

Appendix D

# Mitigation Monitoring Plan



## Appendix D

# Mitigation Monitoring Plan

Table D-1 contains the project's proposed mitigation monitoring plan. In accordance with CEQA (Pub. Res. Code sec. 21081.6) and the State CEQA Guidelines (sec. 15091[d] and 15097), this plan identifies those mitigation measures from the EIR that are recommended for adoption by the City of Chico to ensure that potential significant environmental impacts of the proposed project are avoided or mitigated to a less-than-significant level. For each mitigation measure, Table D-1 identifies the party responsible for implementing the mitigation measure, the timing for implementing the measure, how the measure will be monitored, and the standards that can be used to determine the success of the measure.



**Table D-1. Draft Mitigation Monitoring Program**

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
<b>Recommended Mitigation Measures this EIR</b>				
<b>Chapter 3. Noise</b>				
NZ-2a: Employ Noise-Reduction Construction Measures	City of Chico (City) or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Compliance with Caltrans standard specifications for Sound Control Requirements and the City's noise ordinance
<b>Chapter 4. Air Quality</b>				
AIR-1a: Implement Measures from Butte County Air Quality Management District's (BCAQMD) CEQA Air Quality Handbook	City or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Compliance with BCAQMD's standards for construction emissions
<b>Chapter 5. Biological Resources</b>				
BIO-1a: Conduct a Biological Resources Education Program for Construction Crews and Enforce Construction Restrictions	Qualified biologist	Prior to construction	City approval of education of education program, monitoring of administration of program, and periodic inspections during construction by the City and biological monitor to ensure implementation of construction restrictions and guidelines by contractors	Adherence by construction contractor to construction restrictions and guidelines
BIO-1b: Install Construction Barrier Fencing to Protect Sensitive Biological Resources Adjacent to the Construction Zone	City or Caltrans or designated contractor	Prior to construction	Periodic site inspections by the City and biological monitor	Installation of fencing around construction area so as to avoid removal or disturbance of sensitive biological resources that are outside of the construction zone
BIO-1c: Retain a Biological Monitor	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspections when construction activities occur in and adjacent to environmentally sensitive areas	Adherence to all adopted biological resources mitigation measures
BIO-1d: Minimize Loss of Trees	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspections by the City and biological monitor	Adherence to specific actions identified in this mitigation measure

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
BIO-1e: Compensate for Loss of Riparian Habitat	City	Prior to construction as part of Section 404 nationwide (NWP) permit	Corps will issue permit upon evidence of purchase of required mitigation credits	Issuance of NWP by Corps
BIO-2a: Compensate for Loss of Fresh Emergent Wetland	City	Prior to construction as part of Section 404 nationwide (NWP) permit	Corps will issue permit upon evidence of purchase of required mitigation credits	Issuance of NWP by U.S. Army Corps of Engineers (Corps)
BIO-3a: Compensate for Loss of Vernal Pool, Vernal Swale, and Seasonal Wetland	City	Prior to construction as part of Section 404 nationwide (NWP) permit	Corps will issue permit upon evidence of purchase of required mitigation credits	Issuance of NWP by Corps
BIO-4a: Compensate for Temporary and Permanent Loss of Seasonal Drainage	City	Prior to construction as part of Section 404 nationwide (NWP) permit	Corps will issue permit upon evidence of purchase of required mitigation credits	Issuance of NWP by Corps
BIO-5a: Compensate for Loss of Butte County Meadowfoam (BCM) and Its Habitat	City	Prior to construction	City to monitor compliance with U.S. Fish and Wildlife Service (USFWS) biological opinion (BO) , dated February 3, 2009	Approval of management plan by City for Bidwell Ranch Conservation Area  Establishment of a new BCM preserve within USFWS-approved location
BIO-6a: Fence Habitat for Vernal Pool Branchiopods and Implement Erosion Control Measures	City or Caltrans or designated contractor	Prior to construction	Periodic site inspections by the City and biological monitor	Installation of fencing around suitable vernal pool branchiopod habitat
BIO-6b: Implement Erosion Control Measures	City or Caltrans or designated contractor	Prior to and during construction	Periodic inspection during construction	Compliance with project Storm Water Pollution Prevention Plan
BIO-6c: Avoid Changes in Hydrology and Avoid or Minimize Long-Term Water Quality Impacts	City or Caltrans or designated contractor	Prior to, during construction, and after construction	Long-term inspection and maintenance of permanent Best Management Practices	Compliance with the National Pollutant Discharge Elimination System (NPDES) permit
BIO-6d: Compensate for Direct and Indirect Impacts to Vernal Pool Branchiopod Habitat	City	Prior to construction	City to monitor compliance with USFWS BO, dated February 3, 2009	Purchase of vernal pool preservation credits or preserve features within a USFWS approved off-site conservation area per the BO

