

Attachment 3

CERTIFICATION OF THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION PROJECT (UFRF)

AND

SJAFCA'S FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE APPROVAL OF THE UFRF

I. INTRODUCTION

The San Joaquin Flood Control Agency (SJAFCA) proposes to implement the Mossdale Tract Urban Flood Risk Reduction Project (UFRF or proposed project) to provide increased public safety benefits by rehabilitating and improving flood management infrastructure for the 22,400-acre Mossdale Tract area (proposed project area), which includes Reclamation District 17 (RD 17) and portions of the incorporated cities of Stockton, Lathrop, and Manteca, and unincorporated San Joaquin County.

SJAFCA, as lead agency under the California Environmental Quality Act (Pub. Res. Act § 21000 et seq.) and the CEQA Guidelines (14 Cal. Code Regs. §§ 15000–15387) (collectively, “CEQA”), has completed the Final Environmental Impact Report (Final EIR) for the proposed project. This document pertains to SJAFCA’s lead agency responsibilities and requirements pursuant to CEQA only and is organized into the following sections:

- Section I, “Introduction,” provides an introduction to the Document.
- Section II, “Project Description,” provides background on the UFRF, the proposed project’s purpose and objectives, a summary of alternatives considered in the UFRF and Draft EIR, and an overview of the Record of Proceedings.
- Section III, “Certification of the Final EIR,” sets forth SJAFCA’s findings in support of certification of the Final EIR.
- Section IV sets forth the Findings required under CEQA, as follows:
 - Part IV.A: Findings regarding the environmental review process and the contents of the Final EIR.
 - Part IV.B: Findings regarding the environmental impacts of the proposed project and the mitigation measures for those impacts identified in the Final EIR and adopted as conditions of approval. As described in Part IV.B, SJAFCA hereby adopts the impact findings as set forth in Exhibit A to these findings.
 - Part IV.C: Findings regarding alternatives discussed in the UFRF.
 - Part IV.D: Description of the Mitigation Monitoring or Reporting Program (MMRP) for the proposed project, which is attached as Exhibit B.
 - Part IV.E: Summary of the findings and determinations regarding the proposed project.
- Section V, “Statement of Overriding Considerations,” sets forth the substantial benefits of the proposed project that outweigh and override the proposed project’s significant and unavoidable impacts, such that the impacts are considered acceptable.

II. PROJECT INFORMATION

A. Background

On March 9, 2015, the City of Lathrop authored a Concept Proposal for a state UFRR grant to design fix in-place improvements to the RD 17 levees to achieve an urban level of flood protection (ULOP) equivalent to a 200-year level of protection. On May 15, 2015, the California Department of Water Resources (DWR) responded with a grant to prepare a UFRR study of alternatives and preliminary design of the preferred flood risk reduction project for the proposed project area, which was identified as being at risk of flooding from a 200-year flood event, with this risk being significantly increased under future climate conditions. In November 2017, SJAFCA, consisting of the City of Stockton, San Joaquin County, and the San Joaquin County Flood Control and Water Conservation District, modified its joint-powers authority structure to add the cities of Lathrop and Manteca. The UFRR grant agreement and lead agency status were then transferred to SJAFCA in March 2020. The final selected alternative in the UFRR study (Alternative 4a) is the proposed project that is analyzed in the Environmental Impact Report.

B. Project Description

The proposed project would include the construction and operation and maintenance of flood risk reduction and multi-benefit components in and adjacent to the proposed project area. Specifically, the primary components of the proposed project include:

- Fix-in-place improvements with habitat enhancement and revegetation;
- Dryland levee extension;
- Ecosystem restoration at multiple sites; and
- Recreational features along the levee system.

The various levee improvements that would be constructed and operated within the levee rights-of-way and easements under the proposed project include existing dryland levee reconstruction and construction of an associated seepage berm; construction of a fix-in-place traditional cement/bentonite slurry cutoff wall of varying depth along portions of the existing levee alignment; construction of a drained seepage berm of varying width along portions of the existing levee alignment; placement of riprap rock slope protections on the waterside of the levee along portions of the existing levee alignment; removal of high-hazard encroachments; reconstruction of pipe penetrations that cross the levee; and raising the height of levee along portions of the existing levee alignment and extending the landside toe to meet levee slope design standards.

The Dryland Levee Extension would extend an existing dryland levee located near Fig Avenue in the City of Manteca and unincorporated San Joaquin County by approximately 3 miles to the east as needed to prevent flanking during flood events.

Ecosystem restoration components of the proposed project would locate undeveloped land on the water side of the levee system to create ecosystem restoration sites, while recreational features along the levee system would develop recreational features,

including recreational paths, along the top of levee and landside toe. Because the locations and design of these components are still under development, analysis of these proposed project components is done at a programmatic level in the EIR.

Construction would occur over at least five years, with most levee work limited to the July 16–October 31 work window due to regulatory restrictions, while the dryland levee extension may occur year-round. Restoration features would be constructed over one year, followed by three years of planting, irrigation, and monitoring, also occurring during the dry season to meet regulatory requirements and site conditions.

Operation and maintenance of flood risk reduction features would consist of routine inspections, vegetation management, and minor repairs, similar to existing conditions. Restoration sites would be actively managed during a multi-year establishment period, including irrigation, plant maintenance, and general site upkeep to ensure successful vegetation establishment.

C. Project Purpose and Objectives

The overall objective of the proposed project is to provide increased public safety benefits by rehabilitating, improving, and constructing flood risk reduction infrastructure to achieve a 200-year ULOP for the Mossdale Tract area. The objectives include the improving long-term operation, maintenance, repair, rehabilitation, and replacement over time; modernizing flood risk reduction infrastructure to accommodate future performance and climate change resiliency goals identified in the Central Valley Flood Protection Plan and in SJAFCA's Climate Change Adaptation Policy; and implementing a multi-benefit flood risk reduction project that improves ecological function and habitat in the flood-system, and contributes additional societal benefits such as recreation where feasible.

D. Summary of Alternatives in the Final EIR

CEQA requires that an EIR describe and evaluate a reasonable range of alternatives to a project or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts. Alternatives to the proposed project are discussed in Chapter 6, *Alternatives*, of the Draft EIR and a comparison of the environmental impacts of the proposed project and alternatives are provided in Table 6-1 of the Draft EIR. The alternatives that were considered but rejected include the following:

- Construction of a dryland levee north of the City of Lathrop.
- Construction of a setback levee, breach of the existing levee, and installation of an aquatic habitat ecosystem restoration site at river mile (RM) 52.
- Installation of an additional dryland habitat ecosystem restoration site at RM 52 without the proposed levee breaches or setback levee.

Two alternatives were identified for further evaluation as a result of the alternatives development and screening process described in Chapter 6 of the Draft EIR. The alternatives are:

- No Project Alternative.
- Dryland Levee Extension to Union Road.

The No Project Alternative would not result in any construction or operations and maintenance (O&M) impacts when compared to the proposed project. However, none of the proposed flood risk reduction or multi-benefit objectives of the proposed project would be achieved, because the fix-in-place levee improvements, dryland levee extension, ecosystem restoration sites, and other multi-benefit components would not be developed. The approximately 17 miles of levee system protecting the proposed project area would not achieve a ULOP consistent with Senate Bill 5 requirements for urban areas; modernization of infrastructure to accommodate climate change resiliency goals would not occur; and there would be no improvement to ecological function (the net quantity, diversity, and connectivity of riparian and floodplain habitats) or recreational opportunities along the lower San Joaquin River corridors. Deficiencies in the existing levee would leave areas within the Mossdale Tract area increasingly vulnerable to flood events in the future, potentially resulting in damage to property and/or existing land uses, increased run-off, and other risk factors.

The Dryland Levee Extension to Union Road Alternative would require a reduced construction footprint compared to the proposed project, extending the proposed dryland levee to Union Road instead of Tinnin Road, which would result in reduced construction impacts as compared to the proposed project. The Dryland Levee Extension to Union Road would therefore be the environmentally superior alternative. However, this alternative would only partially achieve the overall objectives of the proposed project. This alternative would achieve the objective of implementing a multi-benefit project that would improve ecological function and habitat in the flood system and contribute additional social benefits, such as recreational features or opportunities in the proposed project area. However, extending the dryland levee to Union Road instead of Tinnin Road would result in reduced freeboard at the eastern terminus of the levee and reduced performance under future hydrologic uncertainties and climate change scenarios. The Dryland Levee Extension to Union Road would not fully achieve proposed project objectives to modernize flood risk reduction infrastructure and accommodate climate change resiliency goals.

F. Record of Proceedings

Various documents and other materials constitute the record upon which SJAFCA bases these findings and approvals contained herein. The custodian of these documents and materials is SJAFCA. The documents and materials are available for review upon request at 2800 West March Lane, Suite 200, Stockton, CA 95219, during normal business hours.

III. CERTIFICATION OF THE FINAL EIR

The Final EIR comprises a program-level and project-level analysis and contains environmental review evaluating the impacts of the proposed project. The Final EIR (State Clearinghouse No. 2022040471) was prepared in the manner specified in Section IV.A.1, and is incorporated here by reference. The Final EIR includes:

- An assessment of the potential environmental effects of implementation of the proposed project and identification of means to eliminate or reduce potential adverse impacts, and an evaluation of a reasonable range of alternatives.
- Comments on the Draft EIR submitted by interested public agencies and organizations; written responses to the environmental issues raised in those comments; and revisions to the text of the Draft EIR reflecting changes made in response to comments and other information. The Final EIR has been consolidated, reflecting the Draft EIR along with all text revisions in hard edits that were made.

The SJAFCA Board of Directors hereby certifies as follows:

1. That it has been presented with the Final EIR and that it has reviewed and considered the information contained in the Final EIR prior to making the following certification and the findings in Section IV, below;
2. That, pursuant to CEQA Guidelines Section 15090 (Title 14 of the California Code of Regulations, Section 15090), the Final EIR has been completed in compliance with CEQA and the State CEQA Guidelines; and
3. That the Final EIR reflects the SJAFCA Board of Directors' independent judgment and analysis.

IV. CEQA FINDINGS

Having received, reviewed, and considered the Final EIR and other information in the record of proceedings, the SJAFCA Board of Directors hereby adopts the following findings in compliance with CEQA and the CEQA Guidelines:

- Part IV.A: Findings regarding the environmental review process and the contents of the Final EIR.
- Part IV.B: Findings regarding the environmental impacts of the proposed project and the mitigation measures for those impacts identified in the Final EIR and adopted as conditions of approval. As described in Part IV.B, SJAFCA hereby adopts the impact findings as set forth in Exhibit A to these findings.
- Part IV.C: Findings regarding alternatives discussed Final EIR.
- Part IV.D: Description of the MMRP for the proposed project.
- Part IV.E: Summary of the findings and determinations regarding the proposed project.

In addition, these findings incorporate by reference Section V of this document, which includes the Statement of Overriding Considerations and determines that the benefits of

implementing the proposed project outweigh the significant and unavoidable environmental impacts that will result, and therefore justifies approval of the proposed project despite those impacts. The Final EIR is hereby incorporated in this document by reference. The SJAFCA Board of Directors certifies that these findings are based on full appraisal of all viewpoints, including all comments received up to the date of close of the hearing prior to approval of the proposed project.

A. Environmental Review Process and Contents of the EIR

1. Preparation of the EIR:

- a. *Notice of Preparation.* SJAFCA issued a Notice of Preparation (NOP) on Wednesday, April 22, 2022, to satisfy the requirements of CEQA and CEQA Guidelines Section 15082 (State Clearinghouse #2022040471). Each responsible agency, trustee agency, and involved federal agency was requested to provide, in writing, the scope and content of the environmental information to be included in the Draft EIR related to its area of statutory responsibility. Public notices were placed in the *Manteca Bulletin* and the *Stockton Record* to inform the general public of the scoping meetings and the availability of the NOP. The NOP was also sent to public agencies, organizations, and individuals that requested receipt of SJAFCA's public notices, to invite them to provide input. The NOP was also available for review on SJAFCA's website: www.sjafca.org/projects/mossdale-tract.

The public comment period for the NOP closed at 5:00 p.m. on Monday, May 23, 2022. Two public meetings were held during the 30-day NOP review period to solicit comments on the scope and content of the EIR, and to provide information to the public, including a description of the proposed project. An in-person meeting was held at 6:30 p.m. on Monday, May 9, 2022 at the Manteca Transit Center located at 220 Moffat Boulevard, Manteca, CA 95336; and a virtual public meeting was held at 11:30 a.m. on Thursday, May 12, 2022 via the Zoom web conference application. Concerns raised in response to the NOP, written comments, and verbal comments received at the scoping meeting were considered during the preparation of this Draft EIR.

- b. *Native American Outreach.* In accordance with the requirements of PRC Section 21080.3, SJAFCA staff conducted Native American outreach and consultation efforts. In 2022, SJAFCA contacted the Wilton Rancheria, the Confederated Villages of Lisjan (CVL), and additional Tribes identified through the Native American Heritage Commission (NAHC). Wilton Rancheria initially requested consultation but did not provide further responses. CVL requested consultation and participated in a conference call with SJAFCA in September 2022 to discuss potential impacts to cultural and tribal cultural resources; SJAFCA subsequently provided a summary of proposed mitigation measures. The Northern Valley Yokuts Tribe also requested consultation and met with SJAFCA in July and September 2022, after which SJAFCA provided a summary of mitigation

measures. No additional correspondence was received from these Tribes following those communications. In 2025, SJAFCA reinitiated outreach by requesting an updated NAHC Sacred Lands File search and contacting additional Tribes; Wilton Rancheria responded that it had no comments and did not wish to open consultation, and no other responses were received.

- c. *Public Review of the Draft EIR.* The Draft EIR was made available to federal, state, and local agencies and interested organizations and individuals. Publication of the Draft EIR marked the beginning of a 45-day public review period, which extended from Friday December 19, 2025, through Monday February 2, 2026, ending at 5 p.m. A Notice of Completion (NOC) and an electronic version of the Draft EIR were filed with the State Clearinghouse on December 19, 2025. A Notice of Availability (NOA) of the Draft EIR was posted with the San Joaquin County Clerk, published in the Stockton Record, and sent to respondents of the NOP and other interested parties that requested receipt of the notice on December 19, 2025.

