

Appendix L Mitigation, Monitoring, and Reporting Plan



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Date of MMRP: June 2021

Project Phase:

☐ DEIR/FEIR
☐ Final Design
☐ Construction

MITIGATION, MONITORING, AND REPORTING PROGRAM (MMRP) Stockton Diamond Grade Separation Project

		Responsible for Development and/or			Final Design <u>Task</u> Completed	Construction <u>Task</u> Completed	Environ Compl	
	Avoidance, Minimization, and/or Mitigation Measures	Implementation of Measure	<u>Timing/</u> <u>Phase</u>	Action(s) Taken to Implement Measure/if checked No, add Explanation here	<u>Date /</u> <u>Initials</u>	<u>Date / Initials</u>	<u>YES</u>	<u>NO</u>
AESTHETICS								
BMP AES-1:	Coordinate Design Elements to Reduce Visual Impacts. During final design, SJRRC will ensure that all infrastructure within the corridor owned by UP and all materials and aesthetic features will be reviewed and approved by UP. The detail design of the elements in the Project corridor and the selection of the flyover's specific materials and forms will be rigorously coordinated to reduce visual impacts and enhance existing visual quality.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
	For retaining wall options, this would include but not be limited to the wall type (cast-in-place, mechanically stabilized earth, or other types), the materials used in wall construction (concrete, block, stone, or metal), and the architectural treatment of its façade (dimensions, jointing, colors, textures).							
	For the viaduct option, the bridge type, proportions for the openings, and design of piers would be coordinated, especially where located adjacent to a retaining wall or embankment structure, to achieve design coherence.							
	For the embankment option, seed mixes will be selected to provide vigorous growth and seasonal variety. Coordination regarding potential sculpting of the embankments to be responsive to the public's interest in visual quality would be incorporated.							
	For any of the design options, the type and placement of fencing, railings, and lighting to provide safety and security would be carefully considered and incorporated into the proposed Project during the design phase in coordination with UP.							
BMP AES-2:	Street Tree Planting. During final design, SJRRC will ensure coordination with the City of Stockton on the incorporation of trees along the west side of South Union Street for the viaduct and retaining	<u>SJRRC</u>	During Final Design					



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	wall design options. The incorporation of trees would improve the visual quality of the proposed structure. SJRRC will coordinate with the City of Stockton and UP on the locations and types of plantings along the street to provide the visual screening of the viaduct or retaining wall structures.							
BMP AES-3:	Lighting Plan. During final design, SJRRC will ensure that a lighting plan will be developed that will select temporary and permanent lighting fixtures to minimize glare on adjacent properties and into the night sky. As defined in the City's Municipal Code, permanent lighting fixtures will be selected to ensure that the light beam is controlled and not directed across a property line or upward into the sky. Lighting will be shielded with non-glare hoods or reflectors and focused within the Project right-of-way. The lighting plan will be reviewed and approved by the City of Stockton prior to construction to ensure compliance with the City's Municipal Code and General Plan.	SJRRC	<u>During Final</u> <u>Design</u>					
AIR QUALITY								
BMP AQ-1:	Compliance with Stockton Community Emissions Reduction Program. During final design, SJRRC will review the Stockton CERP and incorporate emission reduction strategies into the Project, as feasible. The emissions reduction strategies in the Stockton CERP will include, but will not be limited to, enhancing community participation in land use processes, the deployment of zero and near-zero emission Heavy-Heavy Duty (HHD) trucks, HHD truck rerouting analyses, reducing HHD truck idling, and incorporating vegetative barriers and urban greening.	SJRRC	<u>During Final</u> <u>Design</u>					
BMP AQ-2:	Vegetative Barriers and Urban Greening. During final design, SJRRC will evaluate the feasibility of incorporating vegetative barriers and urban greening as a measure to potentially reduce air pollution exposure on sensitive receptors in the Project Study Area. Examples of vegetative barriers will include, but are not limited to, trees, bushes, shrubs, or a mix of these types of vegetation	SJRRC	During Final Design					
BMP AQ-3:	Compliance with EPA's Tier 4 Exhaust Emission Standards. During construction, SJRRC will ensure that all off road diesel powered construction equipment greater than 50 horsepower shall comply with	<u>SJRRC</u>	During Construction					



