Mitigation Monitoring and Reporting Program

This Mitigation Monitoring and Reporting Program (MMRP) is intended to facilitate the tracking of the implementation of all Project mitigation measures. This MMRP contains information of potential significant impacts; measures that will be taken to mitigate those impacts; how monitoring will be accomplished; who will be the responsible party; and when implementation of the mitigation measures will occur. The County will ensure that this MMRP will be implemented for all phases of the proposed Project.

Based on the conclusions of the SEIR and SEIR Addendum, mitigation measures are required for the resource areas identified in Table E-1. More detailed information on each mitigation measure can be found in the Final SEIR or SEIR Addendum section covering the specific resource area as listed in Table A-1.

TABLE A-1

	Resource	Areas	Requiring	Mitigation
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Resource Area	Draft SEIR/SEIR Addendum Section Where Impacts and Mitigation Measures are Identified
Aesthetics	3.15/3.1
Air Quality	3.10/3.2
Biological Resources	3.5/3.3
Cultural Resources	3.6/3.4
Geology and Soils	3.2/NA*
Hydrology and Water Quality	3.3/3.6
Noise	3.9/3.7
Public Services	3.16/NA*
Transportation/Traffic	3.8/3.8
Utilities and Service Systems	3.11/NA*

^{*}NA = not analyzed

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Geology and	Soils					
GEO-1 (T-1 Topography Revised in SEIR Addendum)	During final design of Clinton Keith Road, the County will ensure that the following recommendations are incorporated in the final design for Clinton Keith Road and are implemented by the proposed Project contractor during construction: • All grading and landform modifications will be conducted in conformance with state-of-the-practice design and construction parameters. These typical standard minimum guidelines are set forth in Chapter 70 of the <i>Uniform Building Code</i> . • All graded slopes will be constructed to be grossly and surficially stable. • Boulders removed during grading will be reused, as feasible, to replicate the key features of the local topography.	County	County	Verify that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
T-2 Soils and Geology	During final design of Clinton Keith Road and any needed bridges or drainage crossings, the County will contract with a qualified geotechnical engineer to conduct a detailed geotechnical investigation into the soil conditions and properties along the Clinton Keith road alignment. The geotechnical engineer will prepare a geotechnical conditions report consistent with Chapter 70 of the <i>Uniform Building Code</i> and Riverside County Ordinance 457.85 (Building and Grading Ordinances). The recommendations of this geotechnical investigation will be incorporated in the final design and implemented during construction, as appropriate.	County	County Geotechnical Engineer	Verify that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Construction	
T-3 Seismicity	During final design of Clinton Keith Road, the County will contract with a qualified geotechnical engineer to conduct a detailed geotechnical investigation into the seismic conditions and properties for the proposed Project area. This detailed study will include at a minimum, the following: • Exploratory fault trenching will be conducted, as appropriate, to evaluate potential geologic and geotechnical hazards related to the Elsinore and Wildomar Faults. • Detailed soils studies will be conducted to identify the potential for liquefaction. • Detailed studies will be conducted regarding requirements for the bridge and drainage crossing structures. Riverside County will ensure that the recommendations from these studies are incorporated in the final design for Clinton Keith Road and implemented during construction, as appropriate.	County	County Geotechnical Engineer	Verify that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
lydrology an	d Water Quality					
H-1 Permits	Prior to initiation of construction activity, the County will obtain the required SD RWQCB and United States Army Corps of Engineers (USACE) permits for the proposed Project. It is anticipated that SD RWQCB will require the County to obtain and implement the following permits/approvals/conditions: an NPDES General Construction Activity Storm Water Permit (General Permit), Stormwater Pollution Prevention Plan (SWPPP) and BMPs; and a 401 Water Quality Certification. It is anticipated that USACE will require the County to obtain and implement the following permits/approvals/conditions: a Section 404 Permit	County	County RWQCB USACE	Verify that these recommendations are completed prior to construction and are implemented during construction. Verify compliance with applicable regulations and standards.	Preconstruction Construction	