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
BIO-7a: Compensate for Impacts to Valley Elderberry Longhorn Beetle and its Habitat	City	After construction	Monitoring to be conducted in compliance with USFWS-approved procedures and approved USFWS BO	Compliance with USFWS approved guidelines for establishment of Valley elderberry longhorn beetle conservation areas; approval of conservation area by USFWS; compliance with conditions of USFWS BO
BIO-9a: Conduct Work in Creeks Only During the Dry Season or Conduct a Preconstruction Survey for Western Pond Turtles	Qualified biologist	Work in creeks during dry season (June 1-October 15) or conduct survey within 24 hours prior to start of construction	Site inspection by qualified biologist	If turtle found, move turtle to suitable aquatic habitat outside construction area
BIO-9b: Conduct Preconstruction Surveys for Western Pond Turtle and Giant Garter Snake	Qualified biologist	Within 24 hours prior to start of construction	Site inspection by qualified biologist	If active nest found, implement avoidance measures with California Department of Fish and Game (DFG) approval
BIO-10a: Conduct Construction Activities during the Active Period of Giant Garter Snakes	City or Caltrans or designated contractor	Construction to occur during snake active period (May 1-October 1) or notify USFWS to determine if additional measures required	Site inspection by qualified biologist	Compliance with USFWS approved measures if construction to occur between October 2-April 30
BIO-10b: Monitor Construction Activities in Giant Garter Snake Habitat	Qualified biologist	During construction	Site inspection by qualified biologist	No disturbance to giant garter snake
BIO-10c: Restore and Compensate for Direct and Indirect Impacts to Giant Garter Snake Habitat	City	Prior to construction	City to monitor compliance with USFWS BO, dated February 3, 2009	Compliance with USFWS BO
BIO-11a: Avoid Construction during the Nesting Season of Migratory Birds or Conduct Preconstruction Survey for Nesting Birds	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspection during construction	No disturbance to nesting birds
BIO-11b: Avoid Bridge Work during the Swallow Nesting Period or Implement Measures to Exclude Swallows from the Bridge	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspection during construction	No disturbance to nesting swallows

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
BIO-12a: Compensate for the Loss of Swainson's Hawk Foraging Habitat	City or Caltrans or designated contractor	Prior to construction		Compliance with DFG mitigation for Swainson's hawks in the Central Valley by providing off-site management lands
BIO-13a: Conduct Preconstruction Surveys for Roosting Bats	Qualified bat biologist	Prior to tree removal or trimming	Site inspections during tree removal and trimming	No disturbance to roosting bats
BIO-15a: Compensate for Loss of Protected Trees	City or Caltrans or designated contractor	After construction	Annually for 3 years after planting or per the approved planting plan	Replace plantings per a mitigation planting plan to be approved by the City urban forester
BIO-16a: Avoid the Introduction of New Invasive Plant Species or the Spread of Existing Invasive Plant Species	City or Caltrans or designated contractor	Prior to and during construction	Site inspection by City or Caltrans and biological monitor	No introduction of new noxious weed infestations during or after construction
<b>Chapter 6. Visual Resources</b>				
VIS-1a: Apply Minimum Lighting Standards if Nighttime Construction is Required	City or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Lights used for night time construction are lowest allowable height and wattage and are screened and shielded away from adjacent residences
VIS-4: Implement Sound Barrier Aesthetics	City or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Construction of walls that blend into the environment to the extent feasible
VIS-5a: Apply Minimum Lighting Standards	City or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Lighting standards used with lowest allowable height and wattage per City and Caltrans standards
VIS-5b: Construct Walls with Low-sheen and Non-reflective Surface Materials for Concrete Sound Barrier Design Option	City or Caltrans or designated contractor	During construction	Periodic site inspection during construction	Construction of walls that blend into the environment to the extent feasible