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	EPA's Tier 4 Final exhaust emission standards (40 CFR Part 1039). In addition, if not already supplied with a factory equipped diesel particulate filter, all construction equipment shall be outfitted with Best Available Control Technology devices certified by the ARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by California ARB regulations.	<u>Measure</u>	<u>Phase</u>	checked No, add Explanation here	<u>Initials</u>			
BMP AQ-4:	Fugitive Dust. Prior to issuance of a grading or building permit, SJRRC shall submit the dust control plan to SJVAPCD for review and approval, and shall provide the plan to the County, to demonstrate compliance with SJVAPCD Regulation VIII (Fugitive PM10 Prohibition). The plan shall address construction-related dust as required by SJVAPCD.	<u>SJRRC</u>	Prior to Issuance of Grading or Building Permit					
BIOLOGICAL	RESOURCES							
BMP BIO-1:	Biological Monitor and Environmental Awareness Training. If deemed necessary, SJRRC will ensure that a qualified biologist(s) will monitor activities that could affect special-status species and/or sensitive biological resources within the BSA. The amount and duration of monitoring would depend on the activity and would be determined by the qualified biologist. The duties of the qualified biologist shall comply with all agency conditions outlined in Project-related permits, but could include activities such as clearance surveys, flagging or fencing off environmentally sensitive areas for avoidance, and construction monitoring.	SJRRC/Qualified Biologist	Prior to and During Construction					
	The biological monitor will conduct preconstruction clearance surveys for special-status species prior to the start of Project activities and implement all biological-resources avoidance and minimization measures and applicable SJMSCP Incidental ITMMs.							
	In addition, a qualified biologist shall be retained to conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the identified location of sensitive biological resources, including how to identify species (visual and auditory) most likely to be present, the need to avoid impacts on biological resources (for example, plants, wildlife, and jurisdictional waters), and to brief them on							



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	Avoidance, Minimization, and/or Mitigation Measures the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the Project, SJRRC will ensure that the mandatory training be conducted by the contractor prior to starting work on the proposed Project.	<u>Measure</u>	<u>Phase</u>	checked No, add Explanation here	<u>Initials</u>			
BMP BIO-2:	Swainson's Hawk Nest Surveys. Prior to construction, a qualified biologist shall conduct surveys for Swainson's hawk nests in accordance with current CDFW-approved guidance, such as the Swainson's Hawk Technical Advisory Committee's 2010 Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFW 2000), or as required by the SJMSCP.	Qualified Biologist	Prior to Construction					
BMP BIO-3:	Migratory Bird and Raptor Surveys and Nest Avoidance. If vegetation clearing and/or construction activities are scheduled to occur during the migratory bird nesting season (February 1 to September 15), then pre-construction surveys to identify active migratory bird and/or raptor nests will be conducted by a qualified biologist no more than 7 days prior to construction initiation. If active nest sites are identified in the survey area, a no-disturbance buffer will be established for all active nest or burrow sites prior to commencement of any proposed Project-related activities. The size of the no-disturbance buffer would vary and would be determined by a qualified biologist based on the species, activities proposed near the nest, and topographic and other visual barriers, or as otherwise required through the SJMSCP (as described in SJMSCP ITMM 5.2.4.17, 5.2.4.18, and 5.2.4.19). A qualified biologist will monitor any active nest until the nest is deemed inactive and the no-disturbance buffer can be removed. The amount and duration of the monitoring will be determined by a qualified biologist and will depend on the same factors described above when determining the size of the no-disturbance buffer.	Qualified Biologist	Prior to and During Construction					
BMP BIO-4:	Burrowing Owl Surveys and Avoidance. A qualified biologist shall conduct surveys for burrowing owl during the peak breeding season (April 15 to July 15) prior to construction in accordance with current CDFW-approved guidance [Burrowing Owl Survey Protocol and	Qualified Biologist	Prior to Construction					



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	Mitigation Guidelines or Staff Report on Burrowing Owl Mitigation (CDFW 2012)]. If no active burrowing owl burrows are located within, or within 500 feet of, the proposed Project construction limits, SJRRC or its construction contractor will proceed with measures A or B identified in SJMSCP ITMM 5.2.4.15 to prevent burrowing owls from subsequently occupying the Project construction limits, if feasible. If burrowing owl subsequently occupy the Project construction limits prior to construction SJRRC or its construction contractor will proceed with measures C or D identified in SJMSCP ITMM 5.2.4.15 to avoid impacts to breeding burrowing owls. Measure C consists of passive relocation during the non-breeding season (September 1 through January 1). Measure D consists of implementing 250-foot buffers around occupied, active nests/burrows. Once a qualified biologist has determined that young have fledged and are capable of independent survival, the burrow can be destroyed.							
BMP BIO-5:	Bat Roost Surveys. A qualified biologist will conduct a daytime site reconnaissance in the maternity season prior to the construction of new infrastructure or modifications to existing infrastructure of any buildings, bridges, or other structures suitable to support bat roosts. The qualified bat biologist will survey for SJMSCP-protected bats and bat sign, including existing roost sites and bat guano deposits, and will listen for roosting bats. If potential roost sites are identified, a nighttime exit survey will be conducted to determine the species of roosting bats and relative bat activity, and to estimate the number of individual bats. This nighttime survey may be an active or passive acoustic monitoring survey. If SJMSCP-protected bat individuals or roosts are found in, or within 100 feet of, the proposed Project construction limits, SJMSCP ITMM 5.2.4.28 will be implemented.	Qualified Biologist	Prior to Construction					
MM BIO-6:	Compliance with SJMSCP. Prior to and during construction, SJRRC will ensure compliance of the proposed Project with all applicable standards and regulations set forth in the SJMSCP, as well as all applicable Incidental Take Avoidance Measures identified within the SJMSCP.	<u>SJRRC</u>	Prior to and During Construction					



