Executive Summary

S.1 Introduction

The Riverside County Transportation Commission (RCTC), the California Department of Transportation (Caltrans), and the Federal Highway Administration (FHWA) propose to improve west-east transportation in western Riverside County (County) between Interstate 215 (I-215) in the west and State Route 79 (SR-79) in the east, a distance of approximately 16 miles (mi). The proposed project will construct a new freeway, known as the Mid County Parkway (MCP), which will provide a direct and continuous route connecting major population/employment centers as identified in the Land Use Element of the County of Riverside General Plan and the General Plans of the cities of Perris and San Jacinto.

RCTC is the project proponent and the lead agency under California Environmental Quality Act (CEQA) and has adopted guidelines for implementing the CEQA. FHWA is the lead agency under National Environmental Policy Act (NEPA) in cooperation with Caltrans. Caltrans may also become the owner/operator of the MCP if it is designated as a State Highway following the completion of construction. RCTC, Caltrans, and FHWA are working in close collaboration with United States Army Corps of Engineers (USACE), the United States Environmental Protection Agency (EPA), the United States Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG) in the development of the MCP project pursuant of the *Memorandum of Understanding for the NEPA and Clean Water Act Section 404 Integration Process for Federal Aid Surface Transportation Project in California April 2006* (NEPA/404 MOU).

The MCP project was identified as a key west-east regional transportation corridor as a result of several years of comprehensive land use and transportation planning in Riverside County through the Riverside County Integrated Project (RCIP). The RCIP was an unprecedented, multiyear planning effort to simultaneously prepare environmental, transportation, housing, and development guidelines for Riverside County for the first half of the 21st century. The RCIP included three components: (1) a new General Plan for Riverside County, adopted in October 2003; (2) a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County (approved in June 2004); and (3) the Community and Environmental Transportation Acceptability Process (CETAP). CETAP study efforts were jointly undertaken by the RCTC and the County of Riverside as a part of the RCIP. CETAP included the study

of two intercounty corridors (Riverside County to Orange County and Riverside County to San Bernardino County) and two intracounty transportation corridors (a north-south corridor and a west-east corridor both in western Riverside County).

The west-east corridor was known as the Hemet to Corona/Lake Elsinore (HCLE) Corridor. After a Draft Tier 1 Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) was completed for the HCLE Corridor and circulated for public review in 2002 with a suite of 14 "build" alternatives, the RCTC Board accepted a staff recommendation in June 2003 to proceed with the preparation of a project-level environmental document for a west-east alternative that would generally follow the existing alignment of Cajalco Road and Ramona Expressway, known as the MCP project.

Engineering and environmental studies were initiated in 2004 for the MCP project, a proposed 32 mi facility between Interstate 15 (I-15) and SR-79, and in September 2007, the RCTC Board selected a Locally Preferred Alternative (Alternative 9 Temescal Wash Design Variation) for the MCP project. In October 2008, the Draft EIR/EIS for the MCP project was circulated for a 90-day public review period. The following two key themes emerged in the public review comments:

1. Concern about the cost and timing of available funds for the project. Many comments noted that, given the current economy and difficulty in securing funding for the entire project, limited financial resources should be focused on areas of greatest need.
2. Although the public comments raised concerns about many aspects of the project throughout its entire length, many comments suggested that making improvements to existing facilities rather than building the MCP facility would be a better expenditure of public funding in the western portion of the project area between I-15 and I-215. In this area, improving existing facilities, such as Cajalco Road, instead of building the MCP facility would minimize impacts to the rural communities of Gavilan Hills and Lake Mathews Estates, as well as existing habitat reserves. Impacts to rural communities and existing habitat reserves were two major concerns raised in the public comments.

To address the concerns identified above, in spring 2009, RCTC, FHWA, and Caltrans developed an approach for being responsive to these concerns in completing the EIR/EIS process for the project. This approach modified the MCP project limits from 32 mi (I-15 to SR-79) to 16 mi (I-215 to SR-79) in order to focus transportation

funding where the need is the greatest, between I-215 and SR-79, near existing facilities (i.e., Ramona Expressway[1]). This approach also includes preparation of a Recirculated Draft EIR/Supplemental Draft EIS that would revise the project purpose statement and modify the project alternatives.[2] RCTC recognizes that while the need for transportation improvements still exists between I-15 and I-215, the Riverside County Transportation Department's proposed widening improvements to Cajalco Road will alleviate a portion of that need. As discussed in Section 1.3.2.1 of this EIR/EIS, the greatest near-term need for west-east transportation improvements is east of I-215, even with the planned improvements along existing Ramona Expressway. Therefore, the project purpose for the modified MCP project focuses on the need for transportation improvements between I-215 and SR-79.

Fundamental to the modification of the MCP project purpose statement and alternatives is the tenet that no improvements between I-15 and I-215 are planned, designed, or intended to be implemented as part of the MCP project. The distinct transportation needs between I-15 and I-215 will be addressed by the Riverside County Transportation Department's General Plan roadway improvements for Cajalco Road. The Cajalco Road improvement project would be subject to a separate environmental review process in the future with the Riverside County Transportation Department acting as the lead agency (a Notice of Preparation for the Cajalco Road project was issued in September 2011). A Community and Environmental Transportation Acceptability Process (CETAP) corridor between I-15 and I-215 would remain in the Regional Transportation Plan (RTP) so as to not preclude consideration of transportation improvements to address future needs beyond those being addressed by the Cajalco Road improvements.

On July 8, 2009, the RCTC Board formally took action to refocus the MCP project between I-215 and SR-79. As a result of the RCTC's Board action, a Recirculated Draft EIR/Supplemental Draft EIS is being prepared for the modified project. Public and agency comments previously submitted for the October 2008 Draft EIR/EIS will be included in the MCP Administrative Record, but no formal responses will be

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1 Ramona Expressway exists today between I-215 and SR-79 as a two- to six-lane arterial highway with numerous intersections and driveways for local property access.

2 See Chapter 2, Project Description and Alternatives, of this Recirculated Draft EIR/Supplemental Draft EIS for additional details on the project alternatives.

prepared. However, any comments applicable to the modified MCP project have been addressed in this Recirculated Draft EIR/Supplemental Draft EIS. Any comments received during the public review period of the Recirculated Draft EIR/Supplemental Draft EIS will be formally responded to in the Final EIR/EIS.

S.2 Overview of the Project Area

For the last several decades, western Riverside County has served as a population center for commuters to jobs in Orange and Los Angeles Counties, resulting in high levels of west-east travel demand. The major north-south transportation facilities in western Riverside County are I-215 and SR-79, and the major west-east transportation facilities are SR-91, State Route 60 (SR-60), and State Route 74 (SR-74). The MCP project is located between the SR-91/SR-60 corridor and SR-74, and would provide another needed west-east corridor/connection to improve the regional transportation network and to meet future west-east travel demand.

The following are related transportation projects that would directly connect to the MCP facility (see Chapter 1 and Figure 1.3.4 for additional detail and related projects in the vicinity of the MCP study area):

- **Widening of I-215:** RCTC plans to widen I-215 from Murrieta Hot Springs Road in Murrieta to the I-215/Box Springs Road interchange in Riverside. The project is divided into three segments (south, central, and north). The south segment would add one mixed-flow lane in each direction from Murrieta Hot Springs Road in Murrieta to Scott Road north of Murrieta. Construction for the south segment was initiated in 2011 and is anticipated to last approximately 16 months. The central segment would also add one mixed-flow lane in each direction from Scott Road north of Murrieta to Nuevo Road in Perris. Construction for the central segment is planned for 2012–2015. The Project Approval/Environmental Documentation for the north phase has not been initiated.
- **Constructing SR-79 as a Four-Lane Expressway:** RCTC and Caltrans plan to construct SR-79 as a four-lane expressway on a new alignment from Gilman Springs to Domenigoni Parkway, generally following an alignment west of Warren Road through the city of Hemet. Construction of initial phases is tentatively scheduled to begin in 2014.
- **I-215/Cajalco Road Interchange Improvement Project**: Construction is underway by the County of Riverside to improve the I-215/Cajalco Road interchange by widening the northbound and southbound off-ramps from two to

three lanes, and widening Ramona Expressway between the northbound and southbound ramps to provide truck turning movements and accommodate one additional lane eastbound and westbound in the future. Construction is planned to be completed in late 2012.

S.3 Purpose and Need

S.3.1 Project Purpose

The purpose of the proposed action is to provide a transportation facility that would effectively and efficiently accommodate regional west-east movement of people, goods, and services between and through the cities of Perris and San Jacinto. More specifically, the selected alternative would:

- Provide increased capacity to support the forecast travel demand for the 2040 design year;
- Provide a limited access facility;
- Provide roadway geometrics to meet state highway design standards;
- Accommodate Surface Transportation Assistance Act (STAA) National Network trucks[1]; and
- Provide a facility that is compatible with a future multimodal transportation system.

The MCP project provides logical termini since it connects to two major north-south transportation facilities (I-215 and SR-79), has independent utility since the project is usable and a reasonable expenditure even if no additional transportation improvements in the area are made, and it does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

S.3.2 Project Need

The MCP project is located in an area of western Riverside County[2] that is currently undergoing substantial population and employment growth. According to the 2010

[1] These are larger trucks that are permitted on the federal interstate system and the non-interstate federal-aid primary system.

[2] Western Riverside County consists of 17 incorporated cities and portions of unincorporated Riverside County and is generally bounded by San Diego County to the south, Orange County to the west, San Bernardino County to the north, and the San Jacinto Mountains to the east.

Census, the population in Riverside County is approximately 2.2 million people. Population in Riverside County overall is expected to increase to approximately 3.4 million by 2035, and employment is projected to increase to 1.29 million jobs by 2035.[1] In addition, according to the Inland Empire Quarterly Economic Report (January 2012), the Inland Empire, which includes the counties of Riverside and San Bernardino, experienced a 2 percent growth in employment from December 2010 to December 2011 indicating that the region's recovery has begun.

Although currently funded transportation improvements will address some of the projected future travel demand generated by this population and employment growth, additional transportation improvements are needed to provide for the efficient movement of people and goods in the future.

S.4 Proposed Action

S.4.1 Alternatives

Descriptions of the three Build Alternatives (Alternatives 4 Modified, 5 Modified, and 9 Modified) and the two design variations (San Jacinto River Bridge [SJRB DV] and San Jacinto North [SJN DV]) that are evaluated in this Recirculated Draft EIR/ Supplemental Draft EIS are provided below. Descriptions of the two No Project/No Action Alternatives (Alternatives 1A and 1B) are provided later in this section (see Section S.4.1.2).

Alternatives that were considered but eliminated from further analysis are discussed in this Recirculated Draft EIR/Supplemental Draft EIS in Section 2.6, Alternatives Considered and Withdrawn from Further Study.

S.4.1.1 Build Alternatives

Alternative 4 Modified: North Perris (Drain)

Alternative 4 Modified proposes a six-lane controlled access freeway. Alternative 4 Modified follows a northern alignment through the city of Perris, adjacent to the Perris Drain (as shown in Figure 2.3.1a, page 2-9).

[1] 2010 Riverside County Progress Report – Riverside County Jurisdiction Profile. Riverside County Center for Demographic Research. http://www.rctlma.org/rcd/content/progress.aspx. Accessed October 20, 2011.

System interchanges (a freeway-to-freeway type interchange) are proposed for all Build Alternatives at I-215 and SR-79. Descriptions of these system interchanges are as follows:

- The MCP/I-215 interchange is proposed as a three-level interchange that will not preclude possible future connections to the west. At the highest point, the MCP/I-215 interchange would be approximately 75 to 100 feet (ft) above ground level.
- The MCP/SR-79 interchange is proposed as a three-level interchange at an approximate height of 75 ft. The MCP connection to SR-79 will be made at the proposed realignment of SR-79, south of Ramona Expressway.[1] The MCP provides direct connectors to northbound and southbound SR-79, as well as a six-lane easterly extension that terminates at a proposed signalized intersection at Ramona Expressway.

Service interchanges (interchanges that connect a freeway to local arterials) for Alternative 4 Modified are proposed at Perris Boulevard, Evans Road, Ramona Expressway/Antelope Road, Bernasconi Road, Reservoir Road, Town Center Boulevard (proposed new arterial associated with future proposed development), Park Center Boulevard (proposed new arterial associated with future proposed development), and Warren Road.

All of the modified Build Alternatives, including Alternative 4 Modified, include improvements to I-215. These improvements are as follows: (1) the addition of one auxiliary lane between the MCP/I-215 systems interchange and the adjacent service interchange to the north and south to facilitate movement between the MCP and I-215; (2) the addition of an operational/mixed-flow lane from MCP to the Van Buren Boulevard interchange to accommodate additional traffic on I-215 as a result of the MCP; (3) the addition of an operational/mixed-flow lane from Nuevo Road to Cajalco-Ramona Expressway or Harley Knox Boulevard to facilitate weaving on I-215; (4) the addition of a new interchange at Placentia Avenue; and (5) the modification of the existing interchange at Cajalco Road/Ramona Expressway.

Alternative 4 Modified includes two design variations: SJRB DV and SJN DV.

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[1] SR-79 is proposed to be realigned as a four-lane limited access expressway on a new alignment from south of Domenigoni Parkway to north of Gilman Springs Road and is currently undergoing separate environmental review.

Alternative 5 Modified: South Perris (at Rider Street)

Alternative 5 Modified is a six-lane controlled-access freeway. Alternative 5 Modified follows a central alignment through the city of Perris along Rider Street (as shown in Figure 2.3.1b, page 2-13).

System interchanges proposed for Alternative 5 Modified are the same as for Alternative 4 Modified, with connections at I-215 and SR-79. However, the I-215 system interchange differs from that in Alternative 4 Modified as it connects the MCP to I-215 near Rider Street. As with Alternative 4 Modified, the system interchange at I-215 is proposed as a three-level interchange that will not preclude possible future connections to the west. The interchange will be approximately 75 to 100 ft above ground level.

Locations of the service interchanges proposed for Alternative 5 Modified are the same as those in Alternative 4 Modified: Perris Boulevard, Evans Road, Ramona Expressway/Antelope Road, Bernasconi Road, Reservoir Road, Town Center Boulevard (proposed new arterial associated with future proposed development), Park Center Boulevard (proposed new arterial associated with future proposed development), and Warren Road (see Figure 2.3.1b).

Alternative 5 Modified also includes the same improvements to I-215 as described above for Alternative 4 Modified. Alternative 5 Modified also includes the same design variations as Alternative 4 Modified: SJRB DV and SJN DV.

Alternative 9 Modified: Placentia Avenue

Similar to Alternatives 4 Modified and 5 Modified, Alternative 9 Modified is a six-lane controlled-access freeway. Alternative 9 Modified follows a southerly alignment through the city of Perris along Placentia Avenue (as shown in Figure 2.3.1c, page 2-15).

System interchanges are proposed for all Build Alternatives, including Alternative 9 Modified, at I-215 and SR-79. The system interchanges at SR-79 are the same as those proposed for Alternatives 4 Modified and 5 Modified. However, the I-215 system interchange differs from those in Alternatives 4 Modified and 5 Modified as it connects the MCP to I-215 near Placentia Avenue. As with Alternatives 4 Modified and 5 Modified, the system interchange at I-215 is proposed as a three-level interchange that will not preclude possible future connections to the west. The interchange will be approximately 75 to 100 ft above ground level.

Service interchanges are also proposed for Alternative 9 Modified at the following locations: Redlands Avenue, Evans Road, Ramona Expressway/Antelope Road, Bernasconi Road, Reservoir Road, Town Center Boulevard (proposed new arterial associated with future proposed development), Park Center Boulevard (proposed new arterial associated with future proposed development), and Warren Road (see Figure 2.3.1c).

Alternative 9 Modified also includes the same improvements to I-215 as described above for Alternatives 4 Modified and 5 Modified. In addition, Alternative 9 Modified has been designed to avoid Paragon Park and Fire Station No. 90 in the city of Perris.

Alternative 9 Modified includes the same design variations as Alternatives 4 Modified and 5 Modified: SJRB DV and SJN DV.

S.4.1.2 Design Variations

San Jacinto River Bridge Design Variation

Under the SJRB DV, the MCP project would construct two bridges in the Lakeview Nuevo area, a 531 ft bridge spanning Martin Street and a 1,941 ft bridge spanning the San Jacinto River, for a total of 2,472 ft of bridge. The base case design in all three build alternatives described above proposes one 4,321 ft bridge to span the entire San Jacinto River floodplain and Martin Street. The SJRB DV applies to all three build alternatives: Alternatives 4 Modified, 5 Modified, and 9 Modified (see Figures 2.3.1a-2.3.1c, pages 2-9, 2-13, and 2-15). The SJRB DV would also include a total of 1,849 ft of fill on either end of the bridges within the same limits as the base case bridge design. Similar to the base case, the bridges under this design variation would be located to the south of the existing Ramona Expressway Bridge over the San Jacinto River, which is 255 ft in length and would remain in place.

San Jacinto North Design Variation

Under the SJN DV, the MCP route diverges from the proposed MCP alignment from west of Warren Road and follows an alignment easterly that is approximately 1,140 ft north of the existing Ramona Expressway. The SJN DV will also provide a connection to existing Ramona Expressway from Warren Road, similar to the base case design for Alternatives 4 Modified, 5 Modified, and 9 Modified (see Figures 2.3.1a–2.3.1c, pages 2-9, 2-13, and 2-15).

S.4.1.3 No Build Alternatives

Alternative 1A: No Project/No Action—Existing Ground Conditions

Alternative 1A represents 2040 traffic on the planned street network without future improvements to Ramona Expressway, which would remain as they exist today. Construction of the MCP project would not be implemented with the No Project/No Action Alternative 1A. The future west-east traffic in the study area would be served by the existing Ramona Expressway between I-215 and SR-79. This alternative assumes 2040 land use conditions and implementation of planned improvements to the regional and local circulation system, as accounted for in the adopted Riverside County General Plan (2008), RCTC's Measure A program, and other adopted plans and policies.

Alternative 1B: No Project/No Action—General Plan Circulation Element Conditions

Alternative 1B represents 2040 traffic levels on the planned street network, according to the Circulation Element of the Riverside County General Plan. Construction of the MCP project would not be implemented with No Project/No Action Alternative 1B. This alternative is the same as Alternative 1A but includes implementation of Ramona Expressway consistent with the Riverside County General Plan Circulation Element. Under Alternative 1B, Ramona Expressway would be widened to a six-lane arterial street as needed to meet expected traffic demand. These improvements would result in the construction of a six-lane roadway along Ramona Expressway between I-215 and SR-79.

