



Appendix P: Environmental Commitments Record (ECR)



This page is intentionally blank.



P.1 Purpose of the Environmental Commitments Record

In order to be sure that all of the environmental best management practices (BMP) and mitigation measures (MM) identified in this environmental assessment (EA) are executed at the appropriate times, the following commitments would be implemented. During project design, BMPs and/or mitigation measures will be incorporated into the Project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the proposed Project. During construction, environmental, construction, and engineering staff will ensure that the commitments contained in this Environmental Commitments Record (ECR) are fulfilled. Following construction and appropriate phases of proposed Project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields (columns) have not been completed, and will be filled out as each of the measures is implemented.

A full list of BMPs is provided in Table P-1, and a full list of MMs is provided in Table P-2.



This page is intentionally blank.

Date of ECR: March 2022

Project Phase:

- DEA/FEA
 Final Design
 Construction

ENVIRONMENTAL COMMITMENT RECORD (ECR) Stockton Diamond Grade Separation Project

Table P-1. Best Management Practices

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
Community Impacts and Growth							
BMP COM-1	Outreach and Engagement Plan. SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	Before and During Project Construction.				
Utilities and Emergency Services							
BMP UTL-1	Notify Stakeholders of Utility Service Interruptions. During final design and prior to construction, SJRRC, in coordination with CHSRA, will ensure compliance with Section 4216 of the California Government Code, that requires proposed 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 will also include efforts to communicate and inform utility service customers of potential planned service interruptions.	SJRRRC/CHSRA	During Final Design and Prior to Construction				
BMP UTL-2	Minimize Utility and Service System Disruptions. During final design, SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	During Final Design				
BMP UTL-3	Utility Avoidance Coordination. SJRRC, in coordination with CHSRA, will coordinate with City of Stockton (City) and other utility providers during final design to address utility relocation impacts. The following	SJRRRC/CHSRA	During Final Design				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
methods will be implemented to avoid permanent impacts to utilities and access to existing or future planned utilities: <ul style="list-style-type: none"> • 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. • Underground Service Alert. Prior to grading activities, SJRRC will require the design/build contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the Project disturbance limits identify the locations of underground transmission lines and other utility facilities 							
Traffic and Transportation – Pedestrian and Bicycle Facilities							
BMP TRA-1	Protection of Public Roadways during Construction. Prior to construction, SJRRC, in coordination with CHSRA, 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/CHSRA	Prior to Construction.				
BMP TRA-2	Construction Transportation Plan. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that the contractor will prepare a detailed Construction Transportation Plan for the purpose of minimizing the effect of construction and construction traffic on adjoining and nearby roadways in close consultation with the local jurisdiction having authority over the site.	SJRRC/CHSRA	Prior to Construction.				
BMP TRA-3	Off-Street Parking for Construction-Related Vehicles. During construction, SJRRC, in coordination with CHSRA, will ensure that the contractor will identify adequate off-street parking for all construction-related vehicles throughout the construction period to minimize effects on public on-street parking areas.	SJRRC/CHSRA	During Construction.				
BMP TRA-4	Maintenance of Pedestrian Access. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that the contractor will prepare a specific CMP to address maintenance of pedestrian access during the construction period.	SJRRC/CHSRA	Prior to Construction.				
BMP TRA-5	Maintenance of Bicycle Access. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that the contractor would prepare	SJRRC/CHSRA	Prior to Construction.				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>a specific CMP to address maintenance of bicycle access during the construction period.</p> <p>BMP TRA-6 Protection of Freight and Passenger Rail During Construction. During construction, SJRRC, in coordination with CHSRA, 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.</p>	SJRRC/CHSRA	During Construction.					
<p>BMP TRA-7 Transportation Management Plan. During final design, SJRRC, in coordination with CHSRA, will ensure that a Project TMP 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, in coordination with CHSRA, 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.</p>	SJRRC/CHSRA	During Final Design.					
<p>BMP TRA-8 Road Closure Formalization Process. During final design, SJRRC, in coordination with CHSRA, will ensure that all proposed Project road closures will be formalized as part of CPUC 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 the City of Stockton, CPUC, and UP, including pedestrians, bicycles, automobiles, and trucks.</p>	SJRRC/CHSRA	During Final Design.					
Visual and Aesthetics							
<p>BMP AES-1 Lighting Plan. During final design, SJRRC, in coordination with CHSRA, 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 ROW. 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.</p>	SJRRC/CHSRA	During Final Design.					
<p>BMP AES-2 Coordinate Design Elements to Reduce Visual Effects. During final design, SJRRC, in coordination with CHSRA, 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 proposed Project corridor and the selection of the flyover's specific materials and forms will be rigorously coordinated to reduce visual effects and enhance existing visual quality.</p> <p>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),</p>	SJRRC/CHSRA	During Final Design.					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>and the architectural treatment of its façade (dimensions, jointing, colors, textures).</p> <p>For the viaduct option, the bridge type, proportions for the openings, and design of piers would be coordinated, especially when located adjacent to a retaining wall or embankment structure, to achieve design coherence.</p> <p>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.</p> <p>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.</p>							
BMP AES-3 Street Tree Planting. During final design, SJRRC, in coordination with CHSRA, 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 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.	SJRRC/CHSRA	During Final Design.					
Cultural Resources							
BMP CUL-1 Archaeological and Tribal Monitoring. Prior to issuance of grading permits, SJRRC, in coordination with CHSRA, shall retain an archaeological monitor as well as Native American monitors from the North Valley Yokuts Tribe and The Confederated Villages of Lisjan. The archaeological monitor, working under the direct supervision of a qualified archeologist, shall be present for proposed Project earth-moving activities that occur within undisturbed, original ground in the proposed Project Area. Earth moving activities include, but are not limited to, excavation, trenching, grading, and drilling. One Native American monitor from the North Valley Yokuts Tribe and one Native American monitor from The Confederated Villages of Lisjan shall also be requested to be on-site during proposed Project earth-moving activities that occur within undisturbed, original ground in the proposed Project Area. Attendance is ultimately at the discretion of the tribes.	SJRRC/CHSRA	Prior to Issuance of a Grading Permit.					
<p>Areas identified for archaeological and Native American monitoring will be further refined in consultation with interested Native American tribes. All archaeological monitors shall be familiar with the types of historical and prehistoric resources that could be encountered within the proposed Project Area.</p>							

