APPENDIX G: California Coastal Commission Consultation

DEPARTMENT OF THE AIR FORCE
30TH SPACE WING (AFSPC)

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Dear Mr. Simon

Under the Federal Coastal Zone Management Act of 1972, as amended, Section 307c(1), and 15 CFR Part 930, the United States Air Force (USAF) has determined that conducting necessary repair and erosion protection system maintenance of the San Antonio Road West Bridge at Vandenberg Air Force Base (VAFB) will not affect coastal uses or resources, because it is well inland of the coastal zone boundary and is not likely to have adverse effects on coastal resources. Therefore, the Proposed Action does not require a consistency determination.

PROJECT DESCRIPTION

Project Location

VAFB is located on the south-central coast of California, approximately halfway between San Diego and San Francisco (Figure 1). The Base encompasses 99,099 acres in western Santa Barbara County and is positioned geographically in a transitional ecological region that includes the northern or southern distributional limits for many plant and animal species.

The San Antonio Road West Bridge project area is located within the San Antonio Creek watershed on VAFB. The San Antonio Road West Bridge is approximately 0.6 miles east of the Lompoc-Casmalia Road and 2.6 miles west of the United States (U.S.) Highway 1 crossing at the Barka Slough (Figure 2).

San Antonio Creek is a 28-mile long, east-west trending creek, entering north VAFB at Barka Slough, on its eastern boundary, and emptying into the Pacific Ocean north of Purisima Point (Figure 2). The San Antonio Creek drainage basin is approximately 154 square miles and includes Los Alamos Valley in the upstream portion and San Antonio Valley in the downstream portion.

Overview and Purpose

Reliable transportation corridors are critical to the missions VAFB. San Antonio Road West crosses San Antonio Creek near its intersection with Richmond Avenue and serves as a vital access route into North VAFB. The San Antonio Road West Bridge was constructed in 1969 and repaired in 1983 to include the installation of riprap and gabions (metal nets containing rock) under the bridge (Penfield & Smith 2012).

A recent inspection of the bridge noted that water pooling upstream of the bridge is eroding and undermining the gabions that attach to the bridge piling (Bengal 2011). The USAF proposes to improve water flow through the San Antonio Creek at the bridge by removing a build-up of sediment at the gabions; manually removing vegetation from the channel at the bridge; assessing the extent of damage to the gabions; and repairing or replacing the gabions, as necessary. Vegetation growing around the gabions reduces the velocity of water flowing under the bridge and increases sediment deposition at the gabions. Roots from the vegetation can also damage the gabions (Penfield & Smith 2012). These maintenance and enhancement activities would ensure that water flows through the San Antonio Creek, under normal and flood conditions, and does not undermine the stability of the bridge.

The purpose of the project is to maintain secure reliable transportation to mission critical access points on North VAFB and to maintain utilities that span the San Antonio Creek at the bridge location. To achieve this, the erosion protection system at the San Antonio Road West Bridge needs to be inspected and repaired. If the erosion protection system is not maintained and repaired, various USAF missions would continue to operate under the risk of potential bridge failure, which would result in:

a) Significant reduction of physical access to North VAFB
b) Severance of utility infrastructure
c) Impacts to space launch missions
d) Constraints on the ability for VAFB to provide safety and security support to North VAFB

Specific components of the project include:

Vegetation Removal

The USAF would perform manual (or mechanical) removal of vegetation. VAFB is concerned that roots from vegetation could damage the erosion control structures by growing into the gabions and breaking them open. The presence of vegetation also promotes sedimentation, restricts water flow and contributes to pooling of water upstream of the bridge, placing excessive stress on structural components of the bridge.

a) Manual or mechanical removal of riparian vegetation would be confined to an area of approximately 0.3 acres under the bridge ("Main Project Area"; Figure 3). The area would extend approximately 60 feet northeast and 80 feet southwest of the creek, and be up to 18 feet in width.
b) All woody vegetative material with stems greater than or equal to 2 inches in diameter will be trimmed to within 3 inches of the ground or water's surface. Vegetation less than 2 inches in diameter will remain.

c) Vegetation removal will not require the diversion of San Antonio Creek. The USAF would carry out this work in and around San Antonio Creek.

San Antonio Creek Diversion

Prior to commencing bridge maintenance activities, the project site would be dewatered by installing dams upstream and downstream of the bridge and pumping the water within the project area out of the channel to the adjacent agricultural field. Integrated into the process of dewatering would be the diversion of the active creek channel through culverts that pass through the project site. This would serve to keep soil and debris out of the river, protect sensitive species, and prevent flowing water from flooding the maintenance activities. The upstream and downstream dams would be constructed in a manner that will allow for two culverts to be installed at separate times during the project period. The first culvert would be installed in the eastern bay of the bridge (hereafter referred to as Bay 2), allowing for work to be conducted on the western bay (hereafter referred to as Bay 1), in an effort to reduce movement and space restrictions of the work crew. At the completion of maintenance activities in Bay 1, the creek would be diverted through the second culvert installed through Bay 1, and the first culvert would be removed to allow work to occur in Bay 2. The exact logistics of damming the creek and installing and removing the culverts and diversion pipes would be determined by the contractor in consultation with VAFB and a biological monitor approved by the U.S. Fish and Wildlife Service (USFWS).