Section 404 No Action Alternative

In addition to the above No Project/No Action alternatives, a specific Section 404 No Action Alternative (avoidance alternative) was developed for purposes of compliance with the Section 404(b)(1) Guidelines and USACE regulations (33 Code of Federal Regulations [CFR] 325, Appendix B). The Section 404 No Action Alternative includes measures needed (e.g., bridges) to fully avoid the placement of dredge or fill within waters of the United States. The Section 404 No Action Alternative represents the one alternative that results in no construction requiring a Section 404 permit from the USACE. The discussion of the Section 404 No Action Alternative (avoidance alternative) is provided below and is also included in the Section 404(b)(1) Alternative Analysis in Appendix N.

Several alignments were analyzed for the Section 404 No Action Alternative, and it was determined that no feasible alignment exists within the project study area that

would completely avoid waters of the United States. As a result, the Section 404 No Action Alternative follows the proposed alignment for Alternative 9 Modified, but provides for bridge structures to be built over the majority of water crossings in order to fully avoid dredge or fill within waters of the United States. Alternative 9 Modified was chosen as the base for the Section 404 No Action Alternative because it is the Build Alternative with the least impact to waters of the United States. The alignment and proposed interchange locations for the Section 404 No Action Alternative are identical to those of Alternative 9 Modified. Implementation of the Section 404 No Action Alternative would necessitate revisions to 9 planned bridge structures that would require longer spans and the placement of 34 additional bridge structures to completely avoid waters of the United States. However, the Section 404(b)(1) Alternatives Analysis concludes that the Section 404 No Action Alternative cannot be considered practicable because it would add an additional cost of $365 million (approximately 20 percent more than Alternative 9 Modified) and has, thus, been determined to be unreasonably expensive.

S.5 Joint CEQA/NEPA Document

The MCP project is a joint project by RCTC, FHWA, and Caltrans, and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. RCTC is the project proponent and lead agency under CEQA and FHWA is the lead agency under NEPA, in cooperation with Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. One of the commonly seen joint document types is an EIR/EIS.

Following receipt of public comments on the Recirculated Draft EIR/Supplemental Draft EIS, a Final EIR/EIS will be prepared. RCTC and FHWA may undertake additional environmental and/or engineering studies to address comments. The Final EIR/EIS will include responses to comments received on the Recirculated Draft EIR/Supplemental Draft EIS and will identify a preferred alternative. Following circulation of the Final EIR/EIS, if the decision is made to approve the project, a Notice of Determination will be filed with the State Clearinghouse for compliance with CEQA and a Record of Decision will be prepared and noticed in the Federal Register for compliance with Caltrans.

S.5.1 Determining Significance Under the California Environmental Quality Act

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance under NEPA is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental document.

CEQA, on the other hand, does require a Lead Agency (RCTC) to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the mandatory findings of significance of CEQA.

S.5.2 Discussion of Significance of Impacts Under CEQA

The significance of the potential impacts of the MCP Build Alternatives under CEQA was assessed based on the CEQA Environmental Checklist provided in Appendix A, CEQA Environmental Checklist, and the analyses of project impacts discussed in detail in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures. The impacts of the Build Alternatives and the No Build Alternative are discussed for a full range of topics throughout Chapter 3. Chapter 4, California Environmental Quality Act Evaluation, provides the applicable discussion regarding the determination of significance under CEQA based on the responses to the CEQA Checklist questions.

S.6 Project Impacts

S.6.1 Summary of Impacts and Measures

Table S.1, which follows the last page of text in this Executive Summary, summarizes the impacts of the MCP Build Alternatives. The environmental commitments (measures to avoid, minimize, and/or mitigate impacts) to address those impacts are also summarized in Table S.1. All measures in Table S.1 apply to all MCP Build Alternatives, unless otherwise noted.

The impacts in Tables S.1 are organized in the order in which the impact analyses are presented in Chapter 3. For more detailed information regarding the impacts summarized in Table S.1, refer to the following sections in Chapter 3:

- 3.1 Land Use
- 3.2 Growth
- 3.3 Farmlands/Timberlands
- 3.4 Community Impacts
- 3.5 Utilities/Emergency Services
- 3.6 Traffic and Transportation/Pedestrian and Bicycle Facilities
- 3.7 Visual/Aesthetics
- 3.8 Cultural Resources
- 3.9 Hydrology and Floodplains
- 3.10 Water Quality and Storm Water Runoff
- 3.11 Geology/Soils/Seismic/Topography
- 3.12 Paleontology
- 3.13 Hazardous Waste/Materials
- 3.14 Air Quality
- 3.15 Noise
- 3.16 Energy
- 3.17 Natural Communities
- 3.18 Wetlands and Other Waters
- 3.19 Plant Species
- 3.20 Animal Species
- 3.21 Threatened and Endangered Species
- 3.22 Invasive Species
- 3.23 Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

- 3.24 Irreversible and Irretrievable Commitments of Resources That Would Be Involved in the Proposed Action
- 3.25 Cumulative Impacts

S.6.2 Summary of Significant Adverse Impacts Under CEQA after Mitigation

As discussed in detail in Chapter 4, the following impacts of the MCP Build Alternatives were determined to be significant, adverse, and unavoidable under CEQA, after implementation of the identified avoidance, minimization, and mitigation measures, as well as project design features:

- Long-term aesthetic impacts
- Long-term impacts to farmlands
- Impacts to cultural resources
- Long-term noise impacts

The remaining impacts of the MCP Build Alternatives were determined to be either not significant or to be avoided or reduced to below a level of significance under CEQA, based on implementation of the project avoidance, minimization, and mitigation measures and project design features, as described in detail in Chapter 4.

S.7 Coordination with Public and Other Agencies

Early and continuing coordination with the general public and public agencies has been and will continue to be an essential part of the process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project has been accomplished through a variety of formal and informal methods, including: the MCP website (http://www.midcountyparkway.org/), public scoping meetings held in late 2004 and August 2005, public meetings in October 2008 during release of the Draft EIR/EIS for the 32 mi MCP, continued coordination between transportation and resource agencies under the NEPA/404 Memorandum of Understanding, project development team meetings (involving RCTC, Caltrans, the County, and the affected cities), meetings with other agencies and interested parties, and ongoing consultation with Native American tribes. Chapter 5 summarizes the results of the FHWA, Caltrans, and RCTC's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

S.8 Permits and Approvals

Table S.2 identifies the permits and/or approvals that are or may be required prior to or during construction and/or operation of the MCP project. Table S.2 is provided following Table S.1 at the end of this Executive Summary.

S.9 Unresolved Issues

The MCP, as a CETAP corridor under the RCIP, involves consideration of a complex set of interrelated issues. Local and federal decision-makers (RCTC and FHWA, respectively) must balance the need to provide transportation infrastructure to serve a growing populace with the need to preserve natural resources and improve environmental quality.

While no specific unresolved issues are noted at this time for the MCP project, through the public review of this Recirculated Draft EIR/Supplemental Draft EIS, other issues may be identified that would require resolution prior to approval of the Final EIR/EIS, the Notice of Determination under CEQA, and the issuance of a Record of Decision under NEPA.

S.10 Areas of Controversy

Based on comments received on the Notice of Preparation, the Supplemental Notice of Preparation, and the Draft EIR/EIS circulated in 2008 for the 32 mi MCP project, areas of controversy may include business and residential relocations, impacts to threatened/endangered species, loss of agricultural land, and impacts to cultural resources.

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Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Land Use: Existing and Future Land Uses	No impact	Less impact than MCP Build Alternatives.	**Existing Land Use -** Agriculture: 901.1 Commercial: 25.1 Industrial: 5.8 Open Space and Recreation: 1.0 Public Facilities: 10.4 Residential: 48.1 Transportation: 152.1 Vacant Land: 248.0 Other: 5.5 ***Grand Total: 1,397*** **General Plan Land Use -** Agriculture: 198.20 Commercial: 278.38 Transportation: 2.42 Industrial: 187.91 Residential: 264.23 Open Space and Recreation: 25.54 Other: 8.16 Public Facilities: 24.08 ***Grand Total: 988.93***	**Existing Land Use -** Agriculture: 846.7 Commercial: 25.5 Industrial: 15.1 Open Space and Recreation: 1.0 Public Facilities: 10.1 Residential: 37.0 Transportation: 154.1 Vacant Land: 279.0 Other: 13.5 ***Grand Total: 1,382.0*** **General Plan Land Use -** Agriculture: 198.20 Commercial: 215.18 Transportation: 2.39 Industrial: 238.89 Residential: 245.80 Open Space and Recreation: 25.54 Other: 8.16 Public Facilities: 29.25 ***Grand Total: 963.41***	**Existing Land Use -** Agriculture: 789.7 Commercial: 9.4 Industrial: 25.8 Open Space and Recreation: 1.0 Public Facilities: 8.4 Residential: 45.7 Transportation: 149.8 Vacant Land: 285.3 Other: 17.4 ***Grand Total: 1,332.5*** **General Plan Land Use** - Agriculture: 198.20 Commercial: 244.24 Transportation: 3.65 Industrial: 180.46 Residential: 254.10 Open Space and Recreation: 25.54 Other: 8.16 Public Facilities: 21.97 ***Grand Total: 936.30***	**LU-1** **Pedestrian Access During Construction.** During site preparation, disturbance, grading, and construction, the Riverside County Transportation Commission (RCTC) Resident Engineer will require the Construction Contractor to maintain pedestrian access to adjacent land uses in the construction area throughout the construction period. If existing access points are disrupted, alternative access will be provided. Appropriate signage and temporary sidewalks will be provided by the Construction Contractor, as needed, throughout the construction phase of the project, and the Construction Contractor shall provide and maintain appropriate signage to direct both pedestrian and vehicular traffic to businesses via alternate routes. Disabled access, consistent with the requirements of the Americans with Disabilities Act, will also be maintained during construction by the Construction Contractor. **LU-2** **Pedestrian Access during Project Operation.** During final design, the RCTC Project Engineer will ensure that pedestrian access across the Mid County Parkway (MCP) facilities is included in the permanent project features and that those features are designed consistent with applicable California Department of Transportation (Caltrans) and/or local jurisdiction standards. **LU-3** **Public Information Field Office.** Prior to and during site preparation, disturbance, grading, and construction, the RCTC Project Manager will establish one or more public information field office(s) near the construction site(s). The field office(s) will serve the following purposes: • Provide the community and businesses with a physical location where information pertaining to construction can be obtained in both English and Spanish • Enable RCTC staff to facilitate communication between RCTC staff and the Construction Contractor with residents and business operators • Notify property owners, residents, and businesses of major construction activities (e.g., utility relocation/disruption, rerouting of delivery trucks) at least 14 days prior to the disruption • Respond to phone inquiries • Coordinate business outreach programs **LU-4** **March Joint Powers Authority Airspace Review.** During final design, the RCTC Project Engineer will request the March Joint Powers Authority to conduct an airspace review of the MCP project to ensure that the MCP project does not introduce new hazards to the operations at the March Joint Powers Authority Airport.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Land Use: Consistency with Federal, State, Regional, and Local Plans	No impact	No impact	Inconsistent with Land Use Policies LU 16.2 and 16.4, which protect agricultural lands of the Riverside County General Plan. Inconsistent with designated roadways and land uses for the City of Perris General Plan because it does not follow original CETAP alignment. Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	Inconsistent with Land Use Policies LU 16.2 and 16.4, which protect agricultural lands of the Riverside County General Plan. Inconsistent with designated roadways and land uses for the City of Perris General Plan because it does not follow original CETAP alignment. Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	Inconsistent with Land Use Policies LU 16.2 and 16.4, which protect agricultural lands of the Riverside County General Plan. Inconsistent with designated roadways and land uses for the City of Perris General Plan because it does not follow original CETAP alignment. Amendments to San Jacinto General Plan required to reflect either San Jacinto North or San Jacinto South alignment at east end of MCP.	**LU-5 General Plan Consistency.** Following selection of a Preferred Alternative and approval of the MCP project for implementation, the RCTC Project Manager will request that the County of Riverside and the City of Perris amend their respective General Plans to reflect the final MCP alignment, interchange locations, and modification of land use designations for property that will be acquired for the project.
Land Use: Parks and Recreation Facilities	No impact	No impact	Alternative 4 Modified would result in a permanent impact to 3.0 ac of property from the SJWA, which represents 0.01 percent of the approximately 20,000 ac SJWA. Alternative 4 Modified would not result in temporary or permanent impacts to Liberty Park. Several recreational trails will be impacted by the MCP Build Alternatives in the cities of Perris and San Jacinto and in unincorporated Riverside County.	Alternative 5 Modified would result in a permanent impact to 3.0 ac of property from the SJWA, which represents 0.01 percent of the approximately 20,000 ac SJWA. Alternative 5 Modified and its DVs would result in a 0.011 ac TCE in Liberty Park. Several recreational trails will be impacted by the MCP Build Alternatives in the cities of Perris and San Jacinto and in unincorporated Riverside County.	Alternative 9 Modified would result in a permanent impact to 3.0 ac of property from the SJWA, which represents 0.01 percent of the approximately 20,000 ac SJWA. Alternative 9 Modified and its DVs would result in a 0.097 ac TCE in Liberty Park. Several recreational trails will be impacted by the MCP Build Alternatives in the cities of Perris and San Jacinto and in unincorporated Riverside County.	**LU-6 San Jacinto Wildlife Area Replacement Land.** Prior to the initiation of project construction in the vicinity of the intersection of Bernasconi Road and the Ramona Expressway, the RCTC will acquire replacement land for the 3.4 acres (ac) of land acquired for the project from the San Jacinto Wildlife Area (SJWA) as follows: • The replacement land will be provided at a 2:1 ratio (for a total 6.8 ac of replacement land) • The replacement land will be from areas adjacent to the Davis or Potrero Units of the SJWA or another area acceptable to California Department of Fish and Game (CDFG) • After RCTC acquires the replacement land, it will convey the fee ownership for the replacement land to CDFG. **LU-7 San Jacinto Wildlife Area MSHCP Requirements.** The MCP project is a Covered Activity of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and, therefore, the use of 3.4 ac of land in the SJWA would be subject to the requirements for replacement of Public/Quasi-Public (P/QP) lands as required by the Western Riverside County MSHCP. Those requirements for habitats in existing P/QP Lands used by a project are the purchase and dedication into the MSHCP Conservation Area of replacement land at not less than a ratio of 1:1. RCTC's compliance with the requirements of Measure LU-6 would also satisfy the requirements for replacement of P/QP Lands used by the project under the Western Riverside County MSHCP. **LU-8 San Jacinto Wildlife Area Uniform Act.** For the acquisition of the 3.4 ac in the SJWA, RCTC's Right-of-Way Agents will follow the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						LU-9 **Existing Pedestrian and Trail Facilities.** During final design, the RCTC Project Engineer will develop a Pedestrian and Trail Facilities Temporary Closure Plan for addressing the short-term impacts to existing pedestrian facilities and trails crossings or within the construction limits of the project. Trails are defined as facilities other than sidewalks including pedestrian, bicycle, and equestrian trails, and bike lanes. Specifically, the Plan will address procedures for: • Identification of facilities that will be closed temporarily during construction • Temporarily closing sidewalks and trails during construction • Developing and implementing detours for closed sidewalks and trails • Coordinating sidewalk and trail closures and detours with the local jurisdictions with authority over the sidewalks and trails • Criteria for detour routes and facilities • Information signing for closures and detours • Requirements for compliance with the Americans with Disabilities Act • Maintaining signing for closures and detours throughout the closure period and replacing lost or damaged signing • Restoring pedestrian and trail facilities at the completion of project construction Prior to the initiation of project activities that will require the temporary closure of a pedestrian or trail facility, the RCTC Project Engineer will require the Construction Contractor to comply with and implement the procedures in the Pedestrian and Trail Facilities Temporary Closure Plan for the affected sidewalk or trail facility crossing. **LU-10** **Temporary Closures of Trails.** Prior to any temporary closures of trails, the RCTC Resident Engineer will require the project Construction Contractor to meet with the Riverside County Department of Public Works (RCDPW) to review the location and need for each closure. Detours for each closure will be developed in consultation with the RCDPW. **LU-11** **Signing for Alternative Trail Routes.** The RCTC Resident Engineer will require the project Construction Contractor to develop signs directing trail users to alternative routes in consultation with RCDPW and the local jurisdictions through which detours would be routed. Appropriate directional and informational signage will be provided by the project Construction Contractor prior to each closure and far enough away from the closure so that trail users will not have to backtrack to get to the detour route. **LU-12** **Contact Information at Trail Detours.** The RCTC Resident Engineer will require the project Construction Contractor to provide a contact number and information that will be provided for trail users to contact the project Construction Contractor