Clinton Keltin Ko	pad Extension Project Mitigation Monitoring and Reporting	g Piograffi				
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
H-2 (modified in SEIR Addendum)	The following BMPs will be installed to maintain water quality: Preserve existing vegetation Install three detention basins at the following locations: - East of Warm Springs Creek on the south side of the roadway near Station 306+00 (Segment 2) - Adjacent to the west side of the proposed roadway at Station 353+00, near Leon Road (Segment 4) - In the corner bounded by Clinton Keith Road, realigned Briggs Road, and Porth Road (Segment 4) - Utilize native drought-tolerant seed mix for all slopes and detention basin surfaces	County	County	Verify that these recommendations are incorporated into the final design and are implemented during construction. Monitor construction activities to verify compliance.	Final Design Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
H-3 SWPPP	After final design and prior to the proposed Project construction, the construction contractor will develop the SWPPP, select appropriate BMPs, and will obtain RWQCB approval of the SWPPP prior to start of construction. The SWPPP will identify the sources of sediment and other pollutants that may affect the quality of the stormwater discharges during construction. The SWPPP also will describe the implementation of BMPs that would effectively prevent or minimize the introduction of pollutants into the stormwater runoff from the proposed Project site for construction, and will include BMPs to ensure that temporary construction dewatering at drainage crossings will not cause excessive erosion or turbidity. These BMPs may include, but are not limited to, structural (e.g., erosion-control fences) and nonstructural BMPs (e.g., education and general awareness of permit conditions). Erosion and sediment control BMP methods may include straw bales, silt fences, sedimentation basins, filter strips, and other techniques.	County	County Construction Contractor RWQCB	Verify that these recommendations are completed prior to construction and are implemented during construction. Verify compliance with applicable regulations and standards.	Preconstruction Construction	

Clinton Kelth K	pad Extension Project Mitigation Monitoring and Reportin	g Program				
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
H-4 Culverts (modified in SEIR Addendum)	The County will install culverts and energy dissipaters at various locations throughout the Project limits to maintain post-construction runoff volumes and flow rates. The following culverts will be installed: • Culvert at Station 19+10 under Menifee Road (a 24-inch reinforced concrete pipe [RCP]) • Culvert at Station 252+70 under Clinton Keith Road (42-inch RCP) • Culvert at Station 269+00 under Clinton Keith Road (2-60-inch RCP) • Culvert at Station 277+18 under Clinton Keith Road (2-36-inch RCP) • Culvert at Station 349+98 under Clinton Keith Road (two 24 feet by 9 feet reinforced concrete box [RCB] {Segment 4})	County	County	Verify that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
iological Re	sources					
B-1 MSHCP	Listed below are the MSHCP requirements are applicable to the proposed Project that will be implemented. B-1A – Measures to Accommodate Wildlife Movement The following measures have been developed to accommodate wildlife movement in order to minimize habitat fragmentation consistent with requirements of the MSHCP: - Per MSHCP Table 7-4, "The crossing of Warm Springs Creek will span the floodway with sufficient vertical clearance and length including a span bridge." This is a three-span bridge with a total length of approximately 360 feet. This structure will be constructed within Segment 2 during Phase 1. - Per MSHCP Table 7-4, and Section 7.5.2, "the crossing of Warm Springs Creek will include a cut and cover element or wildlife overcrossing to accommodate avian, mammalian, reptile, amphibian, and insect movement." The wildlife overcrossing structure will be constructed to resemble a double arch structure over Clinton Keith Road. This structure will be constructed within Segment 2 during Phase 1.	County	County	Verify that the required features are included in final design and the required activities are conducted during construction.	Final Design Construction	

Clinton Keith Ro	Clinton Keith Road Extension Project Mitigation Monitoring and Reporting Program								
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE			
	 Per MSHCP Section 7.5.2, wildlife movement requirements will include a number of design elements. The following are in addition to the two elements described above: 								
	 The crossing of French Valley Creek with a single-span bridge with a total length of approximately 180 feet. This structure will be constructed for the proposed Project within Segment 4. 								
	- Two wildlife undercrossings fitted with natural light portals, consisting of three skylights (one within each shoulder, and one within the median) or by other similar or improved method: - Culvert at station 296+40 under Clinton Keith Road (36-inch RCP) - Culvert at station 312+04 under Clinton Keith Road (36-inch RCP)								

