

### Appendix C - Mitigation, Monitoring, and Reporting Program (MMRP)

Mitigation No.	Mitigation Measure	Monitoring and Reporting Actions	Implementation Schedule				Implementing Entity	Monitoring Entity
			Design	Pre-Const	Construction	Post-Const		
<b>Biological Resources</b>								
1	<b>Construction Hours.</b> Ground disturbing activities shall occur only during daylight hours.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X				Contractor	ACRCD and/or it's contractor
2	<b>Vegetation Disturbance.</b> Vegetation disturbance will be limited to the trees identified in the project plan. All impacts to trees will be mitigated through replanting of in-kind native plant species. The tree replacement mitigation rate of 3:1 for trees lost less than 4 inches in diameter at breast height (dbh) and 9:1 for trees greater than 4:1 dbh	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Ensure vegetation disturbance is limited to identified trees using flagging and on-site construction monitoring.</li> <li>Conduct post-construction monitoring to ensure success of planted tree species for mitigation.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X		X		Contractor	ACRCD and/or it's contractor
3	<b>No Plastic mono-filament matting.</b> No plastic mono-filament erosion control matting shall be used for erosion control.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X		X		Contractor	ACRCD and/or it's contractor
4	<b>Sediment Removal.</b> Sediment removed during the stream restoration activities will not be placed where it can enter into waters of the state as per Fish and Game Code 5650.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X		X		Contractor	ACRCD and/or it's contractor
5	<b>Capping structures.</b> All construction pipes, culverts, or similar structures that are stored in the project area for one or more overnight periods shall be securely capped prior to storage or thoroughly inspected for animals if the pipe is subsequently buried, capped, or otherwise used or moved in any way.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct environmental training for on-site construction personnel.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X	X	X		Contractor	ACRCD and/or it's contractor
6	<b>Escape Ramps.</b> All steep-walled trenches and/or holes deeper than 6-inches shall be covered at night or an escape ramp shall be placed in them to facilitate escape by any wildlife that may fall into the excavated area. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle of no greater than 30 degrees. Trenches and holes shall be checked every morning prior to construction activity. If a listed species is present in the trench or hole, a qualified biologist shall be notified immediately and no construction activity shall take place within 100 feet of the site until the animal is relocated.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct environmental training for on-site construction personnel.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X	X	X		Contractor	ACRCD and/or it's contractor
7	<b>Cavity/Tree Nesting/Breeding Bird Surveys.</b> No more than two weeks prior to the initiation of tree removals or pruning, grading or other construction activities scheduled during the nesting/breeding season of protected raptors and migratory birds (February 15 to August 30) a survey will be conducted by a qualified biologist for nesting bird activity. If nesting birds are found within the area, a 50 foot buffer from passerines and 300 foot buffer from raptors will be implemented unless another buffer is authorized by the US Fish and Wildlife Service and/or the Department of Fish and Wildlife.	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct habitat assessment for nesting/breeding bird habitat. Conduct pre-construction surveys for signs of nesting/breeding bird activity.</li> </ol>	X		X		Qualified biologist, Contractor	ACRCD and/or it's contractor

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8	<p><b>Bat Surveys.</b> Trimming or removal of trees is required within the project area. No more than 30 days before removal, all trees subject to the impact will be surveyed for potential roost habitat (cavities, crevices) by a qualified biologist. If roosting bats are identified, tree/limb removal must occur during March 1 to April 15 or August 15 to October 15 unless otherwise authorized by the US Fish and Wildlife Service and/or the Department of Fish and Wildlife.</p>	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct habitat assessment for bat roosting habitat. Conduct pre-construction surveys for signs of bat activity.</li> </ol>	X		X		Qualified biologist, Contractor	ACRCD and/or it's contractor
9	<p><b>Equipment Staging and Storage.</b> Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away from the stream prior to refueling and lubrication. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the release of petroleum materials into waters of the state in accordance with Fish and Game Code 5650.</p>	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X			X	Contractor	ACRCD and/or it's contractor
10	<p><b>Dewatering Activities.</b> If dewatering activities are required, water will be diverted by installation of a temporary barrier. All water above the barrier will be diverted downstream at an appropriate rate to maintain downstream flows during construction. A qualified biologist, with all necessary State permits shall relocate fish, amphibians and other native aquatic species within the project site. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Adequate water depth and channel width will be maintained at all times to allow for fish passage. When construction is completed, the barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance possible to the substrate.</p>	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct environmental training for on-site construction personnel.</li> <li>Conduct habitat assessment for amphibian, fish and other aquatic species habitat. Conduct pre-construction surveys for signs of aquatic species activity. Conduct relocation efforts prior to construction.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X		X	X	Contractor	ACRCD and/or it's contractor
11	<p><b>Use of Herbicides.</b> Use of herbicides to address non-native plant species will occur according to labeled directions and local, State, and Federal regulations and guidelines. Activities shall be limited to the dry period of the year and shall be restricted to periods of low rainfall (less than ¼" per 24 hour period), time periods with less than a 30% chance of rain, or dry weather periods. If rain is predicted based on the above criteria, within 72 hours during project activity, all activities shall cease until no further rain is forecast.</p>	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X			X	Contractor	ACRCD and/or it's contractor
	<p><b>Implement Avoidance and Minimization Measures for Potential Impacts to California red-legged frog and other amphibian species</b></p> <p>a. Restoration activities s will take place between August 31-October 31 (or the first rainfall of the season depositing more than 0.25 inch).</p> <p>b. A qualified biologist shall survey the work site immediately prior to construction activities. If red-legged frogs adults, larvae, or eggs are found, the qualified biologist will determine if moving any of these life-stages is appropriate. In making this determination the qualified biologist shall consider if an appropriate relocation site exists. The qualified biologist shall be allowed sufficient time to move red-legged frogs from the work site before work activities begin.</p>	<ol style="list-style-type: none"> <li>Incorporate appropriate language into Contract Documents.</li> <li>Conduct habitat assessment for California red-legged frog species habitat. Conduct pre-construction surveys. Conduct relocation efforts prior to and during construction if necessary.</li> <li>Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</li> </ol>	X		X	X	Qualified biologist, Contractor	ACRCD and/or it's contractor