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						regarding upcoming or active trail closures. The Construction Contractor will also be required to provide that information to the RCDPW and the Public Works Departments in the jurisdictions where the closures/detours are located. **LU-13** **Restoration of Impacted Trail Segments.** The RCTC Resident Engineer will require the project Construction Contractor to return trail segments closed temporarily during construction to the RCDPW in their original, or better, condition after completion of construction, and those temporarily closed areas will be returned to the original owner (the RCDPW). After project construction, the RCTC shall ensure that access to and connectivity of all recreational trails are restored for all recreational users. **LU-14** **Permanent Trail Closures.** Prior to construction, the RCTC will coordinate with affected local jurisdictions to inform the public of permanent trail closures and opportunities for alternative existing trails that are available to maintain trail connectivity within the community. **LU-15** **Permanent Trail Changes.** During final design, the RCTC will coordinate with the affected local jurisdiction to determine the new location and/or re-routing of an impacted trail outside the MCP right of way in order to maintain trail connectivity within the community.
Growth	No impact	No impact	Because of its prior inclusion as a CETAP corridor in the overall Riverside County Integrated Project (RCIP) planning process that led to the adoption of the updated Riverside County General Plan and the western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the MCP project is not expected to result in adverse growth-related effects. CETAP is an integral component of the RCIP and Riverside County General Plan, and the future growth as projected and planned for in the General Plan reflects the presence of a new major west-east corridor in western Riverside County. However, some segments of the MCP project are located in areas that were not previously analyzed under CETAP and, therefore, these areas may be subject to growth-related effects to resources of concern. The MCP project is implementing CETAP in accordance with the MSHCP. Because of this, all growth-related effects occurring in areas previously not addressed through the CETAP process and impacting environmental resources of concern would be minimized, and mitigated for by compliance with the MSHCP. Because the MCP study area contains a number of environmental resources of concern (i.e., habitat, aquatic resources, and cultural resources), RCTC is exploring the potential to acquire privately held lands in this area to meet both its overall obligations under the MSHCP, as well as the mitigation requirements to natural communities resulting from the MCP project, as discussed in Section 3.17, Natural Communities, of this EIR/EIS. Acquiring privately held lands in this area that may otherwise be subject to future development would help minimize growth-related effects of the Build Alternatives on environmental resources of concern.			No avoidance, minimization, or mitigation measures required.
Farmlands and Timberlands	No impact	No impact	Prime Farmland 212.71 ac, Farmland of State Importance 164.66 ac, Unique Farmland 47.49 ac, Farmland of Local Importance 601.04 ac, and Grazing Land 81.45 ac. **(Total: 1,107.34 ac)**	Prime Farmland 250.81 ac, Farmland of State Importance 149.91 ac, Unique Farmland 47.49 ac, Farmland of Local Importance 537.98 ac, and Grazing Land 75.72 ac. **(Total: 1,061.91 ac)**	Prime Farmland 190.95 ac, Farmland of State Importance 149.91 ac, Unique Farmland 47.49 ac, Farmland of Local Importance 578.57 ac, and Grazing Land 74.87 ac. **(Total: 1,041.79 ac)**	**AG-1** **Notification to Agricultural Property Owners.** Prior to the start of any construction activity adjacent to farmlands, the Riverside County Transportation Commission (RCTC) shall provide written notification to agricultural property owners or leaseholders immediately adjacent to the disturbance limits for the Mid County Parkway (MCP) project. The notification is to indicate the intent to begin construction, including an estimated date for the start of construction. In order to provide agricultural property owners or leaseholders sufficient lead time to make any changes to their operations due to MCP project construction, this notification shall be provided at least 3 but no more than 12 months prior to the start of construction activity. **AG-2** **Temporary Livestock and Equipment Crossings.** Prior to the start of any construction activity adjacent to any farmlands, the

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						RCTC shall coordinate with agricultural property owners or leaseholders to provide temporary livestock and equipment crossings of the MCP right of way to minimize impacts to livestock movement, and routine operations and normal business activities during project construction. **AG-3** **Equipment Crossings.** During final design, and in coordination with property owners of lands in use for agricultural operations, the RCTC will finalize the realignments of any affected access roads to provide equipment crossings to minimize impediments to routine agricultural operations and normal business activities that may result from long-term project operation. In addition, as stated in Section 3.4.2, Relocations, the Build Alternatives would be required to comply with the Uniform Relocation Assistance Program for the acquisition of any farmlands. Fugitive dust emissions from grading and exhaust emissions from construction equipment impacts would be minimized through implementation of air quality and dust control measures as described in Section 3.14, Air Quality, of this document. Noise impacts would be minimized through implementation of Caltrans Standard Specification, Section 5-1, “Sound Control Requirements”. The MCP Build Alternatives would also result in impacts to Williamson Act Preserves. The following mitigation measure shall be implemented to ensure compliance with Williamson Act notification procedures. **AG-4** **Notification to Agencies.** Prior to completion of right of way acquisition, the RCTC shall prepare and send all required notices to the Director of Conservation and the local governing body responsible for the administration of agricultural preserves pursuant to Section 51291 of the Williamson Act for any roadways within established agricultural preserves.
Community Impacts: Community Character and Cohesion	No impact	No impact	All MCP Build Alternatives would result in a “physical change that would permanently alter the character of the existing community” by construction of a six-lane controlled access freeway within the MCP study area. However, the MCP project would also serve to benefit these communities by providing improved mobility within the MCP study area and better connectivity to other parts of the MCP study area, western Riverside County, and the region as a whole. Alternative 4 Modified would follow closely along the existing Perris Valley Storm Drain and existing Ramona Expressway near the (I-215 connection and result in a circuitous route building 3 mi of freeway for a travel distance of 1.5 mi.	All MCP Build Alternatives would result in a “physical change that would permanently alter the character of the existing community” by construction of a six-lane controlled access freeway within the MCP study area. However, the MCP project would also serve to benefit these communities by providing improved mobility within the MCP study area and better connectivity to other parts of the MCP study area, western Riverside County, and the region as a whole. Alternative 5 Modified would bisect several large intermodal distribution centers along Rider Street, as well as impact commercial and industrial businesses adjacent to I-215, and a few industrial businesses along Perris Boulevard.	All MCP Build Alternatives would result in a “physical change that would permanently alter the character of the existing community” by construction of a six-lane controlled access freeway within the MCP study area. However, the MCP project would also serve to benefit these communities by providing improved mobility within the MCP study area and better connectivity to other parts of the MCP study area, western Riverside County, and the region as a whole. Alternative 9 Modified would bisect a residential community located between Placentia Avenue and Rider Street and a cluster of businesses in the northeast quadrant of the proposed MCP/Redlands	**CC-1** **School Safety.** During all site preparation, grading, disturbance, and construction, the Riverside County Transportation Commission (RCTC) Resident Engineer shall require the Construction Contractor to coordinate with the Val Verde Unified School District (School District) to ensure that school crossing guards are present in the vicinity of any construction areas near schools in and near the project limits when students are present, to protect the safety of students crossing streets near project construction areas. In the event that school crossing guards are not provided by or available from the School District, the RCTC Resident Engineer will require the Construction Contractor to provide traffic control staff at crossings near the project construction limits used by students when students are present. **CC-2** **Placentia Avenue.** If Alternative 9 Modified is selected as the preferred alternative, the RCTC Project Engineer shall ensure that the final design plans include provisions for restoration of the disrupted areas in residential communities along Placentia Avenue with landscaping and hardscape treatments consistent with the area’s existing community character.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
			Alternative 4 Modified would result in a direct impact to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	Alternative 5 Modified would result in direct impacts to portable classrooms of Val Verde High School and Val Verde Unified School District Administrative and Facilities Operation Building (City of Perris).	interchange. Alternative 9 Modified would not result in direct impacts to schools.	
Community Impacts: Relocations	No impact	No impact	• Acquisitions/ Displacements: 91 nonresidential property displacements 48 residential property displacements 68 businesses displaced 350 employees displaced 426 occupants displaced • Property tax revenue loss of $175,547. • Sales tax loss of $3,085,655.	• Acquisitions/ Displacements: 159 nonresidential property displacements 36 residential property displacements 90 businesses displaced 1,129 employees displaced 373 occupants displaced • Property tax revenue loss of $441,402. • Sales tax loss of $4,195,741.	• Acquisitions/ Displacements: 103 nonresidential property displacements 102 residential property displacements 37 businesses displaced 188 employees displaced 659 occupants displaced • Property tax revenue loss of $570,081. • Sales tax loss of $1,521,443.	**CC-3** **Where property acquisition and relocation are unavoidable,** RCTC's Right-of-Way Agents will follow the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) and the 1987 Amendments as implemented by the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs. For properties where a partial acquisition results in the removal of some or all of the parking for the property, RCTC's Right-of-Way Agents will conduct parking studies to investigate the use of adjacent acquisitions for replacement parking, reconfiguring the remaining parking spaces and lots on the property, restriping parking spaces, enlarging parking lots, and reconfiguring driveways and/or delivery locations to reduce the project effects on the property. **CC-4** **Spanish Speaking Relocation Agents.** During the right-of-way acquisition process, RCTC Right-of-Way Agents will ensure that Spanish-speaking Right-of-Way Agents and staff are available to work with Spanish-speaking property and business owners, residents, tenants, and other persons affected by the property acquisition for the project during all phases of the property acquisition and relocation process. The RCTC Right-of-Way Agents will document in writing that all Spanish-speaking parties were offered services with Spanish-speaking Right-of-Way Agents and staff and whether each party requested Spanish-speaking Right-of-Way Agents and staff or not.
Community Impacts: Environmental Justice	No impact	No impact	All MCP Build Alternatives would impact minority and low-income populations, primarily from displacements/relocations and from impacts to community character and cohesion. When comparing the MCP Build Alternatives, Alternative 4 Modified and its DVs have less physical impacts on minority and low-income populations within the MCP study area. The adverse impacts of Alternative 4 Modified would not be appreciably more severe or greater in magnitude than the adverse impacts to non-minority and/or non-low-income population groups after mitigation measures and offsetting project benefits are considered. Therefore, Alternative 4 Modified is not considered to have disproportionate impacts to environmental justice populations.	All MCP Build Alternatives would impact minority and low-income populations, primarily from displacements/relocations and from impacts to community character and cohesion. When comparing the MCP Build Alternatives, Alternative 5 Modified has the greatest impact on business relocations in areas with minority and low-income populations. The large intermodal warehouses displaced by this alternative (approved but not yet constructed and operational) may not be able to be relocated within the Perris area due to the need for large parcels of land to be available for relocation. Should this occur, important sources of employment would be relocated out of CTs with high percentages of low-income and/or minority populations in the MCP study	All MCP Build Alternatives would impact minority and low-income populations, primarily from displacements/relocations and from impacts to community character and cohesion. When comparing the MCP Build Alternatives, Alternative 9 Modified would result in the highest impacts to residential relocations in areas with minority and low-income populations; however, there is ample supply of existing housing stock in the immediate area that will facilitate the ability to relocate residents within their existing communities. Therefore, Alternative 9 Modified is not considered to have disproportionate impacts to environmental justice populations.	Measures stipulated in other sections of the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) (land use, air quality, visual, noise, etc.) will reduce impacts to all affected populations, including minority and low-income populations.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
				area. Because of this potential loss of major employers within these CTs, Alternative 5 Modified is considered to have disproportionate impacts to environmental justice populations.		
Utilities and Emergency Services	No impact	Less impact than for MCP Build Alternatives	All MCP Build Alternatives would have beneficial effects on the ability of the Riverside County Fire Department, the City of Perris Fire Department, and the City of Perris Police Department to provide services to the MCP study area. All MCP Build Alternatives would require relocation of existing utilities. Construction activities, such as temporary road closures, lane closures, or detour routes, could result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response time goals within the MCP study area. The risk of wildfires would increase during construction of any of the MCP Build Alternatives due to the use of combustion engines in construction equipment, welding equipment, and other sources of combustion.	All MCP Build Alternatives would have beneficial effects on the ability of the Riverside County Fire Department, the City of Perris Fire Department, and the City of Perris Police Department to provide services to the MCP study area. All MCP Build Alternatives would require relocation of existing utilities. Construction activities, such as temporary road closures, lane closures, or detour routes, could result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response time goals within the MCP study area. The risk of wildfires would increase during construction of any of the MCP Build Alternatives due to the use of combustion engines in construction equipment, welding equipment, and other sources of combustion.	All MCP Build Alternatives would have beneficial effects on the ability of the Riverside County Fire Department, the City of Perris Fire Department, and the City of Perris Police Department to provide services to the MCP study area. All MCP Build Alternatives would require relocation of existing utilities. Construction activities, such as temporary road closures, lane closures, or detour routes, could result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response time goals within the MCP study area. The risk of wildfires would increase during construction of any of the MCP Build Alternatives due to the use of combustion engines in construction equipment, welding equipment, and other sources of combustion.	**U&ES-1** **Fire Protection.** Prior to site preparation, disturbance, grading, and construction, the Riverside County Transportation Commission (RCTC) Project Engineer will require the Construction Contractor to request the Riverside County Fire Department to identify areas adjacent to the project construction limits which are subject to wildfires and to define when the high fire season occurs. The RCTC Project Engineer will note all areas subject to wildfires on the project plans and specifications. During site preparation, disturbance, grading, and construction in areas subject to wildfires as determined by the Riverside County Fire Department, the RCTC Project Engineer will require the Construction Contractor to install signs around those construction sites warning of high fire risk. In addition, during the high fire season as declared by the Riverside County Fire Department, the RCTC Project Engineer will require the Construction Contractor to post information on area closings and other relevant information provided by the Fire Department around the construction sites adjacent to areas subject to wildfires. The phone numbers for the Riverside County Fire Department and other emergency services providers (law enforcement, emergency medical, etc.) will be provided on these signs. **U&ES-2** **Fire Protection Access During Construction.** Prior to site preparation, disturbance, grading, and construction, the RCTC Project Engineer will request the Riverside County Fire Department to identify fire and emergency access roads crossing or immediately adjacent to the construction areas. The RCTC Project Engineer will show the identified fire and emergency access roads on the project plans and specifications. During site preparation, disturbance, grading, and construction, the RCTC Project Engineer will require the Construction Contractor to maintain access for emergency personnel and vehicles to existing fire roads crossing and immediately adjacent to the construction areas as identified by the Riverside County Fire Department. The RCTC Project Engineer will require the Construction Contractor to clearly mark those access locations with warnings for construction personnel to avoid blocking those locations, even temporarily for short periods of time, with construction equipment, personal vehicles, waste/trash, or materials storage. **U&ES-3** **Fire Protection Access During Operations.** During final design, the RCTC Project Manager and RCTC Project Engineer will coordinate with the Riverside County Fire Department to incorporate long-term provision of access to

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						the existing fire road grid in the project final design and specifications. The long-term access locations must be approved by the California Department of Transportation (Caltrans) along Interstate 215 (I-215) and State Route 79 (SR-79), the local jurisdictions with land use authority, and the Riverside County Fire Department. **U&ES-4** **Fire Protection During Construction.** Prior to site preparation, disturbance, grading and construction, the RCTC Project Engineer will request the Riverside County Fire Department to identify areas of fire hazard adjacent to construction areas and to request recommendations for appropriate fuel modification techniques for those areas. The RCTC Project Engineer will note the identified fire hazard areas on the project plans and specifications and indicate the need for fuel modification techniques in those areas. During site preparation, disturbance, grading, and construction, the RCTC Project Engineer will require the Construction Contactor to install signs around construction sites in identified fire hazard areas and to implement fuel modification techniques as soon as possible in those areas to ensure that those techniques are in place prior to the operation of substantial amounts of construction equipment in the area. The phone numbers for the Riverside County Fire Department and other emergency services providers (law enforcement, emergency medical, etc.) will be provided on these signs. **U&ES-5** **Fire Protection During Construction.** To minimize the risk of wildfire during site preparation, disturbance, grading, and construction, the RCTC Project Engineer will require the Construction Contractor to: • Ensure that all construction equipment and vehicles are equipped with readily accessible fire extinguishers and shovels • Inspect all construction equipment and vehicles weekly to verify they are in compliance with minimum fire safety standards • Document the inspections and compliance with these requirements in weekly reports to the RCTC Project Engineer **U&ES-6** **Fire Protection.** During final design, the RCTC Project Engineer, in consultation with a qualified biologist (Contract Qualified Biologist) under contract to RCTC, will incorporate brush management zones in areas adjacent to existing reserves, the Multiple Species Habitat Conservation Plan (MSHCP) Conservation Area, and other undeveloped lands in accordance with Section 6.4 of the MSHCP in the final project plans and specifications. During site preparation, disturbance, grading, and construction, the RCTC Project Engineer will require the Construction Contractor to implement the provision of brush

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						management zones shown in the project plans and specifications in areas adjacent to existing reserves, the MSHCP Conservation Area, and other undeveloped lands in accordance with Section 6.4 of the MSHCP. **U&ES-7** **Fire, Emergency Medical, and Law Enforcement Call Boxes.** During final design, the RCTC Project Engineer will incorporate emergency call boxes in the final plans and specifications, consistent with Riverside County Fire Department, Caltrans, and/or local jurisdictions' policies on emergency call boxes. **U&ES-8** **Utilities.** During final design, the RCTC Project Engineer will prepare plans showing the utility facilities expected to be relocated or protected in place during project construction. The RCTC Project Engineer will coordinate the final plans for the proposed relocations/protection in place with each affected utility provider. During this process, the RCTC Project Engineer will: 1. Continue to seek to avoid utility relocations by refining the project design and/or protection of existing utilities in place during and after construction; 2. If relocation is necessary, to relocate utilities across/within the MCP project right of way, other existing public right of ways and/or where easements are required; 3. Receive approval from each utility provider regarding the proposed relocation and/or protection in place; and 4. Incorporate the final relocation/protection in place measures in the final plans and specifications.
Traffic and Transportation/ Pedestrian and Bicycle Facilities	In 2040, the travel time for the no build conditions from I-215 to SR-79 will be 44.3 minutes. There would be no improvements to east-west travel on Ramona Expressway; therefore, there will be no effect on traffic circulation under Alternative 1A.	In 2040, the travel time for no build conditions from I-215 to SR-79 will be 44.3 minutes. While some intersections would improve in LOS under Alternative 1B in 2040, there are still intersections along Ramona Expressway that would be below the acceptable LOS standards.	The MCP Build Alternatives will not cause a substantial increase in traffic in relation to the existing and projected traffic load and capacity of the street system. In 2040, the travel time for MCP from I-215 to SR-79 will be 15.9 minutes. The MCP Build Alternatives will result in temporary and permanent impacts to traffic circulation due to traffic diversions resulting from local road closures and temporary ramp and I-215 mainline lane closures during construction. The MCP Build Alternatives will result in temporary and permanent impacts to existing and planned trails that cross the proposed freeway alignment.	The MCP Build Alternatives will not cause a substantial increase in traffic in relation to the existing and projected traffic load and capacity of the street system. In 2040, the travel time for MCP from I-215 to SR-79 will be 14.8 minutes. The MCP Build Alternatives will result in temporary and permanent impacts to traffic circulation due to traffic diversions resulting from local road closures and temporary ramp and I-215 mainline lane closures during construction. The MCP Build Alternatives will result in temporary and permanent impacts to existing and planned trails that cross the proposed freeway alignment.	The MCP Build Alternatives will not cause a substantial increase in traffic in relation to the existing and projected traffic load and capacity of the street system. In 2040, the travel time for MCP from I-215 to SR-79 will be 14.2 minutes. The MCP Build Alternatives will result in temporary and permanent impacts to traffic circulation due to traffic diversions resulting from local road closures and temporary ramp and I-215 mainline lane closures during construction. The MCP Build Alternatives will result in temporary and permanent impacts to existing and planned trails that cross the proposed freeway alignment.	**TR-1** **Traffic Management Plan.** During final design, the Riverside County Transportation Commission (RCTC) Project Engineer shall prepare the Final Traffic Management Plan (TMP), which will be based on the Preliminary TMP developed for the Project Report, to address specific short-term traffic impacts during construction of the project. The objectives of the Final TMP are to: • Maintain traffic safety during construction • Effectively maintain an acceptable level of traffic flow throughout the transportation system during construction • Minimize traffic delays and facilitate reduction of overall duration of construction activities • Minimize detours and impacts to pedestrians and bicyclists • Foster public awareness of the project and related impacts • Achieve public acceptance of construction of the project and the Final TMP measures. The RCTC Project Engineer shall submit the Final TMP to

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures

						the California Department of Transportation (Caltrans) for review and approval during final design and prior to any construction activities affecting Interstate 215 (I-215) or State Route 79 (SR-79). The Final TMP shall also be reviewed with the local jurisdictions, which would or could experience short-term traffic impacts during project construction.
						