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	 Directive and exclusion fencing along the Project roadway and at wildlife under and over crossing locations, see Figure 3.5-5 of the SEIR for fencing locations 					
	 One-way animal exclusion boxes, see Figure 3.5-5 of the SEIR for exclusion locations 					
	B-1B - Construction Guidelines	County	County	Verify that the required	Final Design	
	Construction guidelines will be implemented consistent with terms and conditions of the MSHCP in Section 7.5.3. This will include the following items:			features are included in final design and the required activities are conducted during construction.	Construction	
	 A plan for water pollution and erosion control will be prepared and implemented (see Mit. Measure H-1). 					
	 Timing of construction will avoid habitat clearing during species active breeding defined as March 1 to August 15. 					
	 Short-term stream diversions, silt fencing, settling ponds and other measures will be implemented to avoid release of silt or debris in streams. 					
	 Equipment storage and fueling will be sited on non-sensitive uplands. 					
	 Exotic species will be properly handled to avoid resprout or regrowth. 					
	 Appropriate firefighting equipment shall be on hand when working adjacent to flammable habitats. 					
	 Active construction will be watered for dust control. 					
	 Dispensing fuel, oil, or other toxic substances shall occur only in designated areas. 					

MITIGATION MEASURE	oad Extension Project Mitigation Monitoring and Reporting	RESPONSIBLE					
NUMBER	MITIGATION REQUIREMENT	ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE	
	B-1C – Best Management Practices	County	County	Verify that the required	Final Design		
	BMPs required under the MSHCP, will be implemented and include the following:			features are included in final design and the	Construction		
	 A qualified biologist shall conduct training sessions for construction personnel. 				required activities are conducted during construction.		
	 Water pollution and erosion control plans shall be developed. 						
	 Project footprints will be minimized and clearly marked. 						
	 Projects shall be designed to avoid placement of equipment and personnel in stream channel habitat used by target species of concern. Where the Project cannot avoid placement of equipment or personnel in sensitive habitats, it should be timed to avoid the breeding season of riparian species. 						
	 Erosion shall be minimized by diverting stream flows, use of settling ponds, and/or use of silt fences. 						
	 Removal of native vegetation shall be avoided and minimized to the maximum extent practicable; temporary impacts shall be returned to a pre-existing contour and revegetated with appropriate native species. 						
	 Exotic species that prey upon native species shall be permanently removed to the extent feasible, and the site shall be kept clean to avoid attracting predators. 						

TABLE E-2		
Clinton Keith Road Extension Proj	ject Mitigation Monitoring	and Reporting Program

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	B-1D – Fuel Management Brush management will be implemented within the County and City right-of-way on the new Clinton Keith Road alignment, consistent with fuel management requirements in the MSHCP for areas adjacent to conservation areas. This will include brush management by mechanical removal where feasible to minimize risk of fire originating along the roadway. B-1E – Urban Wildlands Interface Proposed Project measures will be implemented to meet terms and conditions of the MSHCP pertaining to urban/wildlands interface, as described in MSHCP Section 6.1.4. This will include, among other measures, the following. - Drainage facilities and design will ensure that quantity and quality of runoff discharged to the MSHCP is not altered in an adverse way compared to existing conditions. Section 2.0 Project Description of the SEIR provides stormwater management system design measures. - Only legal herbicides applied by applicators licensed with the State of California will be applied during roadway operations and maintenance, according to all state and federal regulations. Toxic runoff will be managed with stormwater management design measures.	County	County	Verify that the required features are included in final design and the required activities are conducted during construction.	Final Design Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	 Roadway lighting shall be directional or shielded to avoid increasing ambient lighting conditions in the Conservation Area. Project lighting is described in Section 2.0 Project Description of the SEIR. The proposed HPSV street lights would include full cut-off fixture to not allow direct lighting above the horizontal plane of the fixture. In addition, lighting fixtures adjacent to the MSHCP Conservation Area or other natural habitat areas will be fitted with external opaque reflectors to shield fixtures and reduce spillage into adjacent areas outside the ROW. To minimize the effects of noise on the MSHCP Conservation Area, all proposed conservation acquisitions by the Resource Conservation Area adjacent to the Project roadway will be reviewed by the County. To minimize the effects of noise to the proposed MSHCP Conservation Area adjacent to the Project, all slope areas adjacent to Clinton Keith Road will be acquired in fee title or permanent easement which will increase the distance between noise generating traffic and proposed Conservation Areas thereby reducing noise to acceptable levels on conservation lands. The County submitted final fencing, culvert crossing and revegetation plans to the Resource Conservation Agency and Wildlife Agencies for their review prior to construction. 					