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12	<p>c. Bare hands shall be used to capture red-legged frogs. Qualified biologists will not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within two hours before and during periods when they are capturing and relocating individuals. To avoid transferring disease or pathogens of handling of the amphibians, qualified biologists will follow the Declining Amphibian Populations Task Force's "Code of Practice."</p> <p>d. Only qualified biologists will capture, handle, and relocate red-legged frogs.</p> <p>e. A qualified biologist shall be present on site during all grading, dewatering, tree removal, in-stream construction activities, and relocation of red-legged frogs. After instruction of project personnel, relocation of red-legged frogs, and the activities listed above have been completed, the qualified biologist shall designate a person to monitor on-site compliance. The qualified biologist shall ensure that this individual receives the appropriate training and is competent in the identification of red-legged frogs.</p> <p>f. To address the removal of the outlet pool at MP 8.60 to regrade and improve passage for steelhead the proposed action plan includes creation of 7 step pools, totalling 1,120 cubic feet of water. Impacts to the loss of the outlet pool volume will be fully mitigated through the replacement step-pool morphology. The potential impacts to the California red-legged frog will require consultation with the United States Fish and Wildlife Service. A biological assessment will be completed and appropriate avoidance and minimization measures during construction will be identified.</p>	<p>4. Ensure mitigation measures to address pool volume changes are implemented. Conduct 10 year monitoring to meet permit requirements.</p>			X	X		
13	<p><b>Implement Avoidance and Minimization Measures for Potential Impacts to Alameda whipsnake and other snakes.</b></p> <p>a. No plastic mono-filament erosion control matting will be used for erosion control</p> <p>b. Disturbance shall only take place between June 15- October 31, when the whipsnake is more active and less likely to be impacted.</p>	<p>1. Incorporate appropriate language into Contract Documents.</p> <p>2. Conduct habitat assessment for Alameda whipsnake species habitat. Conduct pre-construction surveys. Conduct relocation efforts prior to and during construction if necessary.</p> <p>3. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</p>	X		X	X	Contractor	ACRCD and/or it's contractor
14	<p><b>Implement Avoidance and Minimization Measures for Potential Impacts to the San Francisco Dusky Footed Woodrat.</b></p> <p>Preconstruction surveys will be conducted by a qualified biologist for projects that occur within woodrat habitat for the presence of middens. If middens are found within the breeding season (December 1 to August 31) exclusion fence will be installed to protect the middens from construction activities.</p>	<p>1. Incorporate appropriate language into Contract Documents.</p> <p>2. Conduct habitat assessment for San Francisco Dusky footed woodrat species habitat. Conduct pre-construction surveys. Conduct relocation efforts prior to and during construction if necessary.</p> <p>3. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action if necessary.</p>	X		X	X	Qualified biologist, Contractor	ACRCD and/or it's contractor
<b>Noise</b>								
15	<p><b>Construction Hours.</b></p> <p>Construction activities will not take place before seven a.m. or after seven p.m. on any day except Saturday or Sunday, or before eight a.m. or after five p.m. on Saturday or Sunday. The construction contractor will comply with regulating construction noise to the extent feasible and undertake efforts to minimize noise disruption to nearby neighbors and sensitive receptors during construction. Construction activities will be limited to the time frame defined in the Alameda County Noise Ordinance (6.60.070 – Special Provisions or Exceptions – Paragraphs D and E)</p>	<p>1. Provide advance notification of construction, including name and phone number of Communications person responsible for addressing noise complaints. Post same information at construction sites.</p> <p>2. Monitor to ensure that the contractor implements measures in contract documents, report noncompliance, and ensure corrective action. Ensure that contractor implements corrective actions in response to noise complaints and document resolution (i.e., effectiveness of corrective action).</p>		X			Contractor	