.

**Mitigation Measures:**

None

**Greenhouse Gas Emissions Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**VIII. HAZARDS AND HAZARDOUS MATERIALS:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
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?			X	
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?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
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?			X	

**Environmental Setting**

The City of Redlands adopted a Hazard Mitigation Plan (HMP) in 2015 to comply with the Disaster Mitigation Act of 2000 to increase disaster planning funding. The purpose of the HMP is to establish a plan for reducing and/or eliminating risk in the city. The HMP assesses risk associated with flooding, earthquake, wildfire, hazardous material, and drought hazards, and identifies mitigation goals, objectives, and projects to reduce risk. The recommendations of the HMP are incorporated into the City’s General Plan.

**Impact Analysis**

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less than Significant.** The construction phase of the Proposed Project may include the transport of gasoline and diesel fuel to the project site as well as the on-site storage for the sole purpose of fueling construction equipment. All transport, handling, use and disposal of substances such as petroleum products, solvents, and paints related to operation and maintenance would comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Therefore, the potential impacts associated with the routine transport, use, or disposal of hazardous materials will be less than significant and no mitigation measures are recommended.

*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?*

**Less Than Significant.** Construction and maintenance would involve short-term use of petroleum based fuels, lubricants, pesticides and other small amounts of potentially hazardous materials. Use of these materials would occur in the short term during construction and thereafter occasionally during maintenance as discussed in question VIII (a) above. A less than significant impact is anticipated.

*c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Less Than Significant.** Clement Middle School is located approximately one-half mile south of the proposed trail alignment near Orange Street; Judson and Brown Elementary School is located approximately one-fifth south of the proposed trail alignment on Judson Street. Construction activities would involve short-term use of petroleum based fuels, lubricants, and other similar materials. As described above, all transport, handling, use and disposal of substances such as petroleum products and solvents would comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Following construction, operation of the trail would include regular inspections on an annual basis and maintenance activities would be completed as necessary. Similar to the construction phase, handling of potentially hazardous materials as needed for trail maintenance would comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Less than significant impacts are anticipated and no mitigation measures are recommended.

*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?*

**No Impact.** A review of the California State Water Resources Control Board (SWRQBC) GeoTracker website indicates that no listed hazardous material sites are located on or immediately adjacent to the proposed trail alignment (SWRCB 2018). GeoTracker is a data management system for hazardous material sites and contains sites that require cleanup (Department of Toxic Substance Control, Leaking Underground Storage Tanks, Department of Defense, and Site Cleanup Programs) as well as permitted facilities that could impact groundwater (Irrigated Lands, Oil and Gas Production, operating USTs, and Land Disposal sites) and meets Government Code Section 65962.5 (Cortese List) requirements. Although no sites were identified with an address at or adjacent to the project site, one underground storage tank (UST) release is reported in GeoTracker at the Redlands Municipal north of the trail alignment. The reported UST release impacted site soils with petroleum and chlorinated hydrocarbons. The San Bernardino County Fire Department supervised removal of the USTs, and remediation of impacted soils. The Airport received site closure in 1998 (IO Environmental 2018).

No known hazardous material sites are known to occur within the limits of disturbance for construction of the proposed trail. Therefore; the project would not create a significant hazard to the public or to the environment. No impact would occur.

Construction of the trail is anticipated to result in minimal ground disturbance. At the river bluffs a maximum excavation depth of 5 feet is anticipated for construction of the Class I trail including appurtenant improvements

such as construction of retaining walls. On the existing local streets, disturbance would be limited to road re-striping where the local streets are already built to the ultimate right-of-way; where the ultimate right-of-way is not developed, the street would be widened and curb and gutter constructed. Excavation depths related to road widening are not expected to exceed ---- feet. As such

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?*

**Less than Significant Impact.** The proposed pedestrian/bicycle trail alignment is located in the vicinity of the Redlands Municipal Airport. Redlands Municipal Airport does not have an operational airport traffic control tower. Therefore, there are no actual counts of operations at the Airport; the Redlands Airport Master Plan estimates 82,000 annual operations as the base year total of annual operations (Redlands 2008). The City’s General Plan mitigates safety impacts associated with the airport through land use policies that specify the types and land uses near the airport and thus limit the number of people exposed to the risk of an accident and protect airspace from land uses that can create hazards to flight (Redlands 2017b). The proposed pedestrian/bicycle trail alignment traverses airport compatibility zones B1, B2, and C (Redlands 2017b). The primary compatibility criteria for each zone is defined as follows:

Zone	Location	Risk Level	Residential (du/ac) <sup>1</sup>	Other Uses (people/ac) <sup>2</sup>	Required Open Land <sup>3</sup>
B1	Approach/departure zone and adjacent to runway	Substantial Risk – aircraft commonly below 800 feet AGL <sup>4</sup>	0.1 (10-acre parcel)	60	30%
B2	Approach/departure zone	Moderate risk – aircraft commonly below 400 feet AGL or within 1,000 feet of runway	0.5 (2-acre parcel)	90	30%
C	Common traffic pattern	Limited risk – aircraft at or below 1,000 feet AGL	6	150	15%

Source: Redlands 2017b

Notes

<sup>1</sup> Residential development should not contain more than the indicated number of dwelling units per gross acre. Clustering of units is encouraged as a means of meeting the Required Open Land requirements.

<sup>2</sup> The Land use should not attract more than the indicated number of people per acre at any time, measured as an average over the entire site. In Compatibility Zones B1 and B2, no single acre (rectangular, not irregular in shape) should be occupied by more than double the average number of people per acre allowed for the specified compatibility zone. In Zone C, no single acre should attract more than triple the average allowable number of people per acre. These figures should include all individuals who may be on the property (e.g. employees, customers, visitors, etc.). These densities are intended as general planning guidelines to aid in determining the acceptability of proposed land uses.

<sup>3</sup> Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan.

<sup>4</sup> AGL – above ground level.