Repair or Replacement of Gabion Mattresses and Baskets

The USAF would inspect and replace or repair gabions at the San Antonio Road West Bridge. Not all gabions were visible in a 2012 inspection because of sediment build-up, necessitating the removal of sediment prior to inspection and damage assessment (Penfield & Smith 2012).

a) Sediment Removal. The USAF would remove approximately 0.1 acres of sediment from under the bridge deck to facilitate the inspection and subsequent replacement or repair of the gabions. The gabions were originally installed 3 feet below ground level, but because of sediment build-up, the current depth of some gabions is unknown; whereas some gabions are visible above ground level.

b) Replacement. After sediment removal, the USAF would inspect the gabions and replace any failed or excessively worn wire fabric. The wire fabric would be replaced with fabric of the same or better quality than the original. The replacement wire fabric would also be galvanized to inhibit wear by abrasion and chemical interaction with sediments and water.

c) Repair. Repair would consist of adding additional rock-fill to the gabions and securely attaching wire fabric over the damaged sections. Fastening methods would follow Caltrans Standard Plans D100A and D100B.

Maintenance Requirements

After completion of the project, the USAF would conduct annual inspections to maintain the erosion protection system in good condition. Additional vegetation clearing may be required on an annual basis, depending on the rate of regrowth. All woody vegetative material with stems

greater than or equal to 2 inches in diameter will be trimmed to within 3 inches of the ground or water's surface. Vegetation less than 2 inches in diameter will remain.

Staging Areas

Two staging areas, one located north and the other south of San Antonio Road West, would be required to carry out the project (Figure 3). The south staging area is approximately 0.4 acres and the northern area is approximately 0.12 acres. These areas would be cleared and grubbed prior to starting the project.

Site Restoration

Restoration of the area impacted during the repairs and maintenance to the bridge would begin during the final stages of maintenance activities as machinery and materials are removed. All surplus and waste materials would be removed from the Proposed Action Area, unless they are also required for the restoration of the Proposed Action Area. To the extent practicable, the site contours, river channel, and habitat types would be restored to pre-maintenance conditions, except directly under the bridge where maintenance activities occurred. Permanent and temporary impacts to vegetation would be offset by performing mitigation through further habitat restoration within the wetland mitigation area. All exposed soil areas at the upland staging and access areas would be stabilized with native vegetation. An upland native grass seed mix that is approved by the base botanist would be applied to upland areas. Weed-free mulch would be used to protect the seed and provide temporary stabilization. Once the native grassland is established, native shrub container plantings would be installed in the upland areas. Irrigation may be used in upland areas as needed to help establish native vegetation. Irrigation water would either come from a municipal source or water pumped from the creek. Water pumped from San Antonio Creek would be pumped into containers for hand-watering or into a drip irrigation system. The irrigation pump intake would be placed in a 30-gallon barrel with fine mesh (1/16th in.) screened holes by a qualified biologist to protect listed species from entering the pump intake.

Because vegetation removal under the bridge will be an ongoing maintenance activity, losses of willow riparian vegetation are considered to be permanent by the Central Coast Regional Water Quality Control Board (RWQCB). Permanent impacts to wetlands are required to be mitigated at a 3:1 (area mitigated: area impacted) for restored or enhanced wetlands. There were no feasible wetland mitigation opportunities identified adjacent to the San Antonio Road West Bridge maintenance area; therefore, a wetland mitigation area that was identified is 0.48 ac. (0.19 ha) and runs parallel to a riparian zone and is adjacent to a fallow farm field approximately 0.75 mi. (1.21 km) downstream of the bridge (Figure 4). Willow planting in this area would establish willow riparian habitat on an existing fallow farm field. The Proposed Action would impact 0.16 ac. (0.10 ha) of central coast arroyo willow riparian forest and scrub. Permanent impacts to willow riparian habitat would be mitigated at a 3:1 ratio (area mitigated to area impacted). In total, 0.48 ac (0.19 ha) of willow riparian habitat would be restored at the wetland mitigation area.

Mitigation activities would include two main objectives: site preparation and willow pole planting with an overall timeline of approximately three years. An additional two years of monitoring will occur depending on achievement of success criteria. Site preparation will require broadleaf specific herbicide treatment for two consecutive years through the winter into

the early spring, harrowing and seed application during the first years' winter, with a follow-up seed application during the winter of the second year, and spot herbicide treatments of non-native grasses as needed. Willow pole planting and container planting of native riparian plants will occur during the winter of the third year. To reduce competition for newly planted willows and container plantings, spot treatments of invasive weeds will be performed as needed.

Monitoring of the site would be conducted for a minimum of five years to assess the effectiveness of the planting efforts and help provide guidance for follow-up maintenance.

PROJECT SCHEDULE

The USAF anticipates that the project would take approximately 90 days to complete, be limited to daytime hours, and commence upon completion of the NEPA process. Additionally, the project would be scheduled to occur outside of the rainy season, which extends from approximately 15 October through 15 April.

DETERMINATION

The USAF determined that inspecting and repairing or replacing the erosion protection system at the San Antonio Road West Bridge will not significantly impact natural, cultural and paleontological resources, access to the coast, or coastal scenic and visual qualities. The USAF has determined that the project, as described above, would occur outside the coastal zone. As defined in Section 304 of the Act, the term "coastal zone" does not include "lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal government." The project will occur within VAFB, which is wholly owned and operated by the Department of Defense, and therefore is excluded from the coastal zone. The USAF has therefore determined that the project will not affect the coastal zone and does not require a consistency determination.

However, the USAF recognizes that actions outside the coastal zone may affect land or water uses or natural resources along the coast and therefore are subject to the provisions of the Act. Consequently, an analysis of the impacts of the project on the coastal zone was conducted.