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MM BIO-7:	National Marine Fisheries Service Consultation. SJRRC will implement all commitments and avoidance and minimization measures identified in the National Marine Fisheries Service Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response issued for the Project on May 17, 2021 (Appendix C). SJRRC will implement a crossing type for the structure spanning the Mormon Slough that will retain a natural substrate stream channel bottom as part of this consultation. In addition, SJRRC will avoid the use of rip-rap to armor the channel at this location.	<u>SJRRC</u>	<u>During</u> <u>Consultation</u>					
BMP BIO-8:	Construction BMPs at Mormon Slough. During final design, SJRRC will ensure that construction best management practices will be employed on-site to prevent erosion or runoff of loose soil and dust. Methods will include the use of appropriate measures to intercept and capture sediment prior to entering aquatic resources, as well as erosion control measures along the perimeter of disturbance areas to prevent the displacement of fill material. All best management practices shall be in place prior to initiation of project-related activities and shall remain until activities are completed. All erosion control methods will be maintained until all onsite soils are stabilized.	SJRRC	<u>During Final</u> <u>Design</u>					
BMP BIO-9:	Environmentally Sensitive Area Fencing at Mormon Slough. Prior to and during construction, SJRRC will ensure that work areas will be reduced to the smallest practicable footprint throughout the duration of construction activities. Prior to any ground-disturbing activity, SJRRC will ensure that staging areas for construction equipment be stored in areas that minimize impacts on sensitive biological resources, including aquatic resources. Staging areas (including any temporary material storage areas) will be located in areas that will be occupied by permanent facilities, where practicable. Equipment staging areas will be identified on final project construction plans. SJRRC will ensure to flag and mark access routes to restrict vehicle traffic within the Project footprint to established roads, construction areas and other designated areas.	SJRRC	Prior to and During Construction					
BMP BIO-10:	Restoration of Temporary Impact Areas. During construction, SJRRC will ensure that all exposed and/or disturbed areas resulting from Project-related activities will be returned to its original contour and	<u>SJRRC</u>	During Construction					



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	grade, and restored using locally native grass and forb seeds, plugs, or a mix of the two. Areas shall be seeded with species appropriate to their topographical and hydrological character. Seeded areas shall be covered with broadcast straw and/or jute netted, where appropriate.							
BMP BIO-11:	Vehicle Access and Speed Limits. During construction, SJRRC will ensure that all vehicle traffic associated with project-related activities will be confined to established roads, staging areas, and parking areas. Vehicle speeds will not exceed 15 miles per hour on access roads with no posted speed limit to avoid collisions with special-status species or habitats. Additionally, maintenance or refueling of vehicles or equipment must occur in designated areas and/or a secondary containment, located away from aquatic resources.	<u>SJRRC</u>	<u>During</u> <u>Construction</u>					
BMP BIO-12:	Storage and Disposal of Excavated Materials. During ground-disturbing activities, SJRRC may temporarily store excavated materials produced by construction activities in areas at or near construction sites within the Project footprint. Where practicable, SJRRC will return excavated soil to its original location to be used as backfill. Any excavated waste materials unsuitable for treatment and reuse would be disposed at an off-site location, in conformance with applicable state and federal laws. Stockpiled, disassembled, and hazardous construction material should be stored at least 100 feet from aquatic resources, where possible.	SJRRC	During Construction					
MM BIO-13:	Mitigation for Aquatic Resources. During final design, SJRRC will ensure that temporary Project impacts on aquatic resources associated with the Mormon Slough will be restored in-place and permanent Project impacts on aquatic resources to the Mormon Slough will be mitigated at a minimum 1:1 ratio. Mitigation can include on-site restoration, in-lieu fee payment, or purchase of mitigation credits at an agency-approved mitigation bank.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
MM BIO-14:	Compliance with Permitted Mitigation Measures. Prior to construction, SJRRC will obtain all required permits and authorizations for Project impacts to the Mormon Slough, which may include the preparation and submittal of the following applications:	<u>SJRRC</u>	Prior to Construction					



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	Pre-Construction Notification to USACE to use a Nationwide Permit for any Project impacts to Waters of the US subject to Section 404 of the federal Clean Water Act							
	Water Quality Certification Application to Central Valley Regional Water Quality Control Board (RWQCB) for any Project impacts to Waters of the U.S. subject to Section 401 of the federal Clean Water Act							
	Streambed Alteration Agreement Notification to CDFW.							
MM BIO-15:	Preparation of Formal Jurisdictional Delineation. During final design, SJRRC will ensure that a formal field-delineation of aquatic resources the proposed Project, to be verified by the regulatory agencies, will be conducted in order to confirm the exact extent of jurisdictional resources impacted by the proposed Project.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
BMP BIO-16:	City of Stockton Tree Ordinance. During final design, SJRRC will ensure that the proposed Project will comply with the City of Stockton's tree ordinance which requires a permit issued by the City for the removal of any street trees or heritage oak trees within the City.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
CULTURAL R	RESOURCES CONTROL OF THE PROPERTY OF THE PROPE							
BMP CUL-1:	Archaeological and Tribal Monitoring. Prior to issuance of grading permits, SJRRC will ensure that a qualified archeologist and Native American monitors from the North Valley Yokuts Tribe and The Confederated Villages of Lisjan shall be retained to monitor earthmoving activities. One Native American monitor from the North Valley Yokuts Tribe and one Native American monitor from The Confederated Villages of Lisjan shall be on-site during these activities. Attendance is ultimately at the discretion of the tribes. The archaeological and Native American monitor shall be present for all ground-disturbing activities within the Project area. The qualified archaeologist shall have the ability to recommend, with written and photographic justification, the termination of monitoring efforts to SJRRC, and should SJRRC and the Native American monitors concur with this assessment, then monitoring shall cease.	SJRRC/Qualified Archeologist	Prior to Issuance of Grading Permits					