The proposed pedestrian/bicycle trail will introduce users into the vicinity in the airport into areas subject to the airport’s compatibility zone criteria. However, use of the trail is transitory; therefore, users would move in and out of the airport compatibility zones without staying at any given location for a prolonged period of time. Furthermore, the Proposed Project would not conflict with or change existing open space land use designations within the airports established compatibility zone and the project does not include facilities or public infrastructure improvements that would encourage large groups of users to congregate. The City of Redlands Sports Park parking lot within the airports B2 compatibility zone may be utilized by trail users as a staging point; however, as

previously mentioned the users would move out of the zone as they travel through the trail. A less than significant impact is anticipated and no mitigation measures are proposed.

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?*

**No Impact.** There are no private airstrips in the vicinity of the Proposed Project. No impact is anticipated.

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** The Proposed Project is a pedestrian/bicycle trail. The trail is proposed on existing opens space and on existing local streets. The developed trail would not conflict with access and/or circulation of emergency vehicles in response to an emergency and/or evacuation. No impact is anticipated.

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?*

**Less Than Significant.** As identified in the City of Redlands General Plan the highest fire risk areas are in the San Timoteo and Live Oak Canyons to the south of the proposed trail alignment (Redlands 2017b). Crafton Hills to the east is another higher risk area. The proposed trail alignment is located entirely within a moderate fire hazard area as identified in the General Plan. Per the current HMP and City policies, Redlands implements an on-going Weed Abatement Program to manage weeds and brush and provide defensible space in areas prone to fire due to vegetation. The majority of the trail is proposed within the City's urban landscape on existing local streets. The westernmost limits of the trail are proposed on existing open space on the Santa Ana River bluffs; this area is located in close proximity to residential development and appears to be regularly maintained to suppress grasses. The General Plan identifies the river bluffs as a future park; therefore, more regular maintenance of the site can be expected in the future. The trail alignment is predominantly located on urban streets or in areas that are regularly maintained to mitigate wildfire risks; it is not anticipated that development of the trail would result in significant increase in risk related to wildland fires.

**Mitigation Measure:**

None.

**Hazards and Hazardous Materials Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**IX. HYDROLOGY AND WATER QUALITY:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>HYDROLOGY AND WATER QUALITY:</b> Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
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)?			X	
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 onsite or offsite?			X	
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 onsite or offsite?				X
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?			X	
f) Otherwise substantially degrade water quality?			X	
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?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
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?			X	
j) Inundation by seiche, tsunami, or mudflow?				X

**Environmental Setting**

The Proposed Project is located within the Santa Ana River Watershed and in some instances on the bluffs adjacent to the south side of the river. The watershed is approximately 3,000 square miles and all drainage features within the project area drain to the Santa Ana River. Topography is generally flat to gently rolling. Just to the north of the project area, the bluffs drop down into the floodplain proper. The elevations range from approximately 1,322 feet above mean sea level (msl) in the west to 1,561 feet above msl in the east (Aguilar 2018).

## **Impact Analysis**

### *a) Violate any water quality standards or waste discharge requirements?*

**Less Than Significant.** Construction of the trail would be subject to the National Pollution Discharge Elimination System (NPDES) permit requirements. The State of California is authorized to administer various aspects of the NPDES. Construction activities covered under the State's General Construction permit include removal of vegetation, grading, excavating, or any other activity that causes the disturbance of one acre or more. The General Construction permit requires recipients to reduce or eliminate non-stormwater discharges into stormwater systems, and to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to: 1) identify pollutant sources that may affect the quality of discharges or stormwater associated with construction activities; and 2) identify, construct and implement stormwater pollution control measures to reduce pollutants into stormwater discharges from the construction site during and after construction.

The RWQCB has issued an area-wide NPDES Storm Water Permit for the County of San Bernardino, the San Bernardino County Flood Control District, and the incorporated cities of San Bernardino County. Construction of the proposed SART Phase IV Trail would not violate waste discharge requirements (WDRs) because the project does not include any commercial or industrial components that would require issuance of WDRs. Water quality in the Santa Ana River would not be compromised because the Trail is intended to be used only for non-motorized transportation. The Trail would be maintained by the County Regional Parks Department or City of Redlands to ensure that incidental trash is routinely collected.

A Water Quality Assessment Report (WQAR) was prepared for the subject project. Potential pollutants associated with development and operation of the proposed trail as identified in the WQAR include oil, grease, and chemical pollutants that are generally considered to be common on project sites that accommodate pedestrian and non-vehicular traffic. The proposed trail would be utilized for non-motorized transportation, due to its nature, the determination in the WQAR is that the project would have a minimal adverse effect on stormwater quality associated with both construction and operation of the trail (Aguilar 2018).

### *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)?*

**Less Than Significant.** A Well Search Report was completed as part of the WQAR. The Well Search Report shows that groundwater levels in the vicinity of the project area range from approximately 170 feet below ground surface to 230 feet below ground surface. However, groundwater near the Santa Ana River is anticipated to be shallower due to groundwater recharge from the river. Approximately two-thirds of a mile of the approximately 3-mile trail are proposed on undeveloped lands on the bluffs of the Santa Ana River. The remaining length is proposed on the existing concrete portion of the City of Redlands Bluffs Trail and on existing local roads. As such, it was determined in the WQAR that the project would result in a minimal net addition of impervious area to the overall watershed and that implementation of the project would not affect the existing conditions of the groundwater table nor have any adverse effect on aquifer recharge.

### *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 onsite or offsite?*

**Less Than Significant.** The Proposed Trail would be located on the bluffs of the Santa Ana River and on local streets within the City of Redlands; all drainage features within the project area drain to the Santa Ana River.

The proposed project includes approximately 4,500 feet of Class 1 trail on the bluffs of the Santa Ana River; the Class 1 trail would consist of a 10-foot wide trail with 2-feet of decomposed granite shoulder on each side. The remaining length is proposed on existing local roads within the City of Redlands. The proposed trail on the bluffs would not preclude or significantly alter the existing drainage pattern of the area; post-construction BMPS per a project specific Water Quality Management Plan (WQMP) would be implemented during operation of the project to avoid and minimize potential erosion into the river. Storm drains and other drainage features discharging into the Santa Ana River would not be impacted by implementation of the project. A less than significant impact is anticipated.

