SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

ADDRESSING

CONSTRUCTION OF AN ACCESS CONTROL POINT AT FORT HUNTER LIGGETT, CALIFORNIA

JUNE 2013

SIGNATURE SHEET

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT ADDRESSING CONSTRUCTION OF AN ACCESS CONTROL POINT AT FORT HUNTER LIGGETT, CALIFORNIA

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COVER SHEET

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT ADDRESSING CONSTRUCTION OF AN ACCESS CONTROL POINT AT FORT HUNTER LIGGETT, CALIFORNIA

Responsible Agencies: U.S. Army Reserve Command (USARC), U.S. Army Garrison Fort Hunter Liggett, California, and U.S. Army Corps of Engineers, Mobile District.

Affected Location: U.S. Army Garrison Fort Hunter Liggett, California.

Proposed Action: Fort Hunter Liggett (FHL) proposes to construct a primary Access Control Point (ACP) at FHL for normally open operations.

Report Designation: Supplemental Environmental Assessment (SEA).

Abstract: Fort Hunter Liggett proposes to construct a primary ACP at FHL for normally open operations that meets U.S. Army and Department of Defense standards. The proposed primary ACP would consist of an Identification Check Area with guard booths, privately owned vehicle inspection area, truck holding area, truck check-in and inspection area, active and passive vehicle barriers, and required lighting and security systems. Construction of the primary ACP would require the relocation of the existing hot refueling pad at Tusi Army Heliport, and the installation or relocation of security fencing.

This SEA supplements the *Final Environmental Assessment Addressing Installation Development and Training (IDTEA) at Fort Hunter Liggett, California,* dated May 2010. FHL developed the 2010 IDTEA to address the potential environmental impacts of implementing projects proposed over a 5-year time period and identified in FHL's Range Complex Master Plan and Real Property Master Plan. Also addressed were the associated increases in training and future development of the cantonment area.

This SEA has been prepared to evaluate the Proposed Action and the No Action Alternative. Areas that are considered in the impacts analysis include land use, air quality, geological resources, water resources, biological resources, threatened and endangered species, cultural resources, and traffic and transportation. This SEA will be made available to the public upon completion.

PRIVACY ADVISORY

Your comments on this document are welcome. Letters or other written comments provided to the proponent concerning this document may be published in the SEA. Comments will normally be addressed in the SEA and made available to the public. Any personal information provided will be used only to identify your desire to make a statement during the public comment period or to fulfill requests for copies of the SEA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the SEA. However, only the names of the individuals making comments and specific comments will be disclosed; personal home addresses and phone numbers will not be published in the SEA.

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

ADDRESSING CONSTRUCTION OF AN ACCESS CONTROL POINT AT FORT HUNTER LIGGETT, CALIFORNIA

JUNE 2013

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AT FORT HUNTER LIGGETT, CALIFORNIA

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EXECUTIVE SUMMARY

The Headquarters Command of U.S. Army Garrison Fort Hunter Liggett (FHL) believes a comprehensive National Environmental Policy Act (NEPA) document would improve the continuing activity of installation development and training and facilitate the NEPA compliance process. As a result, FHL has prepared a Supplemental Environmental Assessment (SEA) that addresses a proposal to construct a primary Access Control Point (ACP) that meets the *Army Access Control Points Standard Design/Criteria* and Unified Facilities Criteria 4-022-01, *Security Engineering: Entry Control Facilities/Access Control Points*, for normally open operations (USACE 2009, DOD 2005). A Visitor's Center will be constructed within the proposed ACP footprint; however, it was previously analyzed in a separate NEPA document.

FHL developed the *Final Environmental Assessment Addressing Installation Development and Training (IDTEA) at Fort Hunter Liggett, California* in May 2010 (FHL 2010) to address the potential environmental impacts of implementing projects proposed over a 5-year time period and identified in FHL's Range Complex Master Plan and Real Property Master Plan. Also addressed were the associated increases in training and future development of the cantonment area. Due to additional proposed changes in installation development that were not considered in the 2010 IDTEA, this SEA has been prepared as a supplement to the 2010 IDTEA. This SEA incorporates the 2010 IDTEA by reference and includes the several changes to the Proposed Action.

Purpose and Need

The purpose of the Proposed Action is to construct a primary ACP for normally open operations using standard Army and Department of Defense design and criteria for ACPs.

The need for the Proposed Action is to provide FHL with a primary ACP that meets minimum Army anti-terrorism force protection requirements and controls traffic flow onto the installation's cantonment area. The existing FHL primary ACP on Bradley Drive does not meet minimum Army AT/FP requirements and does not provide adequate security for the installation. The Higher Headquarters' Anti-Terrorism team determined that the Bradley Drive ACP is non-compliant in all ACP design categories. The Proposed Action is needed to fully support FHL mission requirements and national security objectives.

Summary of Proposed Action

The Proposed Action addressed in this SEA incorporates the Proposed Action from the 2010 IDTEA by reference and includes the following changes:

- Construction of a primary ACP with Identification Check Area with guard booths, privately owned vehicle inspection area, truck holding area, truck check-in and inspection area, active and passive vehicle barriers, and required lighting and security systems
- Construction of an entry/access road to the proposed ACP
- Extension of utilities to support the proposed ACP and the Visitor's Center
- Relocation and reuse of components of the existing Bradley Drive ACP
- Relocation of the hot refueling pad at Tusi Army Heliport
- Installation or relocation of security fencing.

A Visitor's Center, including a gravel parking lot, paved handicapped spot, and a gravel temporary road connecting the Visitor's Center to Mission Road, will be constructed within the proposed ACP footprint. Some utilities, solar panels, and a cistern or septic tank will be installed to support the Visitor's Center. The Visitor's Center was previously analyzed in a separate NEPA document and will be referenced in this SEA, but is not part of the Proposed Action.

Summary of Environmental Consequences and Mitigation Measures

This SEA contains a comprehensive evaluation of the existing conditions and environmental consequences of the Proposed Action and the No Action Alternative, as required by NEPA. Implementation of the Proposed Action would not affect land use or cultural resources. Long-term, beneficial effects on traffic and transportation would be expected. Resources that could be adversely affected by the Proposed Action include air quality, geological resources, water resources, biological resources, threatened and endangered species habitat, and traffic and transportation. In all instances, effects on these resources are expected to be negligible to minor in significance. Use of best management practices (BMPs) identified in the Storm Water Pollution Prevention Plan (SWPPP), Spill Prevention, Control, and Countermeasures (SPCC) Plan, and other BMPs and project-specific design features would help minimize effects on surface and groundwater resources. Permanent removal of suitable San Joaquin kit fox habitat would result in a long-term, minor, adverse impact. FHL would coordinate with and initiate consultation with U.S. Fish and Wildlife Service for the Proposed Action. Implementation of the No Action Alternative would not result in a change in current conditions. Therefore, no significant direct or new indirect effects would occur under the No Action Alternative; however, adverse impacts could result from continuation of inadequate traffic management at the existing ACP.

The potential for cumulative effects on the environment was evaluated by reviewing other projects in the vicinity of the FHL that could affect the same environmental resources as the Proposed Action. Although some cumulative effects could occur, they are expected to be negligible to minor in significance. Implementation of the No Action Alternative would not result in a change in current conditions, and therefore, no cumulative effects would occur on the quality of the human or natural environment.

Table ES-1 summarizes the potential effects of the Proposed Action and the activities that could be conducted during implementation to avoid or minimize these effects. Identified effects were determined to be insignificant based on evaluation criteria presented for significant effects. Some practices to minimize effects would be required by Federal or state regulations. Most of these requirements are currently followed at the installation.