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>The qualified archaeologist shall have the ability to recommend, with written and photographic justification, the termination of monitoring efforts to SJRRC and CHSRA, and should SJRRC and the Native American monitors concur with this assessment, then monitoring shall cease.</p> <p>If an inadvertent discovery of archaeological materials is made during project-related construction activities, the qualified archaeologist shall immediately be notified regarding the discovery and shall follow the process laid out under 36 CFR 800.13. If prehistoric or potential tribal cultural resources are identified, the Native American monitors shall also immediately be notified. 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 established.</p> <p>The qualified archaeologist, in consultation with SJRRC and Native American monitors—should the find be prehistoric or a potential tribal cultural resource—and in coordination with CHSRA, shall determine whether the resource is potentially significant under Section 106 of NHPA. Next, CHSRA shall determine actions that SJRCC can take to resolve adverse effects and notify SHPO and interested tribes within 48 hours of the discovery. If avoidance is not feasible, the qualified archaeologist, in consultation with SJRRC and CHSRA, shall prepare and implement a detailed treatment plan. Treatment for most archaeological resources would consist of, but would not be limited to, in-field documentation, archival research, subsurface testing, and excavation.</p> <p>No work will continue within the 50-foot buffer until the qualified archaeologist, SJRRC, and CHSRA, along with the Native American monitors—should the find be prehistoric or a tribal cultural resource—agree to appropriate treatment.</p>	SJRRC/CHSRA	Prior to Construction					
<p>BMP CUL-2 Worker Environmental Awareness Protection Training. Prior to initiating earth-moving construction activity, 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 with participation requested by Native American representative(s), 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 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.</p>							

