Draft

FINDING OF NO PRACTICABLE ALTERNATIVE

1.0 PURPOSE AND NEED

The purpose of the Proposed Action, Four Bridges Replacement at Beale Air Force Base (AFB), California is to replace four bridge segments along Gavin Mandery Drive that provide access to the Military Family Housing (MFH) area. This project is needed because a recent severe storm event generated flood flows that exceeded the conveyance capacity of the Dry Creek and Best Slough channels and overtopped the four bridges. Additionally, the current bridge segments pose a safety hazard to vehicle and pedestrian traffic due to the narrow width of the spans (i.e., single car capacity) and lack of protective guard rails. Without implementation of the proposed project, future heavy rain events could generate flood flows that again exceed the conveyance capacity of the channels at the bridge locations resulting in overtopping of the existing structures and potential damage to pipeline utilities (sanitary sewer and communications lines) affixed to the side of the bridge, which could cause environmental impacts associated with discharges from damaged pipelines.

The Proposed Action takes place within a floodplain. Per Executive Orders 11988 and 11990 for actions within a 100-year floodplain and new construction in a wetland respectively, documentation of a Finding of No Practicable Alternative (FONPA) is required.

2.0 DESCRIPTION OF PROPOSED ACTION AND NO ACTION ALTERNATIVE

Proposed Action. Replace four bridges over Dry Creek and Best Slough along Gavin Mandery Drive, raising the bridges above the 100-year high water elevation and reducing the number and size of piers within the channels; reinstall sewer and communications lines attached to the bridges, moving them above the 100-year high water elevation; widen Gavin Mandery Drive from one to two traffic lanes through the project area; install a new pump station east of Dry Creek; install sanitary sewer force main from the new pump station to a manhole located west of the bridges, attached to the replaced bridges; install below ground communication line and electrical line across Gavin Mandery Drive to service the new pump station.

Alternative Action. Currently the bridges cross the creek at a location where there is a split in the channel. An alternative proposed was to relocate the bridges upstream or downstream of the split and to conduct the same replacement as described above. This would place the bridges in an undeveloped area of the base, thus increasing impacts to wetlands and other biological resources. Selecting this alternative location would have increased the potential impacts to fish habitat as well as vernal pools and would push the work further into the wider portion of the channel with more significant floodplain areas. The project would be larger in scope to cross the additional channel. This alternative would be more costly with an increase in impacts to natural resources than the proposed action.

No Action Alternative. If the project is not implemented, the bridges would not be replaced. Future heavy rain events could generate flood flows that again exceed the conveyance capacity of the channels at the bridge locations. This would result in overtopping of the existing structures and potential damage to pipeline utilities (sanitary sewer and communications lines) affixed to the side of the bridge, which could cause environmental impacts associated with discharges from damaged pipelines, violating the Clean Water Act.

3.0 SUMMARY OF ENVIRONMENTAL EFFECTS

Biological Resources.
There are 8 vernal pools, a swale, 2 large ponds, and 3 roadside ditches 25 to 181 feet away from the project area. All potential sensitive shrimp habitat within 250 feet of the project area is higher in elevation and no construction equipment will enter any of these pools. Potentially marginal giant garter snake habitat exists within 200 feet of the Proposed Action, however no construction will take place in the water (potential marginally suitable aquatic habitat), and upland construction will cause only temporary disturbance. The giant garter snake has never been detected at Beale AFB. The U.S. Fish and Wildlife Service concurred (8 July 2014) implementation of the Proposed Action is "not likely to adversely affect" federally listed species (vernal pool fairy shrimp, vernal pool tadpole shrimp and giant garter snake).

Implementation of the Proposed Action is not likely to adversely affect, Central Valley steelhead, which requires informal consultation with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries). An informal consultation document was submitted to NOAA Fisheries on 12 June 2014. Construction activities will be timed to avoid adverse effects on threatened and endangered species. Additionally, Environmental Protective Measures specified in the informal consultation documents will be implemented to ensure bridge replacement activities allow for proper protection of habitat in the vicinity of the project area. Therefore, no significant effects to biological resources are expected from implementation of the Proposed Action.