Table ES-1. Summary of Potential Environmental Consequences Associated with the Proposed Action

Resource Area	Proposed Action	No Action
Land Use	No effects on land use would be anticipated.	No adverse effects would be anticipated.
Air Quality	Short-term, minor, adverse effects would be anticipated from generation of emissions during construction activities. Dust control and proper equipment maintenance would help reduce overall emissions. Long-term, negligible, adverse effects would be anticipated from operation of the proposed ACP due to potential use of an emergency generator.	No new effects would be anticipated.
Geological Resources	Short- and long-term, minor, adverse effects on soils would be anticipated from ground disturbance during construction that could result in increased erosion. Long-term, negligible to minor, adverse effects on topography and surface and sub-surface geological resources would be anticipated from disturbance during construction. Implementation of BMPs identified in the SWPPP before, during, and after construction would minimize effects.	No adverse effects would be anticipated.
Water Resources	Short- and long-term, minor, adverse effects on groundwater and surface water quality would be anticipated from soil disturbance resulting in increased erosion and sedimentation, and possible contamination of storm water runoff. Short- and long-term adverse effects could result from increased impervious surfaces and soil compaction resulting in increased storm water runoff. Use of BMPs in the installation's SPCC Plan, SWPPP, and other project design features would help minimize effects.	No effects would be anticipated.
Biological Resources	Short- and long-term, negligible to minor, adverse effects on vegetation and wildlife would be anticipated from vegetation removal, disturbance or loss of habitat, and potential spread of exotic species. Natural resources management practices would be implemented to avoid or minimize impacts.	No new effects would be anticipated.
Threatened and Endangered Species	Short- and long-term, negligible to minor, adverse impacts on the San Joaquin kit fox, California condor, and arroyo toad could occur, primarily due to habitat disturbance. Use of BMPs could minimize impacts.	No effects would be anticipated.
Cultural Resources	No effects on cultural resources would be anticipated.	No effects would be anticipated.

Resource Area	Proposed Action	No Action
Traffic and Transportation	Short-term, minor, adverse effects due to increased traffic and long-term, minor, beneficial effects due to improved traffic management would be anticipated.	No new effects would be anticipated; however, adverse impacts could result from continuation of inadequate traffic management at the existing ACP.

1. Purpose of and Need for the Proposed Action

This Supplemental Environmental Assessment (SEA) addresses a proposal by Fort Hunter Liggett (FHL) to construct a primary Access Control Point (ACP) that meets the *Army Access Control Points Standard Design/Criteria* and Unified Facilities Criteria (UFC) 4-022-01, *Security Engineering: Entry Control Facilities/Access Control Points*, for normally open operations (USACE 2009, DOD 2005). The proposed ACP would include standard primary entry gate components, relocation of the hot refueling pad at Tusi Army Heliport (AHP), and installation or relocation of security fencing. A Visitor's Center will be constructed within the proposed ACP footprint; however, it was previously analyzed in a separate National Environmental Policy Act (NEPA) document.

This SEA has been prepared to comply with the requirements of NEPA, as amended (42 United States Code [U.S.C.] Section 4321−4347); the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508); and Department of Defense (DOD) Instruction 4715.9, *Environmental Planning and Analysis*.

1.1 Introduction

An ACP is a corridor at an installation entrance through which all vehicles and pedestrians must pass when entering or exiting the installation. The purpose of an ACP is to secure the installation from unauthorized access and possibly intercept contraband while maximizing vehicular traffic flow. ACP priorities include security, safety of motorists and guards, traffic flow, and aesthetics. An ACP and its facilities must perform a variety of functions, including visitor processing, vehicle registration, identification (ID) checks, and inspections of vehicles and trucks; and must accommodate pedestrians and a variety of vehicles, including passenger vehicles, trucks, buses, recreational vehicles, motorcycles, and bicycles (MSDDC 2010).

UFC 4-022-01 identifies four types of ACPs (i.e., primary, secondary, limited use, and pedestrian) based on intended function and anticipated usage. A primary ACP should be capable of supporting high traffic volumes and the following functional operations: issue visitor passes, check vehicle registrations, conduct random inspections, process authorized visitors/vehicles, and conduct optional truck/delivery processing. A primary ACP would be open continuously (i.e., 24 hours per day, 7 days per week), and would be capable of operating through Force Protection Condition (FPCON) Delta.

FHL's existing primary ACP is the temporary entry gate on Bradley Drive, between Mission Road and Route Tampa. It accommodates all privately owned vehicles (POVs), commercial vehicles, and tactical traffic; and processes visitors. The Bradley Drive ACP consists of two inbound lanes and one outbound lane and temporary facilities such as a canopy and a Visitor's Center. It is open 24 hours per day, 7 days per week and is manned by two ID checkers performing tandem processing during the morning peak hour. Total daily traffic demand is 771 vehicles with 166 vehicles occurring during the morning peak hour. The traffic volume during training exercises increases to 2,206 vehicles per day with 475 vehicles during the morning peak hour (MSDDC 2010).

1.2 Purpose and Need

The purpose of the Proposed Action is to construct a primary ACP for normally open operations using standard Army and DOD design and criteria for ACPs.

The need for the Proposed Action is to provide FHL with a primary ACP that meets minimum Army anti-terrorism force protection (AT/FP) requirements and controls traffic flow onto the installation's cantonment area. The existing FHL primary ACP on Bradley Drive does not meet minimum Army AT/FP requirements and does not provide adequate security for the installation. The Higher Headquarters' Anti-Terrorism (HHAT) team determined that the Bradley Drive ACP is non-compliant in all ACP design categories. The Proposed Action is needed to fully support FHL mission requirements and national security objectives.

1.3 Scope of the Analysis

The scope of the analysis consists of the range of actions, alternatives, and impacts to be considered. The scope of the Proposed Action and the range of alternatives to be considered are presented in detail in **Section 2**. In accordance with CEQ regulations, the No Action Alternative has been analyzed to provide the baseline against which the environmental impacts of implementing the action alternatives can be compared. This SEA identifies best management practices (BMPs) that are not already included in the Proposed Action.

FHL developed the *Final Environmental Assessment Addressing Installation Development and Training (IDTEA) at Fort Hunter Liggett, California* in May 2010 (FHL 2010) to address the potential environmental impacts of implementing projects proposed over a 5-year time period and identified in FHL's Range Complex Master Plan and Real Property Master Plan. Also addressed were the associated increases in training and future development of the cantonment area. Due to additional proposed changes in installation development that were not considered in the 2010 IDTEA, this SEA has been prepared as a supplement to the 2010 IDTEA.

This SEA incorporates the 2010 IDTEA by reference and includes the following changes to the Proposed Action:

- Construction of a primary ACP with ID Check Area with guard booths, POV inspection area, truck holding area, truck check-in and inspection area, active and passive vehicle barriers, and required lighting and security systems
- Construction of an entry/access road to the proposed ACP
- Extension of utilities to support the proposed ACP and the Visitor's Center
- Relocation and reuse of components of the existing Bradley Drive ACP
- Relocation of the hot refueling pad at Tusi AHP
- Installation or relocation of security fencing.

A Visitor's Center, including a gravel parking lot, paved handicapped spot, and a gravel temporary road connecting the Visitor's Center to Mission Road, will be constructed within the proposed ACP footprint. Some utilities, solar panels, and a cistern or septic tank will be installed to support the Visitor's Center. The Visitor's Center was previously analyzed in a separate NEPA document and will be referenced in this SEA, but is not part of the Proposed Action.

1.4 Summary of Key Environmental Compliance Requirements

The key environmental compliance requirements associated with the NEPA process were discussed in the 2010 IDTEA and are applicable to this SEA. Therefore, Section 1.4 from the 2010 IDTEA is incorporated herein by reference.

1.4.1 National Environmental Policy Act

NEPA (42 U.S.C. Section 4321–4347) is a Federal statute requiring the identification and analysis of potential environmental impacts associated with proposed Federal actions before those actions are taken.

1.4.2 Integration of Other Environmental Statutes and Regulations

This SEA examines potential effects of the Proposed Action and alternatives on eight resource areas: land use, air quality, geological resources, water resources, biological resources, threatened and endangered species, cultural resources, and traffic and transportation. These were identified as being potentially affected by the Proposed Action and include applicable critical elements of the human environment that are mandated for review by Executive Order (EO), regulation, or policy. **Appendix A** contains examples of relevant laws, regulations, and other requirements that are often considered as part of the analysis. Where useful to provide the reader with better understanding, key provisions of the statutes and EOs are discussed in more detail in the text of this SEA.

1.4.3 Interagency Coordination and Public Involvement

Through the interagency coordination process, FHL has notified relevant Federal, state, and local agencies; and federally recognized Tribes of the Proposed Action and provided them sufficient time to make known their environmental concerns specific to the action. FHL has coordinated with such agencies as the U.S. Environmental Protection Agency (USEPA); U.S. Fish and Wildlife Service (USFWS); State Historic Preservation Officer (SHPO); and other Federal, state, and local agencies. The coordination process also provides FHL the opportunity to cooperate with and consider state and local views in implementing the Federal proposal. **Appendix B** includes all coordination letters. A Notice of Availability (NOA) will be published in *The Monterey County Herald* and *King City Rustler*, and the SEA and Draft Finding of No Significant Impact (FNSI) will be made available to the public for a 30-day review period. This is done to solicit comments on the Proposed Action and involve the local community in the decisionmaking process. Upon receipt, public and agency comments will be considered and included in the SEA.