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
BMP CUL-3 Archaeological and Tribal Monitor. Prior to issuance of grading permits, SJRRC, in coordination with CHSRA, 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 CHSRA, and should SJRRC, CHSRA, and the Native American participants concur with this assessment, then monitoring shall cease. 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 resources 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 participants shall be notified. The qualified archaeologist, in consultation with SJRRC (and Native American participants should the find be prehistoric) and in coordination with CHSRA, shall determine whether the resource is potentially significant as per Section 106 (that is, whether it is an historical resource, a unique archaeological resource). If avoidance is not feasible, a qualified archaeologist, in consultation with SJRRC and CHSRA, 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 participants 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 requested to be on-site during all ground disturbing activities that occur in native soil and attendance is at the discretion of the tribes.	SJRRC/CHSRA	Prior to Issuance of a Grading Permit.					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
BMP CUL-4	Inadvertent Discovery of Human Remains During Construction, and in the event of the inadvertent discovery of human remains, SJRRC, in coordination with CHSRA, will ensure that their designated contractor shall immediately notify the county coroner and SJRRC and CHSRA. 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 Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the 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.	SJRRRC/CHSRA	During Construction (in the event of inadvertent discovery of human remains).				
Hydrology, Floodplains, and Water Quality							
BMP HYD-1	Stormwater Management and Treatment Plan. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that the contractor prepares a proposed Project specific stormwater management and treatment plan, and all aspects of the Stormwater Management and Treatment Plan are implemented during construction activities.	SJRRRC/CHSRA	Prior to Construction.				
BMP HYD-2	Flood Protection. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that the contractor prepares and implements a flood protection plan for the proposed Project.	SJRRRC/CHSRA	Prior to Construction.				
BMP HYD-3	Construction Stormwater Pollution Prevention Plan. Prior to construction (that is, any ground-disturbing activities), SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	Prior to Construction.				
BMP HYD-4	Industrial Stormwater Pollution Prevention Plan. Prior to construction of any facility classified as an industrial facility, SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	Prior to Construction.				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance		
				Date / Initials	Date / Initials	YES	NO	
BMP HYD-5	Drainage Report. SJRRC, in coordination with CHSRA, will ensure that a proposed Project-specific drainage report will be developed in coordination with the City of Stockton during final design. The Drainage Report will be prepared consistent with standards set by the City of Stockton.	SJRRRC/CHSRA	During Final Design.					
Geology, Soils, Seismicity, Topography, and Paleontology								
BMP GEO-1	Geologic Hazards. Prior to construction, SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	Prior to Construction.					
BMP GEO-2	Geology and Soils. Prior to construction, SJRRC, in coordination with CHSRA, 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: <ul style="list-style-type: none"> 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 recent versions. 	SJRRRC/CHSRA	Prior to Construction.					
BMP GEO-3	Implement Geotechnical Recommendations. During final design, SJRRC, in coordination with CHSRA, 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.	SJRRRC/CHSRA	During Final Design.					
BMP GEO-4	Preparation and Implementation of a Paleontological Resources Management Plan. Due to the potential for adverse effects to paleontological resources in the proposed Project subsurface, a Paleontological Resources Management Plan (PRMP) will be prepared during final design. SJRRC, in coordination with CHSRA, will ensure that the PRMP will include provisions for paleontological monitoring (e.g., 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 proposed 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.	SJRRRC/CHSRA	During Final Design					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
Hazardous Waste and Materials							
BMP HAZ-1	Prepare a Construction Hazardous Materials Management Plan (HMMP). Prior to construction, SJRRC, in coordination with CHSRA, 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 the Project Study Area, and include, but not be limited to, the following: <ul style="list-style-type: none"> • A description of hazardous materials and hazardous wastes used (29 CFR 1910.1200) • A description of handling, transport, treatment, and disposal procedures, as relevant for each hazardous material or hazardous waste (29 CFR 1910.120) • Preparedness, prevention, contingency, and emergency procedures, including emergency contact information (29 CFR 1910.38) <ul style="list-style-type: none"> ◦ 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 hazardous materials and hazardous wastes, as required by their level of responsibility (29 CFR 1910) • Instructions on keeping Safety Data Sheets on site for each on-site hazardous chemical (29 CFR 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 CFR 1910.120) 	SJRRRC/CHSRA	Prior to Construction.				
BMP HAZ-2	Property Acquisition Phase I and Phase II Environmental Site Assessments. Prior to or during the right-of-way acquisition phase, SJRRC, in coordination with CHSRA, will ensure that Phase I 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 II ESA (for example, soil, groundwater, soil vapor subsurface investigations) would be informed by a Phase I ESA and may require coordination with state and local agency officials.	SJRRRC/CHSRA	Prior to and/or During ROW Acquisition.				
BMP HAZ-3	Prepare a General Construction Soil Management Plan. Prior to construction, SJRRC, in coordination with CHSRA, 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 Study Area 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: <ul style="list-style-type: none"> • General worker health and safety procedures 	SJRRRC/CHSRA	Prior to Construction.				