During the 45-day review period, SJAFCA conducted a virtual public meeting via Zoom held at 6-7 p.m. on Tuesday January 13, 2026. No comments were received at this meeting.

- b. *Copies of the Draft EIR.* Copies were made available for public review at the following locations:
- SJAFCA website – electronic copy available at <https://www.sjafca.org/projects/mosssdale-tract>
 - SJAFCA offices – hard copy available at 2800 W March Lane, Suite 200, Stockton, CA, 95219
 - Cesar Chavez Central Library, 605 N. El Dorado Street, Stockton, California 95202 – USB drive with electronic copy
- c. *Response to Comments:* After the close of the public review period, SJAFCA prepared responses to the written comments contained in the 11 comment letters that were received on the Draft EIR. As required by CEQA Guidelines, 15088(b), responses to comments were sent to public agencies and organizations that submitted comments at least 10 days prior to SJAFCA's consideration. Those public agencies and other entities that commented on the Draft EIR were notified by SJAFCA on June 30, 2026 of the availability of responses to comments and the publication of the Final EIR.
- d. *Final EIR.* The Final EIR was completed and made available to public agencies and members of the public on July 9, 2026. The Final EIR is comprised of the Draft EIR as revised in response to comments, plus all of the comments received during the public comment period, together with written responses to those comments that raised environmental issues, which were prepared in accordance with CEQA and the CEQA Guidelines. The Final EIR also includes refinements to mitigation measures.

- e. The Final EIR was made available electronically via posting on SJAFCA's website on July 9, 2026 at <https://www.sjafca.org/projects/mossdale-tract>.

The SJAFCA Board finds and determines there was procedural compliance with the mandates of CEQA and that the Final EIR provides adequate, good faith, and reasoned responses to all comments raising significant environmental issues.

2. Absence of Significant New Information

CEQA Guidelines Section 15088.5 requires a lead agency to re-circulate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR, but before certification of the Final EIR. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide examples of significant new information under this standard.

SJAFCA recognizes that the Final EIR incorporates information obtained since the Draft EIR was completed, and contains additions, clarifications, modifications, and other changes. With respect to this information, SJAFCA approves of the incorporation of these clarifications into the proposed project and finds that the clarifications do not cause the proposed project to result in new or substantially more severe adverse environmental effects or otherwise require recirculation of the EIR. Various minor changes and edits have been made to the text of the Draft EIR, as set forth in the Final EIR.

SJAFCA finds that this additional information does not constitute significant new information requiring recirculation, and that the additional information merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

In addition to the changes and corrections described above, the Final EIR provides additional information in response to comments and questions from agencies and organizations.

SJAFCA finds that the information added in the Final EIR does not constitute significant new information requiring recirculation, and that the additional information clarifies or amplifies an adequate EIR. Specifically, SJAFCA finds that the additional information, including the changes described above, does not show that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Based on the foregoing, and having reviewed the information contained in the Final EIR and in the record of SJAFCA's proceedings, including the comments on the Draft EIR and the responses thereto, and the above-described information, SJAFCA finds that no significant new information has been added to the Final EIR since public notice was given of the availability of the Draft EIR that would require recirculation of the Final EIR.

3. Differences of Opinion Regarding the Impacts of the proposed project

In making its decision to certify the Final EIR and its determination to approve the proposed project, SJAFCA recognizes that the proposed project may involve several controversial environmental issues and that a range of technical and scientific opinion exists with respect to those issues. SJAFCA has acquired an understanding of the range of this technical and scientific opinion by its review of the Draft EIR, the comments received on the Draft EIR and the responses to those comments in the Final EIR, and its own experience and expertise in assessing those issues. SJAFCA has reviewed and considered, as a whole, the evidence and analysis presented in the Draft EIR, the information and analysis presented in the comments on the Draft EIR, the evidence and analysis presented in the Final EIR, the information submitted on the Final EIR, and the reports prepared by the experts who prepared the EIR (DWR technical experts and SJAFCA's consultants), and by staff, addressing those comments. SJAFCA has gained a comprehensive and well-rounded understanding of the environmental issues presented by the proposed project. In turn, this understanding has enabled SJAFCA to make its decisions after weighing and considering the various viewpoints on these important issues.

Accordingly, SJAFCA certifies that its findings are based on a full appraisal of all of the evidence contained in the Final EIR, as well as the evidence and other information contained in the record.

B. Impacts and Mitigation Measures

1. These findings provide the written analysis and conclusions of SJAFCA regarding the environmental impacts of the proposed project and the mitigation measures identified in the Final EIR that are within the responsibility and jurisdiction of SJAFCA and have been, or can and should be, adopted by SJAFCA as conditions of approval for the proposed project. In making these findings, SJAFCA has considered the opinions of other agencies and members of the public.

SJAFCA finds that the analysis and determination of significance thresholds are judgments within the discretion of SJAFCA; the analysis and significance thresholds used in the Final EIR are supported by substantial evidence in the record, including the expert opinion of the Final EIR preparers and SJAFCA consultants and staff; and the significance thresholds used in the Final EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the proposed project.

2. Exhibit A attached to these findings and incorporated herein by reference is the Summary of CEQA Impacts and Mitigation Measures Table contained in the Executive Summary of the Final EIR that summarizes the environmental determinations of the Final EIR about the proposed project's environmental impacts before and after mitigation. This exhibit does not attempt to describe the full analysis or details of each environmental impact and mitigation measures contained in the Final EIR. Instead, Exhibit A provides a summary description of each environmental impact, a summary of the applicable mitigation measures described in the Final EIR, and states the findings on the significance of each environmental impact after imposition of the applicable mitigation measures. A full explanation of these environmental findings and conclusions can be found in the resource sections contained in Chapter 3 of the Draft EIR, and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the Final EIR's determinations regarding the proposed project's environmental impacts and mitigation measures designed to address those impacts.

SJAFCA approves the findings set forth in Exhibit A as its findings regarding the proposed project's environmental impacts before and after mitigation. In making these findings, SJAFCA ratifies, adopts, and incorporates the analysis and explanation in the Final EIR, and ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, and environmental commitments, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

SJAFCA adopts and incorporates as conditions of approval of the proposed project the mitigation measures set forth in Exhibit A attached to these findings to reduce or avoid the potentially significant impacts of the proposed project, as well as certain less-than-significant impacts.

3. In the event a mitigation measure or environmental commitment recommended in the Final EIR has inadvertently been omitted from Exhibit A, such mitigation measure is hereby adopted and incorporated in the findings below by reference. In addition, in the event the language describing a mitigation measure set forth in Exhibit A fails to accurately reflect the mitigation measures in the Final EIR due to a clerical error, the language of the mitigation measure as set forth in the Final EIR shall control, unless the language of the mitigation measure has been specifically and expressly modified by these findings.

C. SJAFCA's Findings Related to Alternatives

The EIR for the proposed project identified unavoidable significant environmental effects. Therefore, the SJAFCA must make a finding with respect to alternatives to the proposed project considered in the EIR, evaluating whether these alternatives could feasibly avoid or substantially lessen the unavoidable significant effects while achieving most of the proposed project's goals and objectives.

Chapter 6 of the Draft EIR describes and evaluates the comparative impacts of alternatives to the proposed project. Two alternatives were identified for evaluation in the Draft EIR, including the *No Project Alternative* and the *Dryland Levee Extension to Union Road Alternative*.

The No Project Alternative would not result in any construction or O&M impacts when compared to the proposed project. However, none of the proposed flood risk reduction or multi-benefit objectives of the proposed project would be achieved, because the fix-in-place levee improvements, dryland levee extension, ecosystem restoration sites, and other multi-benefit components would not be developed.

Based on the comparison of environmental impacts of these alternatives to the proposed project, due to reduced construction impacts as compared to the proposed project, the Dryland Levee Extension to Union Road Alternative is the environmentally superior alternative. This alternative would achieve the objective of implementing a multi-benefit project that would improve ecological function and habitat in the flood system and contribute additional social benefits, such as recreational features or opportunities in the proposed project area. However, extending the dryland levee to Union Road instead of Tinnin Road would result in reduced freeboard at the eastern terminus of the levee and reduced performance under future hydrologic uncertainties and climate change scenarios and would not fully achieve proposed project objectives to modernize flood risk reduction infrastructure and accommodate climate change resiliency goals.

D. Mitigation Monitoring and Reporting Program

In accordance with CEQA and the CEQA Guidelines, SJAFCA must adopt a mitigation monitoring and reporting program (MMRP) to ensure that the mitigation measures adopted herein are implemented. **SJAFCA hereby adopts the MMRP for the proposed project attached to these findings as Exhibit B.**

E. Summary

1. Based on the foregoing findings and the information contained in the administrative record of proceedings, SJAFCA has made one or more of the following findings with respect to each of the significant environmental effects of the proposed project identified in the Final EIR:

- a. Changes or alterations have been required in, or incorporated into the proposed project, which avoid or substantially lessen most of the significant environmental effects on the environment.

2. Based on the foregoing findings and information contained in the record, it is hereby determined that:

- a. Most significant effects on the environment due to approval of the proposed project have been eliminated or substantially lessened where feasible.
- b. Any remaining significant effects on the environment found unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations in Section V, below.

V. STATEMENT OF OVERRIDING CONSIDERATION

A. Impacts That Remain Significant and Unavoidable After Incorporation of Mitigation

SJAFCA has found that some impacts related to flood risk reduction, site restoration, and multi-benefit components remain significant following adoption and implementation of all feasible mitigation measures, as described in the Final EIR. Certain adverse impacts cannot be avoided with the application of mitigation measures. State CEQA Guidelines CCR Section 21100(b)(2)(A) provides that an EIR shall include a detailed statement setting forth “any significant effect on the environment that cannot be avoided if the project is implemented.”

Chapter 3 of the Draft EIR provides a detailed analysis of all potentially significant direct and indirect environmental impacts of the proposed project, feasible mitigation measures that could reduce or avoid the proposed project’s significant impacts, and a determination of whether these mitigation measures would reduce these impacts to less than significant levels. The proposed project’s cumulative impacts are discussed in Chapter 4 of the Draft EIR. If a specific impact cannot be reduced to a less than significant level, it is considered a significant and unavoidable impact.

Feasibility Findings

The Final EIR identified significant and unavoidable impacts for four resource areas for the proposed project: agricultural resources, cultural resources, noise, and tribal cultural resources. SJAFCA finds that mitigation measures would not be feasible, separately and independently, to reduce impacts to less-than-significant levels for the following reasons:

- a. **Agricultural Resources.** Implementation of the proposed project would result in significant impacts related to the permanent conversion of Important Farmland (Farmland) to non-agricultural uses (i.e., flood protection and/or habitat restoration). Mitigation Measure 3.3-1 identified in Exhibit B would reduce these impacts by preserving in perpetuity an equivalent amount of Farmland of equal or greater quality thereby reducing these impacts.

However, because agricultural conservation easements preserve existing Farmland but do not create new Farmland, the mitigation measure would not fully offset or compensate for the conversion. Fully offsetting the conversion of agricultural land in San Joaquin County is not feasible due to the limited supply of suitable and

commercially available land in the region that could be reasonably converted to new Farmland. As a result, identification of financially feasible property to achieve the required offset may not be possible.

Accordingly, despite the significant regional benefits associated with the proposed project, the permanent conversion of Farmland due to the construction of flood protection and habitat restoration features would be a significant and unavoidable impact.

- b. **Cultural Resources.** Implementation of the proposed project could result in impacts related to historical and archaeological resources. Implementation of Mitigation Measure 3.7-1 and Mitigation Measures 3.7-2(a) through 3.7-2(f) identified in Exhibit B would reduce impacts through development and implementation of a CRMP, including inventory and evaluation, avoidance and minimization measures, construction monitoring, cultural resources awareness training, and unanticipated discovery protocols. These measures would reduce impacts associated with both flood risk reduction and multi-benefit components.

However, because portions of the proposed project area have not been surveyed due to lack of access, and because the design, footprint, and exact location of multi-benefit components are not fully defined, the presence and extent of cultural resources remain uncertain. As a result, it is not possible to conclude that the identified mitigation measures would reduce impacts to a less-than-significant level in all cases.

Accordingly, despite the significant regional benefits associated with the proposed project, impacts to historical and archaeological resources would remain significant and unavoidable for both the flood risk reduction and multi-benefit components.

- d. **Noise.** Implementation of the proposed project would result in impacts related to construction noise generated from construction equipment and hauling activities. Mitigation Measure 3.14-1 identified in Exhibit B would reduce these impacts by implementing measures to control construction and haul truck noise levels, thereby reducing the severity of the impact.

However, because of the close proximity of noise-sensitive receptors to construction activities across all elements of the proposed project, and the limited feasibility of further reducing construction and haul truck noise to acceptable levels, the mitigation measure would not reduce impacts to a less-than-significant level in all cases. In addition, no additional feasible mitigation measures are available to further reduce this impact.

Accordingly, despite the temporary and short-term nature of construction noise, these impacts would remain significant and unavoidable.

- e. **Tribal Cultural Resources.** Implementation of the proposed project could result in impacts related to tribal cultural resources, as defined in PRC Section 21074. Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b) identified in Exhibit B would reduce these impacts through development and implementation of a Cultural

Resources Management Plan, including inventory and evaluation, avoidance and minimization measures, construction monitoring, cultural resources awareness training, and unanticipated discovery protocols.

However, because the extent, design, and exact location of proposed project multi-benefit components are not fully defined, and because the presence and characteristics of archaeological resources within portions of the project area remain unknown, the mitigation measures would not fully offset or compensate for potential impacts in all cases. As a result, it is not possible to conclude that impacts would be reduced to a less-than-significant level.

Accordingly, despite the significant regional benefits associated with the proposed project, impacts to tribal cultural resources would be significant and unavoidable

B. Overriding Considerations Justifying Project Approval

In accordance with CEQA Guidelines Section 15093, SJAFCA has, in determining whether or not to approve the proposed project, balanced the economic, social, technological, and other benefits of the proposed project against its unavoidable environmental risks, and finds that the benefits of the proposed project set forth below outweigh the significant adverse environmental effects that are not mitigated to less-than-significant levels.