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	If an inadvertent discovery of archaeological materials is made during project-related construction activities, the archaeological and Native American monitors shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an Environmentally Sensitive Area physical demarcation shall be established. The qualified archaeologist shall be notified regarding the discovery. If prehistoric or potential tribal cultural resources (TCR) are identified, the Native American monitors shall be notified. Prior to issuance of grading permits, a qualified archaeologist, meeting the Secretary of the Interior's Standards for professional archaeology, shall ensure that a Worker Environmental Awareness Protection (WEAP) training, presented by a Qualified Archaeologist and Native American representative, is provided to all construction and managerial personnel involved with the proposed Project. The WEAP training shall provide an overview of cultural (prehistoric and historic) and tribal cultural resources and outline regulatory requirements for the protection of cultural resources. The WEAP will also cover the proper procedures in the event an unanticipated cultural resource is identified during construction. The WEAP training can be in the form of a video or PowerPoint presentation. Printed literature (handouts) can accompany the training and can also be given to new workers and contractors to avoid the necessity of continuous training over the course of the proposed Project.							
BMP CUL-2:	Archaeological and Tribal Monitor. Prior to issuance of grading permits, SJRRC shall retain an archaeological monitor. The archaeological monitor, working under the direct supervision of the qualified archeologist, shall be present for all ground-disturbing activities that occur in native soil within the archaeological APE. All archaeological monitors shall be familiar with the types of historical and prehistoric resources that could be encountered within the APE. Ground disturbing activities include, but are not limited to, brush clearance, grubbing, excavation, trenching, grading, and drilling. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. The qualified archaeologist shall have the ability to recommend, with written and photographic justification, the termination of monitoring efforts to SJRRC, and should SJRRC and the Native American participant(s) concur with this assessment, then monitoring shall cease.	SJRRC/ Qualified Archeologist/ Archeological Monitor	Prior to Construction					



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	If an inadvertent discovery of archaeological materials is made during Project-related construction activities, the archaeological monitor shall have the authority to halt ground disturbing activities within 50 feet of the resource(s) and an Environmentally Sensitive Area physical demarcation shall be constructed. The qualified archaeologist shall be notified regarding the discovery. If prehistoric or potential tribal cultural resources are identified, the interested Native American participant(s) shall be notified.	<u>Measure</u>	<u>Phase</u>	checked No, add Explanation here	<u>Initials</u>			
	The qualified archaeologist, in consultation with SJRRC (and Native American participant[s] should the find be prehistoric), shall determine whether the resource is potentially significant as per Section 106 and/or CEQA (that is, whether it is an historical resource, a unique archaeological resource, or tribal cultural resources). If avoidance is not feasible, a qualified archaeologist, in consultation with SJRRC, shall prepare and implement a detailed treatment plan. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of, but would not be limited to, in-field documentation, archival research, subsurface testing, and excavation.							
	No work will continue within the 50-foot buffer until the qualified archaeologist, and Lead Agencies (along with the Native American participant[s] should the find be prehistoric) agree to appropriate treatment. One Native American monitor from the North Valley Yokuts Tribe and one Native American monitor from The Confederated Villages of Lisjan shall be on-site during all ground disturbing activities and attendance is at the discretion of the tribes.							
BMP CUL-3:	Inadvertent Discovery of Human Remains During Construction. In the event of the inadvertent discovery of human remains, SJRRC will ensure that their designated contractor shall immediately notify the county coroner and SJRRC. If the county coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission in accordance with Health and Safety Code Section 7050.5 subdivision c, and Public Resources Code Section 5097.98 (as amended by AB 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources	SJRRC/Designated Contractor	During Construction					