The components of the project, described above, were reviewed for potential impacts on coastal zone resources, including aquatic and terrestrial resources. The project area is approximately 1.6 miles upstream from the coastal zone boundary (Figure 5) and is not visible from public access points at or near the coast.

In accordance with the National Environmental Policy Act, the USAF is preparing an environmental assessment (EA) and a Finding of No Significant Impact (FONSI) for this project. The EA will be issued for a 30-day public review. VAFB will mail the EA and FONSI to your office at the start of the public review period. In addition, to assist you in your review, VAFB can provide copies of the Biological Assessments completed for the section 7 consultations with the USFWS. The Biological Assessment includes detailed descriptions of the minimization and monitoring measures that will be implemented to avoid significant impacts to natural resources potentially affected by the project.

The following briefly describes some of the resources in the project area that are analyzed in the EA.

Biological Resources and Water Quality

The biological resources and the water quality of the San Antonio Creek, adjacent to the creek and near the bridge, and downstream resources may be temporarily affected by the project, but long-term effects are not anticipated. The water flow in the creek at the San Antonio Road West Bridge will be temporarily diverted to create a dewatered exclusion zone around the gabions. Diversion of the water flow would be temporary and would be restored prior to the onset of the rainy season. Following the completion of repairs to the gabions, any access roads, fill materials, and culverts would be removed and the site would be contoured to mimic the natural channel to the extent feasible.

The exclusion zone and water diversion will enable sediment removal and repair of the gabions to occur without significant impacts to downstream resources. Biological monitors, qualified by the USFWS will direct and implement the creation of the exclusion zone. Aquatic and terrestrial wildlife, including special status species, will be captured, relocated to the nearest suitable habitat, and excluded from active project areas for the duration of in-stream removal and repair activities.

To minimize impacts to water quality in the project area as well as downstream, the project would be completed outside of the rainy season. VAFB will implement Best Management Practices (BMPs), including erosion control devices (e.g. wattles, silt fences, etc.) throughout the project area to minimize or prevent impacts to water quality (e.g., from sediment or debris being introduced into the creek).

The USAF determined that three special status species present within the project area may be affected by activities at the project site:

a) Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*; federally endangered)

b) Tidewater goby (*Eucyclogobius newberryi;* federally endangered)

c) California red-legged frog (*Rana draytonii*; federally threatened)

A summary of the potential effects of the project on these species is presented below. A more detailed analysis and supporting information is available in the Biological Assessment.

Unarmored threespine stickleback

By 1985, the stickleback's range in southern California was reduced to three locations, including the lower 8.4 miles of the San Antonio Creek drainage (USFWS 1985). Sticklebacks are native to San Antonio Creek and are the most common fish species observed in the creek (Swift et al. 1997). Sticklebacks may be present anywhere within the project area. Swift (1999) reported unarmored threespine stickleback in high densities in the low-gradient portions of San Antonio Creek, where creek flows are slow and the channel is wide, with the highest abundance occurring within 1.25 miles of El Rancho Road.

Population size estimates (Baskin and Bell 1976) indicate that the best habitat for sticklebacks is small, clean pools in a stream with a constant flow of water. Sticklebacks are sensitive to excessive sedimentation and the loss of habitat through changes in water flow, water level, and the growth of emergent plants. Sticklebacks require slow moving water with low turbidity and aquatic vegetation for cover and nest material. While adults can occupy all areas of

a stream, they tend to gather in areas of slow moving or standing water. Young sticklebacks tend to be found at the shallow edges of streams in areas of dense vegetation. Breeding activity of sticklebacks peaks in March; however, breeding continues at a lower level throughout summer and fall. Unarmored threespine sticklebacks make their nests in areas with ample vegetation and gently flowing water. The number of suitable nesting sites may be a limiting factor for this species.

Changes in water flow, draining of areas with ponded water, increases in sedimentation, and removal of aquatic vegetation at the bridge have the potential to adversely impact unarmored threespine stickleback habitat both in the vicinity of the bridge and downstream. Contamination of unarmored threespine stickleback habitat may result from spills and leaks from construction equipment or discharge of construction related materials into the creek. Culverts used for temporary diversion of water flow would be removed after in-stream work is complete.

Prior to dewatering activities, surveys would be conducted for unarmored threespine sticklebacks within the vicinity of the bridge to determine approximate population estimates and quantify the effects of the project on this species. All sticklebacks found in the vicinity of the project area would be captured and relocated prior to dewatering the exclusion zone around the bridge, thus minimizing adverse effects to individuals in the project area. Removal of individuals from the exclusion zone would be considered a temporary disturbance to those individuals, but would not be expected to result in adverse impacts to the population of sticklebacks within San Antonio Creek. It is possible that individual sticklebacks may be injured or killed during capture and relocation efforts despite the best efforts of qualified wildlife specialists to safely capture the fish. Individuals remaining in the project area may be injured or killed as a result of foot or equipment traffic, predators attracted to work areas, or damage to or a reduction in habitat. The proposed minimization measures should ensure that unarmored threespine sticklebacks are protected, and that potential for injury is averted the greatest extent practicable.

In addition to direct impacts, the project may reduce the availability of prey for the unarmored threespine sticklebacks. Disturbance of sediments during dewatering of the exclusion zone and diversion of creek flow may temporarily increase the amount of sediment suspended in downstream waters and remove prey habitat. Sediment in the water column may raise turbidity levels making it difficult to locate prey, and sedimentation may suffocate bottom dwelling organisms that sticklebacks prey upon. A reduction in prey species or prey availability may lead to increased competition for food among sticklebacks and with other species.