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 onsite or offsite?*

**No Impact.** The proposed trail alignment would be sited entirely outside of the Santa Ana River flood plain. Development of the project would not impact the existing drainage pattern of the area and would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite.

e) *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

**Less Than Significant.** The Proposed Project is the construction and operation of a pedestrian/bicycle trail on existing open space and surface streets. Per the findings of a project specific WQAR, development of the project would result in a minimal increase of impervious area in the overall Santa Ana River watershed. As a result, the project would not create or contribute additional runoff water which would exceed the capacity of the existing water drainage system.

f) *Otherwise substantially degrade water quality?*

**Less Than Significant.** As discussed in the answer to question IX (a) above, construction activities associated with the proposed project would be subject to the requirements of the NPDES permit. Best management practices (BMPs) as required in the project specific SWPPP would be implemented during construction. Post-construction the BMPs in a project specific WQMP would also be implemented to ensure that potential water quality impacts to the Santa Ana River are avoided or minimized.

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?*

**No Impact.** The proposed project would be located outside of the 100-year flood hazard area and does not include housing. No impact would occur.

h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

**Less Than Significant.** The proposed project would be located outside of the 100-year flood hazard area and does not include structures that would impede or redirect flood flows. No impact would occur.

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?*

**Less than Significant.** The portion of the trail on the Santa Ana River bluffs is partially located within the Seven Oaks dam inundation area is identified in the City of Redlands General Plan (Redlands 2017b). The operation of the trail does not include facilities or public infrastructure improvements that would encourage large groups of

users to congregate. In the unlikely event of flooding resulting from dam failure less than significant impacts are anticipated.

j) *Inundation by seiche, tsunami, or mudflow?*

**Less Than Significant Impact.** The Upper Santa Ana River is an ephemeral river that is controlled upstream by the Seven Oaks Dam so that flood events are controlled. The Proposed Project would not be constructed within the 100-year flood plain and the proposed project is located approximately 70 miles inland from the ocean. Therefore, the Proposed Project would not be affected by severe storms or earthquake-related water hazards such as a seiche, tsunami, or mudflows.

**Mitigation Measures:**

None.

**Hydrology and Water Quality Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**X. LAND USE AND PLANNING**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?				X
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?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

**Environmental Setting**

The proposed section of the SART is SART Phase IV, Reaches B & C; the trail would begin on the west side of Orange Street in the City of Redlands and terminate at Opal Avenue in the unincorporated community of Mentone near the Redlands city limits. The westerly approximately one-third of the trail is proposed on the southern banks of the Santa Ana River, the remaining alignment is proposed on local streets within the City of Redlands. The proposed trail alignment is located entirely within the Planning Area of the City of Redlands General Plan. As identified in the General Plan existing land uses traversed by the trail and/or immediately adjacent to the alignment include: Vacant; Utilities; Single Family Residential; Agriculture; and, Parks (Redlands 2017b). As identified in the City of Redlands Zoning Map, zoning designations traversed by the trail and/or immediately adjacent to the alignment include: Open Space, Single Family Residential; Agriculture; and, Flood Plain (Redlands 2018).

**Impact Analysis**

a) *Physically divide an established community?*

**No Impact.** The purpose of the project is to develop a non-motorized transportation system that provides safe and contiguous use and enjoyment of open space and provides environmental education. The trail alignment is consistent with bicycle trail alignments identified within the City of Redlands Bicycle Master Plan which outlines the City's vision for improving the bicycling environment within the City by providing expansion of the bikeway network, connecting gaps, and promoting education and awareness program (Redlands 2015). Development of the proposed trail would provide a bikeway connection between the City's Israel Beal Park located on the west side of Orange Street to the Redlands' Sports Park located on the east side of Dearborn Street. The purpose and the concept of the trail are consistent with the vision of the Redlands Bicycle Master Plan and with the multi-path policies of the General Plan as related to Pedestrian, Bicycle, and Vehicular Movement; no impact is anticipated (Redlands 2017b).

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?*

**No Impact.** The proposed pedestrian/bicycle trail alignment is consistent with the City of Redlands Bicycle Master Plan and is consistent with the multi-path policies of the General Plan as related to Pedestrian, Bicycle, and Vehicular Movement as well as Community Cohesion. No impact is anticipated.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

**No Impact.** The portion of the trail alignment sited on the bluffs of the Santa Ana River is located within the planning limits of the Upper Santa Ana River Wash Plan Habitat Conservation Plan (Wash Plan HCP). On March 3, 2015 a Notice of Intent to prepare an EIS/EIR for the HCP was published in the Federal Register. In January 2018 a public review draft of the Wash Plan HCP was released for comment. As of the time of writing a Record of Decision is yet to be published in the Federal Register and a timeline for implementation of the Wash Plan HCP is not definitively known. Nonetheless, the biological technical documents prepared for the subject project analyze consistency with the Wash Plan HCP and incorporate applicable avoidance and minimization measures from the Wash Plan HCP.

**Mitigation Measures:**

None.

**Land Use and Planning Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XI. MINERAL RESOURCES**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>MINERAL RESOURCES:</b> 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?				X
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?				X

**Environmental Setting**

The Santa Ana River adjoining Redlands contains high quality construction aggregates that have been mined since the 1920s (Redlands 2017b). Currently, mining in the Santa Ana River is currently occurring on both sides of the boundary between the cities of Redlands and Highland. New areas are currently being proposed for mining along the City’s northern planning boundary. Mining activities within the Santa Ana River are covered activities in the proposed Upper Santa Ana Wash Land Management and Habitat Conservation Plan (Wash Plan HCP); a Record of Decision for the Wash Plan HCP has not been issued and a timeline for implementation of the Wash Plan HCP is not definitively known.

**Impact Analysis**

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?*

**No Impact.** The proposed trail alignment overlies a sector with a MRZ-2 designation from the State Mining and Geology Board (Redlands 2017b). A MRZ-2 designation indicates that significant PCC-Grade aggregate resources are present in the area. The proposed trail alignment is located in urbanized areas of the City and overlaps an existing multi-use trail on the Santa Ana River Bluffs and local City Streets. Development of the trail would not conflict with the existing established mining areas within the Santa Ana River or with proposed mining land uses as identified in the Wash Plan HCP. Therefore; implementation of the project would not result in the loss of availability of known aggregate resources that would be of value to the region or the State. No impact is identified.

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?*

**No Impact.** As discussed in section XI(a) above the Proposed Project would not conflict with identified mineral resource recovery sites as identified in the City of Redlands long term planning documents. No impact would occur.