						The Preliminary TMP contains the following elements intended to reduce traveler delay and enhance traveler safety. These elements shall be refined during final design and incorporated in the Final TMP for implementation during project construction.
						
						• **Public Information/Public Awareness Campaign (PAC).** The primary goal of the PAC is to educate motorists, business owners/operators, residents, elected officials, and government agencies about construction activities and associated impacts. The PAC is an important tool for reaching target audiences with important construction project information and shall include, but not be limited to:
						
						  • Rideshare information
						  • Brochures and mailers
						  • Media releases
						  • Paid advertising
						  • Public meetings
						  • Broadcast fax and email services
						  • Telephone hotlines
						  • Notification to targeted groups
						  • Commercial traffic reporters/feeds
						  • Project website
						  • Visual information
						  • Local cable television and news
						  • Internet postings
						
						• **Traveler Information Strategies.** The effective implementation of a traveler information system during construction is crucial for enabling motorists to make informed decisions about their travel plans and options with real-time traffic information. That real-time traffic information shall include information on lane closures, detours, delays, access to adjacent land uses, “businesses are open” signing, and other signing and information to assist travelers in navigating through and in construction areas. Key components of this system shall include, but not be limited to:
						
						  • Fixed changeable message signs
						  • Portable changeable message signs

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						• Ground-mounted signs • Automated work zone information systems • Highway advisory radio • Lane closure website • Department highway information network • Bicycle and pedestrian information • Commute Smart website • **Incident Management.** Effective incident management will ensure that incidents in construction areas are cleared quickly and do not lead to substantial delays for the traveling public through work zones. Incident management shall include, but is not limited to: • Construction Zone Enhanced Enforcement Program (COZEEP) • Freeway service patrol for construction • Traffic surveillance stations • Transportation Management Center Unit 370 • Traffic management team • Towing services • **Construction Strategies.** The Final TMP shall include procedures to lessen the effect of typical construction activities and shall include, but not be limited to, consideration of the following: • Conflicts with other projects and special events • Construction staging alternatives • Mainline lane closures • Local road closures • Ramp/connector closures • Pedestrian and bicycle detours and facility closures • Traffic control improvements • Coordination with other projects • Project phasing • Traffic screens • Truck traffic restrictions • Haul routes • **TMP During Construction.** During site preparation, disturbance, grading, and construction, the RCTC Resident Engineer shall require the Construction Contractor to implement the measure in the Final TMP

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						as applicable in each construction area. • **Public Awareness Campaign.** Prior to and during all site preparation, disturbance, grading, and construction, the RCTC Resident Engineer and the Construction Contractor shall coordinate with RCTC's Public Information staff to provide information regarding current and upcoming construction, detours, street closures, etc., that will then be transmitted by the Public Information staff to the general public.
Visual and Aesthetics	No impact	No impact	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and structures, construction vehicles, and construction staging areas. Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and structures, construction vehicles, and construction staging areas. Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	Short-term visual impacts would occur to sensitive viewers during the construction period, and include views of demolition of existing structures, clearing of existing vegetation, grading of cut-and-fill slopes, construction of the MCP roadway and structures, construction vehicles, and construction staging areas. Long-term impacts resulting from the permanent alteration of the visual environment through construction of the highway and associated bridges, interchange structures, retaining walls, and sound walls.	**VIS-1** **Construction Plan.** To keep construction and staging activities within the project right of way and to minimize views of construction access and staging areas, prior to the initiation of construction, the Riverside County Transportation Commission (RCTC) Project Engineer will require the Construction Contractor to document the locations of construction and staging areas within the disturbance footprint for the selected Mid County Parkway (MCP) Build Alternatives or within other public rights of way as approved by the local jurisdictions where those rights of way are located. During construction, the RCTC Project Engineer will require the Construction Contractor to construct the project in accordance with California Department of Transportation (Caltrans) Standard Construction Specifications, including measures included in those Specifications to address visual impacts during construction. **VIS-2** **Construction Lighting.** If construction work must be done at night, early evening, and/or early morning and lighting is required, RCTC's Project Engineer will require the Construction Contractor to properly locate and direct lighting within the construction area to minimize light shining off site during those nighttime construction activities. **VIS-3** **MCP Corridor Master Plan.** During final design, the RCTC Project Manager will have the *MCP Corridor Master Plan* (Master Plan) prepared. The Master Plan will include a design template for aesthetic features for structures throughout the MCP corridor. The purpose of the Master Plan is to create consistency in aesthetic design throughout the length of the MCP corridor. The aesthetic and design features described in Measure VIS-4 will be incorporated in the Master Plan. In addition, the Master Plan will be developed in conjunction with the *MCP Landscape Plan* described in Measure VIS-5. The RCTC Project Manager will coordinate the preparation of the Master Plan with the County of Riverside (County) and the cities in which the project is located, and with Caltrans in the context-sensitive design process for the Master Plan. During final design, the RCTC Project Manager will incorporate the Master Plan in the project specifications. During construction, the RCTC Project Engineer will require the Construction Contractor to implement the Master Plan in the construction of the project hardscape and landscape features.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						VIS-4 **Structural and Hardscape Elements.** To address the adverse visual impacts of project structures, the RCTC Project Engineer will ensure that the final project design incorporates the mitigation and minimization elements A–D, below, and that these enhancements to structures are incorporated in the design and construction of sound walls, retaining walls, and bridge elements. The design of these aesthetic features will be based on the Master Plan described in Measure VIS-3. During construction, RCTC's Project Engineer will ensure that the Construction Contractor constructs the retaining and sound walls, medians, bridges, and other structures and hardscape consistent with aesthetic and design features in the project specifications including the Master Plan. A. Sound walls will include attractive, decorative elements such as local art or local or historical references incorporated into the wall design to reduce visual impacts to community character, increase the visual quality of the area, and provide an expression of the local and/or regional "sense of place." Areas in front of sound walls (the side facing away from the freeway) will be landscaped, where landscaping can be accommodated within the public right of way, including trees, shrubs, and vines (depending on the available space), to break the visual monotony, soften the appearance of sound walls, and deter graffiti. B. Retaining walls (including walls associated with bridge structures) will be heavily textured (i.e., split-face or fractured rib) to minimize glare and visual mass. Retaining walls facing public use areas (parks, streets, etc.) over 9 feet (ft) high will be heavily textured (i.e., split-face or fractured rib) and include site-specific aesthetic features (local or historical references). Color (integral or applied) is not required for retaining walls. C. In addition to texture and color as described in A and B, above, sound walls and retaining walls with low-density development or recreational viewer groups will include planting of trees or trees and shrubs at the base of the walls (non-motorist side) to minimize loss of visual unity. Plantings will be local native species or ornamental species that require no irrigation after establishment consistent with the *MCP Landscape Plan*. These plantings will not require permanent irrigation. D. Slope paving in all areas with bicyclist and pedestrian viewers will include texture (i.e., stamped slate). In urban areas, slope paving will incorporate site-specific aesthetic features in addition to texture. Texture and pattern will be used to minimize the visual impacts of increased hard surface, and reinforce community identify, offsetting reduced community connectivity associated with increased bridge widths. In addition to the design elements noted above, the RCTC Project Engineer will ensure that the designs of sound walls

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						comply with the Caltrans standards for sound attenuation (where walls provide that function), safety requirements, and with the Caltrans *Highway Design Manual* standards. The RCTC Project Engineer will request the Caltrans District 8 Landscape Architect to review and approve the final design of any sound walls within state highway right of way. **VIS-5** **MCP Landscape Plan.** During final design, the RCTC Project Manager will contract with a licensed landscape architect to prepare the *MCP Landscape Plan*. The purpose of the *MCP Landscape Plan* is to create consistency in the landscaping and softscape project features throughout the length of the MCP corridor. The *MCP Landscape Plan* will be developed in conjunction with the Master Plan described in Measure VIS-3, and landscaping will be in compliance with the Multiple Species Habitat Conservation Plan (MSHCP) Urban/Wildlands Interface Guidelines. The RCTC Project Manager will coordinate the preparation of the plan with the County and the cities in which the project is located, and with Caltrans. The RCTC Project Manager will submit the *MCP Landscape Plan* for review and approval by the Caltrans District 8 Landscape Architect for the parts of the *MCP Landscape Plan* applicable to state highway right of way. The RCTC Project Manager will incorporate the *MCP Landscape Plan* in the project specifications. The *MCP Landscape Plan* will include the following components: - Applicable procedures and requirements detailed in the Caltrans *Highway Design Manual,* Section 902.1, Planting Guidelines (September 2006), and any applicable local agency General Plan. - Identification of areas within the project limits for revegetation, including landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new project structures (ramps, sound walls, and retaining walls). - Identification of trees and shrubs and their locations for planting along the MCP corridor and at interchanges to enhance the existing visual planting character of the area. - Identification of drought-resistant plants and their locations for planting along the MCP corridor; the plant materials will be consistent with Metropolitan Water District of Southern California (Metropolitan) guidelines, which promote the use of xeric (adapted to arid conditions) landscaping techniques. The irrigation design and implementation practices will conform to the water conservation measures established in Assembly Bill 325, the Water Conservation in Landscaping Act of 1990 (in effect January 1, 1993). The identified plant materials will also

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						be durable in relation to urban pollutants, such as smog. - Identification of soil erosion control plant materials (groundcover, native grasses, and wildflowers) and the embankments and steeper slopes where those plant materials would be planted. - Identification of plant materials, which are not highly sensitive to shadow and shade, and their locations for planting along the walls of the MCP corridor. - Confirmation that all plantings will be drought-resistant and, where applicable, shadow-resistant to ensure plant longevity and the sustainable use of water resources. - Identification of locations along the MCP corridor where slope rounding and contour grading would be incorporated to minimize the appearance of slopes and visually soften grade changes in those areas. During final design, the RCTC Project Manager will incorporate the *MCP Landscape Plan* in the project specifications. During construction, the RCTC Project Engineer will require the construction contractor to implement the *MCP Landscape Plan* in the construction of the project landscape features. Replacement planning will include no less than 3 years of plant establishment. **VIS-6** **Trees.** During final design, the RCTC Project Engineer will minimize the removal of existing mature trees when it can be accommodated without compromising the design of the project facilities, or the safety of construction workers or future travelers on the project facilities. The RCTC Project Engineer will ensure that the project plans identify mature trees that will not be removed during construction. During construction, the RCTC Project Engineer will require the Construction Contractor to avoid removal of mature trees as noted on the project plans. Any requests from the construction contractor to remove trees shown on the project plans as not to be removed must be approved in writing by the RCTC Project Engineer. If removal of mature trees within the limits of improvements cannot be avoided, the RCTC Project Engineer will incorporate additional landscape improvements during final design at a 1:1 replacement ratio. **VIS-7** **Lighting.** During final design, the RCTC Project Engineer will prepare a facility lighting plan. The lighting plan will include the following: Specifications for lighting fixtures designed to minimize glare and light on adjacent properties and into the night sky. Specifications for nonglare hoods to focus light within the MCP

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						project or local jurisdictions' road rights of way. Compliance with the County of Riverside Ordinance No. 655, Regulating Light Pollution for Zone B, including installation of low pressure sodium street lights on private roadways and streets. The RCTC Project Engineer will submit the lighting plan to the Caltrans District 8 for areas under State jurisdiction and for approval by the County or the affected cities for areas within their jurisdictions. The RCTC Project Engineer will incorporate the lighting plan in the final design and project specifications. The RCTC Project Engineer will require the Construction Contractor to install light fixtures consistent with the lighting plan.
Cultural Resources	No impact	No impact	• Adverse effects to the following sites: 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. • A Memorandum of Agreement will be developed for Sites 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. The Memorandum of Agreement will also stipulate the responsibilities of the FHWA, SHPO, Caltrans, RCTC, and the Advisory Council on Historic Preservation on measures that will be taken to avoid, minimize, or mitigate the effects of the undertaking on historic properties. The executed Memorandum of Agreement will be included as an appendix in the Final EIR/EIS. An Environmentally Sensitive Area Action Plan will be appended to the Discovery and Monitoring Plan for the MCP project.	• Adverse effects to the following sites: 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. • A Memorandum of Agreement will be developed for Sites 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. The Memorandum of Agreement will also stipulate the responsibilities of the FHWA, SHPO, Caltrans, RCTC, and the Advisory Council on Historic Preservation on measures that will be taken to avoid, minimize, or mitigate the effects of the undertaking on historic properties. The executed Memorandum of Agreement will be included as an appendix in the Final EIR/EIS. An Environmentally Sensitive Area Action Plan will be appended to the Discovery and Monitoring Plan for the MCP project.	• Adverse effects to the following sites: 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. • A Memorandum of Agreement will be developed for Sites 33-16598, 33-19862, 33-19863, 33-19864, and 33-19866. The Memorandum of Agreement will also stipulate the responsibilities of the FHWA, SHPO, Caltrans, RCTC, and the Advisory Council on Historic Preservation on measures that will be taken to avoid, minimize, or mitigate the effects of the undertaking on historic properties. The executed Memorandum of Agreement will be included as an appendix in the Final EIR/EIS. An Environmentally Sensitive Area Action Plan will be appended to the Discovery and Monitoring Plan for the MCP project.	**CUL-1 Discovery of Cultural Materials.** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. **CUL-2 Discovery of Human Remains.** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Riverside County Transportation Commission (RCTC) Project Manager and the Caltrans District 8 Environmental Branch Chief so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. **CUL-3 Avoidance of Site 33-3653.** During the final design the RCTC's Project Engineer will designate the part of Site 33-3653 near the project Area of Potential Effects (APE) as an Environmentally Sensitive Area on the project construction plans. The boundary of that site near the APE will be mapped by the Project Archaeologist (to be retained by the RCTC Project Manager) for incorporation in the final design mapping. The Environmentally Sensitive Area for Site 33-3653 will not be shown as a cultural site on the final design plans to avoid unauthorized artifact collection or vandalism to the site. Prior to any ground-disturbing activities in the vicinity of Site 33-3653, RCTC's Project Engineer will require the Construction Contractor to provide fencing or flags around the boundary of the Environmentally Sensitive Area. The Project Archaeologist will monitor the installation of the fencing/flagging.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						The area in the project disturbance limits near or adjacent to the Environmentally Sensitive Area boundary will be monitored when construction in the MCP APE is adjacent to the site by the Project Archaeologist and a Native American monitor during all ground-disturbing and construction activities in this area. The RCTC Project Engineer will require the Construction Contractor to maintain the fencing/flagging throughout the entire construction period in this area. The Project Archaeologist will monitor the condition of the fencing/flagging monthly and will report the need for any repairs to that material to the RCTC Project Engineer and the Construction Contractor.
Hydrology and Floodplain	No impact	No impact	Perris Valley Storm Drain: *Longitudinal Encroachment* San Jacinto River at Lakeview: *Transverse Encroachment* San Jacinto River at SR-79: *Longitudinal Encroachment*	Perris Valley Storm Drain: *Transverse Encroachment* San Jacinto River at Lakeview: *Transverse Encroachment* San Jacinto River at SR-79: *Longitudinal Encroachment*	Perris Valley Storm Drain: *Transverse Encroachment* San Jacinto River at Lakeview: *Transverse Encroachment* San Jacinto River at SR-79: *Longitudinal Encroachment*	**FP-1** **Conditional Letter of Map Revision and Letter of Map Revision.** During final project design, and prior to the issuance of any grading permits, for any parts of the Mid County Parkway (MCP) project located in a 100-year floodplain/floodway, the Riverside County Transportation Commission (RCTC) Project Manager shall process a Conditional Letter of Map Revision and a Letter of Map Revision for the floodplain and floodway encroachments through the Riverside County Flood Control and Water Conservation District (FC&WCD) and Federal Emergency Management Agency (FEMA) if the Perris Valley Storm Drain and the San Jacinto River levee projects are not constructed prior to construction of the MCP project. The information provided to the Riverside County FC&WCD and FEMA shall include the final detailed applications, certification forms, hydraulic analyses (i.e., Final Location Hydraulic Studies), and fee payment to FEMA to obtain a Conditional Letter of Map Revision and a Letter of Map Revision. Any parts of the MCP project located within a 100-year floodplain/floodway shall not be constructed until the Letter of Map Revision is approved by the Riverside County FC&WCD and FEMA.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Water Quality and Storm Water Runoff	No impact	No impact	• 2 bioswales (permanent impact) • 37 infiltration basins (permanent impact) • 13 stream crossings (temporary impact) • 1,153 ac of maximum disturbed area (temporary impact) • 525 ac of new pavement (permanent impact) • Permanent decrease annual loading with implemented BMPs	• 2 bioswales (permanent impact) • 41 infiltration basins (permanent impact) • 11 stream crossings (temporary impact) • 1,145 ac of maximum disturbed area (temporary impact) • 516.9 ac of new pavement (permanent impact) • Permanent decrease annual loading with implemented BMPs	• 2 bioswales (permanent impact t) • 36 infiltration basins (permanent impact) • 13 stream crossings (temporary impact) • 1,091 ac of maximum disturbed area (temporary impact) • 479.5 ac of new pavement (permanent impact) • Permanent decrease annual loading with implemented BMPs	**WQ-1 National Pollutant Discharge Elimination System Permits.** During construction, the Riverside County Transportation Commission (RCTC) Project Engineer will require the Construction Contractor to comply with the provisions of the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), *National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities, and Activities* (Order No. 99-06, NPDES No. CAS000003) , *National Pollutant Discharge Elimination System (NPDES) Permit for Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County with the Santa Ana Region* (Order No. R8-2010-003, NPDES No. CAS618033), and any subsequent permits, as they relate to construction activities for the project. This will include submission of the Permit Registration Documents, including a Notice of Intent, risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board via the Storm Water Multi-Application and Report Tracking System at least 7 days prior to the start of construction. The RCTC Resident Engineer will not authorize the Construction Contractor to begin construction activities until a Waste Discharger Identification number is received from the Storm Water Multi-Application and Report Tracking System. The RCTC Resident Engineer will require the Construction Contractor to prepare the SWPPP and will require the SWPPP to be prepared by a Qualified SWPPP Developer. The RCTC Resident Engineer will require the SWPPP to meet the requirements of the Construction General Permit; to identify potential pollutant sources associated with construction activities; identify non-storm water discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants associated with the construction site. Those BMPs will include, but not be limited to, Good Housekeeping, Erosion Control, and Sediment Control BMPs. The RCTC Resident Engineer will require the Construction Contractor to implement the BMPs identified in the SWPPP during site preparation, grading excavation, construction, and site restoration activities, consistent with how, when, and where the SWPPP indicates those BMPs should be implemented. The RCTC Resident Engineer will require the Construction Contractor to comply with the sampling and reporting requirements of the Construction General Permit.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						The RCTC Resident Engineer will require the Construction Contractor to have a Rain Event Action Plan prepared by a Qualified SWPPP Developer prior to the initiation of site preparation, grading, excavation, or construction activities. The RCTC Resident Engineer will require the Construction Contractor to have the Rain Event Action Plan implemented by a Qualified SWPPP Developer within 48 hours prior to a rain event of 50 percent or greater probability of precipitation according to the National Oceanic and Atmospheric Administration. The RCTC Resident Engineer will require the Construction Contractor to prepare and submit an Annual Report to the State Water Resources Control Board (SWRCB) no later than September 1 of each year using the Storm Water Multi-Application and Report Tracking System. The RCTC Resident Engineer will submit a Notice of Termination to the SWRCB within 90 days of completion of construction and stabilization of the site. **WQ-2** **National Pollutant Discharge Elimination System CAG998001.** The RCTC Resident Engineer will require the Construction Contractor to comply with the provisions of the *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus) Threat to Water Quality*, Order No. R8-2009-0003 National Pollutant Discharge Elimination System (NPDES) No. CAG998001, as they relate to discharge of non-storm water dewatering wastes for the project. The RCTC Resident Engineer will require the Construction Contractor to submit to the Santa Ana Regional Water Quality Control Board (RWQCB) a Notice of Intent at least 60 days prior to the start of construction. The RCTC Resident Engineer will require the Construction Contractor to submit to the Santa Ana RWQCB notification of discharge at least 5 days prior to any planned discharges. The RCTC Resident Engineer will require the Construction Contractor to submit to the Santa Ana RWQCB monitoring reports by the 30th day of each month following the monitoring period. **WQ-3** **Design Pollution Prevention and Treatment Best Management Practices.** Riverside County Transportation Commission (RCTC) will comply with the *Storm Water Management Plan* (SWMP) and follow the procedures outlined in the *Storm Water Quality Handbooks, Project Planning and Design Guide* for implementing Design Pollution Prevention and Treatment BMPs for the project that address pollutants of concern. This will include coordination with the Santa Ana RWQCB with respect to feasibility, maintenance, and monitoring of Treatment BMPs as set forth in the Caltrans Statewide SWMP.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						In addition, impacts to active groundwater wells would be reduced with implementation of Mitigation Measure WQ-4, below. **WQ-4 Groundwater Wells.** During final design, the RCTC will conduct a detailed review of available well information to locate existing active groundwater wells within the MCP project right of way and coordinate with affected property owners of each well to determine if the well requires relocations. The abandonment procedure for each well will be described in accordance with California Department of Water Resources Standards (Bulletin 74-90), and the abandonment approvals by the agencies with jurisdiction for those wells will be documented. Any water supply provided by active wells will be replaced by RCTC during construction of the MCP project. Replacement water may be provided by a variety of means, such as installing a new well or by creating a connection to a municipal supply. In addition to the measures above, a Section 401 and a Section 404 permit will be required from the RWQCB and USACE, respectively. These permits are discussed in Section 3.18, Wetlands and Other Waters.
Geology, Soil, Seismic, and Topography	No impact	Less impacts than the MCP Build Alternatives	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	Alter existing landforms due to grading and construction of various cut-and-fill slopes. Construction activities may also temporarily disturb soil outside the facility footprint, primarily in the trample zone around work areas, heavy equipment traffic areas, and material laydown areas. Temporary impacts would include soil compaction and increased potential for soil erosion. Construction activities could be impacted by ground motion and liquefaction, and possibly ground rupture (deformation) if an earthquake occurred during construction.	**GEO-1 Final Geotechnical Report.** During final design, the Riverside County Transportation Commission (RCTC) will contract with a qualified geotechnical/geologic engineer to prepare the Final Geotechnical Report. This report will build on the information in the Preliminary Geotechnical Report, focusing the analysis on potential geotechnical constraints to the selected build alternative and the specific design features included in the final engineering to address those constraints. The Preliminary Geotechnical Report identified soil-related constraints and hazards, such as slope instability, settlement, liquefaction, or related secondary seismic impacts, that may affect the project. The detailed analysis in the Final Geotechnical Report will address those constraints along the entire alignment of the selected alternative with appropriate design features addressing those constraints included in the final project design. The report will specifically include: • Evaluation of expansive soils along the selected alignment and recommendations regarding construction procedures and/or incorporation of design criteria in the final design to minimize the effect of these soils on the project. • Identification of potential liquefiable areas within the project limits and recommendations and/or design criteria to minimize the effect of liquefaction on the project. • Demonstration that side slopes can be designed and graded so that surface erosion of the engineered fill will not be increased compared to existing, natural conditions. • The performance standards for this report will be the geotechnical design standards of the California Department of Transportation (Caltrans) and the local agencies with jurisdiction over the Mid County Parkway (MCP) project right of way. Acceptance of this report will be needed from