The USAF proposes to implement measures to minimize the sedimentation and the possibility of accidental spills of contaminants into creek waters by implementing appropriate erosion control measures and spill protection measures at the project site. As noted by Baskin and Bell (1976), unarmored threespine sticklebacks are sensitive to changes in habitat, including increases in sedimentation and the growth of aquatic vegetation. While increasing water flow at the bridge may reduce or eliminate pooling upstream of the bridge, removing some vegetation and an accumulation of sediment at the gabions would reduce sedimentation and limit encroachment on habitat by emergent vegetation.

Tidewater Goby

The Tidewater Goby (TWG) is a small bottom dweller of California's coastal estuaries, wetlands, and lagoons, and lower reaches of coastal streams and rivers. On VAFB, TWGs exist

in Shuman Creek, San Antonio Creek, Santa Ynez River, Canada Honda (Honda Creek), and Jalama Creek (USFWS 2005). TWG localities closely correspond to major stream drainages; sediments provided by major drainages produce sandy beaches with low-lying coastal areas conducive to formation of coastal lagoons (USFWS 2005). In San Antonio Creek, TWG have been collected 3 to 5 miles upstream of the tidal lagoons (USFWS 2005).

Population estimates are not readily available for TWG, but the USAF evaluated populations on VAFB on a project-by-project basis, since the populations fluctuate yearly. Researchers have identified San Antonio Creek and Santa Ynez lagoons as the most important habitats supporting the TWG, with the Santa Ynez lagoon supporting the largest population (Swift et al. 1997, Swift 1999). In 1999, researchers documented TWG as being concentrated in the San Antonio Creek lagoon as compare to its channel (Swift 1999).

Since TWG appear to spend all life stages in lagoons, estuaries, and river mouths, their population may experience a decline if flushed out by the breaching of sandbars following storm events (USFWS 2005). However, population decline in one area may lead to colonization of others areas up and down the coast, as is suspected to be the case with Honda Creek (Swift et al. 1997, USFWS 2005).

The TWG was listed as endangered in 1994 (59 FR 5494) with a recovery plan published in 2005 (USFWS 2005). Critical habitat was designated in 2013 (78 FR 8745-8819), but does not include VAFB, since it is controlled by the Department of Defense (DoD) and has adopted an Integrated Natural Resources Management Plan (INRMP; USAF 2011), prepared under section 101 of the Sikes Act (16 U.S.C. 670a). In January 2014, USFWS proposed to reclassify the TWG from endangered to threatened (79 FR 14340-14362); as of March 2018, a decision on this proposal has not yet been reached.

California red-legged frog

California red-legged frogs occur in nearly all permanent streams and ponds on VAFB (Christopher 1996). This species has been observed at every location surveyed along San Antonio Creek except near Highway 1, where the water is too shallow (Christopher 1996). During the wetlands habitat assessment conducted from February through April 2008, California red-legged frogs were regularly observed throughout the creek restoration area.

California-red-legged frog adults and tadpoles may occur anywhere along the San Antonia Creek, including within the project area. The frogs prefer quiet pools in streams, marshes, and occasionally ponds and may occur in any type of vegetation that provides cover. Riparian vegetation immediately adjacent to the creek could be used as refuge for over-wintering tadpoles.

California red-legged frogs may breed in the area as early as November, usually laying egg masses during or shortly following large rainfall events from late December to early April. Surveys conducted from 1995-2002 indicate adult frogs begin breeding on VAFB in early January (Christopher 2002). Critical habitat for the California red-legged frog was designated on March 13, 2001. Habitat on VAFB was excluded from the critical habitat designation under Section 4(b)(2) of the Endangered Species Act. As a result, the project does not affect critical habitat. California red-legged frogs prey on a wide variety species, but most commonly invertebrates (e.g., insects). Larvae are thought to feed on algae, and larger adult frogs will capture other amphibians and small mammals (USFWS 2002).

Changes in water flow, draining of areas with ponded water, increases in sedimentation, and removal of aquatic vegetation have the potential to adversely impact California red-legged frog habitat at the bridge and downstream. Contamination of habitat could result from unintended spills or leaks from construction equipment or discharge of construction related materials into the creek. The two culverts used for temporary diversion of water flow would be removed after in-stream work is complete and would not have any long-term impact on water flow in the creek. The project would take place outside of the rainy season, which extends from 1 October through 15 April, thus avoiding the breeding and egg-laying season for this species.

California red-legged frogs found in the project area would be captured and relocated by a qualified wildlife specialist prior to dewatering of the exclusion zone, minimizing the potential for adverse effects to the species. California red-legged frogs occurring in the vicinity of project area or moving into the project area after project activities begin would be expected to move away from the project area to avoid disturbances. However, any California red-legged frogs found in the project area during any phase of the project would be captured and relocated. Disturbances from capture and removal would be considered short-term and temporary and would not be considered of a magnitude to result in adverse impacts to populations within the vicinity of the project area.

It is possible that individual California red-legged frogs may be injured or killed during capture and relocation efforts despite the best efforts of qualified wildlife specialists to safely capture the frogs. Individuals remaining in the project area may be injured or killed as a result of foot or equipment traffic, predators attracted to work areas, or damage to or a reduction in habitat. The proposed minimization measures should ensure that California red-legged frogs are protected, and that potential for injury is averted to the greatest extent practicable.