Clinton Keith Ro	oad Extension Project Mitigation Monitoring and Reporting	g Program				
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	 Landscape plans shall avoid the use of invasive plants as identified in the MSHCP. 					
B-2	Mitigation for Streambeds and Associated Wetlands. This mitigation measure addresses the potentially significant adverse impacts of the proposed Clinton Keith Road on streambeds and associated wetlands. In addition, the mitigation will be addressed under the requirements of the permitting agencies. The impacts are expected to be mitigated by revegetation and rectification at the impact location, and potentially enhancement of riparian habitat, preferably in the same watershed. The impacts on streambeds and associated wetlands will be mitigated to below a level of significance as part of the mitigation required for a Section 404 permit (USACE) and Section 1601 Agreement (CDFW) for impacts on riparian habitats. The permit and agreement will require replacement in such a manner as to result in no net loss of riparian resources and will meet the MSHCP requirements for a Biologically Equivalent or Superior result (MSHCP Section 6.1.2). Therefore, some limited restoration is anticipated for those resource values not avoided at the Warm Springs Creek Bridge. Any replacement ratios will be determined through consultation with the resource agencies. A riparian revegetation plan will be prepared and coordinated with the USACE and CDFW as necessary. The requirements of the permit and agreement shall be incorporated into the riparian revegetation plan. The basis for the riparian revegetation plan will also be used to	County	County USACE CDFW	Verify that the required permits/approvals are obtained prior to construction. Verify that the permit conditions are implemented prior to or during construction and/or operation, as required.	Pre-construction Construction Operation	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	satisfy the "Biologically Equivalent or Superior Analysis" for the loss of Riparian/Riverine habitat required by the MSHCP.					
B-3 Special Status Bats	Prior to ground-disturbing activities, surveys will be conducted for potential bat roosts. Where potential bat roosts are identified, ground disturbance and roost destruction will be avoided during the parturition period (generally March through August). Where this is not feasible, exit surveys and/or roost surveys of potential roost sites will occur, and active roosts will be identified. Construction activity within 300 feet of active roosts will be prohibited until the completion of parturition (end of August). Alternatively, if potential roosts are identified prior to onset of parturition, roosts may be excluded during the evening forage period (within 4 hours after dark) or fitted with one-way exit doors to effectively eliminate and exclude roost.	County	County	Verify these requirements are implemented prior to construction.	Preconstruction	
B-4 Burrowing Owl	Within 30 days prior to ground-disturbing activities, surveys will be conducted for burrowing owls in suitable habitat. Take of active nests will be avoided. If burrowing owls are observed in the Project impact area, they will be passively or actively relocated following accepted protocols.	County	County Biological Monitor	Verify these requirements are implemented prior to and during construction.	Preconstruction Construction	

MITIGATION	pad Extension Project Mitigation Monitoring and Reporting					
MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
B-5 Revegetation Plan	Mitigation measures for temporary impacts to riparian and/or wetland areas at Drainages 2, 3, 9, 15, and 16, as shown on the plans, will include revegetation of the impacted areas at a 1:1 ratio. This may include the following: Banking of the top 8 inches of topsoil prior	County	County	Verify these requirements are implemented during construction	Construction	
	to site disturbance; topsoil will be banked away from active construction areas and covered with tarpaulins to avoid erosion or seed establishment.					
	 Areas impacted will be regraded to original contours or as close to original contours as feasible once construction is complete, and topsoil redistributed across impact area. 					
	 A hydroseed mix appropriate to wetland and riparian scrub areas in western Riverside County consisting entirely of seeds of native species will be applied according to industry standard methods and rates. 					
	 Hydroseed will contain cellulose-fiber mulch with a tackifier, applied at appropriate rates for erosion control. 					
	 Final re-vegetation plans will be coordinated with the permitting agencies during the permitting process. 					
B-6 Soft bottom Culverts	Within Drainage 15, a double 24 by 9-foot soft- bottom culvert will be installed, as shown on the plans for Segment 4, to avoid impacts to jurisdictional water features	County	County	Ensure that these recommendations are incorporated into the final design.	Final Design Construction	