**Mitigation Measures:**

None.

**Mineral Resources Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XII. NOISE**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>NOISE:</b> 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?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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?			X	
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?				X

**Environmental Setting**

**Noise Fundamentals**

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in  $L_{eq}$ ) and the average daily noise levels (in  $L_{dn}/CNEL$ ).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 A-weighted decibels (dBA) per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (EPA 1971).

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the “line of sight” between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

## Vibration

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

## Impact Analysis

- 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?*

### Less Than Significant.

### Construction Impacts

Construction noise associated with the proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for on-site construction activities as well as construction vehicle traffic on nearby roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., demolition, grading, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could affect residences in the vicinity of the construction site. The nearest sensitive receptors to the Project site are the residences located approximately 25 feet from the proposed trail. It is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the sensitive receptors.

Noise levels associated with individual construction equipment are summarized in Table 8.

Type of Equipment	Maximum Noise ( $L_{max}$ ) at 50 Feet (dBA)	Maximum 8-Hour Noise ( $L_{eq}$ ) at 50 Feet (dBA)
Blasting	94.0	74.0
Crane	80.6	72.6
Dozer	81.7	77.7
Excavator	80.7	76.7
Generator	80.6	77.6
Grader	85.0	81.0
Other Equipment (greater than 5 horsepower)	85.0	82.0
Paver	77.2	74.2
Roller	80.0	73.0
Tractor	84.0	80.0
Dump Truck	76.5	72.5
Concrete Pump Truck	81.4	74.4
Welder	74.0	70.0

Source: FHWA 2006

As depicted in Table 8, noise levels generated by individual pieces of construction equipment typically range from approximately 70.0 dBA  $L_{eq}$  to 82.0 dBA  $L_{eq}$  at 50 feet. During construction, exterior noise levels could affect the nearest existing sensitive receptor in the vicinity, located approximately 25 feet from the Project site. Based on the construction equipment noise levels listed in Table 8 and assuming an average noise attenuation rate of 6 dB per doubling of distance from the source, predicted maximum 8-hour noise levels would range from approximately 76 dBA  $L_{eq}$  to 88 dBA  $L_{eq}$  at vicinity residences.

Per Section 8.06.120 of the City of Redlands Municipal Code, noise sources associated with new construction, remodeling, rehabilitation or grading of any property is exempt from noise standards, provided such activities take place between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, including Saturdays, with no activities taking place at any time on Sundays or federal holidays. All motorized equipment used in such activity shall be equipped with functioning mufflers. Therefore, with adherence to the City’s Municipal Code, construction-noise would be less than significant.

**Operational Impacts**

The proposed Project involves the construction of an approximately 3.3-mile-long section of the SART. The proposed Project will not include the provision of new permanent stationary or mobile sources. While it is anticipated that the Project would require intermittent maintenance to be conducted by County public works staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. People using the trail for recreational activities (e.g., walking, running, cycling) would be the main source of noise for the Project. The trail, however, does not allow motorized vehicles. Furthermore, people will be continuously moving along the trail and will not be concentrated at the point closest to the sensitive receptors. Noise generated by people using the trail will likely be lower than ambient noise levels, so nearby sensitive receptors will not notice a change in noise levels. Impacts in this regard would be less than significant.

*b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**Less Than Significant.** Project construction would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. Ground vibration caused by temporary construction or demolition not regulated by the City. For comparative purposes, this impact discussion utilizes Caltrans’s (2002) recommended standard of 0.2 inches per second (in/sec) peak particle velocity (PPV) with respect to the prevention of structural damage for normal buildings. Table 9 displays vibration levels for typical construction equipment.

<b>Table 9. Representative Vibration Source Levels for Construction Equipment</b>	
<b>Equipment Type</b>	<b>Peak Particle Velocity at 25 Feet (inches per second)</b>
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: Caltrans 2013

The nearest existing structures to any construction activity area are approximately 25 feet away (residences along the proposed trail). Based on the vibration levels presented in **Table 4.12-2**, ground vibration generated by heavy-duty equipment at the nearest structure would not be anticipated to exceed approximately 0.089 in/sec PPV. Therefore, the use of virtually any type of construction equipment would most likely not result in a groundborne vibration velocity level above 0.2 in/sec and predicted vibration levels at the nearest structure would not exceed recommended criteria. Additionally, this would be a temporary impact and would cease completely when construction ends.

Once operational, the Project would not be a source of groundborne vibration.

For these reasons, groundborne vibration impacts would be considered less than significant. No mitigation is necessary.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less Than Significant.** As previously mentioned, the proposed Project involves the construction of an approximately 3.3-mile-long section of the SART. The proposed Project will not include the provision of new permanent stationary or mobile sources. While it is anticipated that the Project would require intermittent maintenance to be conducted by County public works staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. People using the trail for recreational activities (e.g., walking, running, cycling) would be the main source of noise for the Project. The trail, however, does not allow motorized vehicles. Furthermore, people will be continuously moving along the trail and will not be concentrated at the point closest to the sensitive receptors. Noise generated by people using the trail will be lower than ambient noise levels, so nearby sensitive receptors will not notice a change in noise levels. Impacts in this regard would be less than significant.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less Than Significant.** Noise associated with the construction of the proposed Project will result in short-term and intermittent noise. As discussed in Impact a) *Construction Impacts*, the Proposed Project will adhere to Section 8.06.120 of the City's Municipal Code, limiting construction activities to the hours between the hours of 7:00 a.m. and 6:00 p.m. on weekdays, including Saturdays, with no activities taking place at any time on Sundays or federal holidays. Therefore, the proposed Project would result in a less than significant impact related to a substantial temporary or periodic increase in ambient noise levels.

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?*

**Less Than Significant.** The nearest airport to the Project site is Redlands Municipal Airport, located north of the proposed trail alignment. The Redlands Municipal Airport is a source of noise, primarily from takeoffs and landings. Average inbound and outbound flights from this airport are approximately 120 per day. Aircrafts at this airport include single and multi-engine airplanes, jet airplanes, helicopters, gliders, and ultralight aircrafts. Noise from the aircraft generates a relatively minor contribution to the overall noise environment. Aircraft-related noise would not exceed 65 dBA CNEL outside the boundary of the Redlands Municipal Airport (Redlands (2017b).