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						the local agencies with jurisdiction over the MCP project right of way and Caltrans for the parts of the MCP project within State highway right of way. **GEO-2** **Vegetation.** During construction, and as included on project plans during final design, the RCTC will require planting of native vegetation with good soil-binding characteristics and low water requirements on engineered slopes to reduce erosion and slope instability. These types of plants include species that are compatible with existing adjacent habitat and native to the project area, including but not limited to the following: brittlebush (*California encelia*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and deerweed (*Lotus scoparius*). Sixty percent of the planting coverage shall be completed within the first 5 years of construction. **GEO-3** **Quality Assurance/Quality Control Plan.** The RCTC will maintain a quality assurance/quality control (QA/QC) plan during construction. The plan will include observing, monitoring, and testing by a geotechnical engineer and/or geologist during construction to confirm that geotechnical/geologic recommendations identified in Measure GEO-1 are fulfilled, or if different site conditions are encountered, appropriate changes are made to accommodate such issues. During site preparation, grading, excavation, and construction, the geotechnical engineer will submit weekly reports to the RCTC Resident Engineer describing that week's activities and the compliance with the relevant recommendations from GEO-1. **GEO-4** **Blasting.** During final design, if it is determined that blasting will be required, the RCTC Project Engineer shall require the Construction Contractor to prepare a blasting plan to minimize potential hazards related to blasting activities. The blasting plan will address all applicable standards in accordance with the United States Department of the Interior, Office of Surface Mining. The issues to be addressed in the blasting plan will include, but are not limited to, the following: hours of blasting activity, notification to adjacent property owners, noise and vibration, and dust control. RCTC's Resident Engineer shall require the Construction Contractor to implement the blasting plan prior to and during any blasting during construction.

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Paleontology	No impact	No impact	Alternative 4 Modified impacts 95 ac of Low Sensitivity and 1,301 ac total of High Sensitivity that may contain paleontological resources.	Alternative 5 Modified impacts 90 ac of Low Sensitivity and 1,291 ac total of High Sensitivity that may contain paleontological resources.	Alternative 9 Modified impacts 89 ac of Low Sensitivity and 1,243 ac total of High Sensitivity that may contain paleontological resources.	**PAL-1 Paleontological Mitigation Plan.** During final design, the Riverside County Transportation Commission (RCTC) Project Engineer will require the qualified principal paleontologist under contract to RCTC to prepare a *Paleontological Mitigation Plan* (PMP). The PMP will provide guidance for developing and implementing paleontological mitigation efforts, including field work, laboratory methods, and curation during construction of the Mid County Parkway (MCP) project. The PMP will primarily be prepared following the guidelines in the California Department of Transportation (Caltrans) *Standard Environmental Reference* (SER), Environmental Handbook, Volume I, Chapter 8 – Paleontology. In addition, the PMP will be prepared following guidance from the General Plan of the County of Riverside, and the guidelines of the Society of Vertebrate Paleontology. The PMP will be specifically tailored to the resources and sedimentary formations that are within the project disturbance limits. The PMP will include, but not be limited to, the following to reduce impacts to paleontological resources from ground-disturbing activities associated with the construction of the project: • Description of the responsibilities and qualifications of the qualified principal paleontologist and the qualified paleontological monitors (who are qualified to identify vertebrate, invertebrate, and plant fossils). • Description of the communication channels among the qualified principal paleontologist, the qualified paleontological monitors, the RCTC Project Manager and Engineer, and the Construction Contractor. • Development of a detailed Monitoring Plan for paleontological resource monitoring defining the specific monitoring requirements and procedures during all ground-disturbing and excavation activities in areas of High A and High B sensitivity. • Development of specific procedures for temporarily halting or redirecting work at an area of a discovery of paleontological resources to permit the present within the locality. • Development of a detailed plan for the recovery, analysis, identification, processing, and cataloguing of fossils recovered during ground-disturbing and excavation activities. The activities in the PMP will be implemented as described in the following steps: • Prior to any ground-disturbing or excavation activities, the qualified principal paleontologist or his/her representative will participate in preconstruction and pregrading conferences with the RCTC Project Manager and Project Engineer, and the Construction Contractor. At this meeting, the qualified principal paleontologist, or his/her

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						representative, will explain the likelihood for encountering paleontological resources during construction, what resources may be discovered, and the methods that will be employed to recover fossils if anything is discovered, consistent with the procedures established in the PMP. • RCTC's Resident Engineer will require the Construction Contractor to comply with the provisions of the PMP during all ground-disturbance, grading, and excavation activities, including appropriate coordination with RCTC's qualified principal paleontologist. • The curation facility should be identified prior to the beginning of excavation activities. At a minimum, a draft curation agreement should be in place between the curation facility, the land owner (RCTC), and the qualified principal paleontologist. This will ensure that collected resources have a permanent home and that the resources are prepared, identified, and cataloged following procedures acceptable to the curation facility. • After vegetation, pavement, and structures are removed, the qualified principal paleontologist and/or qualified paleontological monitors will conduct a preconstruction field survey in areas identified as having high paleontological sensitivity. Observed surface paleontological resources in those areas will be collected by the qualified principal paleontologist, the qualified paleontological monitors, and/or other staff prior to the beginning of additional ground-disturbing activities in those areas. • A qualified paleontological monitor will be present during ground-disturbing and excavation activities within the project disturbance limits in potentially fossiliferous formations and/or geologic units crossed by the MCP project facilities as defined in the PMP. Consistent with the PMP, the monitoring for paleontological resources will be conducted on a full-time basis where fossiliferous sediments are exposed at the surface (High A) and at elevations where excavation is 3 feet (ft) below the surface where paleontological resources are anticipated at depth (High B). • Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating. Any reduction or modification in scheduling of monitoring will be determined by the qualified principal paleontological in cooperation and consultation with RCTC's Resident Engineer. • If paleontological resources are discovered during ground-disturbing and excavation activities, the qualified principal paleontologist shall implement the appropriate actions consistent with the PMP and in cooperation with the RCTC Resident Engineer, for recovery and collection of the fossil resources.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						• The qualified principal paleontologist and qualified paleontological monitors will be empowered to temporarily halt or redirect construction activities around a discovery to reduce adverse impacts to paleontological resources by allowing for the collection of individual or multiple paleontological resources at the paleontological locality. The qualified principal paleontologist and qualified paleontological monitors will be equipped to rapidly remove any large or small fossil specimens encountered during excavation to locations away from the active construction areas to either a safe area within the overall project disturbance limits or an off-site laboratory setting. If large mammal fossils or large concentrations of fossils are encountered, RCTC's Resident Engineer will require the Construction Contractor to make heavy equipment available to assist in the removal and collection of those larger materials. The use of heavy equipment will speed up the recovery and collection process and reduce delays to construction activities. • Upon encountering a large deposit of fossils, the monitor will attempt to salvage all identifiable vertebrate fossils, and a representative sample of invertebrate fossils using additional field staff, if required. Collection of specimens will be completed in accordance with modern paleontological techniques. If the deposit extends outside the work area, or deeper into the ground than any proposed excavation, detailed notes, sketches, and photographs may be taken in lieu of further attempts to collect fossil resources that would be outside the project limits or excavation conditions. • For each newly discovered fossil locality**,** the qualified principal paleontologist shall submit a brief summary report to RCTC that describes an initial analysis of the discovery such as preliminary identification of the fossil specimen(s), the location within the project limits, the geologic formation or unit in which the fossil is located, and if the discovery resulted in a delay to the project construction. If an abundant number of fossil localities are discovered over 1 week, this report may be prepared on a weekly basis with a summary that includes all localities discovered over that weekly period. • During monitoring of the ground-disturbing and excavation activities, sediment samples will be collected and processed through screens to recover microvertebrate fossils by the qualified paleontological monitors, as described in detail in the PMP. This processing will include either dry or wet screen washing and microscopic examination of the residual matrix to recover and identify any small vertebrate remains that may be present. • All fossils collected will be prepared to a reasonable point of identification by qualified paleontologists. Excess sediment or matrix will be removed from the specimens to reduce the bulk of the material. An itemized inventory/catalog of all

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						material collected and identified will be prepared using an Excel or Access type database in a format acceptable to the repository institution. • A *Paleontological Mitigation Report* (PMR), which documents the results of the monitoring and recovery activities and the significance of the recovered fossils, will be prepared by the qualified principal paleontologist and submitted for filing at RCTC and Caltrans within 4 months of the end of project construction activities that could potentially impact fossiliferous formations or geologic units. The PMR will follow the report guidelines in the Caltrans SER, Environmental Handbook , Volume I, Chapter 8 - Paleontology. Additional time may be required to prepare the PMR if an abundant number of paleontological resources are collected that require an additional amount of time for curation and analysis. • The RCTC Project Manager and the qualified principal paleontologist will transfer all the collected fossils, the itemized inventory/catalog of those specimens, and a copy of the PMP to an established repository (Society of Vertebrate Paleontology, 1995 and 1996), such as the Western Science Center in Hemet, for permanent curation and storage.
Hazardous Waste and Materials	No impact	Hazardous materials similar to those for the MCP project could be encountered during construction of these other projects included in Alternatives 1B.	103 hazardous material/ waste sites within 0.25 mi of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	110 hazardous material/ waste sites within 0.25 mi of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	95 hazardous material/ waste sites within 0.25 mi of the alternative alignment. Potential for hazardous materials spills as a result of traffic accidents on the MCP. Potential for vehicles traveling on the MCP to transport hazardous substances that could spill and impact the roadway, adjacent properties, or resources.	**HW-1** **Site Investigations.** During final design, the Riverside County Transportation Commission (RCTC) Project Manager will require a qualified engineer/geologist (Contract Qualified Engineer/Geologist) under contract to RCTC to conduct site investigations for hazardous materials sites identified in the *Hazardous Waste Initial Site Assessment* (July 2011) that are within the right of way of the alternative selected for implementation. It is not feasible to conduct these site investigations prior to completion of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), because new contamination may occur if the site investigations are completed too far in advance of right of way acquisition for the project. The performance standard for this measure is compliance with applicable federal, state, and local regulations. The Site Investigation Report will meet or exceed the requirements of the United States Environmental Protection Agency's (EPA) Standards and Practices for All Appropriate Inquiries (FR 66070, Vol. 70, No. 210, November 1, 2005). The Site Investigation Report will be submitted to the California Department of Transportation (Caltrans) District 8 Hazardous Waste Coordinator for review and approval of areas within state right of way. If contaminants are determined to be present during the site investigations, the RCTC Project Manager, in consultation with the Contract Qualified Engineer/Geologist, may determine that

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						one or more of the following specialized reports may be necessary: Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report. These reports will be submitted to the Caltrans District 8 Hazardous Waste Coordinator, as well as to the applicable oversight agency for review and approval of areas within state right of way. The RCTC Project Manager will require the Contract Qualified Engineer/Geologist to coordinate all site investigations for any active leaking underground storage tank (LUST) cases will be coordinated with the Riverside County Department of Environmental Health, and if groundwater has been impacted, to also coordinate with the Regional Water Quality Control Board (RWQCB), Santa Ana Region. The RCTC Project Manager will require the Contract Qualified Engineer/Geologist to coordinate all site investigations for any automotive or industrial uses to be coordinated with the Riverside County Department of Environmental Health. Site investigations for any clandestine drug lab locations will be coordinated with the Riverside County Department of Environmental Health, the California Department of Toxic Substances Control (DTSC), and law enforcement agency/ies with jurisdiction in the area of the suspected drug lab. Prior to completion of final design, the RCTC Project Manager will require the Contract Qualified Engineer/Geologist to prepare a Hazardous Substances Disclosure Document that clears affected right of way for acquisition. The RCTC Project Manager will submit the Hazardous Substances Disclosure Document to the Caltrans District 8 Hazardous Waste Coordinator for review and approval. **HW-2** **Soil Sampling.** Prior to any site preparation, disturbance, grading, and construction, the RCTC Project Manager will require a qualified engineer/geologist (Contract Qualified Engineer/Geologist) under contract to RCTC to conduct soil sampling for aerially deposited lead (ADL) in unpaved locations adjacent to existing state highway right of way within the project limits, if not previously tested. It is not prudent to conduct this soil sampling prior to completion of the Final EIR/EIS because a preferred alternative has not been selected. The performance standard for this measure is compliance with applicable federal, state, and local regulations related to the identification, removal, handling, and disposal of ADL. The analytical results of the soil sampling will determine the appropriate handling of the soil in those areas and disposal of surplus materials. During site preparation, grading, excavation, and construction, the RCTC Resident Engineer will allow the Construction Contractor to use soil containing ADL within the Caltrans right of