In addition to direct impacts, the project may reduce the availability of prey for California red-legged frogs. Disturbance of sediments during dewatering of the exclusion zone and diversion of creek flow may temporarily increase the amount of sediment suspended in the water column. Removal of aquatic vegetation used by the frogs and its prey may limit the availability of prey. Sedimentation downstream may cover algae that larvae are thought to feed on, and a reduction in prey species may lead to increased competition for food both among California red-legged frogs and other species.

The USAF proposes to implement measures to minimize the sedimentation and the possibility of accidental spills of contaminants into creek waters through appropriate erosion control measures and spill protection measures at the project site. The erosion control and species removal measures should ensure that California red-legged frogs are protected and that potential for injury and habitat loss is averted to the greatest extent practicable.

Long Term Biological Effects

A recent inspection of the San Antonio Road West Bridge noted that water pooling upstream of the bridge is eroding and undermining the gabions that attach to the bridge piling (Bengal 2011). Vegetation growing around the gabions reduces the velocity of water flowing under the bridge and increases sediment deposition at the gabions. Roots from the vegetation can also damage the gabions (Penfield & Smith 2012).

To improve water flow through under the bridge the USAF will remove sediment and vegetation from around the gabions and repair or replace the gabions, as necessary. These

maintenance and enhancement activities would ensure that water flows through San Antonio Creek, under normal and flood conditions, and does not undermine the stability of the bridge.

As a result, the velocity of water flowing under the bridge will increase and sediment deposition will decrease around the gabions. The project may result in loss of habitat for unarmored threespine sticklebacks and California red-legged frogs at the bridge and immediately upstream from the bridge where pools form in the creek. The removal of sediment and vegetation from around the gabions would likely reduce the area and frequency of pooling water or eliminate pooling altogether. The removal of vegetation would reduce cover for the sticklebacks and frogs. However, the impact would be limited, because not all vegetation would be removed; only vegetative material with stems greater than or equal to 2 inches in diameter will be trimmed to within 3 inches of the ground or water's surface. Vegetation less than 2 inches in diameter will remain intact and available to the species for cover.

The potential impacts of the project on special status wildlife species will be minimized to the greatest extent practicable. Most of the potential impacts will be avoided by the establishment of an exclusion area around the active project area, from which qualified wildlife specialists would capture and relocate special status wildlife species to suitable adjacent habitat prior to the onset project activities. Special status plant species identified in the project area would be marked for easy recognition and avoidance and protected to the extent practicable from damage or disturbance.

The implementation of additional environmental protection measures, described in Section 2.1.4 of the EA, will minimize the potential impact of project related activities on special status species. Therefore, the effects to special status species will be less than significant. Pursuant to the Endangered Species Act, the project may affect, and is likely to adversely affect the unarmored threespine stickleback and the California red-legged frog. However, since the area of potential impacts is small, relatively few individuals have the potential to be affected, and disturbed areas will be restored to natural conditions. Therefore, the project will not have significant effects on populations of federally listed wildlife species.

Formal section 7 consultation for federally listed species with potential to be affected will be completed with USFWS and a Biological Opinion issued in June 2018. VAFB will wholly adopt all mitigation measures stipulated within the Biological Opinion.

Diking, Filling, or Dredging

Article 4, Section 30233, provision (a)(6) of the Act, allows for the "diking, filling, or dredging" of wetland and estuarine areas for restoration proposes. Alterations to existing wetland areas at the project site would occur during sediment and vegetation removal, and dewatering of the exclusion zone. The velocity of water flow in the project area would increase but would be consistent with water flow velocities upstream and downstream of the bridge.

The preferred alternative, as described in the EA and presented in this negative determination, is the only viable alternative that ensures the integrity of the San Antonio Road West Bridge. Proposed mitigation measures would reduce or minimize potential adverse effects to coastal zone resources.

Water Supply and Flood Control

Repairing or replacing the gabions would involve temporarily diverting water flow into two culverts to allow access to the gabions. Project activities would be scheduled to occur outside of the rainy season; however, the culverts would be removed prior to the forecast and onset of significant rainfall (0.5 inches within a 24-hour period) during anytime of the year. Upon completion of the project, the project area would be restored to a natural state to mitigate impacts, including disturbed soil stabilization and native plantings.

Environmentally Sensitive Habitat Areas

The project would disturb environmentally sensitive wetland habitat in the vicinity of the San Antonio Road West Bridge and upland habitat at equipment staging areas. Impacts to wetland habitat would be limited to a small section of the creek upstream and downstream of the bridge and are not expected to have long term effects on the viability of the creek to serve as desirable habitat for wildlife, including protected species.

Archaeological or Paleontological Resources

The San Antonio Road West Bridge project area has been surveyed for archaeological resources, including a survey of the creek cutbanks to look for buried sites (Lebow 2000). Although archaeological sites are recorded within half a mile of the San Antonio Road West Bridge, no sites are recorded within the project area or even within 200 meters of the bridge. Therefore, erosion control and maintenance activities at the bridge are not anticipated to impact archaeological resources.

The project would comply with Section 106 of the National Historic Preservation Act. In the event that previously undocumented cultural or archaeological resources are discovered during monitoring of construction activities, guidelines set forth in the VAFB Integrated Cultural Resources Management Plan (2005) will be followed.

If you need additional information, or if you have any questions, please do not hesitate to call me at (805) 605-7924, or email me at beatrice.kephart@us.af.mil. You can also direct your questions or comments to Tracy Curry at tracy.curry-bumpass@us.af.mil.

Sincerely

BEATRICE L. KEPHART

Chief, Asset Management Flight

List of Figures

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Figure 1. Regional Location of Vandenberg Air Force Base.