This statement of overriding considerations is based on SJAFCA's review of the Final EIR and other information in the administrative record. Each of the benefits identified below provides a separate and independent basis for overriding the significant environmental effects of the proposed project. The benefits of the proposed project are as follows:

1. *The proposed project will meet State flood risk management criteria.* The primary objective of the proposed project is to increase public safety by rehabilitating, improving, and constructing flood risk reduction infrastructure. Implementation of the proposed project would allow the local community to achieve a 200-year Urban Level of Flood Protection (ULOP) for the Mossdale Tract area, consistent with the requirements of Senate Bill 5, which mandates that cities and counties make an Adequate Progress Finding toward providing this level of flood protection.
2. *Increase in the flood risk management safety levels will reduce risk to people and property and provide economic benefits.* The proposed project area is protected by the RD 17 levee system, which protects a population of approximately 45,000 people; 15,450 structures and 45 critical facilities (e.g., hospitals, schools); and transportation arteries including Interstate 5 and State Route 120. The potential structural and content value of property damages for a levee breach within the proposed project area is estimated to be greater than \$900 million. Implementation of the proposed project will provide a 200-year ULOP, greatly reducing flood risk to people and property within the 22,400-acre Mossdale Tract.
3. *The proposed project includes feasible mitigation measures.* Mitigation includes all measures that would avoid, minimize, offset or compensate for potential

environmental effects. The proposed project mitigation measures represent sound and proven methods to avoid or reduce potential effects. These measures were discussed in Chapter 3 of the Draft EIR and are included in Exhibit B. The mitigation measures identified would be implemented to avoid or reduce both short-term and long-term effects.

Exhibit A

Summary of Impacts and Mitigation Measures

EXHIBIT A SUMMARY OF IMPACTS AND MITIGATION MEASURES							
Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
3.2 Aesthetics							
3.2-1: Implementation of the proposed project could have a substantial adverse effect on scenic views, scenic vistas, and scenic resources.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.2-2: Implementation of the proposed project could substantially degrade the existing visual character or quality of the site and its surroundings or conflict with applicable zoning and other regulations governing scenic quality.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.2-3: Implementation of the proposed project could create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	S	S	S	Mitigation Measure 3.2-3 (FRR/RS/MB): SJAFCA shall require its construction contractors to ensure that all temporary lighting used for security of the staging areas is shielded or directed away from nearby residences to avoid or minimize any direct illumination onto light-sensitive receptors located outside of the project area.	LSM	LSM	LSM
3.3 Agriculture Resources							
3.3-1: Implementation of the proposed project could convert existing Important Farmland to non-agricultural uses.	S	S	S	Mitigation Measure 3.3-1 (FRR/RS/MB): Permanent conversion of Important Farmland shall be mitigated by adhering to the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, as well as other local ordinances, related to agricultural conservation and mitigation. Specifically, any loss or conversion of Important Farmland due to implementation of the proposed project shall be mitigated by preserving other Important Farmland of equal or greater value in perpetuity by acquiring an agricultural conservation easement, or by contributing funds to a land trust or other entity qualified to preserve Important Farmland in perpetuity at a ratio of 1:1.	SU	SU	SU
3.3-2: Implementation of the proposed project could conflict with existing zoning for agricultural use, or a Williamson Act contract.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.3-3: Implementation of the proposed project could involve other changes in the existing environment that could result in the conversion of Important Farmland to non-agricultural use.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.4 Air Quality							
3.4-1: Implementation of the proposed project could conflict or obstruct the implementation of air quality plans adopted by the SJVAPCD and any other applicable air quality plans.	S	S	S	Mitigation Measure 3.4-1 (FRR/RS/MB): Before starting onsite construction activities, construction contractors shall be required to submit a Construction Emissions Minimization Plan (Plan) to the SJAFCA for review and approval. The Plan shall state, in reasonable detail, how the contractor will achieve fleet reduction of 20 percent in NOx emissions over the statewide fleet average. The Plan shall rely on any combination of the following measures to meet this requirement: 1. <i>Engine Requirements.</i> All off-road equipment greater than 25 horsepower and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements: a. Electricity powered portable equipment, such as generators, shall be used. If electricity is not available to power portable equipment, propane or natural gas-powered generators shall be used b. Electric engines shall be used for all equipment that is commercially available (i.e., inventory is available for the contractor team to rent or buy at the time needed based on the construction schedule) as plug-in or battery-electric equipment during each construction phase and activity. c. Engines that cannot be electrically powered must meet or exceed either U.S. EPA or CARB Tier 4 Final off-road emission standards. d. Engines shall be fueled with alternative fuels as commercially available during each construction phase and activity. This may include biodiesel, natural gas, propane, hydrogen fuel cell, and electricity. e. Any other control technology available in the future may be included in the Plan as substitutions for the above items a–d, provided that it can be documented that (1) the technology would result in comparable NOx emissions reductions and (2) it would not increase other pollutant emissions or result in other additional impacts, such as noise. This may include new alternative fuels or engine technology for off-road equipment (such as electric or hydrogen fuel cell equipment) that is not available as of 2022. 2. <i>Emissions Estimates.</i> The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, expected fuel type (e.g., diesel, gasoline, electric, propane, natural gas), and hours of operation. The Plan shall also include an updated calculation of expected annual construction NOx emissions. The Plan shall document the project’s performance in relation to the threshold of 10 tons of NOx per year. 3. <i>Reporting.</i> After start of construction activities, the contractor shall submit biannual reports to the SJAFCA documenting compliance with the Plan. The biannual reports shall include a calculation of NOx emissions for all construction activities completed prior to the biannual report for all phases of construction completed. Emissions shall be reported in tons per year for each calendar year.	LSM	LSM	LSM

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				Within six months of the completion of construction activities, the contractor shall submit to the SJAFCa a final report summarizing construction activities. The final report shall indicate the start and end dates and duration of each construction phase (or Reach and Activity). For each phase, the report shall include detailed information required above. The report shall also include a final inventory of NO _x emissions for all construction activities completed. Emissions shall be reported in average daily pounds (for each construction period during each calendar year) and total tons per calendar year. 4. <i>Certification Statement and Onsite Requirements.</i> Prior to commencing construction activities, SJAFCa shall certify (1) compliance with the Plan, and (2) all applicable requirements of the Plan have been incorporated into contract specifications.			
3.4-2: Implementation of the proposed project could result in an increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.4-1.	LSM	LSM	LSM
3.4-3: Implementation of the proposed project could result in health risk impacts from exposure of sensitive receptors to substantial pollutant concentrations.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.4-1.	LSM	LSM	LSM
3.4-4: Implementation of the proposed project could result in emissions (such as those leading to odors) that would affect a substantial number of people.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.4-5: Implementation of the proposed project could expose workers and sensitive receptors to the risk of Valley Fever.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.5 Biological Resources – Aquatic							
3.5-1: Implementation of the proposed project could result in direct or indirect impacts to listed fish species and their associated habitat and could interfere with movement of native resident or migratory fish or impede the use of fish hatchery sites.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.6 Biological Resources – Terrestrial							
3.6-1: Implementation of the proposed project could result in substantial adverse effects, either directly or through habitat modifications, to species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	S	S	S	Mitigation Measure 3.6-1a (FRR/RS/MB): Before SJAFCa initiates any work in the proposed project area, including grading, a qualified biologist would conduct mandatory contractor/worker awareness training for all construction (FRR/RS/MB) and operations (MB) personnel. It would be provided to brief them on the need to avoid effects on sensitive biological resources (e.g., riparian habitat, special-status species, wetlands and other sensitive biological communities) and the penalties for not complying with permit requirements. The biologist would inform all construction personnel about the life history of special-status species, including but not limited to VELB, Swainson's hawk, riparian brush rabbit, northwestern pond turtle, burrowing owl, MBTA species, bats, and special-status plants with potential for occurrence on the site, the importance of maintaining habitat and the terms and any applicable regulatory permit conditions. The training would also cover the restrictions and guidelines that must be followed by all personnel to reduce or avoid effects on sensitive biological communities and special-status species during project construction. The crew leader would be responsible for ensuring that crew members adhere to the guidelines and restrictions. Educational training would be conducted for new personnel as they are brought on the job. General restrictions and guidelines for vegetation and wildlife that must be followed by personnel include the life history and status and of special-status species and their habitat, how to identify these species and their habitats (e.g., nesting, roosting and foraging habitat, elderberry shrubs, and riparian habitat), what to do if these species are encountered during proposed project construction activities and explain the state and federal laws pertaining to them and the possible penalties for non-compliance. Mitigation Measure 3.6-1b (FRR/MB): SJAFCa shall implement the following measures to avoid and minimize effects on Crotch's bumble bee for construction (FRR/MB) and O&M (MB) activities as long as Crotch's bumble bee is considered a CESA candidate species or is listed under CESA: a. Pre-Activity Nest Survey. If ground-disturbing activities will occur during the nesting season (February 1 through October 31) in an area with burrows, a pre-activity nest survey shall be conducted within 30 days of initiation of activities to evaluate whether an active nest is present within work areas. Bee identification shall be documented using photos of bees taken from multiple angles. Only approved biologists are allowed to handle, capture, or net bees if needed for identification, as described in the California Department of Fish and Wildlife's 2023 Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, or most recent version. b. Nest Avoidance. If an active Crotch's bumble bee nest is detected within a work area, an avoidance buffer of 100 feet (30.5 meters) shall be established. The buffer may be reduced if determined by a qualified biologist that, based on bee behavior, a reduced buffer will not affect nesting individuals. Ground-disturbing activities shall avoid active nest resources during the Crotch's bumble bee nesting period (February 1 through October 31), to the maximum extent feasible, or until the nest is determined to no longer be active by a qualified biologist. c. Consultation. If impacts cannot be feasibly avoided and construction could result in potential direct or indirect impacts to Crotch's bumble bee and/or occupied habitats, SJAFCa shall consult with CDFW to ensure compliance with the California Endangered Species Act, which may include obtaining a "take" permit (e.g., CESA Section 2081 Incidental take Permit from CDFW).	LSM	LSM	LSM

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				Mitigation Measure 3.6-1c (FRR/RS/MB): During construction (FRR/RS/MB) and operational (MB) activities SJAFCA shall implement the measures included in the <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (USFWS 2017; see Appendix E) to reduce effects on valley elderberry longhorn beetle. The framework includes avoidance and minimization measures for shrubs that would not be transplanted within 50 meters of the Project, methodologies for transplanting of shrubs, and methodologies for compensatory mitigation guidance for removed habitat.			
				Mitigation Measure 3.6-1d (FRR/RS/MB): SJAFCA shall implement the following measures to reduce effects on nesting Swainson's hawks during construction (FRR/RS/MB) and O&M (MB) activities. a. Breeding Season Survey. If work occurs during the Swainson's hawk breeding season, SJAFCA would conduct a breeding season survey for nesting birds that would be conducted for all trees and shrubs that would be removed or disturbed that are located within 0.5 miles of construction activities, including grading. Swainson's hawk surveys would be completed during at least two of the following survey periods: January 1 to March 20; March 20 to April 5; April 5 to April 20; and June 10 to July 30, with no fewer than three surveys completed in at least two survey periods and with at least one of these surveys conducted no more than 48 hours from the initiation the proposed project activities to confirm the absence of nesting. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removal or pruning of trees and shrubs, could commence without any further mitigation. b. Active Nest Buffer. If active nests are found, SJAFCA shall obtain a qualified biologist to determine the appropriate buffer distance from the nest. The qualified biologist would be present on-site during construction activities to ensure the buffer distance is adequate and the birds are not showing any signs of stress. If signs of stress that could cause nest abandonment are noted, construction activities would cease until a qualified biologist determines that fledglings have left an active nest.			
				Mitigation Measure 3.6-1e (FRR/RS/MB): SJAFCA shall implement the following for construction (FRR/RS/MB) and O&M (MB) activities to reduce effects on riparian brush rabbit per USFWS guidance (USFWS, 2019): a. Preconstruction Surveys. Prior to the initiation of any ground-disturbing construction activities, an approved biologist shall conduct a reconnaissance-level survey to determine if any riparian brush rabbits occur within the proposed work areas. If any riparian brush rabbits are observed within the construction areas, construction shall only be allowed to commence when the observed riparian brush rabbit has exited the work area and at the discretion of the qualified biologist. b. Silt Fencing. Prior to initiation of any ground-disturbing construction activities, silt fencing shall be installed at the top of the waterside of the levee to prevent encroachment of construction personnel and equipment as well as minimize the potential for sedimentation to avoided riparian habitat and Oxbow Preserve. c. Exclusion Fencing. The boundary of the proposed project footprint shall be delineated with exclusionary fencing (silt fence with bottom buried) to prevent riparian brush rabbits from entering the site during construction. Only tightly woven netting or similar material shall be used for erosion control materials, such as coir rolls and geo-textiles, within or adjacent to suitable habitat of sensitive species. No plastic monofilament matting shall be used.			
				Mitigation Measure 3.6-1f (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on northwestern pond turtle for construction (FRR/RS/MB) and O&M (MB) activities: a. A qualified biologist shall conduct a pre-construction survey within 7 days before the start of project activities. If no northwestern pond turtles are observed, SJAFCA shall document that information for the file, and no additional measures would be required, except as described below for dewatering activities. b. Should any northwestern pond turtles be detected on land during the pre-construction survey, the qualified biologist shall identify the location using GPS coordinates. With prior CDFW approval, a qualified biologist may relocate any northwestern pond turtles found on land or in aquatic habitat within the construction footprint to suitable aquatic habitat at least 200 feet away from the construction footprint. c. If northwestern pond turtles are observed on land within the construction footprint during Project activities, work shall be stopped within approximately 200 feet of the turtle, and a qualified biologist shall be notified immediately. If possible, the turtle will be allowed to leave on its own and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the turtle is not harmed. Alternatively, with prior CDFW approval, the qualified biologist may capture and relocate the turtle unharmed to suitable habitat at least 200 feet outside the construction footprint. If a northwestern pond turtle nest is unintentionally uncovered during project activities, work shall be stopped in the vicinity of the nest and SJAFCA shall contact CDFW to determine the appropriate next steps.			
				Mitigation Measure 3.6-1g (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on burrowing owl for construction (FRR/RS/MB) and O&M (MB) activities: a. Prior to initiation of any excavation activities at borrow sites, SJAFCA shall conduct a preconstruction survey for burrowing owls in accordance with CDFW guidelines described in the Staff Report on Burrowing Owl Mitigation. If no burrowing owls are located during these surveys, then effects to burrowing owls would be less than significant and no mitigation would be required. b. If burrowing owls are located on or immediately adjacent to the site, then coordination would occur to determine the proper measures that would need to be implemented to ensure that burrowing owls are not impacted by the proposed project. Potential mitigation measures that could be implemented include: i. A qualified biologist shall conduct appropriate surveys at and around material source sites, to determine the presence/absence of burrowing owls. At least one survey shall be conducted no more than 1 week prior to the onset of any construction activity. ii. A 250-foot buffer, within which no new activity would be permissible, shall be maintained between the proposed project activities and nesting burrowing owls. This protected area shall remain in effect until August 31 or at the discretion of a qualified biologist, until the young owls are foraging independently. iii. No burrowing owls shall be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season could be permitted pending evaluation of eviction plans and receipt of formal written approval from CDFW authorizing the eviction. iv. If accidental take (disturbance, injury or death of owls) occurs, CDFW shall be notified immediately.			