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
<b>Mitigation Measures from 2007 Initial Study</b>				
<b>Cultural Resources</b>				
<p>If buried resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, the contractor will stop work in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City, Caltrans and other appropriate agencies. Further mitigation and/or construction shall be consistent with the recommendations of the archaeologist.</p> <p>Any cultural resources found during construction will be recorded or described in a professional report and submitted to the Northeast Information Center at CSU Chico. The City will be responsible for preparing the report.</p> <p>If human remains are discovered during project construction, the contractor shall stop all work at the discovery location and any nearby area reasonably suspected to overlie adjacent human remains (Public Resources Code, Section 7050.5). The County Coroner shall be contacted to determine if the cause of death must be investigated.</p> <p>If the coroner determines that the remains are of Native American origin, it shall be necessary to comply with state laws regarding the disposition of Native American burials, which fall within the jurisdiction of Native American Heritage Commission (NAHC) (Public Resource Code, Section 5097). The coroner shall contact Native American Heritage Commission. The descendants or most likely descendants of the deceased shall be</p>	<p>City or Caltrans or designated contractor</p>	<p>During construction</p>	<p>Development and implementation and procedures, if required that identifies monitoring requirements by a qualified archeologist during construction</p>	<p>Compliance with Secretary of Interior standards</p>

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
<p>contacted. Work shall not resume until the descendents have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Public Resource Code, Section 5097.98. Work may resume if the NAHC is unable to identify a descendant or the descendant fails to make a recommendation. If human remains are found, the City and Caltrans will work with the NAHC as described on the NAHC web page regarding the treatment of human remains:  <a href="http://nahc.ca.gov/profguide.html">http://nahc.ca.gov/profguide.html</a>.</p>				
<b>Geology and Soils</b>				
<p>The project will be designed to conform to the conclusions and recommendations of the final foundation investigation as it related to the design and construction of Dead Horse Slough bridge.</p>	<p>City or Caltrans or designated contractor</p>	<p>Prior to and during construction</p>	<p>Periodic site inspection during construction</p>	<p>Compliance with recommendations of project foundation investigations report</p>
<p>The project will be designed to conform to the conclusions and recommendations of the final geotechnical report as they relate to structural sections, earthwork, sound walls and drainage to mitigate potential geologic and soil constraints.</p> <p>The contractor shall submit and obtain approval of an erosion control plan from the City of Chico. The erosion control plan will be designed to limit the effects of soil erosion and water degradation during construction. This plan will be prepared in accordance with City requirements.</p> <p>Construction plans and specifications for all elements of the project shall include provisions for erosion control in the event of non-seasonal or early seasonal rainfall during construction, as well as for disturbed area that remain unvegetated during the rainy season. In addition, rainy season control</p>	<p>City or Caltrans or designated contractor</p>	<p>Prior to and during construction</p>	<p>Periodic site inspection during construction</p>	<p>Compliance with recommendations of project geotechnical report</p>

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
measures shall be in place and operational before October 15 <sup>th</sup> of each year.				
<b>Hazards and Hazardous Materials</b>				
<p>A focused site characterization report will be prepared and submitted to Regional Board describing sampling and analysis activities within the SR 32 right-of-way along the South Branch Dead Horse Slough. Based on the findings of this report, a remedial design and implementation plan will be prepared and submitted to the Regional Board. Any soil found to contain hazardous material concentrations above any federal or state remediation action levels would be classified in accordance with Title 22 of the California Code of Regulations, and removed to a suitable off-site facility. Excavation activities would be conducted in accordance with the approval from Regional Board, the Streambed Alteration Agreement from DFG, and an Authority to Construct permit from the Butte County Air Quality Management District (BCAQMD). If testing indicates that the concentrations are below regulatory action levels, the soil may be used on-site or disposed of at a Class II or Class III landfill.</p> <p>The contractor will develop and implement a spill prevention and control program to minimize the potential for, and effects from spills of hazardous, toxic or petroleum substances during construction of the project. The program would be a component of the Storm Water Pollution Prevention Plan. If a spill is reportable under federal, state, or local regulations, the contractor will notify the City of Chico, Butte County Environmental Health and California Department of Toxic Substances Control, which has spill response and cleanup ordinances to govern emergency spill response. A written description of reportable releases will be</p>	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspection during construction	Compliance with remedial design and implementation plan and spill prevention and control program

