(continued from page 1)

BIO-1: Prior to clearing or construction, the outer perimeter of the project work area will be demarcated to prevent damage to adjacent habitat and to provide visual orientation to the project limits. No construction activities (including grading or fill activity), materials, or equipment storage of any type will be permitted outside of the designated construction work area and staging areas. All construction equipment will be operated in a manner to prevent accidental damage to nearby preserved areas. Areas where native vegetation is immediately adjacent to planned grading activities will be protected from accidental deposition of fill material.

BIO-2: A biologist will monitor construction in the vicinity of native vegetation communities prior to and during vegetation removal to ensure that vegetation removal, BMPs, and all avoidance and minimization measures are properly implemented.

BIO-3: A pre-construction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special-status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project.

BIO-4: Caltrans will submit the names and qualifications of biologists that it believes meet the minimum requirements to serve as a Contractor Supplied Biologists to USFWS for review and authorization under the Biological Opinion prior to beginning onsite activities (forms at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/). Caltrans will determine whether the presence of a Contractor Supplied Biologists and approved desert tortoise monitors will be required during project activities as outlined in the “criteria for use in reaching appropriate determination” section of the Programmatic Biological Opinion and the submitted Appendix I notification form to USFWS. In general, where the risk to desert tortoises is low, the Contractor Supplied Biologist or an approved biological monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance..

BIO-5: Caltrans will designate a Contractor Supplied Biologist to be responsible for overseeing compliance with all protective measures. The Contractor Supplied Biologist will immediately notify the Caltrans Resident Engineer of project activities that may be in violation of the PLACs (Permits, Licenses, Agreements, Contracts). In such an event, the Resident Engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Contractor Supplied Biologist.

BIO-6: The Contractor Supplied Biologist will have the authority to halt any activity, through the coordination with the Resident Engineer, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury or mortality to desert tortoise.

BIO-7: Immediately prior to the start of any ground-disturbing activities and prior to the installation of any material demarcating the work area (e.g., staking, lath, fencing), clearance surveys for the desert tortoise will be conducted by the Contractor Supplied Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their burrows by a Contractor Supplied Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities following the 2010 field

survey protocol (USFWS 2010) or more current approved protocol. If burrows are found, they will be examined by a Contractor Supplied Biologist to determine if desert tortoises are present. If a tortoise is present and the burrow cannot be avoided, USFWS and CDFW will be contacted. If desert tortoises are found at a project site where Caltrans (or the Contractor Supplied Biologist) had previously concluded they were unlikely to occur, Caltrans will contact USFWS and CDFW to determine if the implementation of additional protective measures would be appropriate.

BIO-8: A Worker Environmental Awareness Program will be developed and presented by the Contractor Supplied Biologist prior to the start of construction activities. All onsite personnel, including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel, employed for the project will be required to participate in the program prior to performing any onsite work. The program will consist of a class presented by a Contractor Supplied Biologist or a video, provided the Contractor Supplied Biologist is present to answer questions. At a minimum, the program will include the following topics: (1) biology, conservation, identifying characteristics, legal status, and regulations protecting special-status species occurring or potentially occurring within the project site, including nesting birds; (2) responsibilities of the biological monitor; (3) delineation and flagging of adjacent habitat; (4) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent native habitats); (5) onsite pet prohibitions; (6) use of trash containers for disposal and removal of trash; (7) project features and avoidance and minimization measures designed to reduce the impacts on special-status species and habitat and promote continued successful occupation of adjacent habitat areas; (8) the process required for construction personnel to report special-status species detections, including a chain of command and criteria for stopping work/minimizing impacts; and (9) the penalties for violations of state and federal laws. Supporting materials (e.g., wallet-sized cards or a one-page handout) with important information regarding special-status species will be provided to all construction personnel during the training program as a future reference and a reminder of the program's content.

BIO-9: Workers will check under the vehicle each time prior to moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Contractor Supplied Biologist or an approved desert tortoise monitor, who will notify the Resident Engineer. The Resident Engineer must notify the Caltrans Environmental Stewardship and Biological Monitoring Branch. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported as described in the Reporting Requirements section of the Programmatic Biological Opinion (8-8-10-F-59; USFWS 2018).