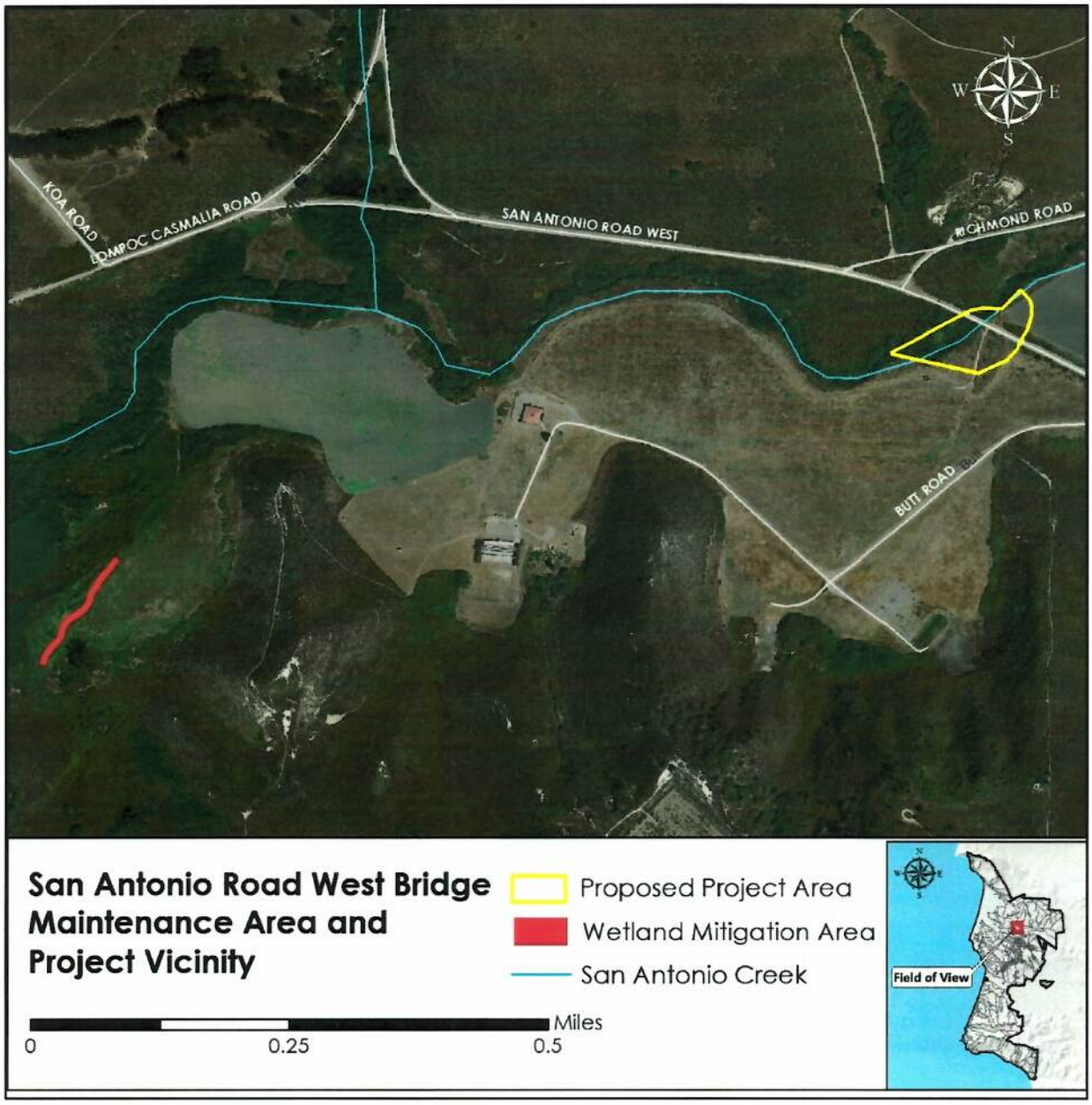

Figure 2. Vicinity of Project Area.