Table D-1. Continued

Mitigation Measure	Party Responsible for Implementation	Implementation Timing	Monitoring Program	Standard for Success
submitted to the Regional Water Quality Control Board (RWQCB). This submittal would include a description of the release, including the type of material and an estimate of the amount spilled; the date of the release; an explanation of why the spill occurred; and a description of the steps taken to prevent and control future releases. The releases will be documented on a spill report form				
Yellow traffic striping will be removed and disposed of in a manner consistent with the handling of solids containing hazardous levels of metals	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspection during construction	Compliance with remedial design and implementation plan
<b>Hydrology and Water Quality</b>				
<p>The project will be designed to conform to the conclusions and recommendations of the Final Location Hydraulic Study Report, Final Bridge Design Hydraulic Study, and Storm Water Data Report.</p> <p>The contractor will avoid and minimize potential construction-related water quality impacts through compliance with the Regional Board by preparing and submitting the following water quality permits and plans.</p> <ul style="list-style-type: none"> <li>■ Enrollment into the National Pollutant Discharge Elimination System (NPDES) Statewide Construction General Permit by submission of a Notice of Intent.</li> <li>■ Preparation of a Storm Water Pollution Prevention Plan (SWPPP) for minimizing and avoiding impacts to water quality during construction activities.</li> </ul> <p>The contractor will be responsible for understanding and following the guidelines set forth in the Caltrans Storm Water Quality Handbook, Construction Best Management</p>	City or Caltrans or designated contractor	Prior to and during construction	Periodic site inspection during construction	Compliance with Final Location Hydraulic Study Report, Final Bridge Design Hydraulic Study, and Storm Water Data Report.

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<p>Practices (BMPs) Manual, March 2003 or latest edition. Measures consistent with the current Caltrans' Construction Site BMPs Manual, including the SWPPP and Water Pollution Control Program (WPCP) Manuals, will be implemented to include an integrated approach that addresses stormwater quality activities of various functional units, including construction.</p> <p>The contractor will prepare a site-specific SWPPP for the project to protect receiving waters from pollution. The SWPPP will include standard sediment and erosion control measures which will include limiting soil disturbances during the winter rainfall season. Given the site-specific conditions of the project area, the SWPPP for this project will generally include limiting soil disturbances during the winter rainfall season of October 15 through April 15 and fully stabilizing disturbed areas prior to December 1. Standard sediment erosion control measures, such as silt fencing, straw bale barriers, sediment traps, or other measures could also directly reduce the offsite transport of sediment from disturbed slopes. Existing vegetation that can be preserved will be identified and flagged or fenced to avoid disturbance. Erosion in disturbed areas will be controlled through the use of grading operations that eliminate direct routes for conveying runoff to drainage channels and use of soil stabilization BMPs, such as mulching, erosion control fabrics, and/or reseeding with grass or other plants where necessary. Standard staging area practices for sediment tracking reduction also will be identified where necessary including vehicle washing and street sweeping. Temporary concentrated flow conveyance systems also will be considered, such as berms, ditches, and outlet flow-velocity dissipation devices to reduce erosion from newly disturbed slopes.</p>				