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				Mitigation Measure 3.6-1h (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on breeding and migratory birds for construction (FRR/RS/MB) and O&M (MB) activities: a. Clearing and Grubbing. Tree and shrub removal and work in other areas scheduled for vegetation clearing, grading, or other construction or O&M activities shall not be conducted during the nesting season (generally February 15 through September 30, depending on the species and environmental conditions for any given year), when feasible. b. Preconstruction Surveys. Conduct surveys to locate any nest sites within proposed construction and O&M areas in the spring. Surveys shall be conducted by a qualified biologist using approved methods. If nests or young of these species are not located, construction may proceed. If nests or young are located, nest buffer requirements shall be implemented as described below. c. Active Nest Buffer. If nesting birds have been identified within or adjacent to the construction footprint, avoidance buffers shall be established of 500 feet for white-tailed kite, northern harrier, and loggerhead shrike; 300 feet for common raptors; 200 feet for heron or egret rookeries, and 100 feet for common passerines. Reduced buffers may be implemented if recommended by the monitoring biologist. Buffers shall be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. No construction activities shall occur within the buffer zone, which would be maintained until the young have fledged (as determined by a qualified biologist).			
				Mitigation Measure 3.6-1i (FRR/RS/MB): In advance of tree and structure removal, a preconstruction survey for bats shall be conducted by a qualified biologist to characterize potential bat habitat and identify active roost sites within a proposed project site. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed, the following measures shall be implemented: a. Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, and outside of bat maternity roosting season (approximately April 15 – August 31) and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. b. If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of a proposed project site where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist. c. The qualified biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F. d. Removal of trees with active or potentially active roost sites shall follow a two-step removal process: i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). e. Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the qualified biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. If deemed necessary by a qualified biologist, bat exclusion devises may be installed to prevent the re-entry of bats to a roost.			
				Mitigation Measure 3.6-1j (RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on special-status plants during restoration activities: a. Preconstruction Surveys. Qualified botanists shall survey the proposed project area to document the presence of special-status plants before project implementation and would conduct a floristic survey that follows the CDFW botanical survey guidelines (CDFW, 2018). All plant species observed would be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer. If any special-status plants are identified during the surveys, the botanist would photograph and map locations of the plants, document the location and extent of the special-status plant population on a CNDDDB Survey Form and submit the completed Survey Form to the CNDDDB. The amount of compensatory mitigation required would be based on the results of these surveys. b. Avoidance. If one or more special-status plants is identified in the proposed project area during preconstruction surveys, SJAFCA shall redesign or modify the proposed project components to avoid indirect or direct effects on special-status plants wherever feasible. If special-status plants cannot be avoided by redesigning projects, implementation of mitigation would avoid significant effects on special-status plants.			
				c. Preservation. If complete avoidance of special-status plants is not feasible, the effects of the proposed project on special-status plants would be compensated through off-site preservation at a one-to-one ratio or as negotiated with the resource agencies. Suitable habitat for affected special-status plant species would be purchased in a conservation area or established onsite and preserved and managed in perpetuity. Detailed information would be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity and the responsible parties. Other pertinent information also would be provided, to be determined through future coordination with the resource agencies.			
				Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.6-2 (see Impact 3.6-2).			

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
3.6-2: Implementation of the proposed project could result in adverse effects to riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.	S	S	LS	Mitigation Measure (FRR): Implement Mitigation Measure 3.6-1a. Mitigation Measure 3.6-2 (FRR/RS): SJAFCA shall conduct an aquatic resources delineation to identify potential wetlands and other waters that fall under state and federal jurisdiction within project areas. During construction and O&M activities, design and or refinement of proposed project activities would be implemented to reduce impacts on sensitive habitat to the extent practicable. Refinements implemented to reduce the loss of riparian and wetland/waters habitat would include reducing the impact footprint, constructing on the landside of the levee to avoid impacts to riparian and wetland/waters habitat, and constructing within the existing disturbed areas of the existing levee. Where practicable, trees on the waterside slopes that are not dead and/or downed would be avoided and not impacted by rock slope protection efforts. Temporary and permanent impacts to riparian habitat and wetland/waters, that cannot be mitigated through avoidance, minimization, or remediation shall be mitigated to ensure no net loss through compensation, by restoring riparian and wetlands/waters habitat at one of the proposed ecological restoration sites or an approved offsite location, mitigation bank, or in-lieu fee program. Riparian and wetlands/waters habitat will not be restored where it would be removed by future maintenance activities. A revegetation plan would be prepared by a qualified biologist or landscape architect and reviewed by the appropriate agencies. The revegetation plan would specify the use of beneficial native plants appropriate for each area that provide a diverse variety of grasses and forbs that support native wildlife species.	LSM	LSM	LS
3.6-3: Implementation of the proposed project could result in adverse effects on state or federally protected wetlands (including but not limited to marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means.	S	S	LS	Mitigation Measure (FRR/RS): Implement Mitigation Measures 3.6-1a and 3.6-2.	LSM	LSM	LS
3.6-4: Implementation of the proposed project could interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery site.	S	S	LS	Mitigation Measure (FRR/RS): Implement Mitigation Measures 3.6-1a through 3.6-1h and 3.6-2.	LSM	LSM	LS
3.6-5: Implementation of the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measures 3.6-1a and 3.6-2. Mitigation Measure 3.6-5 (FRR/RS/MB): In the City of Stockton, SJAFCA shall submit an application for a heritage tree removal permit for any oaks that will be removed that meet Stockton municipal code size requirements. SJAFCA shall replace heritage trees removed per the requirements of the municipal code on a 3:1 basis with each replacement tree being of at least 15-gallon container size. SJAFCA shall comply with any other applicable local code regarding tree removal.	LSM	LSM	LSM
3.6-6: Implementation of the proposed project could conflict with provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.7 Cultural Resources							
3.7-1: Implementation of the proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5.	S	NI	S	Mitigation Measure 3.7-1 (FRR/MB): Before implementation of the proposed project, SJAFCA shall, in consultation with a qualified archaeologist and architectural historian, defined as those meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and Architectural History, and California Native American Tribes culturally and geographically affiliated with the proposed project area, develop and implement a Cultural Resources Management Plan (CRMP) for the proposed project. The CRMP shall be submitted to the CHRIS upon SJAFCA approval, and shall require the following: • A cultural resources survey and associated documentation for those portions of the proposed project area not covered by the pedestrian survey conducted to date. • An evaluation of any cultural resources identified in the proposed project area during the supplemental survey for California Register-eligibility (i.e., as qualifying as historical resources, as defined in CEQA Guidelines section 15064.5) as well as whether they qualify as archaeological resources, pursuant to CEQA Guidelines section 15064.5. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, consultation with relevant California Native American Tribes (for indigenous resources), or archival research. The evaluation should also include any cultural resources previously recorded in the proposed project area that have not been previously evaluated for California Register-eligibility (e.g., P-39-005084). • An assessment of potential project impacts on any cultural resources identified in the proposed project area that qualify as historical resources (per CEQA Guidelines section 15064.5) and/or archaeological resources (per CEQA Guidelines section 15064.5). This shall include an analysis of whether the proposed project's potential impacts would materially alter a resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register. • A technical report documenting the cultural resources survey, evaluations of California Register-eligibility, and assessment of potential project impacts on cultural resources meeting U.S. Secretary of the Interior's Standards for cultural resources technical reporting. This report shall be submitted to the CHRIS upon SJAFCA approval. The CRMP shall also include and require implementation of the following: • Methods and procedures associated with protective measures to avoid impacts on archaeological resources P-39-000006 and P-39-000014/000141 during proposed project construction required under Mitigation Measure 3.7-2(b). • Methods and procedures associated with the cultural resources awareness and sensitivity training required under Mitigation Measure 3.7-2(c). • Methods and procedures for archaeological monitoring for the proposed project required under Mitigation Measure 3.7-2(d), including reporting and unanticipated discovery protocol required under Mitigation Measures 3.7-2(e) to 3.7-2(f).	SU	NI	SU

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
3.7-2: Implementation of the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5.	S	S	S	Mitigation Measure 3.7-2a (FRR/RS/MB): Implement Mitigation Measure 3.7-1. Mitigation Measure 3.7-2b (FRR): Prior to construction activities, a membrane shall be placed over the recorded site boundaries of P-39-000006 and -39-000014/000141 with a 50-foot buffer. A thin (3 to 6-inch-thck) layer of imported gravel and/or sediment shall then be placed over the membrane to cover the entire site boundary and buffer. The sediment and membrane shall be maintained throughout proposed project construction to ensure that the resource boundaries are not impacted by the proposed project. At the conclusion of proposed project construction, the imported gravel and/or sediment and membrane shall be carefully removed to avoid disturbance to the original ground surface at the resources' boundaries. The placement, maintenance, and removal of the membrane and imported gravel and/or sediment shall be subject to the cultural resources monitoring required under Mitigation Measure 3.7-2(d). Mitigation Measure 3.7-2c (FRR/RS/MB): Before implementation of the proposed project, SJAFCA shall, in consultation with a qualified archaeologist, defined as those meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, and California Native American Tribes culturally and geographically affiliated with the proposed project area, develop a Cultural Resources Awareness and Sensitivity Training Program for all construction and field workers involved in proposed project ground-disturbing activities. The program shall include a presentation that covers, at a minimum, the types of cultural resources common to the area, regulatory protections for cultural resources, and the protocol for unanticipated discovery of archaeological resources, submerged cultural resources, and human remains required under Mitigation Measures 3.7-2(e) to 3.7-2(f). Personnel working in areas of proposed project ground-disturbing activities shall receive the training prior to working in these areas. Written materials associated with the program shall be provided to proposed project personnel as appropriate. Documentation of the training attendance shall be maintained by SJAFCA. Mitigation Measure 3.7-2d (FRR/RS/MB): An archaeologist meeting, or supervised by an archaeologist meeting, the Secretary of the Interior's Professional Qualifications Standards for Archeology, in addition to a compensated representative from a California Native American Tribe culturally and geographically affiliated with the proposed project area, shall conduct construction monitoring for all proposed project ground-disturbing construction activities in culturally designated areas. The conduct and work of any Tribal Monitor shall be consistent with the NAHC <i>Guidelines for Native American Monitors/Consultants</i> (NAHC, 2005). The methods and procedures for the monitoring shall follow those presented in the ATMP portion of the CRMP, including unanticipated discovery and reporting protocol. Monitoring may be concluded upon mutual agreement between SJAFCA, the archaeologist, and the California Native American Tribe. Mitigation Measure 3.7-2e (FRR/RS/MB): If archaeological resources are encountered during proposed project construction, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, shall inspect the find within 24 hours of discovery and notify SJAFCA of their initial assessment. Indigenous archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include: building or structure footings and walls; and deposits of metal, glass, and/or ceramic refuse. If SJAFCA, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated with proposed project area (if the resource is indigenous), determines that the resource may qualify as a historical resource or unique archaeological resource (pursuant to CEQA Guidelines section 15064.5), or a tribal cultural resource (as defined in PRC section 21074), the resource shall be avoided, if feasible. Consistent with CEQA Guidelines section 15126.4(b)(3), this may be accomplished through: planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance of the resource is not feasible, SJAFCA shall continue to consult with California Native American Tribes that are traditionally and culturally affiliated with the proposed project area (if the resource is indigenous) and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC section 21083.2 and CEQA Guidelines section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC section 21084.3). Any technical report developed to document the implementation mitigation shall be submitted to the CHRIS upon SJAFCA approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the CHRIS, in which case, the report shall be submitted to the NAHC. Mitigation Measure 3.7-2f (FRR/RS/MB): If a shipwreck, and associated artifacts, or other cultural resource on or in the tide and submerged lands of California is encountered during proposed project construction or operation, Mitigation Measure 3.7-2(e) shall be implemented, in addition to the following measures: • SJAFCA shall initiate consultation with CSLC staff within two business days of the discovery. • Per PRC section 6313(c), any submerged cultural resource remaining in State waters for more than 50 years shall be presumed to be archaeologically or historically significant. • If the find is a maritime archaeological resource, the qualified archaeologist assessing the find shall have expertise in maritime archaeology. • SJAFCA shall consult with the CSLC regarding assessment of the find and development of any treatment measures to minimize or mitigate potential impacts on the resource, pursuant to PRC section 21083.2 and CEQA Guidelines section 15126.4. Treatment measures would typically consist of (but would not necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be affected by the proposed project. SJAFCA shall prepare a treatment plan to document the treatment measures and their implementation methods. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals. Any treatment measures implemented shall be documented in a professional-level technical report (e.g., archaeological testing results report, archaeological data recovery report, ethnographic report) authored by a qualified archaeologist, to be filed with the CHRIS. Proposed	SU	LSM	SU