BIO-10: The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly and distinctly demarcated to minimize surface disturbance associated with vehicle movement. To the extent possible, a previously disturbed areas within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where feasible. Project-related vehicle traffic will be restricted to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Contractor Supplied Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary.

BIO-11: The Resident Engineer is responsible for ensuring that all protective measures are being fully implemented. If the Resident Engineer determines, or is notified by the Contractor Supplied Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, Contractor Supplied Biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The Resident Engineer must always contact the Caltrans Environmental Stewardship and Biological Monitoring Branch to resolve any unforeseen issues.

BIO-12: Permanent or temporary exclusion fencing may be used to prevent entry by desert tortoises into a work site, if Caltrans and the Contractor Supplied Biologist determine this measure is appropriate. Exclusion fencing, should it be deemed necessary, will be installed following USFWS guidelines (2005) or more current protocol. The Contractor Supplied Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Contractor Supplied Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Contractor Supplied Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground-disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed.

BIO-13: Upon locating a dead or injured tortoise within a project site, the Resident Engineer will immediately notify the Contractor Supplied Biologist who will then contact the Caltrans Environmental Stewardship and Biological Monitoring Branch. The Contractor Supplied Biologist will also notify USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).

BIO-14: If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped.

BIO-15: When feasible or practicable, construction vehicles will be cleaned of all mud, dirt, and debris from other sites prior to entering the project area. The purpose of this measure is to minimize the spread of weedy plant species that may degrade desert tortoise habitat.

BIO-16: Desert tortoise exclusion fence construction, should it be deemed necessary, would follow the guidelines in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2010), which is available at the Ventura Fish and Wildlife Office website (www.fws.gov/ventura). If needed, fencing that is tortoise-proof would be installed along any fence gate bottoms beginning at least 2 feet above the fence bottom and extending toward the ground, leaving less than a 1-inch gap (USFWS 2010). All desert tortoise exclusion fences and gates would be regularly maintained at a frequency sufficient to ensure that they would continually provide an effective barrier to passage of desert tortoises. Any installed desert tortoise exclusion fences would not cross washes. If washes and culverts are encountered, the desert tortoise exclusion fence would follow the wash to the roadway and either tie into the existing bridge or cross over the top of a culvert.

BIO-17: During inspections and repairs of the demarcated work area, if any desert tortoises are observed, workers are to notify the Contractor Supplied Biologist and Resident Engineer. Any such incident will be reported to the Caltrans Environmental Stewardship and Biological Monitoring Branch and in the annual report.

BIO-18: After each shift, surveyor flagging tape will be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Contractor Supplied Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift.

BIO-19: To determine if burrowing owls are occupying the project limits or adjacent areas prior to construction, the first take avoidance survey following CDFW protocol (2012) will be conducted no more than 14 days prior to initiating ground disturbance activities, and a second survey will be conducted within 24 hours prior to ground disturbance. The survey will be conducted from civil twilight to 10 a.m. or 2 hours before sunset until evening civil twilight within areas providing suitable habitat for burrowing owl. The survey will include the proposed project limits and a 300-foot buffer if performed between February 1 and August 31 (nesting season) and a 100-foot buffer if conducted outside of the nesting season. If burrowing owls are present within 300 feet of project activities during the breeding season or within 100 feet of project activities outside of the nesting season, Measure BIO-21 or BIO-22 will be implemented, as applicable.

BIO-20: If burrowing owls are found during pre-construction take avoidance surveys during the nesting season (BIO-20), the burrowing owls will be fully avoided by establishing an appropriate buffer in coordination with CDFW.

BIO-21: If burrowing owls are found during pre-construction take avoidance surveys outside of the nesting season (BIO-20), passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities have not begun. Passive relocation efforts will be conducted in coordination with CDFW. If the burrowing owl is found to be paired and exhibiting potential nesting behavior, construction disturbance will not occur within a designated buffer determined in coordination with CDFW of the active burrow(s) until it is confirmed by the avian biologist that the pair is not nesting and that young are not present, or if present are independently foraging.