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<p>The contractor will regularly inspect and maintain the BMPs in good working order.</p> <p>The City will incorporate permanent post-construction BMPs in the project design to avoid or minimize long-term water quality impacts, pursuant to the NPDES storm water permit. Appropriate BMPs for the project site could include stabilization measures such as preservation of existing vegetation, concentrated flow conveyance systems (ditches, berms, drains, flared culvert end sections, outlet protection, and flow-velocity dissipation), and slope roughening or terracing for new cut-and-fill slopes as deemed necessary by the project engineer. Slope protection measures will be implemented to control erosion such as reducing the length of disturbed slopes, reducing the gradient of slopes, and preventing concentrated flow over slope soils. The City will be responsible for long-term inspection and maintenance of the permanent BMPs to ensure that they are maintained in good working order.</p>				
<b>Public Services</b>				
<p>The contractor will prepare and implement a coordinated Transportation Management Plan (TMP) for the project that addresses local and Caltrans concerns. The TMP shall be submitted to the City, Caltrans, Butte Regional Transit, California Highway Patrol, and Chico Unified School District 30 days prior to commencement of construction. The TMP shall be consistent with City and Caltrans policies and procedures.</p> <ul style="list-style-type: none"> <li>■ The local aspect of the TMP will identify the locations of any temporary detours and signage to facilitate local traffic patterns and through-traffic requirements.</li> <li>■ The Caltrans aspect of the TMP will identify</li> </ul>	<p>City or Caltrans or designated contractor</p>	<p>Prior to and during construction</p>	<p>Periodic site inspection during construction</p>	<p>Compliance with Transportation Management Plan</p>

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<p>TMP strategies that will be considered for the project include Construction Zone Enhanced Enforcement Patrol, lane closure, and maintaining traffic. Most of the construction along State Route 32 will take place behind temporary K-railing with traffic attenuators placed as necessary. the design of the project and the TMP, especially staging and traffic control systems, will be coordinated closely with the Caltrans District 3 TMP coordinator.</p> <ul style="list-style-type: none"> <li>■ The TMP will include measures to facilitate coordination with Butte Regional Transit to ensure that B-line bus routes are not adversely affected during project construction.</li> <li>■ The TMP will include measures to facilitate coordination with the California Highway Patrol to ensure that operations out of its office at 995 Fir Street will not be adversely affected during project construction.</li> </ul> <p>The contractor will provide 10 days notice to emergency service providers (i.e., law enforcement, fire protection, ambulance service, and the California Highway Patrol), Butte Regional Transit, and the Chico Unified School District of any construction activity that would hinder emergency vehicle response time, bus travel routes, or access to or from the school.</p> <p>The contractor will provide 10 days notice to residents, businesses and the school to minimize construction conflicts. Construction activities will be coordinated to avoid blocking or limiting access to homes, business, and properties to the maximum extent possible. Residents and businesses will be advised about potential access or parking effects before construction activities begin.</p> <p>The contractor shall provide a parking plan to</p>				

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<p>accommodate construction equipment and parking for construction workers at the same sites. For each construction phase, the parking plan will identify sites for construction staging/parking to avoid effects on local residents and businesses.</p> <p>The contractor will also include measures in the TMP to ensure provision of safe travel for pedestrians and bicyclists during construction. The TMP will also ensure that all affected roadway facilities remain compliant with the American Disabilities Act during construction.</p>				
<b>Transportation and Circulation Factors</b>				
<p>The contractor shall prepare a Transportation Management Plan (TMP) for the project. Consistent with Caltrans policy and procedures, the design of the project and the TMP, especially staging and traffic control systems, will be coordinated closely with the Caltrans District 3 TMP coordinator. TMP strategies that will be considered for the project include Construction Zone Enhanced Enforcement Patrol, lane closure, and maintaining traffic. Most of the construction will take place behind temporary K-railing with traffic attenuators placed as necessary</p>	<p>City or Caltrans or designated contractor</p>	<p>Prior to and during construction</p>	<p>Periodic site inspection during construction</p>	<p>Compliance with Transportation Management Plan</p>
<b>Utilities and Service Systems</b>				
<p>During project construction, construction of utility crossings at intersections along SR 32 will be constructed on an as-needed basis for various utilities (such as water, wastewater, drainage, electrical, communications, telephone, gas, etc.), as determined to be needed in coordination with the various service providers. These utility crossings would “stud out” within the project limits on the north and south sides of SR 32.</p>	<p>City or Caltrans or designated contractor</p>	<p>Prior to and during construction</p>	<p>Periodic site inspection during construction</p>	<p>No disruption of utility services during and after construction</p>