

4.1 SUMMARY OF MITIGATION MEASURES

BIOLOGICAL RESOURCES (SECTION 3.4)

- MM 3.4.1a** To minimize potential impacts to the Northwestern pond turtle and the giant garter snake during construction, the project shall implement the U.S. Fish and Wildlife Service's *Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake (*Thamnophis gigas*) Habitat*. The Standard Avoidance Measures include, but are not limited to, minimizing disturbed areas to only those required to complete project construction, limiting construction windows to warm months when snakes are more likely to be active and be able to avoid construction activities, and restoration of the construction area after completion of construction. See **Appendix B** for the full text of the *Standard Avoidance* document.
- MM 3.4.1b** To protect any giant garter snakes or Northwestern pond turtles encountered during construction, any giant garter snake or Northwestern pond turtle found on the project site must be avoided and left alive and uninjured. If a giant garter snake or Northwestern pond turtle becomes trapped or retreats into any area subject to construction, construction in the vicinity of the snake or turtle shall stop and the City of Elk Grove and the U.S. Fish and Wildlife Service shall be notified immediately. Construction shall not be re-initiated until a qualified biologist has either removed the snake or turtle from the construction area or, after thorough inspection, determined that the snake or turtle has vacated the construction area.
- MM 3.4.1c** To compensate for the permanent loss of giant garter snake and Northwestern pond turtle habitat, the project shall provide compensatory mitigation per the requirements of the Fish and Wildlife Service's January 24, 2005 *Programmatic Biological Opinion on the Effects of Small Highway Projects on the Threatened Giant Garter Snake in Butte, Colusa, Glenn, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba Counties, California*, or as required by the U.S. Fish and Wildlife Service during Section 7 consultation. The *Programmatic Biological Opinion* compensation requirements include, but are not limited to, restoration of the construction area after completion of construction and purchase of credits at a U.S. Fish and Wildlife-approved giant garter snake mitigation bank, or payment of an in-lieu fee to a U.S. Fish and Wildlife-approved giant garter snake mitigation fund to compensate for the permanent loss of habitat. See **Appendix B** for the full text of the *Programmatic Biological Opinion* document. Mitigation shall occur in such a way as to provide for no net loss of giant garter snake habitat after project completion.
- MM 3.4.2** To compensate for the permanent loss of potential foraging habitat, it is anticipated that the City of Elk Grove would purchase mitigation credits from a CDFG-approved Swainson's Hawk Mitigation Fund at a 1:1 ratio. Final compensatory mitigation requirements and ratios will be determined under consultation with CDFG.
- MM 3.4.3** If possible, prevent nest establishment on the bridge structure prior to beginning bridge construction activities. Nest prevention methods include, but are not limited to, installation of a barrier (such as netting) to prevent bird access to the bridge and/or continued removal of deposited mud material under the bridge early in the nesting season to prevent construction of habitable nests. If nest prevention cannot be accomplished prior to the start of construction, and birds establish nests on the bridge, the nests shall be protected from construction activity that would disrupt nesting activities until the nestlings fledge. After the nestlings have fledged, the nests shall be inspected by a qualified biologist to confirm the absence of eggs and nestlings, prior to nest removal and commencement of bridge construction activities. Alternatively, the City will consult as appropriate with the U.S. Fish and Wildlife Service and/or the CA Dept. of Fish and Game to discuss the potential loss of nests of native birds covered by the MBTA to obtain, if necessary, a permit authorizing activities that may otherwise result in MBTA violations.

4.0 LIST OF MITIGATION MEASURES

- MM 3.4.4a** To compensate for the temporary impacts to Laguna Creek, such as the loss of streamside vegetation due to construction activities, a creek restoration plan shall be developed and implemented to restore the areas of Laguna Creek temporarily impacted by project construction to pre-construction conditions.
- MM 3.4.4b** To compensate for the permanent impacts to Laguna Creek, such as the loss of waters of the U.S. due to fill, it is anticipated that the City of Elk Grove will purchase mitigation credits at a U.S. Army Corps of Engineers-approved wetland mitigation bank, or pay an in-lieu fee to a U.S. Army Corps of Engineers-approved wetland mitigation fund at a minimum ratio of 1:1. Final determination on if compensatory mitigation credits will be purchased from a mitigation bank or if an in-lieu fee will be paid, and final determination of the ratio of compensatory mitigation will be made by the District Engineer during City consultation with Army Corps under Section 404 of the Clean Water Act. Mitigation shall occur in such as way as to result in no net loss of waters of the U.S. after project completion.

HAZARDS AND HAZARDOUS MATERIALS (SECTION 3.7)

- MM 3.7.1** Prior to start of construction, the construction contractor shall designate staging areas where fueling and oil-changing activities will take place. The staging area(s) shall be reviewed and approved by City of Elk Grove's Environmental Mitigation Monitor and the Storm Water Pollution and Prevention Manager prior to the start of construction. No fueling and oil-changing activities shall be permitted outside the designated staging areas. The staging areas, as much as practicable, shall be located on level terrain and away from sensitive land uses such as residences, day care facilities, and schools. Staging areas shall not be located near any stream, channel, or wetlands. The proposed staging areas shall be identified in the Storm Water Pollution Prevention Plan (SWPPP).

HYDROLOGY AND WATER QUALITY (SECTION 3.8)

- MM 3.8.1** Prior to construction, a sediment control plan and a SWPPP shall be prepared by the contractor and submitted to the City for approval. The sediment control plan shall be designed to limit the effects of soil erosion and water degradation during construction. This plan shall be prepared and implemented in accordance with the requirements of the RWQCB's NPDES permit requirements, and shall include (but not be limited to) the following measures:
- Timing of work within Laguna Creek (targeted for the dry months between May 1 – October 1, when feasible);
 - Use of sediment control measures that utilize sediment traps, barriers, covers, or other methods approved by the Regional Water Quality Control Board;
 - Plans for appropriate deposition and storage of excavated material;
 - Construction phasing; and
 - Cover all stockpiles of fill material during extended periods of rain.

NOISE (SECTION 3.11)

- MM 3.11.1** Pile-driving activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. On Sunday, pile-driving activities shall be limited to the hours of 10:00 a.m. to 6:00 p.m.