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>BMP HAZ-4</p> <ul style="list-style-type: none"> Dust control Management of soil stockpiles Traffic control Stormwater erosion control using BMPs <p>Prepare Parcel-Specific Soil Management Plans and Health and Safety Plans (HASP). Prior to construction, SJRRC, in coordination with CHSRA, will ensure that parcel-specific Soil Management Plans be prepared for known contaminated sites and LUST-adjudicated sites for submittal and approval by DTSC. The plans shall include specific hazards and provisions for how soils will be managed for known contaminated sites and LUST-adjudicated sites. The nature and extent of contamination varies widely across the Project Study Area, and the parcel-specific Soil Management Plan shall provide parcel-specific requirements addressing the following:</p> <ul style="list-style-type: none"> Soil disposal protocols Protocols governing the discovery of unknown contaminants Soil management on properties within the Project Study Area <p>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 OSHA requirements, Title 29 of the CFR 1910.120 and CCR Title 8, Section 5192, and all applicable federal, state, and local regulations and agency ordinances related to the proposed management, transport, 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:</p> <ul style="list-style-type: none"> Training requirements for site workers who may be handling contaminated material Type of appropriate personal protective equipment required Mitigation and monitoring measures that are protective of site worker and public health and safety <p>Prior to construction, SJRRC, in coordination with CHSRA, shall coordinate proposed soil management measures and reporting activities with stakeholders and 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.</p>	SJRRC/CHSRA	Prior to Construction.					
<p>BMP HAZ-5</p> <p>Prepare Project Construction Health and Safety Plan. Prior to construction, SJRRC, in coordination with CHSRA, will ensure the development of a Health and Safety Plan (HASP) for the overall proposed Project to guide all construction activities. A Certified Industrial Hygienist will review this plan, based on evaluations of proposed</p>	SJRRC/CHSRA	Prior to Construction					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>construction activities, the potential hazards identified, and any future assessment prepared for the proposed Project. This HASP will contain specific procedures for encountering expected and unexpected contaminants. It will prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. The plan will meet the requirements of 29 CFR 1910 and 1926, and all other applicable federal, state, and local regulations and requirements. The HASP will be prepared before the start of construction.</p>							
<p>BMP HAZ-6 LUST Sites and Coordination with DTSC. Prior to construction on properties with a LUST, SJRRC, in coordination with CHSRA, 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 and the environment.</p>	SJRRC/CHSRA	Prior to Construction.					
<p>BMP HAZ-7 Halt Construction Work if Potentially Hazardous Materials/Abandoned Oil Wells are Encountered. During construction, SJRRC, in coordination with CHSRA, 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. Construction work shall halt in the event of the discovery of unidentified underground storage tanks (UST), unexpected contamination, or hazardous waste or materials to allow UST decommissioning, field screening, material testing, mitigation, and contaminant management. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies.</p>	SJRRC/CHSRA	During Construction.					
<p>BMP HAZ-8 Pre-Demolition Investigation. Prior to the demolition of any structures constructed prior to the 1970s, SJRRC, in coordination with CHSRA, 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. 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</p>	SJRRC/CHSRA	Prior to Demolition of Any Structures.					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
contractor shall be required to secure the site and ensure utilities are disconnected.							
Air Quality							
BMP AQ-1	Compliance with EPA's Tier 4 Exhaust Emission Standards. During construction, SJRRC, in coordination with CHSRA, will ensure that all off-road diesel-powered construction equipment greater than 50 horsepower shall comply with 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 CARB. 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 CARB regulations.	SJRRC/CHSRA	During Construction.				
BMP AQ-2	Fugitive Dust. Prior to issuance of a grading or building permit, SJRRC, in coordination with CHSRA, 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.	SJRRC/CHSRA	Prior to Issuance of Grading Permits.				
BMP AQ-3	Compliance with Stockton Community Emissions Reduction Program. During final design, SJRRC in coordination with CHSRA, will review the Stockton Community Emissions Reduction Program (CERP) and incorporate emission reduction strategies into the proposed 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/CHSRA	During Final Design.				
BMP AQ-4	Vegetative Barriers and Urban Greening. During final design, SJRRC, in coordination with CHSRA, 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/CHSRA	During Final Design.				
Noise and Ground Borne Vibration							
BMP NV-1	Noise Control Plan. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that a noise control plan be prepared that will incorporate, at a minimum, the following best practices into the construction scope of work and specifications to reduce the effects of temporary construction-related noise on nearby noise-sensitive receptors. The Noise Control Plan will be developed in coordination with	SJRRC/CHSRA	Prior to Construction.				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>the City of Stockton in compliance with City standards. Components of the Noise Control Plan will include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • 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. • Use low-noise emission equipment. • 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. • 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. 							
<p>BMP NV-2 Vibration Control Plan. Prior to construction, SJRRC, in coordination with CHSRA, will ensure that a 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 effects of temporary construction-related vibration on nearby vibration-sensitive land uses will be prepared and implemented.</p> <ul style="list-style-type: none"> • 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. 	SJRRRC/CHSRA	Prior to Construction.					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
In the event building damage occurs due to construction, repairs would be made, or compensation would be provided by SJRRC.							
Biological Resources							
BMP BIO-1	Biological Monitor and Environmental Awareness Training. If deemed necessary, SJRRC, in coordination with CHSRA, 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 proposed Project-related permits, but could include activities such as clearance surveys, flagging or fencing off environmentally sensitive areas for avoidance, and construction monitoring. The biological monitor will conduct preconstruction clearance surveys for special status species prior to the start of proposed 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 adverse effects on biological resources (for example, plants, wildlife, and jurisdictional waters), and to brief them on the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the proposed Project, SJRRC in coordination with CHSRA, will ensure that the mandatory training be conducted by the contractor prior to starting work on the proposed Project.	SJRRC/CHSRA	During Construction (if deemed necessary by Project biologist)				
BMP BIO-2	Migratory Bird and Raptor Surveys and Nest Avoidance. Prior to and during construction, SJRRC, in coordination with CHSRA, will ensure that 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	SJRRC/CHSRA	Prior to and During Construction				