The General Plan includes a land use compatibility table that provides the City with a tool to gauge the compatibility of new land uses relative to existing noise levels. This table identifies normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses, including open space land uses such as those proposed by the Project. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment. An acceptable existing noise level for locating park uses is noise levels up to 72.5 dBA CNEL (Redlands 2017a). Since aircraft-related noise would not exceed 65 dBA CNEL outside the boundary of the Redlands Municipal Airport, the existing noise level is below 72.5 dBA. Therefore, the project is not anticipated to expose people using the trail to excessive noise level from airport operations. The impact would be less than significant.

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?*

**No Impact.** There are no private airstrips located within the vicinity of the Project site. No impact would occur and no mitigation is necessary.

**Mitigation Measures:**

None

**Noise Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XIII. POPULATION AND HOUSING:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>POPULATION AND HOUSING:</b> 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)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

**Environmental Setting**

The proposed SART Phase IV Reaches B and C is located entirely within the City of Redlands. The City of Redlands is located at the base of the San Bernardino Mountains in San Bernardino County, 60 miles northeast of Los Angeles and 45 miles west of Palm Springs. Redlands is a mid-sized city with a population of 68,049 in 2016 (Redlands 2017a). As of 2016, 30,200 housing units were inventoried within the City of Redlands planning area (Redlands 2017c).

**Impact Analysis**

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)?*

**No Impact.** The Proposed Project is the construction and operation of a non-motorized pedestrian/bicycle trail. The project is consistent with the City of Redlands General Plan and is identified within the *City of Redlands Bicycle Master Plan*. Implementation of the Proposed Project would not result in new residential uses or significant employment opportunities that would induce population growth. No impact is anticipated.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The Proposed Project is the construction and operation of a non-motorized pedestrian/bicycle trail. The proposed alignment is consistent with bicycle trail alignments identified within the *City of Redlands Bicycle Master Plan*. Implementation of the Proposed Project would not displace any existing housing units necessitating the construction of replacement housing. No impact is anticipated.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The Proposed Project is the construction and operation of a non-motorized pedestrian/bicycle trail. The portion of the trail proposed on the river bluffs occurs in an area with an “Open Space” land use designation (Redlands 2017b); the remaining alignment is proposed within road right-of-way. Implementation of the proposed project would not displace people or necessitate construction of replacement housing. No impact is anticipated.

**Mitigation Measures:**

None.

**Population and Housing Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XIV. PUBLIC SERVICES:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>PUBLIC SERVICES:</b> 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?			X	
Police protection?			X	
Schools?				X
Recreation/Parks?				X
Other public facilities?				X

**Environmental Setting**

Public safety services within the City or Redlands are provided by the Redlands Police Department; fire services are provided by the Redlands Fire Department.

The Redlands Unified School District serves Redlands and the surrounding communities of Mentone and Crafton as well as Loma Linda and the eastern portion of Highland.

**Impact Analysis**

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, Recreation/Parks, Other public facilities?*

**Less Than Significant.**

Public safety services within the City of Redlands are provided by the Redlands Police Department and Redlands Fire Department. According to the City of Redlands the service ratio for the City is 1.1 officers per 1,000 residents; the average response time in 2015 was reported to be 6.5 minutes (Redlands 2017b). While there is no industry standard for response time to emergency calls, the City identified a desirable goal of 4.5 minutes (Redlands 2017b). The proposed trail would be operated for recreational purposes and would be open to the public during daylight hours for hiking and cycling. The County does not anticipate the need for new or expanded police or fire protection. While occasional demand for emergency response may result during operation of the trail, such demand is not expected to substantial existing service ratios or response times.

Implementation of the Proposed Project would not result in a demand for additional housing or increase the population of the area. Therefore, the Proposed Project is not expected to have an effect on schools or parks or in substantial adverse physical impacts that would result in new or physically altered public facilities.

**Mitigation Measures:**

None

**Public Services Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XV. RECREATION:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>RECREATION:</b>				
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?			X	
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?			X	

**Environmental Setting**

The City of Redlands General Plan provides for a system of trails serving recreational and emergency access needs to accommodate walking, jogging, bicycling, equestrian use, and bicycle use. Existing and proposed future trails are identified in the 2015 City of Redlands Bicycle Master Plan which is used as the primary source for planning and implementing bikeway improvements in Redlands. The proposed alignment for the SART Phase IV, Reaches B and C is consistent with future trails as identified in the City of Redlands Bicycle Master Plan.

**Impact Analysis**

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?*

**Less Than Significant.** The Proposed Project would result in the addition of a recreational facility consistent with the circulation policies of the City’s General Plan and with the Bicycle Master Plan; the trail would link two City parks (Israel Beal Park and the Sports Park). Long term operation of the trail includes regular inspections and maintenance/repairs as needed. Implementation of the project is not anticipated to result in substantial physical deterioration of the facility itself or of the City parks and is anticipated to result in a beneficial impact to regional recreation opportunities.

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?*

**Less Than Significant.** The Proposed Project is the development of a recreational pedestrian and bicycle trail and is anticipated to result in a beneficial impact to regional recreation opportunities. As identified within in this Initial Study checklist all environmental effects may be mitigated to a level less than significant with the incorporation of mitigation.

**Mitigation Measures:**

None.

**Recreation Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XVI. TRANSPORTATION / TRAFFIC:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>TRANSPORTATION / TRAFFIC:</b> 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?				X
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?			X	
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?				X
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?			X	X
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?				X

**Environmental Setting**

As stated in the City or Redlands General plan, The City is proactively improving the active transportation network by providing more bicycle lanes, bicycle lockers, replacing and installing new sidewalk facilities, and improving the existing transit network. The General Plan seeks to further such efforts by incorporating policies that promote the development of a comprehensive network of on- and off- roadway bike routes. The City’s Bicycle Master Plan is the primary resource for planning and implementing the City’s bikeway improvements.

**Impact Analysis**

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?*

**No Impact.** The proposed SART IV, Reaches C and B alignment is consistent with the multi-path policies in the City of Redlands General Plan as related to Pedestrian, Bicycle, and Vehicular Movement and Active Lifestyle

(Redlands 2017b). Additionally, the proposed trail alignment is consistent with the bicycle trail alignments identified within the City of Redlands Bicycle Master Plan.