1.5 Organization of this Document

Section 1 contains background information on FHL and the locations of the Proposed Action, the purpose of and the need for the Proposed Action, and the scope of the SEA analysis, a summary of applicable regulatory requirements, and an introduction to the organization of the SEA. **Section 2** provides a detailed description of the Proposed Action, and **Section 3** describes alternatives to the Proposed Action. **Section 4** provides a general description of the environmental resources and baseline conditions that could be affected by the Proposed Action and the No Action Alternative. **Section 5** presents an analysis of the environmental consequences for the Proposed Action and No Action Alternative. **Section 6** includes an analysis of the potential cumulative effects. **Section 7** provides conclusions and recommendations. **Section 8** contains a list of the preparers of this SEA. **Section 9** lists the references used in the preparation of the document. **Section 10** includes abbreviations and acronyms that are used throughout this document.

Appendix A includes descriptions of applicable laws, regulations, policies, and planning criteria. **Appendix B** includes a copy of the coordination letter mailed to the agencies for this action, the distribution list, and any responses to the letter received. **Appendix C** contains air emissions calculations.

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2. Description of Proposed Action

The Proposed Action is to construct a primary ACP at FHL for normally open operations that meets U.S. Army and DOD standards. The proposed primary ACP would require the relocation of the existing hot refueling pad at Tusi AHP, and the installation or relocation of security fencing. While not part of the Proposed Action, a Visitor's Center, which was previously analyzed in a separate NEPA document, is discussed in this SEA due to its functional association with the proposed ACP and its location within the ACP footprint. The total development footprint of the Proposed Action would be approximately 10.7 acres.

All components of the Proposed Action identified and addressed in the 2010 IDTEA would remain unchanged. The Proposed Action addressed in this SEA incorporates the Proposed Action from the 2010 IDTEA by reference and includes the additional components described in the following section.

2.1 Detailed Description of the Proposed Action

The proposed primary ACP would be constructed on the west-central side of the FHL cantonment area, east of Mission Road and west of the Tusi AHP (see **Figures 2-1** and **2-2**). The new ACP would replace the existing primary ACP on Bradley Drive, approximately 0.75 miles to the north. Inbound vehicles would enter the proposed ACP from Mission Road, and would exit the ACP onto 7th Division Road. The FHL Real Property Master Plan (also known as the FHL Master Plan) proposes that 7th Division Road be extended from its current western terminus at Route Tampa to the proposed ACP.

The new primary ACP would consist of standard primary entry gate facilities, including an ID Check Area with two guard booths (one for each of two traffic lanes), two turnaround lanes, POV inspection area, truck holding area, truck check-in and inspection area, passive and active vehicle barriers, berms, landscaping, and lighting and security systems. Canopies with vertical clearances of 15 to 17 feet would cover the ID Check Area and guard booth, and POV and truck inspection areas. Other facilities at the ACP would include an entry gate at Mission Road, a Search Office adjacent to the POV and truck inspection areas to support Search Area guards and their activities, and a gatehouse to accommodate ID Check Area guards and their activities. All buildings would be between 10 to 15 feet tall.

All appropriate physical security measures would be incorporated into the proposed ACP, including required standoff distances from facilities, roads, parking areas, and vehicle unloading areas; security lighting and alarm systems; and passive and active barriers.

Infrastructure upgrades would include the extension of utilities including water, sanitary sewer, natural gas, electrical service, and information systems to the ACP and Visitor's Center. A backup generator would be installed adjacent to the ID Check Area. Appropriate drainage infrastructure would be designed and constructed in accordance with FHL's storm water management plan, which is currently being prepared. The storm water drainage infrastructure would be designed with the goal of maintaining or restoring the natural hydrologic functions of the site, in accordance with the Energy Independence and Security Act (EISA) Section 438.

Construction of the proposed primary ACP would disturb approximately 10.7 acres; approximately 7.5 acres of this area would be impervious surface for the ACP and access road. All of the disturbance area is currently vacant and undeveloped, except for a small portion of the Tusi AHP that is used for hot refueling (i.e., when fuel is transferred into or out of an aircraft while the engines are operating). Construction of the proposed ACP would be expected to last approximately 15 months. Siting and design