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
<p>will depend on the same factors described above when determining the size of the no-disturbance buffer.</p> <p>BMP BIO-3 Construction BMPs at Mormon Slough. During final design, SJRRC, in coordination with CHSRA, 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 proposed Project-related activities and shall remain until activities are completed. All erosion control methods will be maintained until all onsite soils are stabilized.</p>	SJRRC/CHSRA	During Final Design					
<p>BMP BIO-4 Environmentally Sensitive Area Fencing at Mormon Slough. Prior to and during construction, SJRRC, in coordination with CHSRA, 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 adverse effects 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 in coordination with CHSRA, will ensure to flag and mark access routes to restrict vehicle traffic within the proposed Project footprint to established roads, construction areas and other designated areas.</p>	SJRRC/CHSRA	Prior to and During Construction					
<p>BMP BIO-5 Restoration of Temporarily Affected Areas. During construction, SJRRC, in coordination with CHSRA, will ensure that all exposed and/or disturbed areas resulting from proposed Project-related activities will be returned to its original contour and 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.</p>	SJRRC/CHSRA	During Construction					
<p>BMP BIO-6 Vehicle Access and Speed Limits. During construction, SJRRC, in coordination with CHSRA, will ensure that all vehicle traffic associated with proposed 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.</p>	SJRRC/CHSRA	During Construction					