Water Resources.
Surface Water. Implementation of the Proposed Action will have an overall positive impact to water quality by removing a flow obstruction and potential raw sewage discharge source from the channels by raising the sewer line attached to the bridges above the 100-year high water elevation. During the bridge replacement work in the Best Slough and Dry Creek channels, the project is expected to have temporary and minor effects on water quality. Repair activities utilizing construction equipment are expected to cause a minor, temporary increase in turbidity within the channels, as well as a roadside ditch that empties into Best Slough. Implementation of Best Management Practices will minimize the impacts to the immediate channels and downstream.

Bridge replacement activities will be conducted within Waters of the United States (U.S.) and are subject to Clean Water Act Section 404 and 401 requirements. Section 404 permit and Section 401 water quality certification will be obtained before work begins, and adherence to the requirements established in the Section 404 permit and 401 water quality certification will ensure

the construction and repairs do not adversely affect wetlands or waters of the U.S. Therefore, no significant effects to surface water are expected from implementation of the Proposed Action.

Floodplain. Implementation of the Proposed Action will have a minor positive impact to the 100-year floodplain. The project area is within the 100-year floodplain of Best Slough and Dry Creek, and bridge replacement will improve surface water flow, which will improve the function of the floodplain. Therefore, no significant effects to the floodplain are expected from implementation of the Proposed Action.

Cultural Resources.
There are no historic properties located within the project area. The State Historic Preservation Officer issued a letter of concurrence (24 July 2014) on a finding of no historic properties affected from implementation of the Proposed Action. If any inadvertent archaeological discoveries are made during ground disturbing activities, work in the vicinity will cease and a qualified archaeologist will assess the resource.

Geological Resources/Soil.
Implementation of the Proposed Action will cause minor soil disturbance during construction. Disturbance of soil during construction may have minor, temporary effects within the project area. The project will implement Best Management Practices to stabilize the soil during construction. Therefore, no significant effects are expected from implementation of the Proposed Action.

Safety.
Implementation of the Proposed Action will correct safety hazards associated with potential overtopping of the bridge structures by flood flows, as well as the narrow roadway lacking protective guardrails. Therefore, implementation will have a positive impact on safety. Workers at the project site will follow safety plan precautions. Therefore, no significant effects are expected from implementation of the Proposed Action.

4.0 CONCLUSION

The proposed action requires work within surface water drainages and the 100-year floodplain to conduct the bridge replacement and road widening activities. There are no practicable alternatives to conducting work in the drainages or the floodplain that allow for bridge replacement and road widening. The attached AF Form 813 and a draft of this FONPA were made available to the public on X for a 30-day review period. X comments were received.

5.0 STATEMENT OF NO PRACTICABLE ALTERNATIVE

The Proposed Action will have no significant independent or cumulative effects on the human or natural environment, and based on 32 CFR 989 appendix B, this project qualifies for a categorical exclusion and requires no further analysis (see attached AF Form 813). An alternative was considered, but also includes work within Waters of the U.S. and 100-year floodplain. Pursuant to Executive Orders 11988 Floodplain Management and 11990 Wetlands Management and the authority delegated by the Secretary of the Air Force 791.1, and taking the

above information into account, I find there is no practicable alternative to the action and that the Proposed Action includes all practicable measures to minimize harm to wetlands and minimize harm to or within the floodplain.

_____ _____

ROY-ALAN C. AGUSTIN, Colonel, USAF Date
Director, Installations and Mission Support

4 Attachments:

1. AF Form 813 for Four Bridges Replacement Project
2. U.S. Fish and Wildlife Concurrence Letter
3. State Historic Preservation Officer Concurrence Letter
4. NOAA Fisheries NLAA Consultation