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						way in accordance with the California Environmental Protection Agency, DTSC, Variance No. 00-H-VAR-04, September 22, 2000, or a subsequent applicable variance. The RCTC Resident Engineer will require the Construction Contractor to provide written documentation regarding where the soil with ADL was removed from and where it was reused. During site preparation, grading, excavation, and construction, if it is determined by the RCTC Resident Engineer that it is not feasible to reuse soils, and that soils with ADL will require disposal off-site, the RCTC Resident Engineer will require the Construction Contractor to consolidate the material, load it into approved covered vehicles or containers, and transport it to a permitted hazardous waste disposal facility (Class I or II). The RCTC Resident Engineer will require the Construction Contractor to conduct the soil removal and transport consistent with the Caltrans Standard Special Provision XE 19-900, which includes additional information on the disposal of soils impacted with ADL. **HW-3** **Asbestos, Lead-Based Paint, and Polychlorinated Biphenyl Surveys.** Prior to any site preparation, disturbance, and construction, the RCTC Resident Engineer will require a certified consultant under contract to RCTC to conduct predemolition asbestos, lead-based paint, and polychlorinated biphenyl (PCB) surveys of any structures that will be renovated or demolished. Based on the results of the testing conducted by the certified consultant and prior to the demolition or renovation of any structures determined to contain hazardous materials that exceed the California Health and Safety Code criteria for hazardous waste, the RCTC Resident Engineer will require the Construction Contractor to properly remove, store, transport and dispose of (at an appropriate Class I or II facility) any building materials that exceed the California Health and Safety Code criteria for hazardous waste. **HW-4** **Utility Inspections.** Prior to any site preparation, disturbance, grading, and construction, the RCTC Resident Engineer will require a qualified consultant (Contract Qualified Consultant) under contract to RCTC to conduct inspections of utility pole-mounted transformers that will be relocated or removed as part of the project. Any identified leaking transformers will be considered a PCB hazard unless tested and confirmed otherwise by the Contract Qualified Consultant. For any confirmed PCBs, the RCTC Resident Engineer will require the Construction Contractor to remove, handle, store, and dispose of them and any affected soils consistent with applicable laws and regulations. **HW-5** **Yellow Traffic Stripe and Pavement Markings.** Prior to any site preparation, disturbance, grading, and construction, the RCTC Resident Engineer will require the Construction Contractor to test and remove any yellow traffic striping and pavement-marking material in accordance with Caltrans

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						Standard Special Provisions. During site preparation, disturbance, and construction, the RCTC Resident Engineer will require the Construction Contractor to remove yellow traffic striping and pavement-marking material in accordance with Caltrans Standard Special Provisions. **HW-6** **South Coast Air Quality Management District Rule 1403.** No less than 10 days prior to the demolition of renovation of any structures, the RCTC Resident Engineer will require the Construction Contractor to notify and submit fees to the South Coast Air Quality Management District consistent with the requirements of South Coast Air Quality Management District Rule 1403. The RCTC Resident Engineer will require the Construction Contractor to comply with the requirements of South Coast Air Quality Management District Rule 1403 during renovation and demolition activities. **HW-7** **Groundwater Removal.** During final design, the RCTC Project Engineer will determine whether groundwater removal will be required during construction of the project. The RCTC Project Engineer will coordinate with the Riverside County Department of Environmental Health and the DTSC regarding the removal and disposal of groundwater. If it is determined that groundwater dewatering is required in the vicinity of March Air Reserve Base, the RCTC Project Engineer will also coordinate with the Department of Defense regarding the removal and disposal of that groundwater. The RCTC Project Engineer will provide the RCTC Resident Engineer and the Construction Contractor with the Waste Discharge Identification Number or a copy of an individual permit (as applicable) issued by the RWQCB prior to construction. During all disturbance, excavation, and drilling requiring groundwater dewatering, the RCTC Resident Engineer will require the Construction Contractor to collect any extracted groundwater and dispose of that water consistent with the requirements of the Waste Discharge Identification Number or the individual RWQCB permit. **HW-8** **Soil Sampling adjacent to the Burlington Northern Santa Fe Railway Company Right of Way.** During final design, the RCTC Project Engineer will require a qualified consultant (Contract Qualified Consultant) under contract to the RCTC to sample soils adjacent to the Burlington Northern Santa Fe (BNSF) railroad tracks that will be disturbed during construction of the project for petroleum hydrocarbons, metals, solvents, and other potential contaminants to determine whether they require special handling and disposal. Soils exceeding California Health and Safety Code criteria for hazardous waste will be disposed of at the appropriate Class I or II facility. Based on the results of that sampling, prior to the disturbance of any soils in areas documented as containing contaminants that exceed the California Health and Safety Code criteria for hazardous waste, the RCTC Resident Engineer will require the

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						Construction Contractor to properly remove, store, transport and dispose of (at an appropriate Class I or II facility) any soils that exceed the California Health and Safety Code criteria for hazardous waste. **HW-9** **Soil Sampling for Pesticides.** Prior to completion of right of way acquisitions, the RCTC Project Engineer will require a qualified consultant (Contract Qualified Consultant) under contract to the RCTC to conduct soil sampling for pesticides in former or current agricultural properties that will be disturbed by the project where soil has not otherwise been disturbed (through grading, etc.). It is not prudent to conduct these site investigations prior to completion of the Final EIR/EIS, because new contamination may occur if the investigations are completed too far in advance of right of way acquisitions. The performance standard for this measure is in compliance with applicable federal, state, and local regulations. The analytical results of the soil sampling will determine the appropriate handling and disposal of the soil. Sampling will be conducted in general accordance with DTSC Interim Guidance for Sampling Agricultural Fields for School Sites (August 26, 2002). **HW-10** **Caltrans Unknown Hazards Procedures for Construction.** During site preparation, disturbance, grading, excavation, and construction, if suspect hazardous waste or underground tanks are encountered, the RCTC Resident Engineer will require the Construction Contractor to stop work in the affected area and implement the procedures outlined in Appendix E of the Caltrans Construction Manual, *Unknown Hazards Procedures for Construction*. **HW-11** **Health and Safety Plan.** Prior to any site preparation, disturbance, grading, and construction, the RCTC Resident Engineer will require the Construction Contractor to prepare a site-specific Health and Safety Plan consistent with Caltrans and applicable regulatory requirements that were prepared by the Construction Contractor. The Plan will include, but not be limited to, the following: • Identification of key personnel • Summary of risk assessment for workers, the community, and the environment • Air Monitoring Plan • Emergency Response Plan The RCTC Resident Engineer must review and approve the Plan prior to the Construction Contractor accessing any project construction areas. **HW-12** **Underground Transmission Lines.** No less than 2 days prior to any subsurface excavation or digging, the RCTC Resident Engineer will require the Construction Contractor to notify and

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						ensure that utility owners mark the locations of underground transmission lines and facilities by calling the Underground Service Alert of Southern California at 811. **HW-13** **Blasting.** Prior to any rock-blasting activities, the RCTC Resident Engineer will require the Construction Contractor to obtain a blasting permit from the County of Riverside (County) Sheriff's Department. As part of the permit requirements and pursuant to County requirements, the RCTC Resident Engineer will require the Construction Contractor to comply with the following requirements: • Transportation, handling, storage, and use of explosives, blasting agents, and blasting equipment will be directed and supervised by a qualified Blast Officer, in accordance with local, state, and federal regulations. The Blast Officer will possess a current blasting license issued by the California Occupational Safety Administration (Cal-OSHA). • Allow the appropriate fire protection district and Sheriff's Department personnel to inspect the blast site and blast materials or explosives at any reasonable time. • Give reasonable notice in writing using a form approved by the Sheriff's Department for ongoing operations to all residences and businesses within the blast area. Implement adequate precautions to reasonably safeguard persons and property before, during, and after blasting operations.
Air Quality	No impact	No impact	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would be less than the No Build Alternatives due to improved traffic flow in the project area.	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would be less than the No Build Alternatives due to improved traffic flow in the project area.	Short-term air pollutant emissions would occur as a result of construction activities and would include fugitive dust from grading/site preparation, equipment exhaust, and use of emulsified asphalt paving materials. Long-term mobile emissions associated with the MCP Build Alternatives would be less than the No Build Alternatives due to improved traffic flow in the project area.	**AQ-1** **Fugitive Dust Source Controls.** During all site preparation, grading, excavation, and construction, the Riverside County Transportation Commission (RCTC) will require the Construction Contractor to: • Stabilize open storage piles and disturbed areas by covering them and/or applying water or chemical/organic dust palliative to the disturbed surfaces. This applies to inactive and active sites during workdays, weekends, holidays, and windy conditions. • Install wind fencing, phase grading operations, and operate water trucks for stabilization of surfaces under windy conditions. • Limit vehicle speeds to 15 miles per hour (mph) within the project limits. • Cover loads when hauling material to prevent spillage. • Limit speed of earthmoving equipment to 10 mph. **AQ-2** **Mobile and Stationary Source Controls.** During all site preparation, grading, excavation, and construction, the RCTC Resident Engineer will require the Construction Contractor to: • Reduce the use of trips by and unnecessary idling from heavy equipment. • Use solar-powered, instead of diesel-powered, changeable

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						message signs. • Use electricity from power poles, rather than from generators, when electricity can be acquired from existing power poles in proximity to the construction areas. • Maintain and tune engines per manufacturers' specifications to perform at United States Environmental Protection Agency (EPA) certification levels and verified standards applicable to retrofit technologies. The RCTC Resident Engineer will conduct periodic, unscheduled inspections to ensure that there is no unnecessary idling and that construction equipment is properly maintained, tuned, and modified consistent with established specifications. • Prohibit any tampering with engines and require continuing adherence to manufacturers' recommendations. • Use new, clean (diesel or retrofitted diesel) equipment meeting the most stringent applicable federal or state standards and commit to the best available emissions control technology. Use Tier 2, or higher, engines for construction equipment. If nonroad construction equipment that meets or exceeds Tier 2 engine standards is not available, the Construction Contractor will be required to use the best available emissions control technologies on all equipment. • Use EPA-registered particulate traps and other controls to reduce emissions of diesel particulate matter (PM) and other pollutants at the construction site **AQ-3** **Administrative Controls.** During final design, the RCTC Project Engineer will identify sensitive receptors adjacent to the project disturbance limits and along the primary access routes to/from the construction areas. These will include residential uses, schools, and individuals, such as children, the elderly, and the infirm. The Project Engineer will provide figures showing the locations of these sensitive receptors to the Construction Contractor. Prior to any site disturbance, the RCTC Resident Engineer will require the Construction Contractor to: • Provide documentation indicating all areas of sensitive receptors and how construction equipment, travel routes, and other activities that could emit air pollutants are located away from those sensitive populations; for example, locating construction equipment and staging zones away from sensitive receptors and away from fresh air intakes to buildings and air conditioners. • Prepare an inventory of all equipment and identify the compliance of each piece of mobile and stationary equipment with the mobile and stationary source control requirements listed in Measure AQ-2.

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						AQ-4 **California Department of Transportation (Caltrans) Standard Specifications for Construction.** During all site preparation, grading, excavation, and construction, the RCTC Resident Engineer will require the Construction Contractor to adhere to Caltrans Standard Specifications for Construction (Sections 14.9.03 and 18 [Dust Control] and Section 39-3.06 [Asphalt Concrete Plant Emissions]). **AQ-5** **Asbestos-Containing Materials.** Should the project geologist determine that asbestos-containing materials are present at the project study area during final inspection prior to construction, the RCTC shall implement the appropriate methods to remove asbestos-containing materials.
Noise	No impact	Less impact than for MCP Build Alternatives	Of the 337 modeled receptors, 73 receptors approach or exceed the 67 dBA L_{eq} NAC, and 133 receptors would experience a substantial increase in noise of 12 dB or more. 21 sound barriers analyzed; 4 sound barriers meet both reasonable and feasible criteria. Two types of short-term noise impacts would occur during project construction: (1) construction crew commutes and transport of construction equipment and materials to the project site; and (2) noise-generated impacts during roadway construction.	Of the 358 modeled receptors, 69 receptors approach or exceed the 67 dBA L_{eq} NAC, and 151 receptors would experience a substantial increase in noise of 12 dB or more. 23 sound barriers analyzed; 6 sound barriers meet both reasonable and feasible criteria. Two types of short-term noise impacts would occur during project construction: (1) construction crew commutes and transport of construction equipment and materials to the project site; and (2) noise-generated impacts during roadway construction.	Of the 355 modeled receptors, 66 receptors approach or exceed the 67 dBA L_{eq} NAC, and 150 receptors would experience a substantial increase in noise of 12 dB or more. 23 sound barriers analyzed; 6 sound barriers meet both reasonable and feasible criteria. Two types of short-term noise impacts would occur during project construction: (1) construction crew commutes and transport of construction equipment and materials to the project site; and (2) noise-generated impacts during roadway construction.	**N-1** **Sound Barriers.** Based on the studies completed to date, the Riverside County Transportation Commission (RCTC) intends to incorporate noise abatement in the form of reasonable and feasible barriers at four to six locations, depending on the selected alternative, with respective lengths, and ranging in height from 6 feet (ft) to 14 ft (see Table 3.15.AB), depending on the alternative and the design variations. Calculations based on preliminary design data indicate that the barriers will reduce noise levels by 5 to 11 A-weighted decibels (dBA) (satisfying the 7 decibels [dB] or more for at least one of the benefited receptor locations based on the *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects* (Protocol; May 2011) for 136 to 243 residences, depending on the design variation. During final design, the RCTC Project Manager and Project Engineer, in consultation with the California Department of Transportation (Caltrans), will make the final decision on noise abatement to be included in the selected Build Alternative, based on the final design of the highway facilities and the public involvement process for the environmental document. If during final design, conditions have substantially changed, noise abatement at some of the locations noted above may not be necessary. The Project Engineer will incorporate the final noise abatement in the final project design and specifications. During construction, RCTC's Resident Engineer will require the Construction Contractor to construct the noise abatement measures included in the final design and project specifications as early in the construction process as appropriate, based on other construction activities to maximize the reduction of construction noise on sensitive receptors on the non-freeway side of the wall. **N-2** **Construction Noise.** During all site preparation, disturbance, grading, and construction, the RCTC Resident Engineer will require the Construction Contractor to control noise from construction activity consistent with the Caltrans Standard Specifications, Section 14-8.02, "Noise Control," and Standard Special Provisions S5-310. RCTC's Resident Engineer will require the Construction Contractor to ensure that noise levels from construction operations within the state right of way between the hours of 9:00 p.m. and 6:00 a.m. do not exceed 86

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Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						dBA at a distance of 50 ft from the noise source. The noise level requirement will apply to the equipment and activities on the job site or related to the job, including, but not limited to trucks, transit mixers, or transient equipment that may or may not be owned by the Construction Contractor. During all site preparation, disturbance, grading, and construction, RCTC's Resident Engineer will require the Construction Contractor to equip all internal combustion engines with the manufacturer-recommended mufflers and to not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by RCTC's Resident Engineer, the Construction Contractor will implement additional minimization measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources. **N-3** **Noise Ordinances.** During all site preparation, disturbance, grading, and construction, in accordance with the Municipal Codes of the City of Perris and the City of San Jacinto, and the Riverside County Noise Ordinance, the RCTC Resident Engineer will require the Construction Contractor to limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays. If construction is needed outside those hours or days, the RCTC Resident Engineer will require the Construction Contractor to coordinate with the affected local jurisdiction. The measures below would apply to all MCP Build Alternatives and would reduce adverse impacts related to construction noise and vibration as a result of the blasting for the MCP project. Also, see Mitigation Measures GEO-4 and HW-13. **N-4** **Blasting.** A minimum distance of 100 ft from potential blasting is required for the closest residence under Alternative 4 Modified. **N-5** **Blasting.** Prior to blasting, the Construction Contractor shall prepare crack survey and video reconnaissance, documenting the existing condition of surrounding structures within 100 ft. A follow-up crack survey and video reconnaissance of neighboring structures shall be conducted to determine whether any new cracks or other damage have occurred. The Resident Engineer shall review the results of both pre- and post-construction surveys to determine whether any new damage resulted from blasting.
Energy	No impact	No impact	The MCP project would result in a nominal (maximum of 0.36 percent) long-term increase in regional energy consumption.	The MCP project would result in a nominal (maximum of 0.36 percent) long-term increase in regional energy consumption.	The MCP project would result in a nominal (maximum of 0.36 percent) long-term increase in regional energy consumption.	No additional avoidance, minimization, or mitigation measures required; please refer to AQ-1 through AQ-5.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Natural Communities	No impact	Less impact than MCP Build Alternatives.	17.41 ac of impacts to riparian/riverine areas/habitat. 28.9 ac of impacts to San Jacinto River alkali communities. 93.6 ac of impacts to Riversidean upland sage scrub. 195.0 ac affected of Western Riverside County MSHCP Criteria Area.	15.94 ac of impacts to riparian/riverine areas/habitat. 28.9 ac of impacts to San Jacinto River alkali communities. 90.5 ac of impacts to Riversidean upland sage scrub. 195.1 ac affected of Western Riverside County MSHCP Criteria Area.	16.36 ac of impacts to riparian/riverine areas/habitat. 28.9 ac of impacts to San Jacinto River alkali communities. 88.1 ac of impacts to Riversidean upland sage scrub. 195.0 ac affected of Western Riverside County MSHCP Criteria Area.	**NC-1** **Project Biologist.** Prior to the initiation of final design, the Riverside County Transportation Commission (RCTC) Project Manager will require the design contractor to have a Project Biologist under contract. The Project Biologist will ensure that all vegetation removal, seasonal restrictions, Best Management Practices (BMPs), environmentally sensitive areas, and all biological resources avoidance, minimization, and mitigation measures are properly included in the project design and specifications. Additional levels of biological monitors, such as qualified/authorized biologists for monitoring listed species, and general biological monitors, will also be used as needed to ensure that mitigation measures are properly implemented. **NC-2** **Environmentally Sensitive Areas.** During final design, the RCTC Project Manager, the Project Engineer, and the Project Biologist will coordinate with the Construction Contractor and the Project Biologist to ensure that all environmentally sensitive areas (ESAs) within the project footprint and the immediately surrounding areas are properly delineated in the project design and specifications. Those ESAs include, but may not be limited to, riparian/riverine vegetation, San Jacinto River alkali communities, and areas with long term-conservation values for the San Jacinto Valley crownscale, spreading navarretia, Coulter's goldfields, smooth tarplant, least Bell's vireo, burrowing owl, Los Angeles pocket mouse, and San Bernardino kangaroo rat. Prior to site preparation, clearing, or construction, the RCTC Resident Engineer will require the Construction Contractor and the Project Biologist to install highly visible barriers (such as orange construction fencing) around all designated ESAs. No disturbance, grading, staging, parking, materials or equipment storage, fill structures, dumping, or other construction related activities will be permitted within the ESAs. All construction equipment will be operated and construction activities conducted in a manner so as to prevent accidental damage to ESAs. No construction equipment is to enter any ESA at any time. The RCTC Project Engineer will require the Construction Contractor to maintain all ESA barriers throughout all the site preparation, disturbance, and construction activities in the vicinity of the ESAs. The Project Biologist will be required to verify the integrity of the ESA barriers on a regular basis and will require the Construction Contractor to repair damaged or replace missing ESA barriers within 24 hours of being notified of the status of the ESA barriers. During all site preparation, clearing, disturbance, and construction activities, the RCTC Project Engineer will require the Construction Contractor to ensure that equipment maintenance, site lighting, and equipment and materials staging are limited to designated areas away from ESAs. **NC-3** **Nesting Birds.** To avoid effects to nesting birds, the RCTC