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	Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where he Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendent regarding their recommendations, if applicable. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 37 et seq.) directing identification of the next-of-kin will apply.							
GEOLOGY AN	ND SOILS							
BMP GEO-1:	Geologic Hazards. Prior to construction, SJRRC will ensure that the contractor shall prepare a Construction Management Plan addressing how the contractor will address geologic constraints and minimize or avoid impacts to geologic hazards during construction. The plan will be submitted to SJRRC for review and approval. At minimum, the plan will address unstable soils and water and wind erosion.	SJRRC/Contractor	Prior to Construction					
BMP GEO-2:	Geology and Soils. Prior to construction, SJRRC will ensure that the contractor will issue a technical memorandum documenting the ways in which the following guidelines and standards have been incorporated into facility design and construction: 2015 AASHTO Load and Resistance Factor Bridge Design Specifications and the 2015 AASHTO Guide Specifications for Load and Resistance Factor Seismic Bridge Design, or their most	SJRRC/Contractor	Prior to Construction					
BMP GEO-3:	Implement Geotechnical Recommendations. During final design, SJRRC will ensure that a project specific Geotechnical Design Report will be prepared, which will include final geotechnical recommendations for ground improvement options and foundation, embankment, and retaining wall design for the proposed Project.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
BMP GEO-4:	Preparation and Implementation of a Paleontological Resources Management Plan. Due to the potential for impacts to paleontological resources in the Project subsurface, a Paleontological Resources	SJRRC/Designated Contractor/Qualified Paleontologist	During Final Design/ During Construction					



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	Management Plan (PRMP) will be prepared during final design. SJRRC will ensure that the PRMP will include provisions for periodic spot checks during excavations to check for the presence of the early Holocene- to late Pleistocene-age Modesto Formation, and the implementation of full-time monitoring if the early Holocene- to late Pleistocene-age Modesto Formation is observed. In the event unanticipated paleontological resources are discovered during Project related activities, SJRRC or their designated contractor will ensure that work in the immediate vicinity of the discovery is halted until it can be evaluated by a qualified paleontologist.							
HAZARDOUS	S WASTE / MATERIALS							
MM HAZ-1:	Prepare a Construction Hazardous Materials Management Plan (HMMP). Prior to construction, SJRRC will ensure that an HMMP be prepared, which will outline provisions for safe storage, containment, and disposal of chemicals and hazardous materials, contaminated soils, and contaminated groundwater used or exposed during construction, including the proper locations for disposal. The HMMP shall be prepared to address Project construction limits, and include, but not be limited to, the following: A description of hazardous materials and hazardous wastes used (29 C.F.R. 1910.1200) A description of handling, transport, treatment, and disposal	<u>SJRRC</u>	Prior to Construction					
	procedures, as relevant for each hazardous material or hazardous waste (29 C.F.R. 1910.120)							
	 Preparedness, prevention, contingency, and emergency procedures, including emergency contact information (29 C.F.R. 1910.38) A description of personnel training including, but not limited 							
	to: (1) recognition of existing or potential hazards resulting from accidental spills or other releases; (2) implementation of evacuation, notification, and other emergency response procedures; (3) management, awareness, and handling of							



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	 hazardous materials and hazardous wastes, as required by their level of responsibility (29 C.F.R. 1910) Instructions on keeping Safety Data Sheets on site for each on-site hazardous chemical (29 C.F.R. 1910.1200) Identification of the locations of hazardous material storage areas, including temporary storage areas, which shall be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank (29 C.F.R. 1910.120) 							
MM HAZ-2:	Property Acquisition Phase 1 and Phase 2 Environmental Site Assessments. Prior to or during the right-of-way acquisition phase, SJRRC will ensure that Phase 1 Environmental Site Assessments (ESA) would be conducted in accordance with standard ASTM methodologies to characterize each parcel. The determination of parcels that require a Phase 2 ESA (for example, soil, groundwater, soil vapor subsurface investigations) would be informed by a Phase 1 ESA and may require coordination with state and local agency officials.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
MM HAZ-3:	Prepare a General Construction Soil Management Plan. Prior to construction, SJRRC will ensure that a General Construction Soil Management Plan be prepared, which will include general provisions for how soils will be managed within the Project construction limits for the duration of construction. General soil management controls to be implemented by the contractor, and the following topics, shall be addressed within the Soil Management Plan: General worker health and safety procedures Dust control Management of soil stockpiles Traffic control Stormwater erosion control using BMPs	SJRRC	Prior to Construction					



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	Protocols governing the discovery of unknown contaminants Soil management on properties within the Project construction limits with LUSTs or known contaminants Prior to construction on individual properties with LUSTs or known contaminants, a parcel-specific HASP shall also be prepared for submittal and approval by DTSC. The HASP shall be prepared to meet DSHA requirements, Title 29 of the C.F.R. 1910.120 and CCR Title 8, Section 5192, and all applicable federal, state, and local regulations and agency ordinances related to the proposed management, ransport, and disposal of contaminated media during implementation of work and field activities. The HASP shall be signed and sealed by a Certified Industrial Hygienist, who is licensed by the American Board of industrial Hygiene. In addition to general construction soil management plan provisions, the following parcel-specific HASP provisions shall also be implemented: Training requirements for site workers who may be handling contaminated material Chemical exposure hazards in soil, groundwater, or soil vapor that are known to be present on a property	SJRRC SJRRC	Prior to Construction					