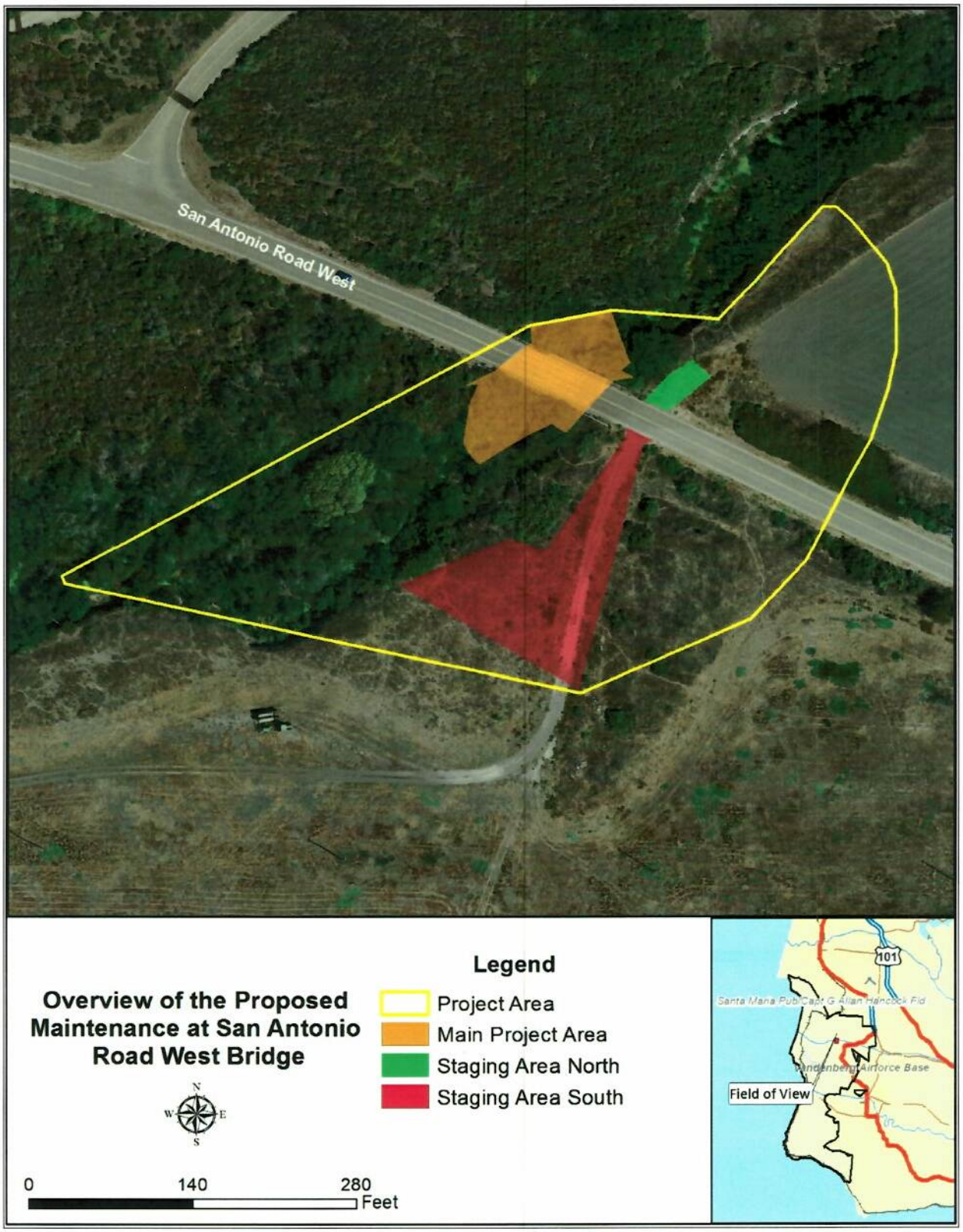

Figure 3. Proposed Action Area.

Figure 4. Wetland Mitigation Area.