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						Project Engineer will require the Construction Contractor to conduct any native or exotic vegetation removal or tree trimming activities outside of the nesting bird season (i.e., March 1 to September 15). In the event that vegetation clearing is necessary during the nesting season (i.e., March 1–September 15), the RCTC Resident Engineer will require the Construction Contractor to have the Project Biologist conduct a preconstruction survey to identify the locations of listed and nonlisted bird nests within 3 days of the commencement of construction activities. Should nesting birds be found, the RCTC Resident Engineer will require the Construction Contractor to establish an exclusionary buffer around the nest developed in consultation among the RCTC Resident Engineer, the RCTC Contract Biologist, the Construction Contractor, and the Project Biologist. This buffer will be clearly marked in the field by construction personnel under guidance of the Project Biologist, and construction or clearing will not be conducted within this buffer zone until the Project Biologist determines that the young have fledged or the nest is no longer active. **NC-4** **Design and Construction Management Measures.** During final design, the RCTC Project Engineer and the Contract Biologist will coordinate with the Design Contractor and the Project Biologist to develop design and construction management specifications to direct temporary construction noise, nighttime construction lighting, and permanent facility lighting away from the wildlife corridors, biologically sensitive areas, the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation Areas, and vegetated drainages. Those specifications will be included in the final design. If construction work must be done at night, the RCTC Residential Engineer will require the Construction Contractor to properly implement the specifications included in the final design to direct temporary construction noise and lighting away from the wildlife corridors, and biologically sensitive areas during those nighttime construction activities. During construction, the RCTC Resident Engineer will ensure that the Construction Contractor properly implement the permanent facility lighting, directing the light from wildlife corridors, biologically sensitive areas, the Western Riverside County MSHCP Conservation Areas, and vegetated drainages. **NC-5** **Conservation Areas.** During final design, the RCTC Project Engineer and the Contract Biologist will coordinate with the Design Engineer and the Project Biologist to identify existing and proposed conservation areas within the project footprint and in the immediately surrounding areas and will designate those areas on the project specifications. During final design, the RCTC Project Engineer and Project Biologist will ensure the design for the wildlife crossing entrance at Wildlife Crossing #10 will minimize noise effects to the

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						adjacent MSHCP Conservation Area and ensure that noise effects do not exceed residential noise standards. To reduce impacts where the project interfaces with existing or proposed conservation areas, RCTC's Resident Engineer will ensure that the project designs and specifications comply with the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the Western Riverside County MSHCP. The RCTC Resident Engineer will ensure that the project specifications include the applicable guidelines from the Western Riverside County MSHCP and as discussed in Section 3.17.3 of this RDEIR/SDEIS. Prior to and during construction, RCTC will require the design contractor and the Construction Contractor to comply with guidelines from the MSHCP and be included in the project specifications. **NC-6** **Determination of Biological Equivalent or Superior Preservation for Riparian/Riverine Areas.** Prior to approval of the Final EIR/EIS, the RCTC Project Manager and the Contract Biologist will prepare a Determination of Biological Equivalent or Superior Preservation (DBESP) for impacts to Western Riverside County MSHCP riparian/riverine habitat pursuant to Section 6.1.2 of the Western Riverside County MSHCP. Measures provided in the DBESP will demonstrate that equivalent or superior conservation for riparian/riverine areas will be achieved through habitat restoration and/or enhancement of on-site areas along the length of the MCP. However, if it is infeasible to mitigate entirely on site, alternative off-site mitigation, such as enhancement, creation, and restoration, would be required as documented in the DBESP. Measures for the project's permanent impacts to riparian/riverine areas will occur at a minimum 2:1 replacement ratio. A minimum 1:1 replacement ratio will occur within the San Jacinto River watershed for replacement of area and function (i.e., establishment or reestablishment). Additional mitigation to achieve the remainder of the minimum 2:1 replacement ratio may occur outside of the San Jacinto River watershed. Measures for temporary impacts to riparian/riverine areas will occur at a minimum 1:1 replacement ratio. Other forms of compensatory mitigation, such as enhancement or rehabilitation, may be used to achieve ratios in excess of the minimum 2:1 replacement, with consideration of relative functions, mitigation timing, etc. If any additional compensation for temporal loss of habitat is required beyond the minimum 1:1 replacement ratio, this mitigation would occur through an approved mitigation bank or in-lieu fee program. After completion of the implementation of the DBESP measures for riparian/riverine areas, the RCTC Project Manager will work with the RCTC Right-of-Way Agent to ensure that all off-site mitigation areas will be conserved in perpetuity, either through fee title transfer or a conservation easement to the Western Riverside County Regional Conservation Authority (RCA).
Wetlands and	No impact	Less impact than	• 7.19 ac of permanent impacts to	• 7.29 ac of permanent impacts to	• 7.17 ac of permanent impacts to	**WET-1** **Permanent Impacts to Jurisdictional Areas.** Prior to, during,

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
other Waters		MCP Build Alternatives.	USACE jurisdictional areas (2.18 ac of wetlands; 5.01 ac of nonwetland waters) • 6.06 ac of temporary impacts to USACE jurisdictional areas (3.78 ac of wetlands; 2.28 ac of nonwetland waters) • 13.3 total ac of aquatic resources (permanent and temporary impacts) • 9.23 ac of permanent impacts to CDFG jurisdictional areas • 5.48 ac of temporary impacts to CDFG jurisdictional areas	USACE jurisdictional areas (2.11 ac of wetlands; 5.18 ac of nonwetland waters) • 4.53 ac of temporary impacts to USACE jurisdictional areas (3.11 ac of wetlands; 1.41 ac of nonwetland waters) • 11.8 total ac of aquatic resources (permanent and temporary impacts) • 9.19 ac of permanent impacts to CDFG jurisdictional areas • 3.96 ac of temporary impacts to CDFG jurisdictional areas	USACE jurisdictional areas (2.15 ac of wetlands; 5.03 ac of nonwetland waters) • 5.26 ac of temporary impacts to USACE jurisdictional areas (3.63 ac of wetlands; 1.63 ac of nonwetland waters) • 12.4 total ac of aquatic resources (permanent and temporary impacts) • 9.00 total ac of permanent impacts to CDFG jurisdictional areas • 4.69 total ac of temporary impacts to CDFG jurisdictional areas	and after construction, the Riverside County Transportation Commission (RCTC) shall mitigate permanent impacts to United States Army Corps of Engineers (USACE) jurisdictional wetlands and nonwetlands and California Department of Fish and Game (CDFG) jurisdictional areas at a minimum replacement ratio of 2:1. The RCTC Project Manager will provide for mitigation to occur primarily through habitat restoration and/or enhancement of on-site areas along the length of the Mid County Parkway (MCP) to the extent practical. Alternatively, if it is infeasible to mitigate entirely on site, the RCTC Project Manager will coordinate with USACE and CDFG to provide off-site mitigation, such as enhancement, creation, and restoration, in accordance with the Conceptual Mitigation Plan (Appendix P in the Environmental Impact Report [EIR]/Environmental Impact Statement [EIS]). The RCTC Project Manager will ensure that the mitigation implemented will comply with the federal policy of "no net loss" of wetlands. The RCTC Project Manager will ensure that a minimum of 1:1 replacement ratio will occur through establishment or reestablishment of jurisdictional areas within the San Jacinto River watershed. This will mitigate for the replacement of area and function of jurisdictional areas within the San Jacinto River watershed. Additional mitigation to achieve the remainder of the 2:1 mitigation ratio may occur outside of the San Jacinto River watershed. **WET-2** **Temporary Impacts to Jurisdictional Areas.** After the completion of construction in areas that resulted in temporary impacts to USACE and/or CDFG jurisdictional areas, the RCTC Resident Engineer will require the Construction Contractor to revegetate those on site areas at a minimum 1:1 replacement ratio. The revegation will be conducted as described in the Habitat Mitigation Monitoring Plan in Measure WET-3 and in the applicable conditions from regulatory permits in Measure WET-4. If additional compensation for temporary impacts beyond the minimum 1:1 on site replacement ratio is required as a result of the approved permits described in Measure WET-4, during final design and construction the RCTC Project Manager will arrange for RCTC to provide that additional mitigation through an approved mitigation bank or an in-lieu fee program. **WET-3** **Habitat Mitigation Monitoring Plan.** The RCTC Project Manager will contract with a biologist (Project Biologist) to develop a Habitat Mitigation Monitoring Plan to direct the restoration of impacted riparian habitats and USACE and CDFG jurisdictional areas. The Habitat Mitigation Monitoring Plan will incorporate the applicable approaches and measures identified in the Conceptual Mitigation Plan (Appendix P in the EIR/EIS). The Habitat Mitigation Monitoring Plan will be subject to approval by the USACE and the CDFG. The Habitat Mitigation Monitoring Plan, at a minimum, will meet the following requirements:

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						• Habitat replacement and/or enhancement ratio of at least 1:1 for temporary impacts; • Habitat replacement and/or enhancement ratio of 2:1 for permanent impacts to USACE jurisdictional wetlands/waters of the U.S. and CDFG jurisdictional areas; • A success criterion of at least 80 percent cover of native riparian vegetation for replaced habitat; • Additional requirements, including a minimum 3-year establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitor in activities to ensure the success of the mitigation plan; and • Mitigation for impacts to Multiple Species Habitat Conservation Plan (MSHCP) riparian/riverine areas will be within the San Jacinto River watershed at a minimum 1:1 ratio for replacement of area and function (i.e., establishment or re-establishment). Measure WET-3 will be implemented in conjunction with Measures WET-1 and WET-2, above. **WET-4** **Permits.** During final design, the RCTC Project Engineer will obtain the following permits in order to comply with Section 1600 of the Fish and Game Code and Sections 404 and 401 of the Clean Water Act. Any additional mitigation required by a regulatory agency beyond the measures outlined in WET-1 through WET-3 for purposes of compliance with California Environmental Quality Act (CEQA)/ National Environmental Policy Act (NEPA) will be negotiated during the permit application and approval process. Those mitigation requirements will incorporate approaches and measures identified in the Conceptual Mitigation Plan (provided in Appendix P in the EIR/EIS) and those described in Measures WET-1 through WET-3 above. • A Section 404 permit from the USACE • A Section 1602 Agreement for Streambed Alteration from the CDFG, • A Section 401 water quality certification from the Santa Ana Regional Water Quality Control Board (RWQCB). Mitigation ratios for the Section 404 permit will be finalized in coordination with the USACE using the most current version of the Corps South Pacific Division Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios. If additional compensation for permanent or temporary impacts beyond the minimum replacement ratios described in WET-1 and WET-2 is required as a result of the approved permits, during final design and construction, the RCTC Project Manager would arrange for RCTC to provide that additional mitigation through purchase of mitigation bank credits for removal of invasive plants and restoration of riparian habitat from a location approved by the USACE and the CDFG under guidelines described by the resource and regulatory agencies through the permitting process, or through participation in another approved

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						habitat mitigation bank. Any additional amount of mitigation will be determined in coordination with the resource and regulatory agencies based on the quality and quantity of jurisdictional resources to be affected with consideration of the results from the study entitled *Potential Impacts of Alternative Corridor Alignments to Waters of the United States, Riparian Ecosystems, and Threatened and Endangered Species: Mid County Parkway Project, Riverside County, California* (Smith 2011).
Plant Species	No impact	Less impact than MCP Build Alternatives.	• 2.72 ac of permanent direct impacts to areas of long-term conservation value for smooth tarplant • 1.99 ac of permanent direct impacts to areas of long-term conservation value for Coulter's goldfields	• 2.72 ac of permanent direct impacts to areas of long-term conservation value for smooth tarplant • 1.99 ac of permanent direct impacts to areas of long-term conservation value for Coulter's goldfields	• 2.72 ac of permanent direct impacts to areas of long-term conservation value for smooth tarplant • 1.99 ac of permanent direct impacts to areas of long-term conservation value for Coulter's goldfields	**PS-1 Determination of Biological Equivalent or Superior Preservation.** Prior to certification of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS), the Riverside County Transportation Commission (RCTC) Project Manager and the biologist under contract to the RCTC (RCTC Project Biologist) will obtain a Determination of Biological Equivalent or Superior Preservation (DBESP) for impacts to smooth tarplant and Coulter's goldfields pursuant to Section 6.1.3 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Measures in the DBESP will demonstrate that equivalent or superior conservation for the species will be achieved through either location and preservation of populations that are not already proposed for conservation in the MSHCP, and/or restoration or enhancement of existing populations within the proposed conservation area. Mitigation for the project impacts to smooth tarplant and Coulter's goldfields within the San Jacinto River floodplain will occur within the San Jacinto River floodplain. After completion of the implementation of the DBESP measures for smooth tarplant and Coulter's goldfields, the RCTC Project Manager will work with the RCTC Right-of-Way Agents to ensure that all off-site mitigation areas will be conserved in perpetuity, either through fee title transfer or a conservation easement to the Western Riverside County Regional Conservation Authority (RCA).
Animal Species	No impact	Less impact than MCP Build Alternatives.	• 44.07 ac of permanent direct impacts to Los Angeles pocket mouse occupied habitat suitable for long-term conservation • 3.1 ac of permanent direct impacts to burrowing owl breeding/foraging/ nesting habitat • The project will directly impact existing bridges and larger culverts that may provide maternity roosts and foraging roosts for bat species.	• 44.07 ac of permanent direct impacts to Los Angeles pocket mouse occupied habitat suitable for long-term conservation • 3.1 ac of permanent direct impacts to burrowing owl breeding/foraging/ nesting habitat • The project will directly impact existing bridges and larger culverts that may provide maternity roosts and foraging roosts for bat species.	• 44.07 ac of permanent direct impacts to Los Angeles pocket mouse occupied habitat suitable for long-term conservation • 3.1 ac of permanent direct impacts to burrowing owl breeding/foraging/ nesting habitat • The project will directly impact existing bridges and larger culverts that may provide maternity roosts and foraging roosts for bat species.	**AS-1 Burrowing Owl Habitat.** During final design, the Riverside County Transportation Commission (RCTC) Project Engineer and Project Biologist will coordinate with the design contractor to identify all areas of potential burrowing owl habitat within the project footprint or in the immediately surrounding areas and will designate those areas on the project specifications. To ensure that any burrowing owl that may subsequently occupy the site are not affected by construction activities, the RCTC Resident Engineer will require the construction contractor to have preconstruction burrowing owl surveys conducted by the Project Biologist within 30 days prior to any phase of construction activities in the areas identified as potential burrowing owl habitat. These preconstruction surveys are also required to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the federal Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						the Construction Contractor to implement all burrowing owl measures, including the preconstruction surveys described above. **AS-2** **Active Burrowing Owl Nests.** During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require the Construction Contractor to avoid the take of active burrowing owl nests. If the focused burrowing owl surveys required in Measure AS-1 determine that the project disturbance limits support burrowing owls, the burrowing owls will be relocated or translocated, as required in the relocation/translocation plan required in Measure AS-3. No site preparation, disturbance, grading, or construction activities will be allowed in those areas until the Project Biologist confirms that the burrowing owl relocation/translocation activities are complete. **AS-3** **Burrowing Owl Relocation/Translocation Plan.** During final design and no later than 60 days prior to any ground-disturbing activities, the RCTC Project Manager and Project Biologist will prepare burrowing owl nests, as described in AS-2. The RCTC Project Manager and the Project Biologist will submit the Plan to the California Department of Fish and Game (CDFG) for approval. The Plan will include, but not be limited to: • A description of passive relocation techniques; • Methodology for monitoring and inspection of occupied and potentially suitable burrows; • Description of monitoring frequency to confirm owls have vacated occupied burrows within the MCP project footprint; • Requirement that any relocation and translocation will occur outside of the breeding season; and • Requirement that sites proposed for burrowing owl translocation sites will be identified and created in coordination with the wildlife agencies to establish new colonies. During all site preparation, disturbance, grading, and construction activities in burrowing owl habitat, the RCTC Resident Engineer will require the Construction Contractor to implement the provisions in the Burrowing Owl Relocation/Translocation Plan. The RCTC Project Biologist will monitor the Construction Contractor's compliance with the provision of that Plan. **AS-4** **Determination of Biologically Equivalent or Superior Preservation.** Prior to certification of the Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the RCTC Project Manager and the biologist under contract to the RCTC (Project Biologist) will obtain a Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to Los Angeles pocket mouse near Lake Perris pursuant to Sections 6.1.2 and 6.1.3 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Mitigation in the DBESP will demonstrate that equivalent or