Best Management Practice (BMP)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
BMP BIO-7 Storage and Disposal of Excavated Materials. During ground-disturbing activities, SJRRC, in coordination with CHSRA, may temporarily store excavated materials produced by construction activities in areas at or near construction sites within the proposed Project footprint. Where practicable, SJRRC in coordination with CHSRA, 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/CHSRA	During Construction					
BMP BIO-8 Prevention of Invasive Species During Construction. Prior to and during construction, SJRRC, in coordination with CHSRA, will ensure that all construction equipment be cleaned when entering work areas within or adjacent to Environmentally Sensitive Areas, and the propose Project Study Area be inspected for the presence of invasive weeds prior to and during construction to detect introduction or spread. The use of eradication strategies and the incorporation of recommended measures, as needed, to avoid the inadvertent spread of invasive weeds in association with the proposed Project will also be incorporated during construction activities.	SJRRC/CHSRA	Prior to and During Construction					

Table P-2. Mitigation Measures

Mitigation Measure (MM)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
Land Use and Planning							
MM LU-1	General Plan Amendment. During final design and prior to construction, SJRRC, in coordination with CHSRA, 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	SJRRRC/CHSRA	During Final Design.				
Relocations and Real Property Acquisition							
MM RLC-1	Relocation Assistance. During final design, SJRRC, in coordination with CHSRA, 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: <ul style="list-style-type: none"> Relocation advisory services Minimum 90 days written notice to vacate prior to requiring possession Reimbursement for moving and reestablishment expenses 	SJRRRC/CHSRA	During Final Design.				
MM RLC-2	Property Ownership and Agreement Coordination Efforts. During final design SJRRC, in coordination with CHSRA, 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: <ul style="list-style-type: none"> Continuing City ownership and maintenance of the street corridors with permanent easements required for the railroad corridor; or SJRRRC and/or railroad company ownership and maintenance of the properties within the railroad corridor with either SJRRRC or private ownership of adjacent remnant parcels. Public Utility easements would be necessary for this option. 	SJRRRC/CHSRA	During Final Design.				
Noise and Ground Borne Vibration							
MM NV-1	Reductions for Severe Noise Effects. Prior to construction, SJRRC, in coordination with CHSRA, 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 façade 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.	SJRRRC/CHSRA	Prior to Construction.				

Mitigation Measure (MM)	Responsible for Development and/or Implementation of Measure	Timing/Phase	Action(s) Taken to Implement Measure/if checked No, add Explanation here	Final Design Task Completed	Construction Task Completed	Environmental Compliance	
				Date / Initials	Date / Initials	YES	NO
Biological Resources							
MM BIO-1	Compliance with SJMSCP. Prior to and during construction, SJRRC, in coordination with CHSRA, 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.	SJRRC/CHSRA	Prior to and During Construction.				
MM BIO-2	National Oceanic and Atmospheric Administration Consultation. Prior to the finalizing the EA, SJRRC, in coordination with CHSRA, 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 proposed Project on May 17, 2021 (Appendix M). SJRRC will ensure that consultation with the NOAA Fisheries Service for Project effects on designated Critical Habitat for Central Valley steelhead and EFH for Chinook Salmon are finalized and any findings and/or determinations incorporated. 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.	SJRRC/CHSRA	Prior to the Finalizing of the EA.				
MM BIO-3	Mitigation for Aquatic Resources. During final design, SJRRC, in coordination with CHSRA, will ensure that temporary proposed Project impacts effects on aquatic resources associated with the Mormon Slough will be restored in-place and permanent proposed Project effects 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.	SJRRC/CHSRA	During Final Design.				
MM BIO-4	Compliance with Permitted Mitigation Measures. Prior to construction, SJRRC, in coordination with CHSRA, will obtain all required permits and authorizations for proposed Project impacts effects to on the Mormon Slough, which may include the preparation and submittal of the following applications: <ul style="list-style-type: none"> • Pre-Construction Notification to USACE to use a Nationwide Permit for any proposed Project impacts to Waters of the US subject to Section 404 of the federal Clean Water Act. • Water Quality Certification Application to Central Valley RWQCB for any proposed Project impacts to Waters of the U.S. subject to Section 401 of the federal Clean Water Act. • Streambed Alteration Agreement Notification to CDFW 	SJRRC/CHSRA	Prior to Construction.				
MM BIO-5	Preparation of Formal Jurisdictional Delineation. During final design, SJRRC, in coordination with CHSRA, 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.	SJRRC/CHSRA	During Final Design.				