*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?*

**Less Than Significant.** During construction of the trail there may be some temporary impacts to traffic in various location along the trail route for construction vehicles carrying asphalt, cement, decomposed granite, etc. These impacts are anticipated to be short term in nature resulting in a less than significant impact.

Operation of the trail for recreational hiking and biking is not anticipated to significant increase the existing traffic load and therefore would not conflict with existing measures of effectiveness for the performance of the circulation system.

*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?*

**No Impact.** The Proposed Project is the construction and operation of a pedestrian/bicycle trail. The project does not include any standing structures that would result in changes to the existing air traffic patterns or in substantial safety risks associated with existing air traffic from the Redlands Municipal Airports. No impacts are anticipated.

*d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

**Less Than Significant.** The final design of the SART facilities would be completed in accordance with the guidance and requirements of the Caltrans Highway Design Manual, Chapter 1000, "Bikeway Planning and Design." Additionally, the project to review and approval by the City of Redlands to ensure that the final design conforms to applicable policies of Chapter 5 of the General Plan including but not limited to the multi-path policies as related to Pedestrian, Bicycle, and Vehicular Movement (Redlands 2017b).

*e) Result in inadequate emergency access?*

**No Impact.** The proposed trail alignment is located on existing pedestrian trails and within existing road right-of-way. Operation of the trail would not conflict with access for emergency vehicles and/or emergency services.

*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?*

**No Impact.** The proposed SART IV, Reaches B and C alignment is consistent with the multi-path policies in the City of Redlands General Plan as related to Pedestrian, Bicycle, and Vehicular Movement (Redlands 2017b). Additionally, the proposed trail alignment is consistent with the bicycle trail alignments identified within the City of Redlands Bicycle Master Plan.

**Mitigation Measures:**

None.

**Transportation/Traffic Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XVII. TRIBAL CULTURAL RESOURCES**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<p><b>TRIBAL CULTURAL RESOURCES:</b>                      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:</p>				
<p>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</p>		X		
<p>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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>		X		

**Environmental Setting**

Assembly Bill (AB) 52 signed on September 25, 2014 and effective on July 1, 2015 established a formal consultation process for California Native American tribes as part of CEQA. AB 52 requires that CEQA Lead Agencies, such as the County of San Bernardino, provide California Native American tribes with notice of projects under CEQA consideration by Lead Agency; the Lead Agency is required to provide notice only to those Tribes that previously requested to be notified by the Lead Agency.

In April 2018, the County of San Bernardino Department of Public Works Environmental Management Division mailed project notices to: Gabrieleño Band of Mission Indians – Kizh Nation; Morongo Band of Mission Indians; San Manuel Band of Mission Indians; and, Soboba Band of Luiseno Indians. The four Tribes expressed interest in the project and requested further consultation. Measures as recommended by the consulting Tribes have been incorporated into the Proposed Project in this section.

**Impact Analysis**

- 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)?

**Less Than Significant with Mitigation Incorporated.** The project specific cultural study identified pre-contact resources within the radius of its records reach (ECORP 2018e). As reported in the cultural study, in pre-contact times the project area was likely used for resource procurement and pre-contact sub-surface archeological deposits may be present. Based on the results of the cultural study and as requested by the consulting tribes, measures CUL-1, CUL-2 in Section V above and TRC-1 and TRC-2 shall be implemented to ensure less than significant impacts to cultural resources of value to California Native American Tribes.

- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**Less than Significant Impact with Mitigation Incorporated.** Refer to discussion in Section XVII (a) above.

**Mitigation Measures:**

- TCR-1 In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, consulting tribes (Gabrieleño Band of Mission Indians – Kizh Nation, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians and Morongo Band of Mission Indians) will be contacted if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. The archaeologist shall complete and isolate/site record for the find and submit this document to the applicant and the Lead Agency for dissemination of the consulting Tribes.
- TCR-2 If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to consulting tribes (Gabrieleño Band of Mission Indians – Kizh Nation, San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians and Morongo Band of Mission Indians) for review and comment. The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, and Gabrieleño Band of Mission Indians – Kizh Nation and Morongo Band of Mission Indians on the disposition and treatment of any cultural materials encountered during the project.

**Tribal Cultural Resources Conclusions:**

With implementation of the above listed measures, less than significant impacts are anticipated, and consulting tribes agreed to close consultation under AB52.

**XVIII. UTILITIES AND SERVICE SYSTEMS:**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>UTILITIES AND SERVICE SYSTEMS:</b>				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
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?				X
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
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?				X
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

**Environmental Setting**

The City of Redlands Municipal Utilities and Engineering Department is responsible for providing infrastructure and related public services, including water production and distribution, wastewater collection and treatment, engineering review and inspections of development proposals, public infrastructure improvements, development and construction of new public facilities, and optimization of the cost of ownership of the City's physical assets (Redlands 2017b). The City operates two surface water treatment plants; water distribution infrastructure includes 15 wells, 37 booster pumps, 18 reservoirs, and 400 miles of transmission and distribution lines. The City also operates a wastewater treatment plant; the waste water system includes one lift station and approximately 230 miles of pipelines. The City's stormwater drainage system serves an area of approximately 37 square miles; the system is composed of a combination reinforced concrete pipe and corrugated metal pipe, box culverts, covered rubble rock and concrete channels, and concrete and natural drains. Stormwater runoff flows by gravity into the San Bernardino County Flood Control District's Mission Channel, Morrey Arroyo Creek, and San Timoteo Canyon, and discharge into in the Santa Ana River. Waste collection services are provided by the City's Quality of Life Department within the City limits; waste is disposed of at either the City's California Street Landfill or at the San Timoteo Sanitary Landfill operated by County of San Bernardino.

**Impact Analysis**

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.*

**No Impact.** The Proposed Project does not include development of public facilities such as staging areas or bathrooms requiring wastewater treatment. No impact is anticipated.

*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?*

**No Impact.** The Proposed Project does not include development of public facilities such as staging areas or bathrooms. The project would not result in the expansion of existing facilities that would require construction of new water or wastewater treatment facilities. No impact is anticipated.