		Responsible for Development and/or			Final Design Task Completed	Construction Task Completed	Environ Comp	<u>iance</u>
	Avoidance, Minimization, and/or Mitigation Measures	Implementation of <u>Measure</u>	<u>Timing/</u> <u>Phase</u>	Action(s) Taken to Implement Measure/if checked No, add Explanation here	<u>Date /</u> <u>Initials</u>	<u>Date / Initials</u>	<u>YES</u>	<u>NO</u>
	regulatory agencies with jurisdiction in order to establish an appropriate monitoring and reporting program that meets all federal, state, and local laws for the Project and each of the contaminated sites.							
MM HAZ-5:	properties with a LUST, SJRRC will ensure that coordination be required with DTSC regarding any plans specified, construction activities, and/or public outreach activities needed to verify that construction activities on properties with LUSTs would be managed in a manner protective of public health.	<u>SJRRC</u>	Prior to Construction					
MM HAZ-6:	Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered. During construction, SJRRC will ensure that contractors will follow all applicable local, state, and federal regulations regarding discovery, notification, response, disposal, and remediation for hazardous materials and/or abandoned oil wells encountered during the construction process.	SJRRC/Contractors	During Construction					
MM HAZ-7:	Pre-Demolition Investigation. Prior to the demolition of any structures constructed prior to the 1970s, SJRRC will ensure that a survey be conducted for the presence of hazardous building materials, such as ACMs, LBPs, and other materials falling under the Universal Waste requirements. The results of this survey shall be submitted to SJRRC and applicable stakeholders as deemed appropriate by SJRRC. If any hazardous building materials are discovered, prior to demolition of any structures, a plan for proper removal shall be prepared in accordance with applicable OSHA and San Joaquin County Environmental Health Department requirements. The contractor performing the work shall be required to implement the removal plan, shall be required to have a C-21 license in the State of California, and possess an A or B classification. If asbestos-related work is required, the contractor or their subcontractor shall be required to possess a California Contractor License (Asbestos Certification). Prior to any demolition activities, the contractor shall be required to secure the site and ensure utilities are disconnected.	SJRRC	Prior to Construction					



	Avoidance, Minimization, and/or Mitigation Measures	Responsible for Development and/or Implementation of	Timing/	Action(s) Taken to Implement Measure/if	Final Design Task Completed Date / Initials	Construction Task Completed Date / Initials	Environ Compl YES	
MM HAZ-8:	Maintenance of Emergency Response Times. Prior to construction and closure of East Church Street and East Lafayette Street, SJRRC will consult with applicable agencies and departments providing emergency response to ensure that acceptable response times are maintained during proposed Project operation.	<u>Measure</u> <u>SJRRC</u>	Prior to Construction	checked No, add Explanation here	<u>iniuais</u>			
HYDROLOGY	AND WATER QUALITY							
BMP HYD-1:	Stormwater Management and Treatment Plan. Prior to construction, SJRRC will ensure that the contractor prepares a Project specific stormwater management and treatment plan and all aspects of the Stormwater Management and Treatment Plan are implemented during construction activities.	SJRRC/Contractor	Prior to Construction					
BMP HYD-2:	Construction Stormwater Pollution Prevention Plan. Prior to construction (that is, any ground-disturbing activities), SJRRC will ensure that the contractor would comply with SWRCB CGP, which requires the preparation and implementation of a SWPPP. The construction SWPPP would propose BMPs to minimize potential short-term increases in sediment transport caused by construction, including erosion control requirements, stormwater management, and channel dewatering for affected stream crossings.	SJRRC/Contractor	Prior to Construction					
BMP HYD-3:	Industrial Stormwater Pollution Prevention Plan. Prior to construction of any facility classified as an industrial facility, SJRRC will ensure that the contractor will comply with existing water quality regulations. The stormwater general permit requires preparation of a SWPPP and a monitoring plan for industrial facilities that discharge stormwater from the site, including vehicle maintenance facilities associated with transportation operations. The permit includes performance standards for pollution control.	SJRRC/Contractor	Prior to Construction					
BMP HYD-4:	Flood Protection. Prior to construction, SJRRC will ensure that the contractor prepares and implements a flood protection plan for the proposed Project.	SJRRC/Contractor	Prior to Construction					
BMP HYD-5:	Drainage Report. SJRRC will ensure that a project-specific drainage report will be developed in coordination with the City of Stockton during	SJRRC	During Final Design					



	Avoidance, Minimization, and/or Mitigation Measures final design. The Drainage Report will be prepared consistent with standards set by the City of Stockton.	Responsible for Development and/or Implementation of Measure	<u>Timing/</u> <u>Phase</u>	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed Date / Initials	Construction Task Completed Date / Initials	Environ Comp YES	
LAND USE A	ND PLANNING							
BMP LU-1:	General Plan Amendment. During final design and prior to construction, SJRRC will coordinate with the City of Stockton to ensure that the City of Stockton's General Plan is amended to reflect the land use designations consistent with what has been identified by the proposed Project.	<u>SJRRC</u>	During Final Design; Prior to Construction					
MM LU-2	Property Ownership and Agreement Coordination Efforts. During final design SJRRC will ensure coordination with the City and UP to determine appropriate property ownership and establish agreements prior to the ROW acquisition process. Options to address property ownership may include, but not be limited to: • Continuing City ownership and maintenance of the street corridors with permanent easements required for the railroad corridor; or • SJRRC and/or railroad company ownership and maintenance of the properties within the railroad corridor with either SJRRC or private ownership of adjacent remnant parcels. Public Utility easements would be necessary for this option.	SJRRC	During Final Design					
MM LU-3:	Relocation Assistance. During final design, SJRRC will ensure that the loss of private industrial property be mitigated by payment of fair market compensation and provision of relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act. For these non-residential displacements, the following would be provided to business operators: Relocation advisory services Minimum 90 days written notice to vacate prior to requiring possession Reimbursement for moving and reestablishment expenses	SJRRC	<u>During Final</u> <u>Design</u>					