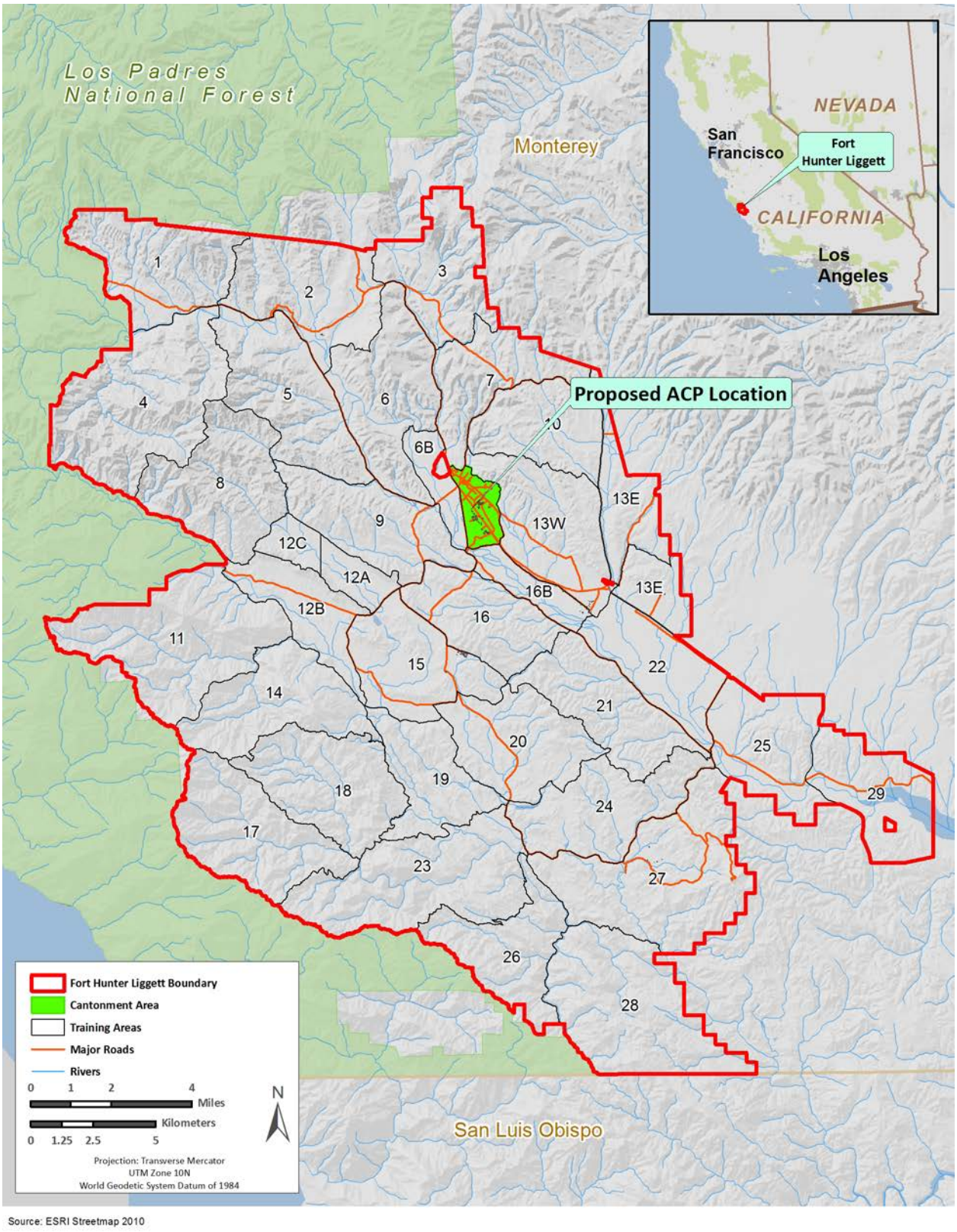


Figure 2-1. Location Map of Fort Hunter Liggett

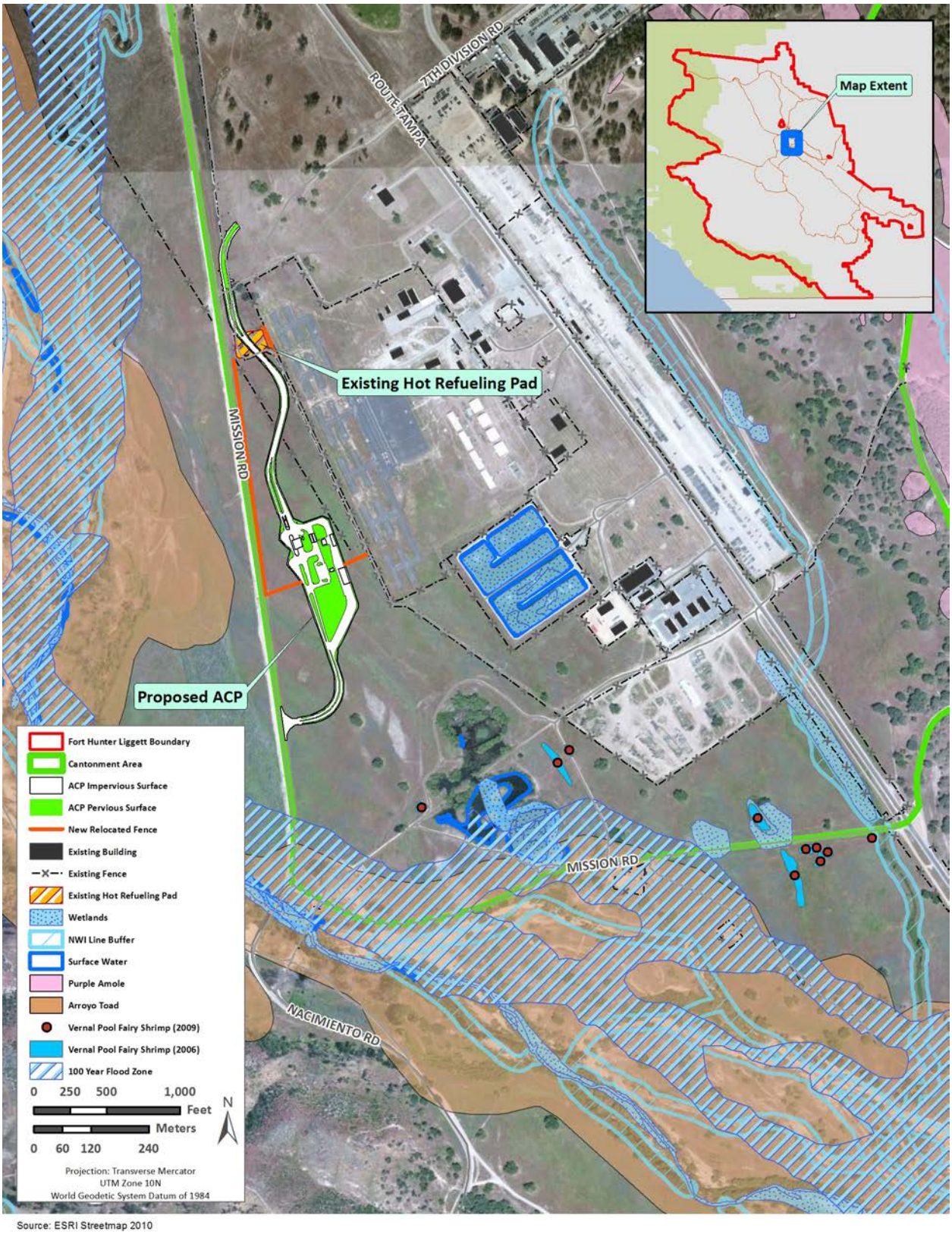


Figure 2-2. Environmental Constraints in the Vicinity of the Proposed Action

of the proposed ACP would be in compliance with the FHL Master Plan. **Figure 2-2** shows the Proposed Action and the environmental constraints in the project area.

The access road from the proposed ACP would traverse the existing hot refueling pad at Tusi AHP. The 800-square-foot (ft^2) hot refueling pad would be relocated to another location within the Tusi AHP footprint. The new site of the hot refueling pad has not been determined, but it would adhere to all appropriate setback distances.

Construction of the ACP and relocation of the hot refueling pad at Tusi AHP would require the relocation or installation of approximately 2,100 feet of 10-foot-tall, chain-link security fencing.

The proposed primary ACP would operate in the normally open operations (i.e., the active barriers are open to normal traffic flow and security guards would close the barriers only when they detect a threat vehicle) and accommodate both POVs and commercial vehicles. The new ACP would perform identical functions as the existing Bradley Drive ACP, and the number of personnel required to operate the ACP would not change. Following construction, the existing Bradley Drive ACP would be deactivated and its components would be transferred to the new ACP for reuse.

3. Alternatives to the Proposed Action

Under NEPA, reasonable alternatives to the Proposed Action must be considered in an Environmental Assessment. To warrant detailed evaluation, an alternative must be reasonable. To be considered reasonable, an alternative must also be "ripe" for decisionmaking (i.e., any necessary preceding events having taken place), affordable, capable of implementation, and satisfactory with respect to meeting the purpose of and the need for the action. The following discussion identifies alternatives considered by the U.S. Army and identifies whether they are reasonable and, hence, subject to further detailed evaluation in this SEA.

3.1 Screening Criteria

The following screening criteria were used to develop the Proposed Action and evaluate potential alternatives:

- ***Security.*** The first objective of an ACP is to maintain perimeter security for an installation. An ACP must accommodate random antiterrorism measures (RAM) for sustained operations and be able to operate at all FPCONs, including 100 percent vehicle inspections. An ACP also must have security features that protect against vehicle-borne threats and illegal entry.
- ***Safety.*** ACPs must have a working environment that is both safe and comfortable for Security Forces personnel. Security Forces safety includes provisions for personal protection against attack and errant drivers; and considers climate, location, and orientation. An ACP should be designed so that persons and vehicles entering and leaving the facility do so in a safe and orderly manner to protect themselves, security personnel, and pedestrians from harm.
- ***Capacity.*** An ACP must be designed to maximize the flow of traffic without compromising safety, security, or causing undue delays that could affect installation operations or off-installation public roadway users.
- ***Aesthetics/Image.*** An ACP should be designed to impart an immediate impression of professionalism and convey the commitment to the protection and safety of personnel, and the security of facilities and resources.

3.2 Alternatives Considered for Further Detailed Analysis

The alternatives considered for further detailed analysis in the SEA include the Proposed Action and the No Action Alternative.

3.2.1 Proposed Action

The Proposed Action was presented in **Section 2** and the configuration of the primary ACP would occur as shown in **Figure 2-2**.

3.2.2 No Action Alternative

CEQ regulations specify the inclusion of the No Action Alternative in the alternatives analysis (40 CFR 1502.14). The No Action Alternative is analyzed to provide a baseline of the existing conditions against which potential environmental and socioeconomic impacts of the Proposed Action and alternative actions can be compared. Under the No Action Alternative, FHL would not implement the Proposed Action. Taking no action would not meet the purpose of and need for the project to provide a primary

ACP for normally open operations at FHL that meets Army and DOD design and AT/FP requirements. The primary ACP would not be constructed. Personnel, families, and facilities at FHL would continue to be vulnerable to unauthorized entry, monitoring, and possible terrorist attack.

3.3 Alternatives Considered but Eliminated from Detailed Analysis

3.3.1 Alternative 1: Master Plan ACP

Alternative 1 was developed and evaluated as part of FHL's installation master planning process. Under this alternative, an ACP would be constructed on the west-central edge of the cantonment area that is adjacent to the northeast and west of the Blackhawk Hills (training/residential area) and the Mission Valley (industrial area) districts of the cantonment area, respectively (see **Figure 3-1**). The ACP would be on a new north-south access road parallel to the east of Mission Road that would connect with an extended 7th Division Road and divert traffic toward a roundabout. The site for this alternative was developed so that visitors would have the feeling that they were entering a college campus or small town.

The ACP in this alternative would interfere with the specified AT/FP standoff distances of several facilities proposed in the FHL Master Plan, including a parking area and three buildings, and would not comply with U.S. Army standards for the appropriate distance between the ID check point and the active vehicle barriers. Additionally, the ACP was not sized correctly to accommodate the expected demand or type of vehicles. Because Alternative 1 would not be compliant with AT/FP standards resulting in potential security issues and would not be sized appropriately, it was determined that this alternative would not be a viable alternative to the Proposed Action and was eliminated from further detailed analysis.