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				project construction work at the location of the find may commence upon completion of the approved treatment and authorization by SJAFCA. Work may proceed in other parts of the proposed project area while the mitigation is being carried out. SJAFCA shall submit to the CSLC any report prepared for the resource as part of the assessment of the find and implementation of treatment measures to minimize or mitigate potential impacts.			
3.7-3: Implementation of the proposed project could disturb human remains, including those interred outside of dedicated cemeteries.	S	S	S	Mitigation Measure (FRR/MB): Implement Mitigation Measures 3.7-2(b) through 3.7-2(d) Mitigation Measure 3.7-3b (FRR/RS/MB): In the event of discovery of any human remains during proposed project-related construction activities, such activities within 100 feet of the find shall cease until the San Joaquin County Coroner has been contacted to determine that no investigation of the cause of death is required. If the Coroner determines that the remains are not modern and are Native American in origin, the NAHC shall be contacted within 24 hours of the Coroner's determination. The NAHC shall then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American; the MLD shall then make recommendations to SJAFCA for the appropriate means of treating the human remains and any grave goods. Per PRC section 5097.98, SJAFCA shall ensure that the immediate vicinity of the location of the human remains is not damaged or disturbed by further development activity until SJAFCA has discussed and conferred with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. Any technical report developed to document the implementation mitigation shall be submitted to the CHRIS and NAHC upon SJAFCA approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the CHRIS, in which case, the report shall be submitted only to the NAHC.	LSM	LSM	LSM
3.8 Energy							
3.8-1: Implementation of the proposed project could result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.9 Geology, Soils, and Mineral Resources							
3.9-1: Implementation of the proposed project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.9-2: Implementation of the proposed project could result in substantial soil erosion or the loss of topsoil.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.9-3: The proposed project could be located on a geologic unit or soil that is unstable as a result of the proposed project, potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, or be located on expansive or corrosive soils that could result in structural damage.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.9-4: Implementation of the proposed project could result in the loss of availability of a known mineral resource or recovery site that would be of value to the region and the residents of the state.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.9-5: Implementation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	S	S	S	Mitigation Measure 3.9-1a (FRR/RS/MB): Prior to the start of any ground-disturbing activities, a Qualified Paleontologist shall conduct preconstruction worker paleontological resources sensitivity training. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. Mitigation Measure 3.9-1b (FRR/RS/MB): If a paleontological resource is discovered during construction, a Qualified Paleontologist or paleontological monitor shall be contacted and empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the University of California Museum of Paleontology at Berkeley, if such an institution agrees to accept the fossils. If no institution accepts fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, photographs, and a technical report shall also be filed at the repository and/or school.	LSM	LSM	LSM

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				Mitigation Measure 3.9-1c (FRR/RS/MB): A Qualified Paleontologist shall select paleontological monitors meeting the Society for Vertebrate Paleontology standards (SVP 2010) who shall be present during all excavations in the Modesto Formation or in areas with high potential to encounter paleontological resources (e.g., excavation depths over five feet in previously undisturbed deposits). Depending on the conditions encountered, full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist may spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitoring activities shall be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction.			
3.10 Greenhouse Gas Emissions							
3.10-1: Implementation of the proposed project could generate greenhouse gas emissions that could have a significant impact on the environment.	LS	LS	LS	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.4-1.	LS	LS	LS
3.10-2: Implementation of the proposed project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.11 Hazards and Hazardous Materials							
3.11-1: Implementation of the proposed project could involve the routine transport, use, or disposal of hazardous materials and may result in reasonably foreseeable upset and accident conditions.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.11-2: Implementation of the proposed project could involve the storage or use of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.11-3: Implementation of the proposed project could interfere with an adopted existing emergency response plan or evacuation plan.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.17-1.	LSM	LSM	LSM
3.11-4: Implementation of proposed project could expose people or structures, either directly or indirectly, to significant loss, injury, or death due to wildland fires.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.12 Hydrology and Water Quality							
3.12-1: Implementation of the proposed project could violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality.	S	LS	LS	Mitigation Measure 3.12-1 (FRR): Prior to the start of construction and before activities that involve the use of bentonite materials, the contractor in coordination with SJAFCA shall develop and implement a Bentonite Slurry Spill Contingency Plan (BSSCP) or frac-out plan, to minimize the potential for a frac-out associated with excavation and tunneling activities, provide for timely detection of frac-outs and ensure a “minimum-effect” response in the event of a frac-out and release of excavation fluid. The BSSCP shall identify sensitive areas such as wetlands and streams, map bore paths, evaluate soil and weather conditions that could increase spill risks. The BSSCP shall also describe protocols for continuous visual checks and pressure monitoring systems to identify loss of circulation. If a spill occurs, the BSSCP shall describe response actions such as stopping drilling, deploying containment measures like sandbags or silt fences, and recovering slurry using pumps or vacuum trucks.	LSM	LS	LS
3.12-2: Implementation of the proposed project could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.12-3: Implementation of the proposed project could substantially alter the existing drainage pattern of the site or area, in a manner which would: result in substantial erosion or siltation on- or off-site, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.12-4: Implementation of the proposed project could substantially alter the existing drainage pattern of the site or area in a manner which would impede or redirect flood flows.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.12-5: Implementation of the proposed project could risk release of pollutants due to project inundation in a flood hazard zone.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.12-6: Implementation of the proposed project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS

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Impact	Significance Before Mitigation				Significance After Mitigation		
	FRR	RS	MB	Mitigation Measure	FRR	RS	MB
3.13 Land Use and Planning							
3.13-1: Implementation of the proposed project could have the potential to physically divide an established community.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.13-2: Implementation of the proposed project could have the potential to cause a significant environmental impact if the proposed project conflicted with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.14 Noise and Vibration							
3.14-1: Implementation of the proposed project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	S	S	Mitigation Measure 3.14-1 (FRR/RS/MB): SJAFCA shall require its contractors to implement the measures below, as a condition of contract, to avoid and minimize temporary and short-term construction noise effects on sensitive receptors. These measures shall be implemented during construction, particularly when construction occurs during the nighttime (10:00 p.m. to 7:00 a.m.) and is within 90 feet of a sensitive receptor in unincorporated San Joaquin County or City of Lathrop, to avoid and minimize temporary and short-term construction noise effects on sensitive receptors: a. All construction equipment shall be equipped with noise-reduction devices, such as mufflers, to minimize construction noise, and all internal combustion engines shall be equipped with exhaust and intake silencers, in accordance with manufacturers' specifications. c. The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only. d. Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators at slurry pond locations). e. Mobile and fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes will be located at the most distant point feasible from noise-sensitive receptors. f. When noise-sensitive uses are located within 450 feet of and subject to prolonged construction noise, noise attenuating buffers, such as structures, truck trailers, or soil piles, shall be located between noise generation sources and sensitive receptors. g. Contractors shall properly maintain all heavy trucks and will equip them with noise-control devices (e.g., mufflers), in accordance with manufacturers' specifications, at each work site during project construction to minimize construction traffic noise effects on sensitive receptors. h. Before haul truck trips are initiated during a construction season on roads within 500 feet of residences located along haul routes, written notification will be provided to the potentially affected residents identifying the hours and frequency of haul truck trips. Notification materials will include contact information for a designated noise disturbance coordinator and also will identify a mechanism for residents to register complaints with the appropriate jurisdiction if haul truck noise levels are overly intrusive or occur outside the exempt daytime hours for the applicable jurisdiction. i. Queuing locations for haul trucks shall be designated at locations at least 500 feet from noise sensitive receptors.	SU	SU	SU
3.14-2: Construction of the proposed project could generate excessive groundborne vibration or groundborne noise levels.	S	LS	S	Mitigation Measure 3.14-2 (FRR/MB): Contractors shall implement the following measures at work sites within 90 feet of sensitive receptors during project construction to avoid and minimize the effects of temporary and short-term construction-related groundborne vibration on sensitive receptors. - Equipment shall be operated as far away as practical from vibration-sensitive receptors. - Contractors, as a condition of contract, shall limit compaction activities to the hours of 8:00 a.m. to 6:00 p.m. when work is within 90 feet of a sensitive land use. - Where practicable, contractors shall use smaller vibratory rollers to minimize vibration levels during compaction activities where needed to meet vibration standards.	LSM	LS	LSM
3.15 Public Services							
3.15-1: Implementation of the proposed project could result in substantial unplanned adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services.	NI	NI	NI	(FRR/RS/MB): None required.	NI	NI	NI
3.16 Recreation							
3.16-1: Construction, operation, and maintenance of the proposed project could cause existing parks to physically deteriorate.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.17 Transportation and Circulation							
3.17-1: Construction, operation, or maintenance of the proposed project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	S	S	S	Mitigation Measure 3.17-1 (FRR/RS/MB): SJAFCA shall require that contractors prepare and implement a construction traffic management plan to manage traffic flow during construction, reduce potential interference with local emergency response plans, reduce potential traffic safety hazards, and ensure adequate access for emergency responders. Development and implementation of this plan shall be coordinated with local agencies with jurisdiction over affected roadways, and/or the construction contractor(s) shall ensure that the plan is implemented during construction. The plan may include but not be limited to the following measures: Identify construction truck haul routes and timing to limit conflicts between truck and automobile traffic on nearby roads. The identified routes will be designed to minimize impacts on vehicular, bicycle, and pedestrian traffic, circulation, and safety.	LSM	LSM	LSM

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Impact	Significance Before Mitigation			Mitigation Measure	Significance After Mitigation		
	FRR	RS	MB		FRR	RS	MB
				- Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs, lane closure procedures, and traffic cones for drivers indicating potential road hazards or detours. - Coordinate construction activities to ensure that one lane of traffic in each direction remains open at all times, unless flaggers or temporary traffic controls are in place, to provide emergency access. - Evaluate the need to provide flaggers or temporary traffic control at project driveways and entries to staging areas. - Notify affected adjacent property owners and public safety personnel regarding the timing of major deliveries, detours, and lane closures. - Develop a process for responding to and tracking issues pertaining to construction activity impacts on traffic, including identification of an on-site traffic manager. Post 24-hour contact information for the traffic manager on all construction sites. - Document road pavement conditions for all routes that would be used by construction vehicles before and after project construction. Make provisions to monitor the condition of roads used for haul routes so that any damage or debris attributable to haul trucks can be identified and corrected. Roads damaged by construction vehicles shall be repaired to their preconstruction condition.			
3.17-2: Construction, operation, or maintenance of the proposed project could conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.17-3: Construction, operation, or maintenance of the proposed project could substantially increase hazards due to a geometric design feature or incompatible uses.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.17-4: Construction, operation, or maintenance of the proposed project could result in inadequate emergency access.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.17-1.	LSM	LSM	LSM
3.18 Tribal Cultural Resources							
3.18-1: Implementation of the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074.	S	S	S	Mitigation Measures (FRR/RS/MB): Implement Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).	SU	SU	SU
3.19 Utilities and Service Systems							
3.19-1: Implementation of the proposed project would result in the need to relocate existing utilities infrastructure.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.19-2: Implementation of the proposed project would result in the need for water that could have an impact on water supplies during normal, dry and multiple dry years.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.19-3: Implementation of the proposed project could generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.20 Wildfire							
3.20-1: Implementation of the proposed project could impair emergency access or an emergency evacuation plan in the proposed project area.	S	S	S	Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.17-1.	LSM	LSM	LSM
3.20-2: Implementation of the proposed project may, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.20-3: Implementation of the proposed project may require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS
3.20-4: Implementation of the proposed project may expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	LS	LS	LS	(FRR/RS/MB): None required.	LS	LS	LS