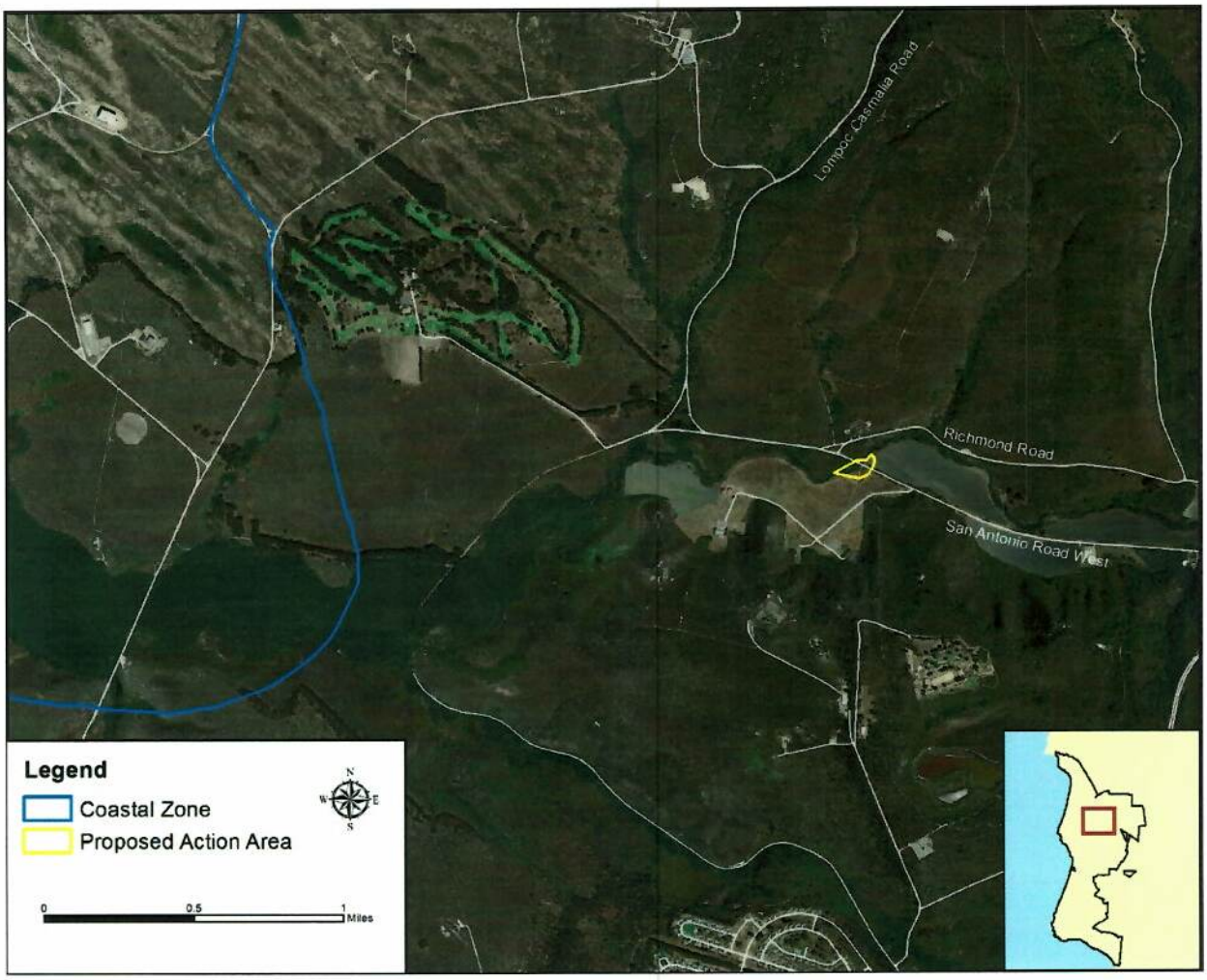

Figure 5. Project Area in Vicinity of Coastal Zone.

CALIFORNIA COASTAL COMMISSION
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September 12, 2018

Beatrice L. Kephardt
Department of the Air Force
30th Space Wing (AFSPC)
30 CES/CEI
1028 Iceland Avenue
Vandenberg AFB CA 93437-6010

Re: **ND-0026-18** Negative Determination, Department of the Air Force, bridge repair and erosion protection system maintenance at San Antonio Road West Bridge at Vandenberg Air Force Base

Dear Ms. Kephardt:

The Coastal Commission staff has received the above-referenced negative determination from the Department of the Air Force (Air Force) for bridge repair and erosion protection system maintenance at the San Antonio Road West Bridge at Vandenberg Air Force Base (Vandenberg), Santa Barbara County. Constructed in 1969, the Air Force describes San Antonio Road as a vital transportation connection to the northern part of Vandenberg. The project goals are to address erosion and undermining of existing gabions under the bridge and to provide for long-term bridge and gabion maintenance, thus maintaining this transportation connection.

The Air Force will achieve project goals through the following activities: removing built-up sediment at the gabions (approximately 0.1 acre in surface area); manually removing channel vegetation, primarily arroyo willow (*Salix lasiolepis*), under and immediately adjacent to the bridge that is greater than two inches in diameter to within 3 inches of the ground or water surface; assessing the gabions following sediment and vegetation removal to determine the extent of any damage; and completing the necessary gabion repair and/or replacement. The proposed project also includes future annual inspections and potential vegetation removal to maintain the bridge erosion protection system. The Air Force estimates that these activities will affect 0.16 acres of willow riparian habitat.

Prior to bridge maintenance activities, the Air Force will dewater the project site by diverting the active creek channel through a culvert installed and removed according to the specifications of a U.S. Fish and Wildlife Service (USFWS)-approved biological monitor. Two upland construction staging areas will be re-seeded with native vegetation (grasses and shrubs) following construction activities: an approximately 0.4 acre site south of San Antonio Road and an approximately 0.12 acre site north of the road. At these staging areas, cranes will place and remove a skid loader and container in the dewatered channel to facilitate sediment removal.

To mitigate impacts to riparian habitat, the Air Force identified a 0.48 acre mitigation site approximately 0.75 miles downstream of the bridge. As summarized in the project's Mitigation and Monitoring Plan and clarified through further communication with Air Force Staff, at this site the Air Force will clear invasive vegetation, plant willow poles and other riparian species, and monitor riparian vegetation establishment and growth for a minimum of five years or until success criteria are achieved. The Air Force will provide Commission staff with reports prepared as part of this monitoring program.

Gabion repair activities will occur outside of the rainy season and last for 90 days, and future annual vegetation removal subsequently will occur on an as-needed basis. Activities at the mitigation site will begin with two years of initial site preparation, followed by willow and riparian planting in the third year and then monitoring as described above.

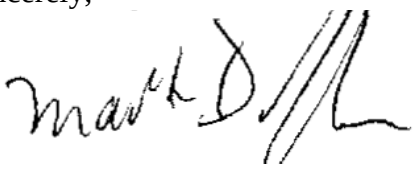
The draft Environmental Assessment (EA) analyzes several project alternatives, including complete replacement of the bridge, replacement of the gabions with rip rap, covering the gabions with concrete to eliminate willow growth, and a no action alternative. The Air Force selected the proposed project as the preferred alternative after considering the potential greater environmental effects of other alternatives.

San Antonio Creek provides habitat for three species that are listed under the federal Endangered Species Act: the unarmored threespine stickleback (*Gasterosteus aculeatus*), tidewater goby (*Eucyclogobius newberryi*), and the California red-logged frog (*Rana draytonii*). As clarified in the draft EA and the USFWS Biological Opinion for the project, 32 habitat and species-specific protection measures will be incorporated into the project. Coastal Commission staff agrees that these measures are adequate to protect these species.

During project development, the Air Force consulted with the California State Historic Preservation Office and the Santa Ynez Band of the Chumash Indians. According to the draft EA, the Santa Ynez Band of the Chumash Indians determined that no impacts to cultural sites would occur and a Native American monitor would be unnecessary.

In conclusion, the Coastal Commission staff **agrees** that the proposed project would not adversely affect coastal zone resources. We therefore **concur** with your negative determination made pursuant to 15 CFR Section 930.35 of the NOAA implementing regulations. Please contact John Weber of the Commission staff at (415) 904-5245 if you have any questions regarding this matter.

Sincerely,



(for) JOHN AINSWORTH
Executive Director

cc: CCC – South Central Coast Office
US Army Corps of Engineers- Los Angeles District