Appendix 7. Fencing and Removal Survey Protocols

In accordance with Measure 8 of the Mitigation section, sites of permanent or long-term (greater than one year) projects in MAS where continuing activities are planned and where FTHL mortality could occur may be enclosed with FTHL barrier fencing. After clearing the enclosed area of horned lizards following the protocol described in this appendix, no on-site monitor is required (see Measure 7 of the Mitigation section). Fencing for the purpose of producing a FTHL barrier along roads (see Mitigation Measure 10) shall also follow these protocols as applicable. Prior to any fencing or removal survey, a proposal shall be developed and approved by AGFD (in Arizona), CDFG (in California), and/or by the state or federal agency that manages the lands to be surveyed.

Fencing Protocol

Barrier fences for the exclusion of FTHLs shall follow these specifications:

- 1) The barrier fence shall be constructed along the entire perimeter of the project and be inset sufficiently from the perimeter of the parcel to allow for construction and maintenance.
- 2) Barrier material shall be 0.25" mesh hardware cloth and 36" in height
- 3) Barrier material shall be buried 6" deep, providing 30" above the surface.
- 4) Barrier material shall be securely attached (using metal clips or wire—not plastic) to t-posts or fence posts, and to barbed wire strung at heights of 15" and 30". A third barbed wire may be strung above the FTHL proof fencing to deter vehicles.
- 5) Additional t-posts or fence posts shall be placed at any junctions between rolls of hardware cloth to discourage the formation of gaps.
- 6) An experienced biological monitor shall oversee the construction of the barrier fence and be on-site to search for and remove FTHLs during surface-disturbing activities.
- 7) The entire fence shall be maintained in perpetuity, including but not limited to the repair of gaps under or in the fence, and accumulation of plant debris or sand on the outside of the fence.
- 8) Biological monitors shall conduct a removal survey, following the protocol below, only after the fence construction is completed.

Removal Survey Protocol

Removal surveys shall be conducted after barrier fence completion and prior to construction activities. Surveys shall follow these guidelines:

- 1) Surveys shall be conducted by experienced biological monitors as described in Appendix 6.
- 2) Surveys shall occur only during appropriate survey conditions as described in Appendix 6

- 3) Projects < 4 acres (1.6 ha) in size require four hours of survey effort. For larger projects, minimum survey effort shall be 0.5 hour per acre. The land managing agency may require a greater survey effort.
- 4) Survey methods shall be designed to achieve a maximal capture rate and shall include but not be limited to the following: strip transects, tracking, and raking around shrubs.
- 5) Survey methods shall incorporate a systematic component to ensure that the entire fenced project site is surveyed. A modification of the Population Monitoring Protocol (Appendix 7) may be used.
- 6) All encountered FTHLs will be collected and relocated to a nearby safe habitat in accordance with the removal plan, approved by AGFD or CDFG.