*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?*

**No Impact.** The Proposed Project is development of a bicycle/pedestrian trail on existing open space and recreation facilities and within road right-of-way on existing City streets. Development of the project would not conflict with existing storm water drainage or require the expansion of existing drainage facilities to accommodate the project.

*d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**No Impact.** The Proposed Project is development of a bicycle/pedestrian trail. Operation of the trail would not require irrigation or place a demand on potable water resources which would result on a need for new or expanded entitlements. No impact is anticipated.

*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?*

**No Impact.** The Proposed Project does not include development of public facilities such as staging areas or bathrooms. The project would not place a demand on waste water treatment capacity. No impact is anticipated.

*f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

**No Impact.** Construction of the project would require minimal grubbing and earthwork. It is expected that solid waste generated by construction activities would be disposed of at either the California Street Landfill or at the San Timoteo Sanitary Landfill. The California Street Landfill encompasses 115 acres and has a design capacity of 11.4 million cubic yards; its maximum permitted capacity is 10 million cubic yards. As of 2017 the landfill had a remaining capacity of 6,800,000 cubic yards (Redlands 2017b). The San Timoteo Sanitary Landfill encompasses 366 acres (114 acres permitted for disposal) and has a permitted capacity of 20,400,000 cubic yards. As of 2017 the reported remaining capacity was 11,402,000 cubic yards (CalRecycle 2018). Operation of the trail would be limited to transitory use by pedestrians/bicyclists for recreation. Operation of the trail is not refuse generating; therefore, no new demand on the waste disposal capacity is expected. No impact would occur.

*g) Comply with federal, state, and local statutes and regulations related to solid waste?*

**Less than Significant.** All solid waste generated during project construction would be disposed of by the contractor at an approved site. The contractor is required to comply with federal, State, and local statutes and regulations regarding solid waste; no impact is identified and no mitigation measures are recommended.

**Mitigation Measures:**

None.

**Utilities and Service Systems Impact Conclusions:**

No significant adverse impacts are identified or anticipated and no mitigation measures are required.

**XIX. MANDATORY FINDINGS OF SIGNIFICANCE**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
<b>MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
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, 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?		X		
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

**SUBSTANTIATION:**

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, 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?*

A project specific Jurisdictional Delineation report and a Natural Environment Study (NES) report were prepared by ECORP Consulting Inc. (ECORP 2018c and 2018d). The findings of the reports are summarized in this Initial Study; all direct, indirect, and cumulative impacts as identified in the technical studies were reduced to a less than significant impact with implementation of Mitigation Measures BIO-1 to BIO-27. Impacts to potentially occurring rare or endangered plant or animal species and their habitats have been reduced to a less than significant impact with implementation of mitigation measures. Development of the proposed project would not cause fish or wildlife populations to drop below self-sustaining levels or restrict the movement/distribution of a rare or endangered species.

A cultural study of the 3.3-mile-long alignment was completed by ECORP Consulting, Inc. (ECORP 2018e). The cultural study included a cultural resources records search, Sacred Lands File search, field survey, and California Register of Historical Resources (CRHR) evaluation. A Paleontological Identification Report of the Project area was completed by Cogstone (Cogstone 2018). The findings of the two reports are summarized in this Initial Study, all direct, indirect, and cumulative impacts as identified in the technical studies were reduced to a less than significant impact with implementation of Mitigation Measures CUL-1, CUL-2, TCR1 and TCR-2. Adherence to the mitigation measures would ensure that important examples of the major periods of California history or prehistory are not eliminated as a result of the Proposed Project.

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)?*

The proposed Project does not have impacts that are individually limited, but cumulatively considerable. The evaluation contained in this document determined that potential impacts to the environment can be reduced to a less than significant level with implementation of the identified mitigation measures. Based on data provided in this document, including the type of project proposed and its location, it is concluded that implementation of the proposed Project will not result in impacts that are either individually or cumulatively considerable or significant when viewed in relation to past, present or probable future projects.

*c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The Proposed Project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly, as there are no such impacts identified within this analysis or in the project specific technical analyses or available data from other agencies.

Only minor temporary increases in emissions and noise will be created by implementation of the Proposed Project. These potential impacts have been thoroughly evaluated and have been deemed to be neither individually significant nor cumulatively considerable in terms of any adverse effects upon the region, the local community or its inhabitants.

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## XX. SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

### **BIOLOGICAL RESOURCES:**

#### **Pre-construction:**

##### *Final Design*

- BIO-1 Barriers such as boulders, fences, and gates will be placed and maintained along work areas and trail boundaries to help prevent unauthorized activities, including dumping and off-road vehicle use. Such barriers shall be identified in the final project design.
- BIO-2 Trail boundaries will be clearly identified to ensure that the public stays on the marked trail. Signs educating the public on the importance of staying on trails shall be posted in prominent areas.
- BIO-3 Construction activity and access roads will be minimized to the maximum extent practicable. If impacts to jurisdictional features associated with access roads are subsequently identified in the final design; permit applications to the regulatory agencies will be submitted.
- BIO-4 A Stormwater Pollution Prevention Plan (SWPPP) in accordance with the Department's National Pollutant Discharge Elimination System (NPDES) General Storm Water Discharges Associated with Construction Activity (General Permit No. CAS000003) will be developed to eliminate potential offsite sedimentation effects. BMPs within the SWPPP will minimize any potential for sedimentation resulting from the discharge of untreated stormwater from the Project entering the Santa Ana River during construction.

##### *Scheduling*

- BIO-5 Construction and maintenance activities resulting in the removal of RSS during the breeding season will be avoided if feasible during the CAGN breeding season (February 15 to August 30). If construction and maintenance activities must occur within 500 feet of potential CAGN habitat during the nesting season (February 15 to August 30), a biologist that holds a 10(a)(1)(A) permit to conduct surveys for CAGN will conduct pre-activity nesting bird surveys. The area to be disturbed and a 500-foot buffer will be surveyed for five (5) consecutive days to determine if CAGNs are nesting in or near the construction or operation activities. If CAGNs are nesting, a temporary ESA and 300-foot buffer will be established and maintained between the nearest activity and the nest location until nesting is completed. Noise within the buffer area will not exceed 60 dBA Leq. Daily noise monitoring reports will be prepared.
- BIO-6 Prior to ground disturbance in potentially suitable woolly star and/or spineflower habitat, surveys will be conducted if the area has not been surveyed within the last 5 years to determine if the plant is present. Surveys will be conducted in accordance with the CDFW protocols for surveying special-status plant populations.
- BIO-7 If woolly star and/or spineflower is detected during the pre-project survey, seeds will be collected at the appropriate time for the species prior to ground disturbance. Seed collection and storage will be by an entity that has a Memorandum of Understanding with the USFWS to process and

handle the seeds of endangered plant taxa. In areas of temporary impacts, the seed will be replanted in the temporarily disturbed area. The seed planting time and location for seeds collected from permanent impact areas will be at the discretion of the County.