		Responsible for Development and/or Implementation of	<u>Timing/</u>	Action(s) Taken to Implement Measure/if	Final Design Task Completed Date /	Construction Task Completed Date / Initials	Environ Comp YES	
NOISE AND		<u>Measure</u>	<u>Phase</u>	checked No, add Explanation here	<u>Initials</u>			
MM NV-1:	Noise Control Plan. Prior to construction, SJRRC will ensure that a noise control plan is prepared that will incorporate, at a minimum, the following best practices into the construction scope of work and specifications to reduce the impact of temporary construction-related noise on nearby noise-sensitive receptors. The Noise Control Plan will be developed in coordination with the City of Stockton in compliance with City standards. Components of the Noise Control Plan will include, but not be limited to, the following: Install temporary construction site sound barriers near noise sources. Use moveable sound barriers at the source of the construction activity. Avoid the use of impact pile drivers at night and, where possible, near noise-sensitive areas or use quieter alternatives (for example, drilled piles) where geological conditions permit. Locate stationary construction equipment as far as possible from noise-sensitive sites. Re-route construction-related truck traffic along roadways that will cause the least disturbance to residents.	Measure SJRRC	Prior to Construction	checked No, add Explanation here	Initials			
	Implement noise-deadening measures for truck loading and operations.							
	Line or cover storage bins, conveyors, and chutes with sound-deadening material.							
	 Use acoustic enclosures, shields, or shrouds for equipment and facilities. 							
	Use high-grade engine exhaust silencers and engine-casing sound insulation.							
	Minimize the use of generators to power equipment.							



	Avoidance, Minimization, and/or Mitigation Measures	Responsible for Development and/or Implementation of Measure	<u>Timing/</u> <u>Phase</u>	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed Date / Initials	Construction Task Completed Date / Initials	Environ Comp YES	
MM NV-2:	 Limit use of public address systems. Grade surface irregularities on construction sites. Monitor and maintain equipment to meet noise limits. Implement noise monitoring during construction to ensure noise limits are met. Maintain active coordination with the City to identify potential options to retrofit residences closest to the construction with noise reduction window technology. Establish an active community liaison program to keep residents informed about construction and to provide a procedure for addressing complaints. Vibration Control Plan. Prior to construction, SJRRC will ensure that a 	<u>SJRRC</u>	Prior to Construction					
	 vibration control plan is prepared and will incorporate, at a minimum, the following best practices into the construction scope of work and specifications to reduce the impact of temporary construction-related vibration on nearby vibration-sensitive land uses will be prepared and implemented. Avoid the use of impact pile drivers where possible near vibration-sensitive areas or use alternative construction methods (for example, drilled piles) where geological conditions permit. Avoid vibratory compacting/rolling in close proximity to structures. Require vibration monitoring during vibration-intensive activities. In the event building damage occurs due to construction, repairs would be made, or compensation would be provided by SJRRC. 		Construction					
MM NV-3:	Reductions for Severe Noise Impacts. Prior to construction, SJRRC will ensure that sound insulation improvements will be installed in the residential properties that would be exposed to severe noise impacts. The goal of these improvements is to reduce the interior noise levels to below the 45 dBA Ldn noise threshold set by the U.S. Department of Housing and Urban Development. In addition to the sound insulation	<u>SJRRC</u>	Prior to Construction					



		Responsible for Development and/or Implementation of	<u>Timing/</u>	Action(s) Taken to Implement Measure/if	Final Design Task Completed Date /	Construction Task Completed Date / Initials	Environ Comp YES	
	improvements, a form of fresh air exchange must be maintained. The air exchange can be achieved by installing an air conditioning unit for the residence. Sound insulation is normally only used on older dwellings with single-paned windows or in buildings with double-paned windows that are no longer effective because of leakage. Sound insulation testing would be conducted to determine the appropriate measures to improve the outdoor to indoor sound level reduction, such as improved windows, doors or vents.	<u>Measure</u>	<u>Phase</u>	checked No, add Explanation here	Initials	Date / Hilliais	<u>123</u>	<u>NO</u>
POPULATION	AND HOUSING							
BMP PH-1:	Outreach and Engagement Plan. SJRRC will actively coordinate with the City, County, and local stakeholder groups before and during proposed Project construction to prepare and implement an Outreach and Engagement Plan to address the homeless encampments that are present within the Mormon Slough area. The Outreach and Engagement Plan will include input on goals and strategies from local stakeholder groups, as well as established goals and policies of the County's Community Response to Homelessness Strategic Plan. The Outreach and Engagement Plan will focus on a targeted proactive response for temporary and permanent relocation assistance for transient populations affected by the proposed Project.	SJRRC	Prior to and During Construction					
TRANSPORT	<u>ATION</u>							
BMP TRA-1:	Protection of Public Roadways during Construction. Prior to construction, SJRRC will ensure that the contractor will provide a photographic survey documenting the condition of the public roadways along truck routes providing access to the proposed Project site to restore such routes utilized by the Project during construction to their previous condition.	SJRRC/Contractor	Prior to Construction					
BMP TRA-2:	Construction Transportation Plan. Prior to construction, SJRRC will ensure that the contractor will prepare a detailed construction transportation plan for the purpose of minimizing the impact of construction and construction traffic on adjoining and nearby roadways in close consultation with the local jurisdiction having authority over the site.	SJRRC/Contractor	Prior to Construction					