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Exhibit B

Mitigation Monitoring and Reporting Program Developed for the Proposed Project

EXHIBIT B MOSSDALE TRACT URBAN FLOOD RISK REDUCTION PROJECT MITIGATION MONITORING PROGRAM					
Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
3.2 Aesthetics					
Mitigation Measure 3.2-3 (FRR/RS/MB): SJAFCA shall require its construction contractors to ensure that all temporary lighting used for security of the staging areas is shielded or directed away from nearby residences to avoid or minimize any direct illumination onto light-sensitive receptors located outside of the proposed project area.	FRR/RS/MB	Ensure that all temporary lighting used for security of the staging areas is shielded or directed away from nearby residences.	Contractor	During construction activities.	SJAFCA
3.3 Agriculture Resources					
Mitigation Measure 3.3-1 (FRR/RS/MB): Permanent conversion of Important Farmland shall be mitigated by adhering to the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, as well as other local ordinances, related to agricultural conservation and mitigation. Specifically, any loss or conversion of Important Farmland due to implementation of the proposed project shall be mitigated by preserving other Important Farmland of equal or greater value in perpetuity by acquiring an agricultural conservation easement, or by contributing funds to a land trust or other entity qualified to preserve Important Farmland in perpetuity at a ratio of 1:1.	FRR/RS/MB Adhering	Adhere to the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, as well as other local ordinances, related to agricultural conservation and mitigation. Acquire agricultural conservation easements or contribute funds to a land trust or other entity qualified to preserve Important Farmland in perpetuity at a ratio of 1:1.	SJAFCA	Prior to any proposed project activity that would result in the loss or conversion of Important Farmland.	SJAFCA
3.4 Air Quality					
Mitigation Measure 3.4-1 (FRR/RS/MB): Before starting onsite construction activities, construction contractors shall be required to submit a Construction Emissions Minimization Plan (Plan) to the SJAFCA for review and approval. The Plan shall state, in reasonable detail, how the contractor will achieve fleet reduction of 20 percent in NOx emissions over the statewide fleet average. The Plan shall rely on any combination of the following measures to meet this requirement: 1. <i>Engine Requirements.</i> All off-road equipment greater than 25 horsepower and operating for more than 20 total hours over the entire duration of construction activities shall meet the following requirements: a. Electricity powered portable equipment, such as generators, shall be used. If electricity is not available to power portable equipment, propane or natural gas-powered generators shall be used. b. Electric engines shall be used for all equipment that is commercially available (i.e., inventory is available for the contractor team to rent or buy at the time needed based on the construction schedule) as plug-in or battery-electric equipment during each construction phase and activity. c. Engines that cannot be electrically powered must meet or exceed either U.S. EPA or CARB Tier 4 Final off-road emission standards. d. Engines shall be fueled with alternative fuels as commercially available during each construction phase and activity. This may include biodiesel, natural gas, propane, hydrogen fuel cell, and electricity. e. Any other control technology available in the future may be included in the Plan as substitutions for the above items a–d, provided that it can be documented that (1) the technology would result in comparable NOX emissions reductions and (2) it would not increase other pollutant emissions or result in other additional impacts, such as noise. This may include new alternative fuels or engine technology for off-road equipment (such as electric or hydrogen fuel cell equipment) that is not available as of 2022. 2. <i>Emissions Estimates.</i> The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, expected fuel type (e.g., diesel, gasoline, electric, propane, natural gas), and hours of operation. The Plan shall also include an updated calculation of expected annual construction NOX emissions. The Plan shall document the project’s performance in relation to the threshold of 10 tons of NOX per year. 3. <i>Reporting.</i> After start of construction activities, the contractor shall submit biannual reports to the SJAFCA documenting compliance with the Plan. The biannual reports shall include a calculation of NOX emissions for all construction activities completed prior to the biannual report for all phases of construction completed. Emissions shall be reported in tons per year for each calendar year. Within six months of the completion of construction activities, the contractor shall submit to the SJAFCA a final report summarizing construction activities. The final report shall indicate the start and end dates and duration of each construction phase (or Reach and Activity). For each phase, the report shall include detailed information required above. The report shall also include a final inventory of NOX emissions for all construction activities completed. Emissions shall be reported in average daily pounds (for each construction period during each calendar year) and total tons per calendar year.	FRR/RS/MB	Develop and submit a Construction Emissions Minimization Plan to the SJAFCA for review and approval. Incorporate requirements into construction contract specifications and certify compliance. Submit biannual reports that document compliance with the Construction Emissions Minimization Plan. Submit final report summarizing activities at construction completion.	Contractor	Prior to, during and following completion of construction.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
4. <i>Certification Statement and Onsite Requirements.</i> Prior to commencing construction activities, SJAFCA shall certify (1) compliance with the Plan, and (2) all applicable requirements of the Plan have been incorporated into contract specifications.					
3.6 Biological Resources – Terrestrial					
Mitigation Measure 3.6-1a (FRR/RS/MB): Before SJAFCA initiates any work in the proposed project area, including grading, a qualified biologist would conduct mandatory contractor/worker awareness training for all construction (FRR/RS/MB) and operations (MB) personnel. It would be provided to brief them on the need to avoid effects on sensitive biological resources (e.g., riparian habitat, special-status species, wetlands and other sensitive biological communities) and the penalties for not complying with permit requirements. The biologist would inform all construction personnel about the life history of special-status species, including but not limited to VELB, Swainson’s hawk, riparian brush rabbit, northwestern pond turtle, burrowing owl, MBTA species, bats, and special-status plants with potential for occurrence on the site, the importance of maintaining habitat and the terms and any applicable regulatory permit conditions. The training would also cover the restrictions and guidelines that must be followed by all personnel to reduce or avoid effects on sensitive biological communities and special-status species during project construction. The crew leader would be responsible for ensuring that crew members adhere to the guidelines and restrictions. Educational training would be conducted for new personnel as they are brought on the job. General restrictions and guidelines for vegetation and wildlife that must be followed by personnel include the life history and status and of special-status species and their habitat, how to identify these species and their habitats (e.g., nesting, roosting and foraging habitat, elderberry shrubs, and riparian habitat), what to do if these species are encountered during proposed project construction activities and explain the state and federal laws pertaining to them and the possible penalties for non-compliance.	FRR/RS/MB	Conduct mandatory biological resource awareness training for all construction and operations personnel. Ensure that all construction personnel adhere to guidelines and restrictions.	Contractor Qualified Biologist. Contractor	Prior to and during construction activities.	SJAFCA
Mitigation Measure 3.6-1b (FRR/MB): SJAFCA shall implement the following measures to avoid and minimize effects on Crotch’s bumble bee for construction (FRR/MB) and O&M (MB) activities as long as Crotch’s bumble bee is considered a CESA candidate species or is listed under CESA: a. Pre-Activity Nest Survey. If ground-disturbing activities will occur during the nesting season (February 1 through October 31) in an area with burrows, a pre-activity nest survey shall be conducted within 30 days of initiation of activities to evaluate whether an active nest is present within work areas. Bee identification shall be documented using photos of bees taken from multiple angles. Only approved biologists are allowed to handle, capture, or net bees if needed for identification, as described in the California Department of Fish and Wildlife’s 2023 Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species, or most recent version. b. Nest Avoidance. If an active Crotch’s bumble bee nest is detected within a work area, an avoidance buffer of 100 feet (30.5 meters) shall be established. The buffer may be reduced if determined by a qualified biologist that, based on bee behavior, a reduced buffer will not affect nesting individuals. Ground-disturbing activities shall avoid active nests during the Crotch’s bumble bee nesting period (February 1 through October 31), to the maximum extent feasible, or until the nest is determined to no longer be active by a qualified biologist. c. Consultation. If impacts cannot be feasibly avoided and construction could result in potential direct or indirect impacts to Crotch’s bumble bee and/or occupied habitats, SJAFCA shall consult with CDFW to ensure compliance with the California Endangered Species Act, which may include obtaining a “take” permit (e.g., CESA Section 2081 Incidental take Permit from CDFW).	FRR/MB (construction activities) and MB (operation and maintenance activities)	Conduct preconstruction nest surveys for the presence of Crotch’s bumble bee. Establish buffer of 100 feet (30.5 meters) if active nest is identified. Avoid identified nest during nesting period (February 1 through October 31) to the maximum extent feasible or until nest is determined to no longer be active. Consult with CDFW to ensure compliance with CESA if impacts cannot be feasibly avoided.	SJAFCA Qualified Biologist Contractor Qualified Biologist SJAFCA	30 days before initiation of ground disturbing activities that occur February 1 through October 31. If nest is identified in work area when conducting ground disturbing activities February 1 through October 31. Prior to indirect or direct impacts that cannot be feasibly avoided.	SJAFCA
Mitigation Measure 3.6-1c (FRR/RS/MB): During construction (FRR/RS/MB) and operational (MB) activities SJAFCA shall implement the measures included in the <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (USFWS 2017; see Appendix E to the Draft EIR) to reduce effects on valley elderberry longhorn beetle. The framework includes avoidance and minimization measures for shrubs that would not be transplanted within 50 meters of the proposed project, methodologies for transplanting of shrubs, and methodologies for compensatory mitigation guidance for removed habitat.	FRR/RS/MB	Implement measures included in the <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (USFWS 2017).	Contractor	During construction (FRR/RS/MB) and operational (MB) activities.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.6-1d (FRR/RS/MB): SJAFCA shall implement the following measures to reduce effects on nesting Swainson's hawks during construction (FRR/RS/MB) and O&M (MB) activities. a. Breeding Season Survey. If work occurs during the Swainson's hawk breeding season, SJAFCA would conduct a breeding season survey for nesting birds that would be conducted for all trees and shrubs that would be removed or disturbed that are located within 0.5 mile of construction activities, including grading. Swainson's hawk surveys would be completed during at least two of the following survey periods: January 1 to March 20; March 20 to April 5; April 5 to April 20; and June 10 to July 30, with no fewer than three surveys completed in at least two survey periods and with at least one of these surveys conducted no more than 48 hours from the initiation the proposed project activities to confirm the absence of nesting. If the biologist determines that the area surveyed does not contain any active nests, construction activities, including removal or pruning of trees and shrubs, could commence without any further mitigation. b. Active Nest Buffer. If active nests are found, a buffer of 0.25 mile shall be established until the nest is no longer active. A qualified biologist may propose a smaller distance from the nest subject to SJAFCA approval in coordination with CDFW. The purpose of the buffer shall be to avoid any take of nesting birds until the nest is no longer active (i.e., the young have fledged or the nest otherwise becomes inactive). The extent of an alternative buffer will depend on the level of noise or construction disturbance compared to ambient noise or other disturbances, line of sight, barriers, or development between the next and activities, and other site-specific circumstances. A qualified biologist shall be present on-site daily during construction activities within .025 mile of an active nest to ensure the buffer distance is adequate and the birds are not showing any signs of stress. If signs of stress that could cause nest abandonment are noted (such as defensive flights at intruders, getting up from a brooding position, or flying off the nest), construction activities shall cease until they can be resumed without signs of stress.	FRR/RS/MB (construction activities) and MB (operation and maintenance activities)	Conduct breeding season survey for the presence of Swainson's hawk active nests. Establish buffer of 0.25 mile if active nest is identified and maintain buffer until nest is determined to no longer be active.	SJAFCA Qualified Biologist Contractor Qualified Biologist	During at least two survey periods, no more than 48 hours from the initiation of project activities. If active nest is identified in work area.	SJAFCA
Mitigation Measure 3.6-1e (FRR/RS/MB): SJAFCA shall implement the following for construction (FRR/RS/MB) and O&M (MB) activities to reduce effects on riparian brush rabbit per USFWS guidance (USFWS, 2019): a. Pre-construction Surveys. Prior to the initiation of any ground-disturbing construction activities, an approved biologist shall conduct a reconnaissance-level survey to determine if any riparian brush rabbits occur within the proposed work areas. If any riparian brush rabbits are observed within the construction areas, construction shall only be allowed to commence when the observed riparian brush rabbit has exited the work area and at the discretion of the qualified biologist. b. Silt Fencing. Prior to initiation of any ground-disturbing construction activities, silt fencing shall be installed at the top of the waterside of the levee to prevent encroachment of construction personnel and equipment as well as minimize the potential for sedimentation to avoided riparian habitat and Oxbow Preserve. c. Exclusion Fencing. The boundary of the proposed project footprint shall be delineated with exclusionary fencing (silt fence with bottom buried) to prevent riparian brush rabbits from entering the site during construction. Only tightly woven netting or similar material shall be used for erosion control materials, such as coir rolls and geo-textiles, within or adjacent to suitable habitat of sensitive species. No plastic monofilament matting shall be used.	FRR/RS/MB	Conduct preconstruction nest surveys for the presence of riparian brush rabbit. Install silt fencing at the top of the waterside of the levee. Delineate exclusion fencing around the boundary of the proposed project footprint.	SJAFCA Qualified Biologist Contractor Qualified Biologist Contractor Qualified Biologist	Prior to the initiation of any ground-disturbing construction activities. Prior to the initiation of any ground-disturbing construction activities. Prior to construction activities.	SJAFCA
Mitigation Measure 3.6-1f (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on northwestern pond turtle for construction (FRR/RS/MB) and O&M (MB) activities: a. A qualified biologist shall conduct a pre-construction survey within 7 days before the start of project activities. If no northwestern pond turtles are observed, SJAFCA shall document that information for the file, and no additional measures would be required, except as described below for dewatering activities. b. Should any northwestern pond turtles be detected on land during the pre-construction survey, the qualified biologist shall identify the location using GPS coordinates. With prior CDFW approval, a qualified biologist may relocate any northwestern pond turtles found on land or in aquatic habitat within the construction footprint to suitable aquatic habitat at least 200 feet away from the construction footprint. c. If northwestern pond turtles are observed on land within the construction footprint during proposed project activities, work shall be stopped within approximately 200 feet of the turtle, and a qualified biologist shall be notified immediately. If possible, the turtle will be allowed to leave on its own and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the turtle is not harmed. Alternatively, with prior CDFW approval, the qualified biologist may capture and relocate the turtle unharmed to suitable habitat at least 200 feet outside the construction footprint. If a northwestern pond turtle nest is unintentionally uncovered during project activities, work shall be stopped within 200 feet of the nest and SJAFCA shall contact CDFW to determine the appropriate next steps.	FRR/RS/MB	Conduct preconstruction surveys for the presence of northwestern pond turtles. Identify the location of any northwestern pond turtles that are discovered and may relocate the species at least 200 feet away from the construction footprint. Stop work within approximately 200 feet of any northwestern pond turtles observed within the construction footprint and notify a qualified biologist.	SJAFCA Qualified Biologists. Qualified Biologists Contractor Qualified Biologists	Within 7 days before start of construction activities. During preconstruction survey. During construction activities	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.6-1g (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on burrowing owl for construction (FRR/RS/MB) and O&M (MB) activities: a. Prior to initiation of any excavation activities at borrow sites, SJAFCA shall conduct a pre-construction survey for burrowing owls in accordance with CDFW guidelines described in the Staff Report on Burrowing Owl Mitigation. If no burrowing owls are located during these surveys, then effects to burrowing owls would be less than significant and no mitigation would be required. b. If burrowing owls are located on or immediately adjacent to the site, then coordination would occur to determine the proper measures that would need to be implemented to ensure that burrowing owls are not impacted by the proposed project. Potential mitigation measures that could be implemented include: i. A qualified biologist shall conduct appropriate surveys at and around material source sites, to determine the presence/absence of burrowing owls. At least one survey shall be conducted no more than 1 week prior to the onset of any construction activity. ii. A 250-foot buffer, within which no new activity would be permissible, shall be maintained between the proposed project activities and nesting burrowing owls. This protected area shall remain in effect until August 31 or at the discretion of a qualified biologist, until the young owls are foraging independently. iii. No burrowing owls shall be evicted from burrows during the nesting season (February 1 through August 31). Eviction outside the nesting season could be permitted pending evaluation of eviction plans and receipt of formal written approval from CDFW authorizing the eviction.	FRR/RS/MB	Conduct preconstruction surveys for the presence of burrowing owl. Conduct coordination to determine the proper measures that would need to be implemented to avoid impacts to burrowing owl. Conduct surveys at and around material source sites to determine the presence/absence of burrowing owls. Maintain a 250-foot buffer between the proposed project activities and nesting burrowing owls.	SJAFCA Qualified Biologist SJAFCA Contractor Qualified Biologists Contractor Qualified Biologists	Prior to initiation of any excavation activities at borrow sites. During construction activities if burrowing owls are located on or immediately adjacent to the site. No more than 1 week prior to the onset of any construction activity. During construction activities, until August 31 or at the discretion of a qualified biologist.	SJAFCA
Mitigation Measure 3.6-1h (FRR/RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on breeding and migratory birds for construction (FRR/RS/MB) and O&M (MB) activities: a. Clearing and Grubbing. Tree and shrub removal and work in other areas scheduled for vegetation clearing, grading, or other construction or O&M activities shall not be conducted during the nesting season (generally February 15 through September 30, depending on the species and environmental conditions for any given year), when feasible. b. Pre-construction Surveys. Conduct surveys to locate any nest sites within proposed construction and O&M areas in the spring. Surveys shall be conducted by a qualified biologist using approved methods. If nests or young of these species are not located, construction may proceed. If nests or young are located, nest buffer requirements shall be implemented as described below. c. Active Nest Buffer. If nesting birds have been identified within or adjacent to the construction footprint, avoidance buffers shall be established of 500 feet for white-tailed kite, northern harrier, and loggerhead shrike; 300 feet for common raptors; 200 feet for heron or egret rookeries, and 100 feet for common passerines. Reduced buffers may be implemented if recommended by the monitoring biologist. Buffers shall be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. No construction activities shall occur within the buffer zone, which would be maintained until the young have fledged (as determined by a qualified biologist).	FRR/RS/MB	Conduct preconstruction surveys for the presence of nests. Establish avoidance buffers (distance based on species) if nesting birds have been identified within or adjacent to construction footprint.	SJAFCA Qualified Biologists Contractor Qualified Biologists	Prior to construction activities. During construction activities.	SJAFCA
Mitigation Measure 3.6-1i (FRR/RS/MB): In advance of tree and structure removal, a pre-construction survey for bats shall be conducted by a qualified biologist to characterize potential bat habitat and identify active roost sites within the proposed project area. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed, the following measures shall be implemented: a. Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, and outside of bat maternity roosting season (approximately April 15 – August 31) and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. b. If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the proposed project area where tree and structure removal is planned, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist. c. The qualified biologist shall be present during tree and structure removal if active bat roosts, which are not being used for maternity or hibernation purposes, are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for three days and when daytime temperatures are at least 50°F.	FRR/RS/MB	Conduct preconstruction surveys for the presence of bats. Remove trees and structures when bats are active (March 1 to April 15 and August 15 to October 15), and outside of bat maternity roosting season (April 15 – August 31) and outside of months of winter torpor (October 15 – February 28). Establish a no-disturbance buffer of 100 feet around active roost sites. Remove trees and structures with active roosts when no rain is occurring or is forecasted to occur for three days when daytime temperatures are at least 50°F. Follow two step process for removal of tress with active or potentially active roost sites.	SJAFCA Qualified Biologists Contractor Qualified Biologists Contractor Qualified Biologists Contractor Qualified Biologists Contractor Qualified Biologists	Prior to construction activities. During tree and structure removal activities. During tree and structure removal activities. During tree and structure removal activities. During tree and structure removal activities.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
d. Removal of trees with active or potentially active roost sites shall follow a two-step removal process: i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). e. Removal of structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, shall be dismantled under the supervision of the qualified biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. If deemed necessary by a qualified biologist, bat exclusion devises may be installed to prevent the re-entry of bats to a roost.		Remove structures containing or suspected to contain active bat roosts, which are not being used for maternity or hibernation purposes, in the evening and after bats have emerged from the roost to forage.	Contractor Qualified Biologists	During tree and structure removal activities.	
Mitigation Measure 3.6-1j (RS/MB): SJAFCA shall implement the following measures to avoid and minimize effects on special-status plants during restoration activities: a. Pre-construction Surveys. Qualified botanists shall survey the proposed project area to document the presence of special-status plants before project implementation and would conduct a floristic survey that follows the CDFW botanical survey guidelines (CDFW, 2018). All plant species observed would be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. To account for different special-status plant identification periods, one or more series of field surveys may be required in spring and summer. If any special-status plants are identified during the surveys, the botanist would photograph and map locations of the plants, document the location and extent of the special-status plant population on a CNDDB Survey Form and submit the completed Survey Form to the CNDDB. The amount of compensatory mitigation required would be based on the results of these surveys. b. Avoidance. If one or more special-status plants is identified in the proposed project area during pre-construction surveys, SJAFCA shall redesign or modify the proposed project components to avoid indirect or direct effects on special-status plants wherever feasible. If special-status plants cannot be avoided by redesigning proposed project components, implementation of mitigation would avoid significant effects on special-status plants. c. Preservation. If complete avoidance of special-status plants is not feasible, the effects of the proposed project on special-status plants would be compensated through off-site preservation at a one-to-one ratio or as negotiated with the resource agencies. Suitable habitat for affected special-status plant species would be purchased in a conservation area or established onsite and preserved and managed in perpetuity. Detailed information would be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity and the responsible parties. Other pertinent information also would be provided, to be determined through future coordination with the resource agencies.	RS/MB	Conduct preconstruction surveys for the presence of special-status plants and conduct a floristic survey. Redesign or modify the proposed project components to avoid indirect or direct effects on special-status plants wherever feasible. Compensate for the effects on special-status plants through off-site preservation at a one-to-one ratio or as negotiated with the resource agencies.	SJAFCA Qualified Botanists SJAFCA SJAFCA	Prior to construction activities. Following preconstruction surveys. Following construction activities.	SJAFCA