3.3.2 Alternative 2: Mission Road/Route Tampa ACP

Alternative 2 was developed for and identified in the *Fort Hunter Liggett, California Comprehensive Traffic Engineering Study* (MSDDC 2010). Under this alternative, an ACP would be constructed northwest of the intersection of Mission Road and Route Tampa in the southern portion of the cantonment area (see **Figure 3-1**). The proposed ACP would be in the Mission Valley industrial district south of the wastewater treatment plant. Northbound vehicles would enter the ACP from Mission Road, follow a curved access road, and exit onto Route Tampa.

This alternative would require the relocation of the newly constructed tactical vehicle wash rack, and would not comply with specified AT/FP standoff distances. Additionally, the FHL Master Plan and 2010 IDTEA identify this area for future redevelopment, including other industrial buildings and a convoy queuing area. Because Alternative 2 would require relocation of the tactical vehicle wash rack, and would not be compliant with the FHL Master Plan and specified AT/FP standoff distances, it was determined that this alternative would not be a viable alternative to the Proposed Action and was eliminated from further detailed analysis.

3.3.3 Alternative 3: Mission Road/Jolon Road ACP

Alternative 3 was developed to reutilize the former Mission Road ACP. Under this alternative, an ACP would be constructed at the approximate location of the former ACP located on Mission Road, just west of Jolon Road (see **Figure 3-1**). The proposed ACP would be outside of and approximately 2.75 miles south of the cantonment area.

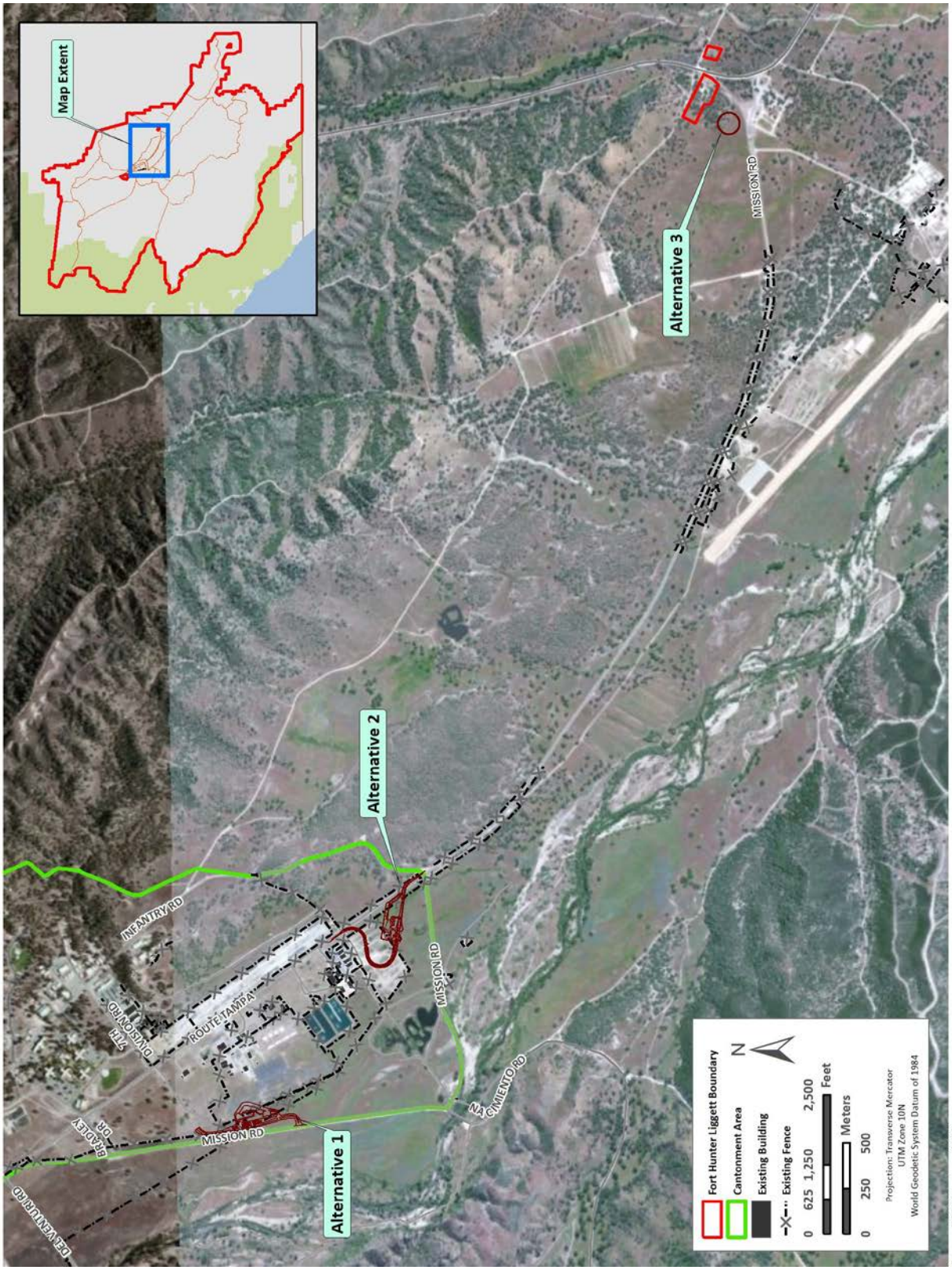


Figure 3-1. Location Map of Alternatives

This alternative does not provide appropriate security for the cantonment area, which is almost 3 miles away. It was determined that the cantonment area required tighter security around its perimeter, and the long distance between the alternative ACP site and the cantonment area would not provide that level of security. Because Alternative 3 would not provide appropriate security for the cantonment area, it was determined that this alternative would not be a viable alternative to the Proposed Action and was eliminated from further detailed analysis.

4. Affected Environment

This section describes the environmental resources and conditions most likely to be affected by the Proposed Action and provides information to serve as a baseline against which the SEA analysis can identify and evaluate environmental consequences likely to result from implementation of the Proposed Action. Baseline conditions represent current conditions. In compliance with NEPA, CEQ guidelines, and 32 CFR Part 651, as amended, the description of the affected environment focuses on those resources and conditions potentially subject to impacts.

Several resource areas have been omitted from detailed analysis in this SEA because existing conditions are the same as those described in the 2010 IDTEA, and the Proposed Action and No Action Alternative would result in no impacts or identical, non-significant impacts as those described in the 2010 IDTEA. These resource areas are incorporated herein by reference. The reasons for excluding these resource areas from detailed analysis in this SEA are outlined in the following paragraphs.

Airspace Management and Safety. Under the Proposed Action and No Action Alternative, existing airspace management and safety conditions would continue, and no changes in airspace would occur. Therefore, no impacts on airspace management and safety would be expected.

Noise. The Proposed Action would result in identical, non-significant noise impacts as those identified in the 2010 IDTEA, particularly those discussed in Section 5.4.3 under Representative Cantonment Construction Projects. The existing noise conditions at the cantonment area in the vicinity of the proposed ACP site were reviewed with respect to the latest available information and remain the same as those described in the 2010 IDTEA.

Socioeconomics and Environmental Justice. The Proposed Action and No Action Alternative do not involve activities that would directly affect activities outside of FHL. The Proposed Action would result in identical, non-significant beneficial impacts on socioeconomic resources from expenditures in the local economy. It is anticipated that construction would be accomplished by a minimal number of workers in the local labor force, and would not result in any outside workers and their dependents moving to the area. There would be no change in the number of personnel assigned to FHL and no changes in area population or associated changes in the demand for housing and public/social services. The Proposed Action and No Action Alternative do not involve activities that would affect minority or low-income populations because all work would be performed within the boundary of FHL, and would not impact adjacent communities.

Infrastructure. The Proposed Action would not result in the demand for a utility to exceed its capacity, interruption to utilities, or the violation of utility plans or permit conditions. Utility service would cease at the existing Bradley Drive ACP and utilities with comparable demand would be constructed at the proposed ACP. Therefore, no impacts on utility systems would be expected. The Proposed Action would result in identical, non-significant impacts on solid waste generation during construction as those identified in the 2010 IDTEA. Under the No Action Alternative, existing infrastructure conditions would continue and no changes to infrastructure would occur.

Hazardous Materials and Waste. The Proposed Action would result in identical, non-significant hazardous materials and waste impacts from construction activities as those identified in the 2010 IDTEA. Hazardous materials used and hazardous waste generated during construction would be handled in accordance with Federal and state regulations and established installation policies. The Proposed Action would not occur on a land in the Environmental Restoration Program, and would not involve asbestos-containing materials, lead-based paint, polychlorinated biphenyls, or pesticides.