		Responsible for Development and/or Implementation of	<u>Timing/</u>	Action(s) Taken to Implement Measure/if	Final Design Task Completed Date /	Construction Task Completed Date / Initials	Enviror Comp YES	
BMP TRA-3:	Off-Street Parking for Construction-Related Vehicles. During construction, SJRRC will ensure that the contractor will identify adequate off-street parking for all construction-related vehicles throughout the construction period to minimize impacts on public onstruct parking areas.	Measure SJRRC/Contractor	Phase During Construction	checked No, add Explanation here	<u>Initials</u>			
BMP TRA-4:	Maintenance of Pedestrian Access. Prior to construction, SJRRC will ensure that the contractor will prepare specific Construction Management Plans (CMPs) to address maintenance of pedestrian access during the construction period.	SJRRC/Contractor	Prior to Construction					
BMP TRA-5:	Maintenance of Bicycle Access. Prior to construction, SJRRC will ensure that the contractor would prepare specific CMPs to address maintenance of bicycle and access during the construction period.	SJRRC/Contractor	Prior to Construction					
BMP TRA-6:	Protection of Freight and Passenger Rail During Construction. During construction, SJRRC will ensure that the contractor will repair any structural damage to freight or public railways that may occur during the construction period and return any damaged sections to their original structural condition.	SJRRC/Contractor	During Construction					
BMP TRA-7:	Traffic Management Plan. During final design, SJRRC will ensure that a Project Transportation Management Plan will be drafted, approved, and filed with the City of Stockton Engineering and Transportation Department, or other agency with jurisdiction over the road, prior to any road closures. SJRRC will also collaborate regularly with the San Joaquin Regional Transit Department during final design to coordinate elements of the TMP. The plan would include alternative routing plans and methods and details for early public outreach.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
BMP TRA-8:	Road Closure Formalization Process. During final design, SJRRC will ensure that all proposed Project road closures will be formalized as part of the California Public Utilities Commission (CPUC) General Order (GO) 88B Diagnostic review process. The CPUC GO 88B Diagnostic review process will include the evaluation of circulation for all modes of travel in coordination with City of Stockton, CPUC and UPRR, including pedestrians, bicycles, automobiles, and trucks.	<u>SJRRC</u>	During Final Design					



	Avoidance, Minimization, and/or Mitigation Measures	Responsible for Development and/or Implementation of Measure	<u>Timing/</u> <u>Phase</u>	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed Date / Initials	Construction Task Completed Date / Initials	Environ Comp YES	
UTILITIES AN	D SERVICE SYSTEMS							
BMP UTIL-1:	Notify Stakeholders of Utility Service Interruptions. During final design and prior to construction, SJRRC will ensure compliance with Section 4216 of the California Government Code, that requires Project proponents to notify and inform relevant stakeholders prior to construction, thereby reducing the adverse impacts associated with temporary disruptions in utility services. SJRRC will coordinate with all utility providers during final design and construction planning phases to develop a Utility Relocation Plan (URP) to minimize service disruption. The URP would also include efforts to communicate and inform utility service customers of potential planned service interruptions.	SJRRC	During Final Design; Prior to Construction					
BMP UTIL-2:	Utility Avoidance Coordination. SJRRC will coordinate with City of Stockton (City) and other utility providers during final design to address utility relocation impacts. The following methods will be implemented to avoid permanent impacts to utilities and access to existing or future planned utilities:	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					
	 Protect in Place. SJRRC will evaluate protect in place options to maintain the utility in its current location. These options include evaluation of load above the utility and reinforcement options, to be approved by the utility provider. Bridge columns and other bridge- related subsurface work will be designed in coordination with the utility provider affected to avoid impacting the utility. Accurate horizontal and vertical location of the utility will be gathered to support the avoidance and protection design. 							
	Access. SJRRC will work with the utility provider during the final design phase to prepare a design that maintains provider access to the utility for inspection and maintenance, as well as to not preclude future potential replacement of the utility.							
BMP UTIL-3:	Minimize Utility and Service System Disruptions. During final design, SJRRC will ensure that utility disruptions and service system inconveniences are avoided, where possible, and will consider design opportunities to avoid permanent impacts to existing utility infrastructure, where practical.	<u>SJRRC</u>	<u>During Final</u> <u>Design</u>					