Mitigation Measure 3.6-2 (FRR/RS): SJAFCA shall conduct an aquatic resources delineation to identify potential wetlands and other waters that fall under state and federal jurisdiction within proposed project areas. During construction and O&M activities, design and or refinement of proposed project activities would be implemented to reduce impacts on sensitive habitat to the extent practicable. Refinements implemented to reduce the loss of riparian and wetland/waters habitat would include reducing the impact footprint, constructing on the landside of the levee to avoid impacts to riparian and wetland/waters habitat, and constructing within the existing disturbed areas of the existing levee. Where practicable, trees on the waterside slopes that are not dead and/or downed would be avoided and not impacted by rock slope protection efforts. Temporary and permanent impacts to riparian habitat and wetland/waters, that cannot be mitigated through avoidance, minimization, or remediation shall be mitigated to ensure no net loss through compensation, by restoring riparian and wetlands/waters habitat at one of the proposed ecosystem restoration sites or an approved offsite location, mitigation bank, or in-lieu fee program. Riparian and wetlands/waters habitat will not be restored where it would be removed by future maintenance activities. A revegetation plan would be prepared by a qualified biologist or landscape architect and reviewed by the appropriate agencies. The revegetation plan would specify the use of beneficial native plants appropriate for each area that provide a diverse variety of grasses and forbs that support native wildlife species.	FRR/RS	Conduct aquatic resources delineation to identify potential wetlands and other waters that fall under state and federal jurisdiction within proposed project areas. Compensate for identified unavoidable impacts to riparian habitat and wetlands/waters to ensure no net loss, where impacts cannot be avoided, minimized, or remediated. Prepare a revegetation plan and submit for review and approval by the appropriate agencies.	SJAFCA Qualified Biologist SJAFCA SJAFCA	Prior to final design and before construction. Following construction activities. Following construction activities.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.6-5 (FRR/RS/MB): In the City of Stockton, SJAFCA shall submit an application for a heritage tree removal permit for any oaks that will be removed that meet Stockton Municipal Code size requirements. SJAFCA shall replace heritage trees removed per the requirements of the municipal code on a 3:1 basis with each replacement tree being of at least 15-gallon container size. SJAFCA shall comply with any other applicable local code regarding tree removal.	FRR/RS/MB FRR/RS/MB	Submit an application for a heritage tree removal permit for any heritage trees meeting the Stockton Municipal Code size requirements that will be removed to accommodate proposed project construction. Replace heritage trees removed per the requirements of the Municipal Code on a 3:1 basis with each replacement tree being of at least 15-gallon container size.	SJAFCA SJAFCA	Prior to removing any heritage trees that meet the Stockton Municipal Code size requirements. Following heritage tree removal consistent with applicable Stockton Municipal Code tree replacement requirements.	SJAFCA
3.7 Cultural Resources					
Mitigation Measure 3.7-1 (FRR/MB): Before implementation of the proposed project, SJAFCA shall, in consultation with a qualified archaeologist and architectural historian, defined as those meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and Architectural History, and California Native American Tribes culturally and geographically affiliated with the proposed project area, develop and implement a Cultural Resources Management Plan (CRMP) for the proposed project. The CRMP shall be submitted to the CHRIS upon SJAFCA approval, and shall require the following: • A cultural resources survey and associated documentation for those portions of the proposed project area not covered by the pedestrian survey conducted to date. • An evaluation of any cultural resources identified in the proposed project area during the supplemental survey for California Register-eligibility (i.e., as qualifying as historical resources, as defined in CEQA Guidelines Section 15064.5) as well as whether they qualify as archaeological resources, pursuant to CEQA Guidelines Section 15064.5. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, consultation with relevant California Native American Tribes (for indigenous resources), or archival research. The evaluation should also include any cultural resources previously recorded in the proposed project area that have not been previously evaluated for California Register-eligibility (e.g., P-39-005084). • An assessment of potential proposed project impacts on any cultural resources identified in the proposed project area that qualify as historical resources (per CEQA Guidelines Section 15064.5) and/or archaeological resources (per CEQA Guidelines Section 15064.5). This shall include an analysis of whether the proposed project's potential impacts would materially alter a resource's physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register. • A technical report documenting the cultural resources survey, evaluations of California Register-eligibility, and assessment of potential proposed project impacts on cultural resources meeting U.S. Secretary of the Interior's Standards for cultural resources technical reporting. This report shall be submitted to the CHRIS upon SJAFCA approval. The CRMP shall also include and require implementation of the following: • Methods and procedures associated with protective measures to avoid impacts on archaeological resources P-39-000006 and P-39-000014/000141 during proposed project construction required under Mitigation Measure 3.7-2(b). • Methods and procedures associated with the cultural resources awareness and sensitivity training required under Mitigation Measure 3.7-2(c). • The protocol for the monitoring and reporting of unanticipated discoveries shall follow the methods and procedures described in the Archaeological and Tribal Monitoring Plan portion of the CRMP required in Mitigation Measures 3.7-2(d), Mitigation Measures 3.7-2(e) and 3.7-2(f).	FRR/MB	Develop and implement a Cultural Resources Management Plan (CRMP). To identify and evaluate cultural resources potentially impacted by implementation of the proposed project. Document methods and procedures to protect identified cultural and tribal cultural resources, along with protocol for monitoring and reporting unanticipated discoveries in the CRMP. Submit the CRMP to the CHRIS.	SJAFCA Qualified Archaeologists and Architectural Historian that meet the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and Architectural History California Native American Tribes culturally and geographically affiliated with the proposed project area	Before conducting any ground disturbing activities.	SJAFCA
Mitigation Measure 3.7-2b (FRR): Prior to construction activities, a membrane shall be placed over the recorded site boundaries of P-39-000006 and -39-000014/000141 with a 50-foot buffer. A thin (3 to 6-inch-thick) layer of imported gravel and/or sediment shall then be placed over the membrane to cover the entire site boundary and buffer. The sediment and membrane shall be maintained throughout proposed project construction to ensure that the resource boundaries are not impacted by the proposed project. At the conclusion of proposed project construction, the imported gravel and/or sediment and membrane shall be carefully removed to avoid disturbance to the original ground surface at the resources' boundaries. The placement, maintenance, and removal of the membrane and imported gravel and/or sediment shall be subject to the cultural resources monitoring required under Mitigation Measure 3.7-2(d).	FRR	Place a membrane over the recorded site boundaries of P-39-000006 and -39-000014/000141; add a3 to 6-inch-thick layer of imported gravel and/or sediment over the membrane to cover the entire site boundary and a 50-foot buffer. Maintain the sediment and membrane. Remove imported gravel and/or sediment and membrane shall be carefully removed to avoid disturbance to the original ground surface at the resources' boundaries. Monitor activities consistent with Mitigation Measure 3.7-2(d).	Contractor Contractor Contractor See Mitigation Measure 3.7-2(d).	Prior construction activities. During construction activities. Following completion of construction activities. See Mitigation Measure 3.7-2(d).	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.7-2c (FRR/RS/MB): Before implementation of the proposed project, SJAFCA shall, in consultation with a qualified archaeologist, defined as those meeting the U.S. Secretary of the Interior’s Professional Qualifications Standards for Archeology, and California Native American Tribes culturally and geographically affiliated with the proposed project area, develop a Cultural Resources Awareness and Sensitivity Training Program for all construction and field workers involved in proposed project ground-disturbing activities. The program shall include a presentation that covers, at a minimum, the types of cultural resources common to the area, regulatory protections for cultural resources, and the protocol for unanticipated discovery of archaeological resources, submerged cultural resources, and human remains required under Mitigation Measures 3.7-2(e) to 3.7-2(f). Personnel working in areas of proposed project ground-disturbing activities shall receive the training prior to working in these areas. Written materials associated with the program shall be provided to proposed project personnel as appropriate. Documentation of the training attendance shall be maintained by SJAFCA.	FRR/RS/MB	Develop a Cultural Resources Awareness and Sensitivity Training Program for all construction and field workers involved in proposed project ground-disturbing activities.	SJAFCA Qualified Archaeologist California Native American Tribe culturally and geographically affiliated with the proposed project area	Prior to construction activities.	SJAFCA
Mitigation Measure 3.7-2d (FRR/RS/MB): An archaeologist meeting, or supervised by an archaeologist meeting, the Secretary of the Interior’s Professional Qualifications Standards for Archeology, in addition a representative from a California Native American Tribe culturally and geographically affiliated with the proposed project area, shall be invited to conduct construction monitoring for all proposed project ground-disturbing construction activities in culturally designated areas. The conduct and work of any Tribal Monitor shall be consistent with the NAHC <i>Guidelines for Native American Monitors/Consultants</i> (NAHC 2005). The methods and procedures for the monitoring shall follow those presented in the ATPM portion of the CRMP, including unanticipated discovery and reporting protocol. Monitoring may be concluded upon mutual agreement between SJAFCA, the archaeologist, and the California Native American Tribe.	FRR/RS/MB	Invite an archaeologist and a representative from a California Native American Tribe to conduct construction monitoring for all proposed project ground-disturbing construction activities in culturally designated areas.	SJAFCA Archaeologist California Native American Tribe culturally and geographically affiliated with the proposed project area	During construction activities.	SJAFCA
Mitigation Measure 3.7-2e (FRR/RS/MB): If archaeological resources are encountered during proposed project construction, all construction activities within 100 feet shall halt, and a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior’s Professional Qualifications Standards for Archeology, shall inspect the find within 24 hours of discovery and notify SJAFCA of their initial assessment. Indigenous archaeological materials might include: obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include: building or structure footings and walls; and deposits of metal, glass, and/or ceramic refuse. If SJAFCA, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated with proposed project area (if the resource is indigenous), determines that the resource may qualify as a historical resource or unique archaeological resource (pursuant to CEQA Guidelines Section 15064.5), or a tribal cultural resource (as defined in PRC Section 21074), the resource shall be avoided, if feasible. Consistent with CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through: planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance of the resource is not feasible, SJAFCA shall continue to consult with California Native American Tribes that are traditionally and culturally affiliated with the proposed project area (if the resource is indigenous) and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2 and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3). Any technical report developed to document the implementation mitigation shall be submitted to the CHRIS upon SJAFCA approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the CHRIS, in which case, the report shall be submitted to the NAHC.	FRR/RS/MB	Halt construction activities within 100 feet if an archaeological resource is encountered. A qualified archaeologist shall inspect the find and notify SJAFCA of their initial assessment. Avoid potentially significant archaeological and/or tribal cultural resources whenever feasible. If avoidance is not feasible, consult with California Native American Tribes that are traditionally and culturally affiliated with the proposed project area. Develop technical report documenting mitigation and submit to CHRIS or to the NAHC, as appropriate.	Contractor Qualified Archaeologists SJAFCA Qualified Archaeologists California Native American Tribes that are traditionally and culturally affiliated with proposed project area SJAFCA Contractor Qualified Archaeologists SJAFCA	During construction activities. Within 24 hours of discovery. During construction activities. During construction activities.	SJAFCA
Mitigation Measure 3.7-2f (FRR/RS/MB): If a shipwreck, and associated artifacts, or other cultural resource on or in the tide and submerged lands of California is encountered during proposed project construction or operation, Mitigation Measure 3.7-2(e) shall be implemented, in addition to the following measures: • SJAFCA shall initiate consultation with CSLC staff within two business days of the discovery. • Per PRC Section 6313(c), any submerged cultural resource remaining in state waters for more than 50 years shall be presumed to be archaeologically or historically significant. • If the find is a maritime archaeological resource, the qualified archaeologist assessing the find shall have expertise in maritime archaeology.	FRR/RS/MB	If a shipwreck, and associated artifacts, or other cultural resource on or in the tide and submerged lands of California is encountered, initiate consultation with CSLC. Consult with the CSLC regarding assessment of the find and development of any treatment measures to minimize or mitigate potential impacts on the resource. Prepare a treatment plan to document the treatment measures and their implementation methods. Submit to the CSLC any report prepared for the resource.	SJAFCA	During construction and O&M activities, within two business days of the discovery. During construction and O&M activities. During construction and O&M activities. During construction and O&M activities.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
- SJAFCA shall consult with the CSLC regarding assessment of the find and development of any treatment measures to minimize or mitigate potential impacts on the resource, pursuant to PRC Section 21083.2 and CEQA Guidelines Section 15126.4. Treatment measures would typically consist of (but would not necessarily be limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be affected by the proposed project. SJAFCA shall prepare a treatment plan to document the treatment measures and their implementation methods. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. Any treatment measures implemented shall be documented in a professional-level technical report (e.g., archaeological testing results report, archaeological data recovery report, ethnographic report) authored by a qualified archaeologist, to be filed with the CHRIS. Proposed project construction work at the location of the find may commence upon completion of the approved treatment and authorization by SJAFCA. Work may proceed in other parts of the proposed project area while the mitigation is being carried out. - SJAFCA shall submit to the CSLC any report prepared for the resource as part of the assessment of the find and implementation of treatment measures to minimize or mitigate potential impacts.					
Mitigation Measure 3.7-3b (FRR/RS/MB): In the event of discovery of any human remains during proposed project-related construction activities, such activities within 100 feet of the find shall cease until the San Joaquin County Coroner has been contacted to determine that no investigation of the cause of death is required. If the Coroner determines that the remains are not modern and are Native American in origin, the NAHC shall be contacted within 24 hours of the Coroner's determination. The NAHC shall then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American; the MLD shall then make recommendations to SJAFCA for the appropriate means of treating the human remains and any grave goods. Per PRC Section 5097.98, SJAFCA shall ensure that the immediate vicinity of the location of the human remains is not damaged or disturbed by further development activity until SJAFCA has discussed and conferred with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. Any technical report developed to document the implementation mitigation shall be submitted to the CHRIS and NAHC upon SJAFCA approval, unless the document contains information that California Native American Tribes involved in the development of the mitigation deem should not be filed with the CHRIS, in which case, the report shall be submitted only to the NAHC.	FRR/RS/MB	Halt construction activities within 100 feet of the discovery of any human remains and contact San Joaquin County Coroner. If the Coroner determines that the remains are not modern and are Native American in origin, contact the NAHC. Any technical report developed to document the implementation mitigation shall be submitted to the CHRIS and NAHC, as appropriate.	Contractor SJAFCA SJAFCA Qualified Archeologist Most Likely Descendant from deceased Native American	During construction activities. Within 24 hours of Coroner's determination. During or following construction activities.	SJAFCA
3.9 Geology, Soils, and Mineral Resources					
Mitigation Measure 3.9-1a (FRR/RS/MB): Prior to the start of any ground-disturbing activities, a Qualified Paleontologist shall conduct pre-construction worker paleontological resources sensitivity training. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreperson or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present.	FRR/RS/MB	Conduct pre-construction worker paleontological resources sensitivity training.	Contractor Qualified Paleontologist	Prior to the start of any ground-disturbing activities.	SJAFCA
Mitigation Measure 3.9-1b (FRR/RS/MB): If a paleontological resource is discovered during construction, a Qualified Paleontologist or paleontological monitor shall be contacted and empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the University of California Museum of Paleontology at Berkeley, if such an institution agrees to accept the fossils. If no institution accepts fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, photographs, and a technical report shall also be filed at the repository and/or school.	FRR/RS/MB	Contact Qualified Paleontologist or paleontological monitor who will establish a buffer and temporarily divert or redirect grading and excavation activities to facilitate evaluation of the discovery. Prepare collected fossils to a point of identification and catalogued and submitted to a final repository.	Contractor SJAFCA Qualified Paleontologist or Paleontological Monitor SJAFCA Qualified Paleontologist	During construction activities. During or following construction activities.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.9-1c (FRR/RS/MB): A Qualified Paleontologist shall select paleontological monitors meeting the Society for Vertebrate Paleontology standards (SVP 2010) who shall be present during all excavations in the Modesto Formation or in areas with high potential to encounter paleontological resources (e.g., excavation depths over five feet in previously undisturbed deposits). Depending on the conditions encountered, full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist may spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Monitoring activities shall be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction.	FRR/RS/MB	Select paleontological monitors to be present during all excavations in the Modesto Formation or in areas with high potential to encounter paleontological resources.	SJAFCA Qualified Paleontologist Paleontological Monitor	During construction activities located in the Modesto Formation or in areas with high potential to encounter paleontological resources.	SJAFCA
3.10 Greenhouse Gas Emissions					
Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.4-1.	FRR/RS/MB	See Mitigation Measure 3.4-1.	See Mitigation Measure 3.4-1.	See Mitigation Measure 3.4-1.	See Mitigation Measure 3.4-1.
3.11 Hazards and Hazardous Materials					
Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.17-1.	FRR/RS/MB	See Mitigation Measure 3.4-1.	See Mitigation Measure 3.17-1.	See Mitigation Measure 3.17-1.	See Mitigation Measure 3.17-1.
3.12 Hydrology and Water Quality					
Mitigation Measure 3.12-1 (FRR): Prior to the start of construction and before activities that involve the use of bentonite materials, the contractor in coordination with SJAFCA shall develop and implement a Bentonite Slurry Spill Contingency Plan (BSSCP), or frac-out plan, to minimize the potential for a frac-out associated with excavation and tunneling activities, provide for timely detection of frac-outs, and ensure a “minimum-effect” response in the event of a frac-out and release of excavation fluid. The BSSCP shall identify sensitive areas such as wetlands and streams, map bore paths to avoid sensitive areas, and evaluate soil and weather conditions that could increase spill risks. The BSSCP shall also describe protocols for continuous visual checks and pressure monitoring systems to identify a loss of circulation. The BSSCP shall describe response actions such as stopping drilling, deploying containment measures like sandbags or silt fences, and recovering slurry using pumps or vacuum trucks to avoid any impacts to sensitive areas if a spill occurs.	FRR	Develop and implement a Bentonite Slurry Spill Contingency Plan (BSSCP), or frac-out plan.	SJAFCA Contractor	Prior to construction activities that involve use of bentonite materials.	SJAFCA
3.14 Noise and Vibration					
Mitigation Measure 3.14-1 (FRR/RS/MB): SJAFCA shall require its contractors to implement the measures below, as a condition of contract, to avoid and minimize temporary and short-term construction noise effects on sensitive receptors. These measures shall be implemented during construction, particularly when construction occurs during the nighttime (10:00 p.m. to 7:00 a.m.) and is within 90 feet of a sensitive receptor in unincorporated San Joaquin County or city of Lathrop, to avoid and minimize temporary and short-term construction noise effects on sensitive receptors: a. All construction equipment shall be equipped with noise-reduction devices, such as mufflers, to minimize construction noise, and all internal combustion engines shall be equipped with exhaust and intake silencers, in accordance with manufacturers’ specifications. c. The use of bells, whistles, alarms, and horns shall be restricted to safety warning purposes only. d. Noise-reducing enclosures shall be used around stationary noise-generating equipment (e.g., compressors and generators at slurry pond locations). e. Mobile and fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes will be located at the most distant point feasible from noise-sensitive receptors. f. When noise-sensitive uses are located within 450 feet of and subject to prolonged construction noise, noise attenuating buffers, such as structures, truck trailers, or soil piles, shall be located between noise generation sources and sensitive receptors. g. Contractors shall properly maintain all heavy trucks and will equip them with noise-control devices (e.g., mufflers), in accordance with manufacturers’ specifications, at each work site during project construction to minimize construction traffic noise effects on sensitive receptors. h. Before haul truck trips are initiated during a construction season on roads within 500 feet of residences located along haul routes, written notification will be provided to the potentially affected residents identifying the hours and frequency of haul truck trips. Notification materials will include contact information for a designated noise disturbance coordinator and also will identify a mechanism for residents to register complaints with the appropriate jurisdiction if haul truck noise levels are overly intrusive or occur outside the exempt daytime hours for the applicable jurisdiction. i. Queuing locations for haul trucks shall be designated at locations at least 500 feet from noise-sensitive receptors.	FRR/RS/MB	Equip construction equipment with noise-reduction devices; restrict the use of bells, whistles, alarms, and horns to safety purposes; use noise-reducing enclosures around stationary equipment; locate equipment, staging areas, and haul routes as far as feasible from noise-sensitive receptors; install temporary noise attenuation buffers where construction occurs near sensitive receptors; properly maintain trucks and equip them with noise-control devices; provide advance notification to nearby residents of haul truck activity and a complaint mechanism; and designate haul truck queuing areas away from sensitive receptors.	SJAFCA Contractor	During construction activities and particularly when construction occurs during the nighttime (10:00 p.m. to 7:00 a.m.) and is within 90 feet of a sensitive receptor in unincorporated San Joaquin County or city of Lathrop.	SJAFCA