Health and Safety. Construction site safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that reduce risks of illness, injury, death, and property damage. Occupational Safety and Health Administration and the USEPA issue standards that specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits with respect to workplace stressors. Construction workers are exposed to safety risks from the inherent dangers at any construction site. Contractors would be required to establish and maintain safety programs at the construction site. The proposed construction of a primary ACP and relocation of the hot refueling pad and security fence would not expose members of the general public to increased safety risks. Therefore, assuming construction protocols are followed and implemented, the Proposed Action would not introduce new or unusual safety risks to workers, FHL personnel, or the general public. The Proposed Action would result in identical, non-significant impacts on health and safety from construction of the proposed ACP.

4.1 Land Use

4.1.1 Definition of the Resource

The definition of land use was discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference.

4.1.2 Existing Conditions

The existing conditions of land use were discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference. The following baseline conditions specific to the Proposed Action were not discussed in the 2010 IDTEA.

The Proposed Action is in a portion of the cantonment area with no assigned land use category. It is currently undeveloped, vacant land with no discernible land uses. The FHL Master Plan identifies the proposed ACP site as natural open space (FHL 2012a). According to the Installation Regulating Plan, a form-based code for the cantonment area, in the FHL Master Plan, the Proposed Action would be in an unregulated area (i.e., area with no applied planning building standard/code) designated as open space (FHL 2012a, FHL 2012b). Land uses surrounding the proposed ACP site include undeveloped portions of the cantonment area to the north (currently site of a temporary ECS) and to the south (Gravel Pit Reservoir), Tusi AHP and the wastewater treatment plant and ponds to the east, and Mission Road and undeveloped portion of Training Area 6B to the west.

4.2 Air Quality

4.2.1 Definition of the Resource

The definition of the air quality resource was described in the 2010 IDTEA. This definition was reviewed with respect to the latest available information, and updates are provided in the following subsections, where applicable.

Ambient Air Quality Standards. Since the publication of the 2010 IDTEA, the USEPA and the State of California have revised the national and state ambient air quality standards for criteria pollutants. **Table 4-1** presents the most recent national and state ambient air quality standards. The revised ambient air quality standards do not change the attainment status designations for Monterey County, California, as described in the 2010 IDTEA.

Table 4-1. National and State Ambient Air Quality Standards

Pollutant	Averaging Time	Primary Standard		Secondary Standard
		Federal	State	
CO	8-hour (1)	9 ppm (10 mg/m^3)	Same as Federal	None
	1-hour (1)	35 ppm (40 mg/m^3)	20 ppm	None
Pb	Rolling 3-Month Average (2)	0.15 µg/m^3 (3)	None	Same as Primary
	30 Days	None	1.5 µg/m^3	None
NO_2	Annual (4)	53 ppb (5)	30 ppb	Same as Primary
	1-hour (6)	100 ppb	180 ppb	None
PM_{10}	24-hour (7)	150 µg/m^3	50 µg/m^3	Same as Primary
	Annual	None	20 µg/m^3	None
$PM_{2.5}$	Annual (8)	12 µg/m^3	Same as Federal	15 µg/m^3
	24-hour (6)	35 µg/m^3	None	Same as Primary
O_3	8-hour (9)	0.075 ppm (10)	0.070 ppm	Same as Primary
	1-hour	None	0.09 ppm	None
SO_2	1-hour (11)	75 ppb (12)	225 ppm	None
	3-hour (1)	None	None	0.5 ppm
	24-hour block	None	0.04 ppm	None
Hydrogen Sulfide	1-hour	None	0.03 ppm	None
Sulfates	24 Hour	None	25 µg/m^3	None
Visibility Reducing Particles	8 Hour	None	0.23 per kilometer (13)	None
Vinyl Chloride	24 Hour	None	0.01 ppm	None

Sources: USEPA 2011, CARB 2012

Notes: Parenthetical values are approximate equivalent concentrations.

1. Not to be exceeded more than once per year.
2. Not to be exceeded.
3. Final rule signed 15 October 2008. The 1978 standard for Pb (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. The USEPA designated areas for the new 2008 standard on 8 November 2011.
4. Annual mean.
5. The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of cleaner comparison to the 1-hour standard.
6. 98th percentile, averaged over 3 years.
7. Not to be exceeded more than once per year on average over 3 years.
8. Annual mean, averaged over 3 years.
9. Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years.
10. Final rule signed 12 March 2008. The 1997 O_3 standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, USEPA revoked the 1-hour O_3 standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour O_3 standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.
11. 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years.
12. Final rule signed 2 June 2010. The 1971 annual (0.3 ppm) and 24-hour (0.14 ppm) SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until 1 year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.
13. Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more due to particles when relative humidity is less than 70 percent.

Key: ppm = parts per million; ppb = parts per billion; mg/m^3 = milligrams per cubic meter; µg/m^3 = micrograms per cubic meter; CO = carbon monoxide; NO_2 = nitrous oxides; O_3 = ozone; PM_{10} = particulates equal to or less than 10 microns in diameter; $PM_{2.5}$ = particulates equal to or less than 2.5 microns in diameter; SO_2 = sulfur dioxide; Pb = lead

Federal Prevention of Significant Deterioration. Federal Prevention of Significant Deterioration (PSD) regulations apply in attainment areas to a major stationary source (i.e., source with the potential to emit 250 tons per year [tpy] of any regulated pollutant), and a significant modification to a major stationary source (i.e., change that adds 10 to 40 tpy to the major stationary source's potential to emit depending on the pollutant). Additional PSD major source and significant modification thresholds apply for greenhouse gases (GHGs), as discussed in the GHG Emissions subsection. PSD permitting can also apply to a proposed project if all three of the following conditions exist: (1) the proposed project is a modification with a net emissions increase to an existing PSD major source, and (2) the proposed project is within 10 kilometers of national parks or wilderness areas (i.e., Class I Areas), and (3) regulated stationary source pollutant emissions would cause an increase in the 24 hour average concentration of any regulated pollutant in the Class I area of 1 mg/m^3 or more (40 CFR 52.21[b][23][iii]). A Class I area includes national parks larger than 6,000 acres, national wilderness areas and national memorial parks larger than 5,000 acres, and international parks. PSD regulations also define ambient air increments, limiting the allowable increases to any area's baseline air contaminant concentrations, based on the area's Class designation (40 CFR 52.21[c]).

Title V Requirements. Title V of the Clean Air Act (CAA) Amendments of 1990 requires states and local agencies to permit major stationary sources. A Title V major stationary source has the potential to emit regulated air pollutants and hazardous air pollutants (HAPs) at levels equal to or greater than Major Source Thresholds. Major Source Thresholds vary depending on the attainment status of an air quality control region (AQCR). The purpose of the permitting rule is to establish regulatory control over large, industrial-type activities and monitor their impact on air quality. Section 112 of the CAA lists HAPs and identifies stationary source categories that are subject to emissions control or work practice requirements.

Greenhouse Gas Emissions. GHGs are gaseous emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. The most common GHGs emitted from human activities include carbon dioxide (CO_2), methane, and nitrous oxide. Human-caused GHGs are produced primarily by the burning of fossil fuels and through industrial and biological processes. On 22 September 2009, the USEPA issued a final rule for mandatory GHG reporting from large GHG emissions sources in the United States. The purpose of the rule is to collect comprehensive and accurate data on CO_2 and other GHG emissions that can be used to inform future policy decisions. In general, the threshold for reporting is 25,000 metric tons or more of CO_2 equivalent emissions per year but excludes mobile source emissions. The regulation of GHG emissions under the PSD and Title V permitting programs was initiated by a USEPA rulemaking issued on 3 June 2010 known as the GHG Tailoring Rule (75 Federal Register 31514). GHG emissions thresholds for the permitting of stationary sources are an increase of 75,000 tpy of CO_2 at existing major sources and facility-wide emissions of 100,000 tpy of CO_2 for a new source or a modification of an existing minor source. The 100,000 tpy of CO_2 threshold defines a major GHG source for both construction (PSD) and operating (Title V) permitting, respectively.

EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, was signed in October 2009 and requires agencies to set goals for reducing GHG emissions. One requirement within EO 13514 is the development and implementation of an agency Strategic Sustainability Performance Plan (SSPP) that prioritizes agency actions based on lifecycle return on investment. Each SSPP is required to identify, among other things, "agency activities, policies, plans, procedures, and practices" and "specific agency goals, a schedule, milestones, and approaches for achieving results, and quantifiable metrics" relevant to the implementation of EO 13514. The DOD's SSPP was originally released to the public on 26 August 2010; it has been updated annually since 2010. This implementation plan describes specific actions that the DOD will take to achieve its individual GHG reduction targets, reduce long-term costs, and meet the full range of goals of the EO. All SSPPs segregate GHG emissions into three categories: Scope 1, Scope 2, and Scope 3 emissions. Scope 1 GHG emissions are those directly occurring from sources that are owned or controlled by the agency. Scope 2 emissions are indirect emissions generated

in the production of electricity, heat, or steam purchased by the agency. Scope 3 emissions are other indirect GHG emissions that result from agency activities but from sources that are not owned or directly controlled by the agency. The GHG goals in the DOD SSPP include reducing Scope 1 and Scope 2 GHG emissions by 34 percent by 2020, relative to Fiscal Year (FY) 2008 emissions, and reducing Scope 3 GHG emissions by 13.5 percent by 2020, relative to FY 2008 emissions.

4.2.2 Existing Conditions

The existing air quality conditions for Monterey County, California, were reviewed with respect to the latest available information and remain the same as those discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference.

In August 2012, FHL estimated their potential to emit for criteria air pollutants and GHGs from regulated stationary sources. The installation's current potential to emit is less than half of the 100 tpy Title V major source threshold for all criteria air pollutants and approximately 13 percent of the 100,000 tpy threshold for CO_2 equivalents. **Table 4-2** summarizes the installation's most recent potential to emit.

Table 4-2. Potential to Emit for FHL

	NO_x (tpy)	**VOC (tpy)**	**CO (tpy)**	**SO_x (tpy)**	**PM_{10} (tpy)**	**$PM_{2.5}$ (tpy)**	**CO_2* (tpy)**
Potential to Emit	44.81	38.30	21.99	4.30	12.91	12.91	12,649

Source: FHL 2012c

Key: NO_x = nitrogen oxides; VOC = volatile organic compound; SO_x = sulfur oxides

Note: * = Expressed as CO_2 equivalents.

4.3 Geological Resources

4.3.1 Definition of the Resource

The definition of geological resources was described in the 2010 IDTEA; thus, this information is incorporated herein by reference.

4.3.2 Existing Conditions

The existing conditions of the geological resources were described in the 2010 IDTEA; thus, this information is incorporated herein by reference. The following baseline conditions specific to the Proposed Action were not discussed in the 2010 IDTEA.

Soils at and in the vicinity of the Proposed Action consist of Arroyo Seco gravelly sandy loam with 0 to 2 percent slopes and Arroyo Seco gravelly sandy loam with 2 to 5 percent slopes. Both soils are well drained with no building limitations (NRCS 2013).

4.4 Water Resources

4.4.1 Definition of the Resource

The definition of water resources was described in the 2010 IDTEA; thus this information is incorporated herein by reference. The portions of the definition of water resources that have changed or were not

previously discussed in the 2010 IDTEA are discussed in the following paragraphs. Wetlands are discussed in **Section 4.5**.

The USEPA published the technology-based Final Effluent Limitations Guidelines (ELGs) and New Performance Standards for the Construction and Development Point Source Category, known as the C&D rule, on 1 December 2009 to control the discharge of pollutants from construction sites. The C&D rule became effective on 1 February 2010. After this date, all USEPA- or state-issued permits were to be revised to incorporate and address the C&D rule requirements, with the exception of the numeric limitation for turbidity. The USEPA currently regulates storm water discharge from large and small (greater than 1 acre) construction activity under the National Pollutant Discharge Elimination System (NPDES) permit program through the 2012 Construction General Permit (CGP).

All new construction sites must meet the requirements outlined in the NPDES permits, which include technology-based and water-quality-based effluent limits that apply to all discharges, unless otherwise specified in the CGP, and development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). In California, SWPPPs must be developed by a qualified SWPPP developer and implemented by a qualified SWPPP practitioner. Permittees must select, install, and maintain effective erosion- and sedimentation-control measures and BMPs as identified in the CGP and SWPPP, including the following:

- Sediment controls (e.g., sediment basins, sediment traps, silt fences, vegetative buffer strips)
- Offsite sediment tracking and dust control
- Runoff management
- Post-construction storm water management
- Erosion control and soil stabilization
- Spill/release prevention.

In California, the NPDES program is administered by the State Water Resources Control Board (SWRCB), and NPDES permits are authorized by Section 402 of the Clean Water Act (CWA) and Section 13370 of the California Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act is the principal law governing water quality compliance in California. The Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources. The Porter-Cologne Water Quality Control Act incorporates many provisions of the Federal CWA, such as delegation to the SWRCB and Regional Water Quality Control Boards (RWQCBs) of the NPDES permitting program. The Act also requires waste dischargers to notify the RWQCB through the filing of a Report of Waste Discharge, and it authorizes the SWRCB and RWQCB to issue waste discharge requirements (WDRs), CWA Section 401 water quality certifications, and other approvals. The Proposed Action is within the Central Coast RWQCB (Region 3). The Central Coast RWQCB developed the *Water Quality Control Plan for the Central Coastal Basin* (i.e., Basin Plan). The Basin Plan is a water quality control plan that establishes beneficial uses, water quality objectives, and implementation programs for the region, including the San Antonio River in the Salinas River watershed.

4.4.2 Existing Conditions

The affected environment for water resources was described in the 2010 IDTEA and is incorporated by reference. The portions of the water resources affected environment that have changed or were not discussed in the 2010 IDTEA are discussed in this section.

Groundwater. A hydrocarbon-contaminated groundwater plume associated with Building 258 extends approximately 2,200 feet south (USACE 2012). Groundwater in the vicinity of the Building 258 plume has been encountered at depths of 12 to 45 feet below ground surface (USACE 2012). This groundwater

plume could potentially affect drinking water supplies (FHL 2011a). The installation's water supply is drawn from groundwater.

Surface Water. Surface water at or near the Proposed Action includes the San Antonio River to the west bordering the western portion of the cantonment area, and a reservoir (Gravel Pit Reservoir) to the south. At its closest point, the San Antonio River is approximately 1,250 feet west of the proposed ACP. Gravel Pit Reservoir is approximately 800 feet south-southeast of the proposed ACP. The new security fence would be installed approximately 1,300 feet north of Gravel Pit Reservoir.

Floodplains. The Federal Emergency Management Agency Flood Insurance Rate Map Panel No. 06053C1575G contains flood potential information for the Proposed Action area. The proposed ACP, relocated hot refueling pad, and new security fence would be within Zone X (FEMA 2009). Zone X is defined as an area of minimal flood hazard that is determined to be outside of zones having a 0.2 percent annual chance to flood.

4.5 Biological Resources

4.5.1 Definition of the Resource

The definition for biological resources was discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference.

4.5.2 Existing Conditions

The existing conditions of biological resources were discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference. The following baseline conditions specific to the Proposed Action were not discussed in the 2010 IDTEA.

Vegetation. Vegetation found within and adjacent to the Proposed Action area are primarily nonnative annual grasses with potential for occasional native bunch grasses to occur. The developed portion of the cantonment area to the east of the Proposed Action area contains a mixture of native oak trees, shrubs, and grasses, intermingled with ornamental landscaping immediately adjacent to buildings (FHL 2011b).

Wetlands. There are approximately 800 acres of both jurisdictional and non-jurisdictional wetlands on FHL (FHL 2010). Jurisdictional and non-jurisdictional wetlands occur to the east, west, and south of the Proposed Action area; however, no jurisdictional waters of the United States are documented in the Proposed Action area. The wetlands to the west of the Proposed Action area are associated with the San Antonio River and the wetlands to the south (Gravel Pit Reservoir) and east (wastewater treatment ponds) are man-made freshwater ponds. These wetlands are located between approximately 750 to 1,300 feet from the Proposed Action area (see **Figures 2-2** and **4-1**).

Vernal pools are seasonal pools that are difficult to detect because of their often small size and seasonal inundation, but they are producers of zooplankton, phytoplankton, and macroinvertebrates. Vernal pools are located approximately 1,100 feet to the south and 1,800 feet to the southeast of the Proposed Action area (see **Figures 2-2** and **4-1**).

Wildlife Resources. Migratory birds are present in the area associated with the Proposed Action with nesting populations present in late spring and summer, overwintering populations in the late fall and winter, and migrating populations transiting the region in between those periods. Bird species potentially found in or near the Proposed Action area include the western meadow lark (*Sturnella neglecta*), horned

lark (*Eremophila alpestris*), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), turkey vulture (*Cathartes aura*), and red-tailed hawk (*Buteo jamaicensis*) (FHL 2011b).