Clinton Keith Road Extension Project Mitigation Monitoring and Reporting Program

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
B-7 ESA Fencing	Environmentally Sensitive Area (ESA) fencing would be installed to minimize additional impacts to jurisdictional water features at Drainage 2 – Warm Springs Creek and Drainage 3 within Segment 2, and Drainage 15 and Drainage 16 – French Valley Creek within Segment 4 as shown on the layout sheets.	County	County Biological monitor	Ensure that these recommendations are incorporated into the final design.	Final Design Construction	
B-8 Compensatory Mitigation	The County will provide appropriate compensatory mitigation through either in-lieu fees or creation or preservation of wetlands/WoUS/WoS within the Santa Margarita Watershed to offset unavoidable impacts. This will be determined through the permitting process. The mitigation ratio identified in the 2006 JD Report is 1:1.5 (acres impacted to acres mitigated) for permanent impacts and 1:1 for shading impacts to CDFW Jurisdictional Areas. This mitigation ratio may be modified through coordination with the permitting agencies.	County	County	Coordinate mitigation with permitting agencies	Pre-construction	
B-9 Updated DBESP	The County will update the MSHCP Determination of a Biologically Equivalent or Superior Preservation alternative using current formats developed by the wildlife agencies to include an assessment of impacts within the 15 MSHCP riparian/riverine resource areas. Any compensation will be determined through consultation with the resource agencies.	County	County	Ensure the DBESP is updated	Pre-construction	

Cultural Resources

Cilition Reith Ro	ad Extension Project Mitigation Monitoring and Reporting	y Fiografii		-		
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
CR-1 ESA and Archaeological Monitoring	Establish ESA and conduct archaeological monitoring to protect 33-016689, CA-RIV-11574/H, CA-RIV-11739, and CA-RIV-11740 in place during construction. Prepare an ESA	County	County Archaeological Monitor	Ensure an ESA Action Plan is prepared, implemented.	Pre-construction	
(Modified in SEIR Addendum)	odified in SEIR Action Plan detailing measures that will be taken to protect the property in place			Monitor construction activities to verify compliance.	Construction	
				Ensure that a monitoring report is prepared	Post-construction	

Cilition Reith Roa	ad Extension Project Mitigation Monitoring and Reporting	y Fiograffi	r		· · · · · · · · · · · · · · · · · · ·	
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
CR-2 Surface Collection	Collect flaked stone artifact from surface of CA-RIV-11572 identified in southwestern portion of property and curate along with other archaeological materials collected from the site.	County	County Archaeological Monitor	Ensure that these recommendations are implemented prior to construction.	Pre-construction	
CR-3 ESA elements of CA-RIV-11572 and conduct archaeological monitoring during construction. Archaeological Monitoring measures that will be taken to protect the	County	County Archaeological Monitor	Ensure an ESA Action Plan is prepared, implemented.	Pre-construction		
	property in place.			Monitor construction activities to verify compliance.	Construction	
				Ensure that a monitoring report is prepared	Post-construction	
CR-4 Retaining Wall	Construct retaining wall, as shown on plans, to protect character-defining elements of CA-RIV-11572 in place.	County	County Archaeological monitor Contractor	Ensure that these recommendations are incorporated into the final design.	Final Design	
View	Evaluate the inclusion of signs, fencing, or any other above-ground structures or objects associated with the Project in order to reduce or eliminate obstruction of the direct line of site viewshed from the work area at OC 2 at CA-RIV-11572 to the place of Luiseño creation, <i>Pu'Eska</i> Mountain.	County	County	Ensure that these recommendations are incorporated into the final design.	Final Design	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
CR-6 PRMMP (formerly CR-1 in SEIR)	A Paleontological Resources Monitoring and Mitigation Plan (PRMMP) has been developed that prescribes onsite monitoring for paleontological resources during all ground-disturbing construction activities in paleontologically sensitive areas (CH2M HILL 2004). Monitoring will consist of visually inspecting fresh exposures of sediment and backdirt generated by the site preparation, grading, and other excavations. The monitoring will concentrate on areas and rock units containing fossil sites recorded during the preconstruction survey. A qualified paleontological monitor shall observe all ground-disturbing activities in the following four paleontologically sensitive areas within the proposed Project impact area:	County	County Paleontologica I Monitor	Monitor construction activities to verify compliance. Ensure that a monitoring report is prepared	Construction Post-construction	
	Area between the intersection of proposed Clinton Keith Road and Meadowlark Road and 1,300 feet east of this intersection (between Stations 236 and 252) North of the proposed Project centerline along Menifee Road					
	Locations where the proposed Project alignment and temporary construction access areas cross the older terrace of Warm Springs Creek, represented by its current floodplain					
	4) From Station 330 to the east end of the proposed alignment (Station 380) The PRMMP calls for construction worker education on paleontological resources identification and avoidance, and the roles of the paleontological monitor and project paleontologist. It includes a Paleontological Resources Discovery Plan (PRDP) for construction supervisors.					