Mitigation Measure	Component(s)	Action(s)	Implementing Party	Timing	Monitoring and Reporting Party
Mitigation Measure 3.14-2 (FRR/MB): Contractors shall implement the following measures at work sites within 90 feet of sensitive receptors during project construction to avoid and minimize the effects of temporary and short-term construction-related groundborne vibration on sensitive receptors. - Equipment shall be operated as far away as practical from vibration-sensitive receptors. - Contractors, as a condition of contract, shall limit compaction activities to the hours of 8:00 a.m. to 6:00 p.m. when work is within 90 feet of a sensitive land use. - Where practicable, contractors shall use smaller vibratory rollers to minimize vibration levels during compaction activities where needed to meet vibration standards.	FRR/MB	Operate equipment as far away as practical from vibration - sensitive receptors. For work that is within 90 feet of a sensitive receptor, limit compaction activities to the hours of 8:00 a.m. to 6:00 p.m. Use smaller vibratory rollers, where practical.	Contractor	During construction activities.	SJAFCA
3.17 Transportation and Circulation					
Mitigation Measure 3.17-1 (FRR/RS/MB): SJAFCA shall require that contractors prepare and implement a construction traffic management plan to manage traffic flow during construction, reduce potential interference with local emergency response plans, reduce potential traffic safety hazards, and ensure adequate access for emergency responders. Development and implementation of this plan shall be coordinated with local agencies with jurisdiction over affected roadways, and/or the construction contractor(s) shall ensure that the plan is implemented during construction. The plan may include but not be limited to the following measures: - Identify construction truck haul routes and timing to limit conflicts between truck and automobile traffic on nearby roads. The identified routes will be designed to minimize impacts on vehicular, bicycle, and pedestrian traffic, circulation, and safety. - Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs, lane closure procedures, and traffic cones for drivers indicating potential road hazards or detours. - Coordinate construction activities to ensure that one lane of traffic in each direction remains open at all times, unless flaggers or temporary traffic controls are in place, to provide emergency access. - Evaluate the need to provide flaggers or temporary traffic control at project driveways and entries to staging areas. - Notify affected adjacent property owners and public safety personnel regarding the timing of major deliveries, detours, and lane closures. - Develop a process for responding to and tracking issues pertaining to construction activity impacts on traffic, including identification of an on-site traffic manager. Post 24-hour contact information for the traffic manager on all construction sites. - Document road pavement conditions for all routes that would be used by construction vehicles before and after proposed project construction. Make provisions to monitor the condition of roads used for haul routes so that any damage or debris attributable to haul trucks can be identified and corrected. Roads damaged by construction vehicles shall be repaired to their pre-construction condition.	FRR/RS/MB	Prepare and implement a construction traffic management plan.	Contractor	Prior to and during construction activities.	SJAFCA
3.18 Tribal Cultural Resources					
Mitigation Measures (FRR/RS/MB): Implement Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).	FRR/RS/MB	See Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).	See Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).	See Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).	See Mitigation Measures 3.7-1, 3.7-2(b) through (f), and 3.7-3(b).
3.20 Wildfire					
Mitigation Measure (FRR/RS/MB): Implement Mitigation Measure 3.17-1.	FRR/RS/MB	See Mitigation Measure 3.17-1.	See Mitigation Measure 3.17-1.	See Mitigation Measure 3.17-1.	See Mitigation Measure 3.17-1.
NOTES: 1. This BMP for idling specifically applies to diesel-powered equipment. Non-diesel vehicles are not required to limit idling time. 2. This BMP specifically applies to diesel-powered equipment.					