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						superior conservation for these species will be achieved through preservation of populations that are not already proposed for conservation in the MSHCP and/or restoration/enhancement of existing populations within the Western Riverside County MSHCP conservation area. The RCTC will ensure that all mitigation areas will be conserved in perpetuity, either through fee title transfer or a conservation easement to the Regional Conservation Authority (RCA). **AS-5** **Bat Maternity Roosting Survey.** During the month of June prior to any site preparation, disturbance, grading, or construction activities, the RCTC Resident Engineer will require the Construction Contractor to have a qualified bat biologist survey the project limits, to assess the presence of or potential for bat maternity roosts, which are generally formed in spring and may change seasonally. Where existing or potential roosting habitat is present, the qualified bat biologist will conduct nighttime surveys that include a combination of structure inspection, sampling, exit counts, and acoustic surveys. A report will be prepared summarizing the data collected during these nighttime surveys, and will include any necessary avoidance and minimization recommendations such as directing light and noise away from bat habitat, humane bat eviction/exclusion, and replacement roosting habitat. **AS-6** **Humane Bat Eviction/Exclusion.** Prior to site preparation, disturbance, grading, or construction activities in areas containing bat habitat, the RCTC Resident Engineer will require the Construction Contractor to install temporary bat eviction/exclusion devices under the supervision of a qualified bat biologist. The installation of the exclusion devices will be limited to the fall (September and October) preceding construction activities at structures containing bat habitat, in order to avoid trapping flightless young inside these structures during the summer or hibernating individuals during the winter. The exclusion devices must be retained in place to keep each structure free of bats until the completion of construction at that location. All bat exclusion devices and techniques will be coordinated with the California Department of Transportation (Caltrans) Biologist, the RCTC Project Manager, the RCTC Resident Engineer, the Construction Contractor, the Project Biologist, and the qualified bat biologist. In cases where bats are evicted from maternity roosts, and will remain excluded from these roosts throughout the maternity season (April through August), the RCTC Resident Engineer and the Project Biologist will ensure that the replacement of roosting structures will be provided to minimize effects to excluded bats by providing an alternative site for these bats to rear young during the maternity seasons. **AS-7** **Retention of Existing Bat Roosting Habitat and Creation of Habitat Replacement Structures.** Prior to any site preparation, disturbance, grading, or construction, the RCTC Project Engineer and the RCTC Contract Biologist will determine whether structural features providing existing bat roosting

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						habitat cannot be permanently retained following construction. If that is the case, the qualified bat biologist will identify alternative roosting habitat/replacement structures to be installed during construction. The project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures. Prior to and during construction, the RCTC Resident Engineer will require the Construction Contractor to properly implement the designs and specifications for bat exclusion and habitat replacement structures included in the project specifications. The installation and maintenance of those structures will be monitored by the Project Biologist.
Threatened and Endangered Species	No impact	Less impact than MCP Build Alternatives.	Permanent impacts: • 3.66 ac of least Bell's vireo habitat (federally and state listed) • 2.9 ac of final SBKR critical habitat (2002)(federally listed) • 4.25 ac of occupied SBKR critical habitat • 0.36 ac of occupied San Jacinto valley crownscale habitat (federally listed) • 1.09 ac of occupied spreading navarretia habitat and final critical habitat (2008) with primary constituent elements • 16.5 ac Spreading Navarretia, Final Critical Habitat (October 7, 2010) (federally listed) • Total 142.2 ac of Stephens' kangaroo rat habitat (Riversidean upland sage scrub and grassland communities) (federally listed) (federally and state listed)	Permanent impacts: • 3.66 ac of least Bell's vireo habitat (federally and state listed) • 2.9 ac of final SBKR critical habitat (2002)(federally listed) • 4.25 ac of occupied SBKR critical habitat • 0.36 ac of occupied San Jacinto valley crownscale habitat (federally listed) • 1.09 ac of occupied spreading navarretia habitat and final critical habitat (2008) with primary constituent elements • 16.5 ac Spreading Navarretia, Final Critical Habitat (October 7, 2010) (federally listed) • Total 142.2 ac of Stephens' kangaroo rat habitat (Riversidean upland sage scrub and grassland communities) (federally listed) (federally and state listed)	Permanent impacts: • 3.66 ac of least Bell's vireo habitat (federally and state listed) • 2.9 ac of final SBKR critical habitat (2002)(federally listed) • 4.25 ac of occupied SBKR critical habitat • 0.36 ac of occupied San Jacinto valley crownscale habitat (federally listed) • 1.09 ac of occupied spreading navarretia habitat and final critical habitat (2008) with primary constituent elements • 16.5 ac Spreading Navarretia, Final Critical Habitat (October 7, 2010) (federally listed) • Total 142.2 ac of Stephens' kangaroo rat habitat (Riversidean upland sage scrub and grassland communities) (federally listed) (federally and state listed)	**TE-1** **Determination of Biologically Equivalent or Superior Preservation.** Prior to certification of the Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the Riverside County Transportation Commission (RCTC) Project Manager and the biologist under contract to the RCTC (Project Biologist) will obtain a Determination of Biologically Equivalent or Superior Preservation (DBESP) for impacts to spreading navarretia, San Jacinto Valley crownscale, least Bell's vireo, and San Bernardino kangaroo rat pursuant to Sections 6.1.2 and 6.1.3 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Mitigation in the DBESP will demonstrate that equivalent or superior conservation for these species will be achieved through preservation of populations that are not already proposed for conservation in the MSHCP and/or restoration/enhancement of existing populations within the Western Riverside County MSHCP conservation area. Mitigation for the project impacts to spreading navarretia and San Jacinto Valley crownscale within the San Jacinto floodplain will occur within the San Jacinto floodplain. After completion of the implementation of the DSESP measures for spreading navarretia, San Jacinto Valley crownscale, least Bell's vireo, and San Bernardino kangaroo rat, the RCTC Project Manager will work with the RCTC Right-of-Way Agents to ensure that all off-site mitigation areas will be conserved in perpetuity, either through fee title transfer or a conservation easement to the Western Riverside County Regional Conservation Authority (RCA). **TE-2** **Stephens' Kangaroo Rat.** Prior to construction, the RCTC Project Manager will ensure "take" is authorized for areas of disturbance to occupied habitat of the Stephens' kangaroo rat. RCTC will voluntarily pay mitigation fees ($500/gross project acre) to mitigate for disturbance of occupied Stephens' kangaroo rat habitat.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Invasive Species	No impact	Less impact than MCP Build Alternatives.	The construction of the MCP Build Alternatives may spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway. During the operation of the MCP facility, vehicles using the facility may also spread invasive species; however, these impacts would be minimal since areas adjacent to the facility will be landscaped with native species that should outcompete the invasive species.	The construction of the MCP Build Alternatives may spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway. During the operation of the MCP facility, vehicles using the facility may also spread invasive species; however, these impacts would be minimal since areas adjacent to the facility will be landscaped with native species that should outcompete the invasive species.	The construction of the MCP Build Alternatives may spread invasive species by the entering and exiting of construction equipment contaminated by invasives, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species so that its seed is spread along the highway. During the operation of the MCP facility, vehicles using the facility may also spread invasive species; however, these impacts would be minimal since areas adjacent to the facility will be landscaped with native species that should outcompete the invasive species.	**IS-1** **Landscaped Disturbed Areas.** During construction, the Riverside County Transportation Commission (RCTC) Resident Engineer will require the Construction Contractor to landscape/revegetate disturbed areas and bare soil in the project disturbance limits with California Department of Transportation (Caltrans) recommended seed mixtures and container plants from locally adapted species to preclude the invasion of noxious weeds. The use of site-specific materials adapted to local conditions increases the likelihood that the landscaping/revegetation will be successful and maintain the genetic integrity of the local ecosystem. The RCTC Resident Engineer and the Construction Contractor will ensure that the invasive plant species listed in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), Table 6-2, are not planted within the project area. During construction, the RCTC Resident Engineer will require the Construction Contractor to submit the proposed seed mixtures for the parts of the project under Caltrans jurisdiction for approval by a Caltrans District 8 Landscape Architect. No landscaping/revegetation in state right of way will be installed prior to Caltrans approval of the seed mixtures. Prior to and during construction, RCTC will require the Construction Contractor to require the Project Biologist to make arrangements well in advance of planting (at least 9 months prior to the scheduled planting) to ensure that the needed plant materials are collected and/or located and available for the scheduled planting time. Sufficient time must be allocated for a professional seed company to visit the project site during the appropriate season to collect native plant seed. If local propagates are not available or cannot be collected in sufficient quantities to meet the scheduled planting time, plant materials collected or grown from other sources within southern California can be substituted, based on approval of use of those alternative plant materials by the RCTC Resident Engineer and the RCTC Contract Biologist, and for areas in the State right of way, by the Caltrans District 8 Landscape Architect. For widespread native herbaceous species that are more likely to be genetically homogeneous, site specificity is a less important consideration, and seed and container plants from commercial sources may be used based on approval of use of those alternate plant materials by the RCTC Resident Engineer and the RCTC Contract Biologist, and for areas in the state right of way, by the Caltrans District 8 Landscape Architect. **IS-2** **Seed Purity.** During construction, as seed mixtures are collected, the RCTC Resident Engineer will require the Construction Contractor to require the Project Biologist to certify the seed purity by planting seed labeled under the California Food and Agricultural Code or that has been tested within the year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists. The Project Biologist will

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
						provide the documentation of compliance with this requirement to the RCTC Project Engineer and the RCTC Contract Biologist, and for seed mixtures that will be used in the state right of way, to the Caltrans District 8 Landscape Architect. **IS-3** **Construction Equipment.** During all site preparation, disturbance, grading and construction activities, the RCTC Resident Engineer will require that the Construction Contractor implement procedures to ensure that construction equipment is cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds both before mobilizing to arrive at the site and before leaving the site. The Construction Contractor will document that equipment coming to the site will be cleaned at established truck wash facilities within the project vicinity and will provide facilities within the project limits to clean equipment leaving the site. **IS-4** **Trucks.** During all site preparation, disturbance, grading and construction activities, the RCTC Resident Engineer will require the Construction Contractor to implement procedures to ensure that all trucks carrying vegetation from the project limits are covered and that all vegetative materials removed from the project limits are properly disposed of in accordance with all applicable laws and regulations. **IS-5** **Inspected Material.** During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require the Construction Contractor implement procedures to ensure that if material is obtained from a borrow site, that the material is inspected for the presence of noxious weeds and invasive plants to ensure that the material imported to the project site does not contain noxious weeds or invasive plants. The RCTC Resident Engineer will require the Construction Contractor to provide written documentation of the procedures and the implementation of those procedures whenever borrow material is brought to the project site. **IS-6** **Weeds and Invasive Plants.** During all site preparation, disturbance, grading, and construction activities, the RCTC Resident Engineer will require the Construction Contractor to control, kill, and remove noxious weeds and invasive plants from the project site, under the direction of the Project Biologist.
Cumulative Impacts	No impact	Less impact than MCP Build Alternatives.	The MCP project would not contribute to cumulative adverse impacts related to community impacts/relocations or visual/aesthetics. The MCP project, when combined with the other anticipated cumulative projects, would contribute to a cumulative loss of farmlands, visual/aesthetics, cultural resources, paleontological resources, natural communities, wetlands and other waters, plant species, animal species, and threatened and endangered species. Anticipated cumulative impacts include the permanent loss of farmlands, the loss of a portion of a significant cultural resource, and the continued destruction and recovery of paleontological resources as a result of excavation associated with construction of the MCP and other future land development and infrastructure projects.				Project mitigation is included in Sections 3.1 through 3.22, and no additional avoidance, minimization, or mitigation measures are required.

Table S.1 Impacts of the MCP Build Alternatives

Potential Impact	No Build Alternative 1A	No Build Alternative 1B	Alternative 4 Modified	Alternative 5 Modified	Alternative 9 Modified	Avoidance, Minimization, and/or Mitigation Measures
Climate Change	No impact	Less impact than MCP Build Alternatives.	The MCP project would result in a small increase (less than 1 percent) in CO_2 emissions within the region in 2020 and 2040 when compared to the 2020 and 2040 project conditions.			1. Landscaping reduces surface warming, and through photosynthesis, decreases CO_2. Landscaping would be provided where necessary within the corridor to provide aesthetic treatment, replacement planting, or mitigation planting for the project. The landscape planting would help offset any potential CO_2 emissions increase. 2. The project would incorporate the use of energy-efficient lighting, such as LED traffic signals. LED bulbs—or balls, in the stoplight vernacular—cost $60 to $70 apiece but lasts 5 to 6 years, compared to the 1-year average lifespan of the incandescent bulbs previously used. The LED balls themselves consume 10 percent of the electricity of traditional lights, which will also help reduce the project's CO_2 emissions.[1] 3. According to Caltrans Standard Specification Provisions, idling time for lane closure during construction is restricted to 10 minutes in each direction. In addition, the contractor must comply with Title 13, California CCR Section 2449(d)(3) that was adopted by the ARB on June 15, 2008. This regulation restricts idling of construction vehicles to no longer than 5 consecutive minutes. Compliance with this regulation reduces harmful emissions from diesel-powered construction vehicles.

[1] Knoxville Business Journal, "LED Lights Pay for Themselves," May 19, 2008, at http://www.knoxnews.com/news/2008/may/19/led-traffic-lights-pay-themselves/.

ac = acres
ARB = California Air Resources Board
BMPs = best management practices
CCR = California Code of Regulations
CDFG = California Department of Fish and Game
CETAP = Community and Environmental Transportation Acceptability Process
CO_2 = carbon dioxide
CTs = census tracts
dB = decibels
dBA = A-weighted decibels
DVs = design variations
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
I-215 = Interstate 215
LED = light-emitting diode
L_{eq} = equivalent continuous sound level
LOS = level of service
MCP = Mid County Parkway
mi = miles
MSHCP = Multiple Species Habitat Conservation Plan
NAC = Noise Abatement Criteria
SBKR = San Bernardino kangaroo rat
SJWA = San Jacinto Wildlife Area
SR-79 = State Route 79
TCE = temporary construction easement
USACE = United States Army Corps of Engineers

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Table S.2 Permits and Approvals Needed

Agency	Permit/Approval	Status/Timeline
United States Fish and Wildlife Service (USFWS)	• Section 7 consultation for Threatened and Endangered Species • Review Riverside County Transportation Commission (RCTC's) Multiple Species Habitat Conservation Plan (MSHCP) Consistency Determination • Concurrence on Determination of Biologically Equivalent or Superior Preservation (DBESP)	1. Section 7 consultations are to be conducted following identification of a Preferred Alternative and preparation of the MSHCP Consistency Determination, which will serve as the Biological Assessment (BA). 2. The MSHCP Consistency Determination and DBESP will be reviewed by USFWS following identification of a Preferred Alternative and prior to approval of the Final EIS.
United States Army Corps of Engineers (USACE)	• Section 404 Permit, if required, for the discharge of dredged or fill material into waters of the United States	Application to be submitted following identification of a Preferred Alternative.
California Department of Fish and Game (CDFG)	• Section 1602 Lake and Streambed Alteration Agreement • Review RCTC's MSHCP Consistency Determination • Concurrence on DBESP	1. Section 1602 Notification is to be submitted and agreement obtained prior to the start of construction. 2. The MSHCP Consistency Determination and DBESP will be reviewed by CDFG following identification of a Preferred Alternative and prior to certification of the Final EIR.
State Water Resources Control Board	• Water Discharge Permit, approval of Notice of Intent to comply with General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit.	Application to be submitted prior to construction.
Western Riverside County Regional Conservation Authority (RCA)	• Concur on and approve RCTC's MSHCP Consistency Determination • Concur on and approve RCTC's DBESP • Concur on and approve RCTC's Public/Quasi-Public Equivalency Determination (per MSHCP, Section 3.2.1)	The MSHCP Consistency Determination, DBESP, and Public/Quasi-Public Equivalency Determination will be prepared and submitted for RCA review/consideration/ approval following identification of a Preferred Alternative and prior to approval of the Final EIS.
Region 8, Santa Ana Regional Water Quality Control Board (RWQCB)	• Section 401 Water Quality certification	Application to be submitted following approval of a Preferred Alternative.
County of Riverside, Cities of Perris and San Jacinto	• Freeway Agreement with Caltrans should the MCP project be adopted as a State Highway by the California Transportation Commission • Approval of encroachment permits and street construction permits, street closures and re-routing, and associated improvements in the public right of way • General Plan Amendment	Actions/permits would be issued prior to start of construction.

Table S.2 Permits and Approvals Needed

Agency	Permit/Approval	Status/Timeline
Riverside County Flood Control District	• Encroachment permits for improvements affecting Riverside County Flood Control District facilities	Application(s) to be submitted prior to construction
Riverside County Environmental Health Department and California Department of Transportation (Caltrans)	• Aboveground storage tank (AST)/underground storage tank (UST) permits • Caltrans Statewide permit (Order No. 99-06-DWQ), NPDES No. CAS000003	Permit to be requested if project acquires parcels with ASTs or USTs on site.
State Historic Preservation Officer (SHPO)	• Approval of a Memorandum of Agreement with Federal Highway Administration (FHWA)	SHPO approval of the Memorandum of Agreement will occur after a preferred alternative is identified prior to completion of the Final EIR/EIS.
Interested Native American Tribes	• Required consultation under Section 106 of the National Historic Preservation Act on the overall project cultural work, including (but not limited to) determinations of eligibility, findings of effect, and future work that includes involvement with the Memorandum of Agreement, Archaeological Monitoring Plan, and Data Recovery Plan.	Native American Consultation for the MCP is ongoing.
Utilities	• Approvals to relocate, protect in place, or remove utility facilities	Prior to any construction activities that would affect utility facilities
Burlington Northern Santa Fe (BNSF) Railroad Company	• Memorandum of Understanding and a Construction and Maintenance Agreement between RCTC and BNSF	Prior to any construction within or above railroad right of way
California Public Utilities Commission (CPUC)	• Approval of the proposed action, based on review of the Construction and Maintenance Agreement between RCTC and BNSF • General Order 131-D for relocation of electrical transmission lines between 50 to 20 kilowatts • Certificate of Public Convenience and Necessity for relocations to electrical transmission lines and gas lines	1. Prior to any construction within or above railroad right of way 2. After certification of EIR/EIS and the filing of a Notice of Determination to complete the CEQA process

CEQA = California Environmental Quality Act
EIR = Environmental Impact Report
EIS = Environmental Impact Statement
MCP = Mid County Parkway