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MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	The PRMMP and the PRDP describe procedures for notification and avoidance by construction should paleontological resources be discovered, and the assessment and recovery of discovered fossil resources. The PRMMP also stipulates procedures for sediment sampling and processing, requirements for the preparation and curation of recovered resources, and the preparation of reports on monitoring conducted, and on discovered paleontological resources if any.	County	County Paleontogical Monitor	Monitor construction activities to verify compliance. Ensure that a monitoring report is prepared	Construction Post-construction	
CR-7 ESA and Archaeological Monitoring	Establish ESA and conduct archaeological monitoring to protect all remaining portions of CA-RIV-11571/H and CA-RIV-11575 in place during construction. Prepare an ESA Action Plan detailing measures that will be taken to protect the property in place.	County	County Archaeological Monitor	Ensure an ESA Action Plan is prepared and implemented. Monitor construction activities to verify compliance.	Pre-construction Construction	
				Ensure that a monitoring report is prepared	Post-construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
CR-8 Discovery Plan and Archaeological Monitoring	Prepare an archaeological discovery, monitoring, and treatment plan will be developed prior to Project construction that requires monitoring of all ground-disturbing activities by a Qualified Archaeologist due to the sensitivity of the Project APE for buried cultural deposits. If buried archaeological resources are uncovered during construction, all work should be halted in the vicinity of the archaeological discovery until a Qualified Archaeologist can visit the site of discovery and evaluate the significance of the archaeological resource. Both the Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians are also requesting Native American monitors to be present during ground-disturbing activities associated with Project construction and implementation.	County	County Archaeological Monitor	Ensure the archaeological monitoring and treatment plan is developed and implemented. Coordinate with Native American monitors. Ensure that a monitoring report is prepared	Pre-Construction Construction Post-construction	
CR-9 Human Remains	Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below. In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the NAHC by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains.	County	County Archaeological Monitor	Monitor construction activities to verify compliance.	Construction	

Clinton Keith Ro	pad Extension Project Mitigation Monitoring and Reportin	g Program	<u> </u>			
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
	The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.					
CR-10 Bury/Relocate Outcrops	Bury or relocate feature outcrops that will be impacted by grading operations or other earthmoving activities at CA-RIV-11571/H and CA-RIV-11573 under the direct supervision of an archaeological monitor and Native American monitor.	County	County Archaeological Monitor Native American Monitor	Ensure that these recommendations are incorporated into the final design. Monitor construction activities to verify compliance.	Final Design Construction	
	Establish ESA during Project construction to protect feature outcrop OC 2 at CA-RIV-11575.	County	County	Ensure that these recommendations are incorporated into the final design.	Final Design	
				Monitor construction activities to verify compliance. Ensure that a monitoring report is prepared	Construction Post-construction	

Clinton Keith Road Extension Project Mitigation Monitoring and Reporting Program

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Data Recovery and Treatment Plan	The County will develop and implement a Data Recovery and Treatment Plan for CA-RIV-11571/H, CA-RIV-11572, CA-RIV-11575, and the potential Adobe Springs archaeological district or prehistoric vernacular landscape in coordination with Native American Tribes that ascribe cultural and/or religious significance to cultural resources.	County	County Archaeological Monitor Native American Tribes	Ensure the Data Recovery and Treatment Plan is prepared and implemented. Ensure that a data recovery report is prepared	Pre-construction Post-construction	

Transportation/Traffic

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
T-1 TMP (Modified in SEIR)	To mitigate potential traffic impacts associated with reduced access, including emergency access, a transportation management plan (TMP) will be prepared during final design, to be approved by Riverside County and Caltrans for the intersection at SR 79, within Segment 4, that addresses, at a minimum, the following: • General access restrictions associated with the Project, including proper notification of affected residences, businesses, and other facilities prior to construction. Advance public notification will include posting of notices and appropriate signage of construction activity. The TMP must ensure adequate access to residences and facilities via existing roadway intersections and private driveways at all times or include alternate access, detours, or temporary mitigation to address access restrictions adequately. • Emergency access restrictions associated with the Project, including proper notification of emergency providers and provision of alternate routes, if necessary. All construction activities will be coordinated with local law enforcement, fire protection, and other emergency service providers. These entities will be notified of the timing, location, and duration of construction activities. • Where construction will result in temporary lane closures of sidewalks and other pedestrian facilities, the Contractor will provide temporary pedestrian access, through detours or safe areas alongside the construction zone. Any affected pedestrian facilities and alternative facilities or detours will be identified.	County	County Caltrans	Verify the TMP is approved prior to construction and implemented during construction.	Preconstruction Construction	