BIO-22: Prior to the start of project construction, a daytime assessment will be conducted by a qualified bat biologist to reexamine structures that are suitable for bat use. If bat sign is observed at that time, then nighttime bat surveys will be conducted to confirm whether the structures with suitable habitat identified during the preliminary assessment are utilized by bats for day roosting and/or night roosting, to ascertain the level of bat foraging and roosting activity at each of these locations, and to perform exit counts to visually determine the approximate number of bats utilizing the roosts. Acoustic monitoring will also be used during these surveys to identify the bat species present and to determine an index of relative bat activity for that site on that specific evening.

BIO-23: bathe Contractor Supplied Biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and structure inspection, sampling, exit counts, and acoustic surveys.

BIO-24: The removal of mature trees and snags will be minimized to the greatest extent practicable. Prior to tree removal or trimming, large trees and snags will be examined by a qualified bat biologist to ensure that no roosting bats are present.

BIO-25: If bat maternity sites are identified during the preconstruction bat habitat assessment, then no construction activities at that location will be allowed during the maternity season (i.e., April 1–August 31) unless a qualified bat biologist has determined the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside of the maternity season, then bat exclusion at maternity roost sites will be completed by the Contractor Supplied Biologist in consultation with CDFW either as soon as possible after the young have been weaned or outside of the maternity season or as otherwise approved by the qualified bat biologist in coordination with CDFW.

BIO-26: A Nesting Bird Management Plan will be drafted to provide a comprehensive approach to handling nesting birds prior to the commencement of construction. It will include the following items:

If vegetation clearing is to occur during the avian nesting season (i.e., February 1–September 15), the designated biologist will conduct a preconstruction survey of construction areas and adjacent habitat in the near vicinity no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, an appropriate buffer will be established around each nest site by a qualified biologist/biological monitor until nesting is completed.

Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days.

BIO-27: Preconstruction clearance surveys for sensitive wildlife species will be performed by a qualified biologist within 48 hours prior to construction to flush the species from the construction footprint. No nesting birds will be flushed during the nesting season. Bats will not be flushed but will be protected as specified in Section 4.3.3 of the Natural Environment Study. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance surveys. Relocation sites will be within the project vicinity and will consist of suitable habitat to support these species.

BIO-28: Equipment maintenance, lighting, and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors.

BIO-29: The project limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the project footprint, will be clearly defined and marked in the field. The biological monitor will review the limits of disturbance prior to initiation of construction activities. The upstream and downstream limits of project disturbance, plus the lateral limits of disturbance on either side of the stream, will be clearly defined and marked in the field to ensure avoidance of jurisdictional areas.

CR-1: Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: Treatment of Human Remains. In the event that human remains are found, the county coroner shall immediately be notified and all construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify NAHC, who will then notify the Most Likely Descendant. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909) 383-2647 and Gary Jones, DNAC: (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

CR-3: Treatment of Identified Cultural Resources. All archaeological sites within the Project Area of Direct Impacts (ADI), regardless of eligibility for the National Register of Historic Places, shall be preserved in place through capping (placement of fill). No grubbing or vegetation clearing shall be conducted within the documented boundaries of archaeological sites prior to the placement of fill.

CR-4: Environmentally Sensitive Areas (ESAs). Environmentally Sensitive Areas shall be established around the portions of archaeological sites P-36-001908, P-36-002328, P-36-005598, P-36-014561, P-36-014564, and P-36-020873 located outside of the Project ADI to prevent inadvertent adverse effects. Because there are no planned construction activities outside the I-40 median and travel lanes, the ESAs will not be fenced during construction. Rather, the ESAs will be delineated on construction plan layouts in the contractor's specifications. No project activities shall occur within the boundaries of ESAs.

CR-5: Archaeological Monitoring Areas (AMAs). Archaeological Monitoring Areas shall be established for archaeological sites within the Project ADI. The AMAs shall include a 50-foot buffer. The AMAs will be shown on Project plans and delineated appropriately in the field through discussion with the Archaeological Monitor. Native American and Archaeological Monitoring will be required within the AMAs to ensure archaeological sites are protected in place through soil capping. Monitoring of soil capping will ensure that subsurface components remain intact and undisturbed while keeping surface components in place and protected by local soil. No clearing or grubbing will occur within the AMAs.