#### *Prior to Ground Disturbance*

- BIO-8 If construction-related activities are to occur during the nesting season (February 1 through September 15), a qualified biologist will conduct a preconstruction survey of the proposed construction area and adjacent habitat in the near vicinity. The preconstruction survey will commence no more than 72 hours prior to the onset of construction. If an active nest is observed, an appropriate buffer will be established until nesting is complete, as determined by a qualified biologist/biological monitor.
- BIO-9 A pre-clearance sweep shall be conducted by a qualified biologist immediately prior to initial removal of RSS – *Encelia farinosa* dominant habitat to detect and flush any potentially occurring special-status species.
- BIO-10 Qualified biologists, botanists, and/or biological monitors will be retained to ensure compliance with protective measures for special-status species. They will be required for monitoring any construction activities that may result in impacts to special-status species if determined applicable based on the results of the pre-construction surveys.
- BIO-11 All workers will receive environmental awareness training. The training will be developed in consultation with a qualified biologist and consist of an onsite or training center presentation for which supporting materials will be provided. Training will provide information about the special-status species potentially occurring on site and an explanation of the purpose and function of the avoidance and minimization measures and the possible penalties for not adhering to them.

#### **During construction:**

- BIO-12 The limits of construction will be marked, fenced, and maintained as necessary until work is completed.
- BIO-13 Personnel will strictly limit their activities, vehicles, equipment, and construction materials to the designated work area.
- BIO-14 Ingress and egress of construction equipment and personnel will be confined to designated access points. Cross-country travel by vehicles and equipment will be prohibited.
- BIO-15 At the Santa Ana River bluffs silt fencing or other sediment trapping materials will be installed at the downstream end of construction activity to minimize the transport of sediments off-site. Care will be exercised when removing silt fences, as feasible, to prevent debris or sediment from discharging into the floodplain.
- BIO-16 Erodible fill material will not be deposited into water courses. Brush, loose soils, or other similar debris material will not be stockpiled within or immediately adjacent to jurisdictional features.
- BIO-17 When construction activities will take place within 50 meters of known occurrences of woolly star and/or spineflower, a temporary fence will be erected to protect the specimens. A qualified

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botanist and/or biological monitor will monitor construction activities, maintain the markers limiting construction, and maintain a fence protecting the specimens to prevent accidental disturbance.

- BIO-18 A qualified biologist or biological monitor with SBKR expertise will be present when construction or ground-disturbing activities that could result in take of SBKR occurs in, or within 100 meters of SBKR habitat which is classified as low, medium, or high habitat potential for SBKR.
- BIO-19 Equipment (e.g., passenger vehicles, trucks, and heavy equipment) will be cleaned prior to entering the worksite and between worksites to prevent the importation and spread of exotic plant species.
- BIO-20 No open trenches or holes (aggregate mining activities excepted) will be left overnight without covering, fencing, or providing escape ramps with a minimum 3:1 slope. If trenches are not covered, they will be inspected for trapped wildlife by a qualified biologist or biological monitor. Animals found will be captured and moved to the nearest safe location outside the construction area.
- BIO-21 No firearms or pets will be allowed at the work areas. Firearms carried by authorized security and law enforcement personnel are exempt.
- BIO-22 Litter control measures will be implemented. Trash and food items will be contained in closed containers and removed daily to reduce the attractiveness of the area to opportunistic predators.
- BIO-23 Dust will be controlled. If water trucks are to be used, pooling of water will be avoided to minimize the potential of attracting opportunistic predators.

**Post-construction:**

- BIO-24 Temporary impact areas in the RSS – *Encelia farinosa* dominant community will be restored with a native species palette that matches the surrounding native vegetation community.
- BIO-25 Areas impacted during construction and O&M activities that contain native vegetation will be restored after the Project is completed. This will include replanting with a plant palette composed of the native species found on site prior to the disturbance. Restoration will also include weed control. Restoration performance standards, and remediation measures, if necessary, will be developed by the County and reviewed and approved by the regulatory agencies.
- BIO-26 Should it be determined during the pre-construction surveys that coastal California gnatcatcher habitat will be impacted, in addition to restoration of the temporary impacts to native habitat, habitat shall be created at a 3:1 ratio.
- BIO-27 Mitigate 2.34 acres of temporary impacts and 2.92 acres of permanent impacts to designated SBKR critical habitat through purchase of credits from an approved mitigation bank, payment to an in-lieu fee program, or another form of mitigation approved by the regulatory agencies.

**CULTURAL RESOURCES:**

- CUL-1 If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 60-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgement. The following notifications shall apply, depending on the nature of the find:
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
  - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the CEQA lead agency, and applicable land owner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be eligible for inclusion in the NRHP or CRHR. Work may not resume within the no-work radius until the lead agencies through consultation as appropriate, determine that the site either: 1) is not eligible for the NRHP or CRHR; or
- CUL-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

**TRIBAL CULTURAL RESOURCES**

- TCR-1 In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, consulting tribes (San Manuel Band of Mission Indians, Soboba Band of Mission Indians and Morongo Band of Mission Indians) will be contacted if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. The archaeologist shall complete and isolate/site record for the find and submit this document to the applicant and the Lead Agency for dissemination of the consulting Tribes.
- TCR-2 If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to consulting tribes (San Manuel Band of Mission Indians, Soboba Band of Mission Indians and Morongo Band of Mission Indians) for review and comment. The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians, Soboba Band of Mission Indians and Morongo Band of Mission Indians on the disposition and treatment of any cultural materials encountered during the project.

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