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MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
T-2 Intersection Monitoring	This measure applies to Design Option 1 of Segment 2. If Design Option 1 (2-lane) is implemented for Segment 2, the County and the City will monitor the intersection of Menifee Road/Clinton Keith Road to determine the timing for the installation of a signal as identified in the SEIR.	County	County City of Murrieta	Ensure that the intersection monitoring of Menifee Road/Clinton Keith Road occurs.	Post- construction	
PS-2 Transit	During final design, the County will coordinate with the RTA on the potential need for Americans with Disabilities Act (ADA)-accessible bus stops, turnouts, shelters, and other possible bus and transit patron amenities that may be appropriately incorporated in the design of the Project.	County	County RTA	Ensure that these recommendations are incorporated into the final design.	Final Design	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Noise						
N-1 Work Hours	During site preparation, grading, excavation, and construction of the proposed Project, the County will require construction contractors to limit all grading and construction activities within unincorporated Riverside County to the hours of 6:00 a.m. to 6:00 p.m. from June to September, and from 7:00 a.m. to 6:00 p.m. from October to May. As required by the City of Murrieta Development Code, construction within the City of Murrieta will take place only between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. No proposed Project work will be conducted on Sundays or federal holidays in the City of Murrieta.	County	County	Verify that these recommendations are incorporated into the specifications and are implemented during construction. Monitor activities to verify compliance.	Construction	
N-2 Mufflers	During site preparation, grading, excavation, and construction of the proposed Project, the County will require the construction contractors to ensure that all construction equipment, fixed or mobile, is equipped with properly operating and maintained mufflers.	County	County	Monitor activities to verify compliance.	Construction	
N-3 Stationary Equipment	During site preparation, grading, excavation, and construction of the proposed Project, the County will require the construction contractors to ensure that, whenever feasible, stationary construction and generating equipment is placed such that emitted noise is directed away from adjacent land uses to minimize the effects of construction related to noise on adjacent land uses.	County	County	Monitor activities to verify compliance.	Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
N-4 Pile Driving	Impact pile driving should be avoided in noise-sensitive areas, where possible. Drilled piles or the use of a sonic or vibratory pile driver are quieter alternatives than impact pile driving. Geological conditions can limit their use. Sonic pile driving typically generates noise levels that are approximately 5 decibels lower than those from impact pile drivers. At Warm Springs Creek, within Segment 2, drilled piles will be used for bridge construction to minimize noise impacts. Within Segment 4, feasibility of alternative pile driving methods for French Valley Creek Bridge will be determined during final design, as identified in the SEIR.	County	County	Verify which pile driving method was used.	Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Air Quality						
AQ-1 Dust Control	Construction The County will require the Project Construction Contractor to comply with AQMD Rule 403 (as amended June 3, 2005) to control dust during all construction activities. Typical control measures may include stabilizing disturbed soil throughout the site or directing construction traffic over established haul roads.	County Contractor	County	Conduct periodic inspections of activities to verify compliance.	Construction	
AQ-2 Equipment maintenance	The County will require the project construction contractor to maintain all construction equipment used for the site preparation, grading, and construction of the proposed Project consistent with the manufacturer's specifications.	County Contractor	County	Conduct periodic inspections of activities to verify compliance.	Construction	
AQ-3 Smog	The County will require the project construction contractor to discontinue all site preparation, grading and construction activities during first-and second-stage smog alerts as announced by the AQMD.	County Contractor	County	Monitor activities to verify compliance.	Construction	
AQ-4 High Winds	During periods of high winds in excess of 40 miles per hour, the County will require the Construction Contractor to terminate all site preparation, grading and construction activities that will disturb the ground surface.	County Contractor	County	Monitor activities to verify compliance.	Construction	
AQ-5 Idling	The County will require the project construction contractor to prevent diesel trucks from idling longer than 2 minutes.	County Contractor	County	Conduct periodic inspections of activities to verify compliance.	Construction	

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Utilities and S	Service Systems					
PS-3 Electricity	During final design, the Riverside County Transportation Department will coordinate with Southern California Edison (SCE) regarding the depth and location of existing electrical facilities in the area and the notification of users of the potential for the interruption of services. All electrical facilities will be clearly marked on the final design plans for the proposed Project.	County	County SCE	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Preconstruction Construction	
PS-4 Natural Gas	During final design, the Riverside County Transportation Department will coordinate with Southern California Gas (SCG) Company regarding the depth and location of existing natural gas facilities in the area and the notification of users of the potential for the interruption of services. All existing natural gas facilities will be clearly marked on the final design plans for the proposed Project.	County	County SCG	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Preconstruction Construction	
PS-5 Telephone Service	During final design, the County will coordinate with Verizon regarding the depth and location of existing telephone facilities in the area and the notification of users of the potential for the interruption of services. All existing telephone facilities will be clearly marked on the final design plans for the proposed Project.	County	County Verizon	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Preconstruction Construction	

TABLE E-2 Clinton Keith R	oad Extension Project Mitigation Monitoring and Reportin	g Program				
MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
PS-6 Water Service	During final design, the County will coordinate with the Eastern Municipal Water District (EMWD) and the Metropolitan Water District of Southern California (Metropolitan) regarding the depth and location of existing water facilities in the area and the notification of users of the potential for the interruption of services. All existing water facilities will be clearly marked on the final design plans for the proposed Project.	County	County EMWD Metropolitan	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Preconstruction Construction	
PS-8 Sewers	During final design, the County will coordinate with the appropriate water district supplying sewer service to the proposed Project area. This coordination will include the identification of depth and location of existing sewer facilities in the area and the notification of users of the potential for the interruption of services.	County	County Water Districts	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Preconstruction Construction	
Aesthetics						
A-1 Landscape (modified from SEIR)	A-1 Implementation through phasing of construction activities Phase 1 of Segment 2 Implementation Phase 1 aesthetic plans, for both design options of Segment 2 will include seeding the future roadbed (where grading occurs for the ultimate facility adjacent to the pavement installed with Phase 1), side slopes and back slopes with native and naturalized grasses and shrubs, together with installation of occasional rock outcroppings that have been repurposed from the roadway excavation. This treatment replicates the visual characteristics throughout the Project alignment.	County	County	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design Construction	

TABLE E-2 Clinton Keith Road Extension Project Mitigation Monitoring and Reporting Program MITIGATION MEASURE RESPONSIBLE NUMBER MITIGATION REQUIREMENT **ENTITY** MONITOR **ACTION BY MONITOR** TIMING COMPLIANCE A-1 County County Phase 2 of Segment 2 Implementation Final Design Ensure that these Landscape A final design Landscape Plan will be recommendations are (cont'd) Construction completed as part of Phase 2 of Segment 2 of incorporated into the the Project. It will be approved by the City of final design and are Murrieta and County of Riverside. The implemented during landscape plan will be implemented during the construction. final build out (Phase 2) of the Clinton Keith Road Extension Project. Segment 4 A final design Landscape Plan will be completed as part of Segment 4 of the Project. It will be approved by the City of Murrieta and County of Riverside. The landscape plan will be implemented during the final build out for Segment 4 of the Clinton Keith Road Extension Project. GEO-1 County County During final design of the Project, the County Ensure that these Final Design Grading will ensure the following recommendations are recommendations are (revised from Construction incorporated for Clinton Keith Road and are incorporated into the SEIR) implemented by the Project contractor during final design and are construction: implemented during All grading and landform modifications construction. will be conducted in conformance with state-of-the-practice design and construction parameters. These typical standard minimum guidelines are set forth in Chapter 70 of the Uniform **Building Code** All graded slopes will be constructed to be grossly and surficially stable Boulders removed during grading will be reused, as feasible, to replicate the key features of the local topography

MITIGATION MEASURE NUMBER	MITIGATION REQUIREMENT	RESPONSIBLE ENTITY	MONITOR	ACTION BY MONITOR	TIMING	COMPLIANCE
Public Servic	es					
PS-1 Fire Plan	During final design of the proposed Project, the County will submit a fire protection plan to the Riverside County Fire Department (RCFD). This plan will ensure that adequate fire flows are maintained when construction activities require water lines to be altered or replaced.	County	County RCFD	Ensure that these recommendations are incorporated into the final design and are implemented during construction.	Final Design	
PS-2 Transit	During final design of each phase of the proposed Project, the County will coordinate with the RTA on the potential need for Americans with Disabilities Act (ADA)-accessible bus stops, turnouts, shelters, and other possible bus and transit patron amenities that may be appropriately incorporated in the design of the proposed Project.	County	County RTA	Ensure that these recommendations are incorporated into the final design.	Final Design	