Mammal species potentially found in or near the Proposed Action area include the California ground squirrel (*Spermophilus beecheyi*), tule elk (*Cervus elaphus nannodes*), California mule deer (*Odocoileus hemionus californicus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus maniculatus*), pocket mouse (*Perognathus californicus*), and kangaroo rat (*Dipodomys* spp.).

4.6 Threatened and Endangered Species

4.6.1 Definition of the Resource

The definition of threatened and endangered species was discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference.

4.6.2 Existing Conditions

The existing conditions for threatened and endangered species were discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference. The following baseline conditions specific to the Proposed Action were not discussed in the 2010 IDTEA.

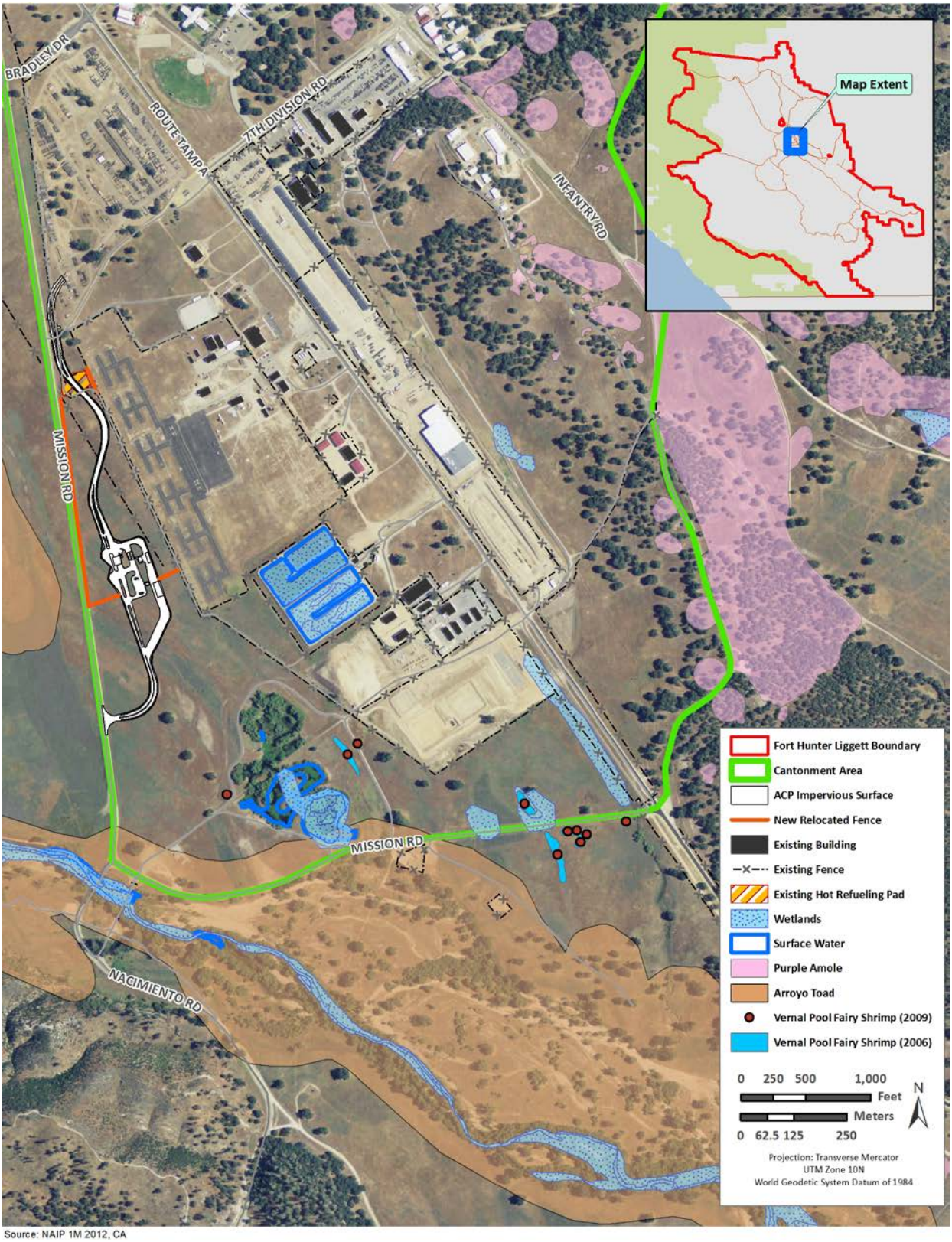
The following four Federal-listed endangered species and three Federal-listed threatened species have the potential to occur within or near FHL.

- San Joaquin kit fox (*Vulpes macrotis mutica*) - endangered
- Least Bell's vireo (*Vireo bellii pusillus*) - endangered
- California condor (*Gymnogyps californianus*) - endangered
- Arroyo toad (*Bufo californicus*) - endangered
- California red-legged frog (*Rana aurora draytonii*) - threatened
- Vernal pool fairy shrimp (*Branchinecta lynchi*) - threatened
- Purple amole (*Chlorogalum purpureum* var. *purpureum*) - threatened.

Potential habitat for all of these Federal-listed species occurs at FHL; however, only habitat for the kit fox is known to occur in the Proposed Action area. Species that potentially occur in or near the Proposed Action area include the San Joaquin kit fox, California condor, arroyo toad, and vernal pool fairy shrimp. See Section 4.8.2 in the 2010 IDTEA for accounts of the species that potentially occur in or near the proposed Action Area (FHL 2010). **Figure 4-1** identifies the Federal-listed protected species that are in the general vicinity of the Proposed Action area. San Joaquin kit fox habitat is in the Proposed Action area and encompasses all area shown in **Figure 4-1**; however, it is not shown on the map for clarity.

The following three state-listed threatened species and one state-listed endangered species are either known or have the potential to occur on or near FHL.

- Santa Lucia mint (*Pogogyne clareana*) - state-endangered
- Bald eagle (*Haliaeetus leucocephalus*) - state-threatened
- Swainson's hawk (*Buteo swainsoni*) - state-threatened
- Bank swallow (*Riparia riparia*) - state-threatened.



Source: NAIP 1M 2012, CA

* San Joaquin kit fox habitat encompasses all area shown in **Figure 4-1**; however, it is not shown on the map for clarity.

Figure 4-1. Federal Listed Species in the Vicinity of the Proposed Action

Of these four species, the bald eagle, Swainson's hawk, and the bank swallow could pass through the Proposed Action area. The Santa Lucia mint is not known to occur in or near the Proposed Action area. See Section 4.8.2 in the 2010 IDTEA for species accounts of the stated-listed species that potentially occur in or near the Proposed Action area (FHL 2010). State requirements for mitigation of effects on special status species are not applicable on Federal lands; however, documentation of potential effects for these species is required under NEPA. Table 4-15 in Section 4.8.2 of the 2010 IDTEA provides a list of the special status species for California that are known to occur on FHL (FHL 2010).

4.7 Cultural Resources

4.7.1 Definition of the Resource

The definition of cultural resources was described in the 2010 IDTEA; thus, this information is incorporated herein by reference.

4.7.2 Existing Conditions

The existing conditions for cultural resources were discussed in the 2010 IDTEA and are incorporated herein by reference. The portions of the cultural resources affected environment that are specific to the Proposed Action are addressed in this section.

Archaeological Resources. No known archaeological sites exist within the Proposed Action area. The Proposed Action area is composed of the proposed primary ACP site and the sites where the Tusi AHP hot refueling pad and security fencing would be relocated.

Historic Buildings and Structures. No historic buildings or structures are within the Proposed Action area.

One building within the cantonment area and one adjacent to the cantonment area are listed in the National Register of Historic Places (NRHP), but are outside of the Proposed Action area. The NRHP-listed Hacienda/Milpitas Ranch House (Building 101; CA-MNT-940H) is located within the cantonment area, just over one mile northwest of the Proposed Action area. The NRHP-listed Mission San Antonio de Padua (CA-MNT-100H) is located on a private holding adjacent to the cantonment area, approximately 1.5 miles to the northwest of the Proposed Action area. An area restricted from development, the Mission Viewshed Restricted Building Zone, surrounds the Mission and prohibits aboveground development within the zone to preserve the Mission viewshed. The Proposed Action area is located approximately 1 mile southeast from the edge of the Mission Viewshed Restricted Building Zone (see **Figure 4-2**).

4.8 Traffic and Transportation

4.8.1 Definition of the Resource

The definition of the traffic and transportation systems resource was discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference.

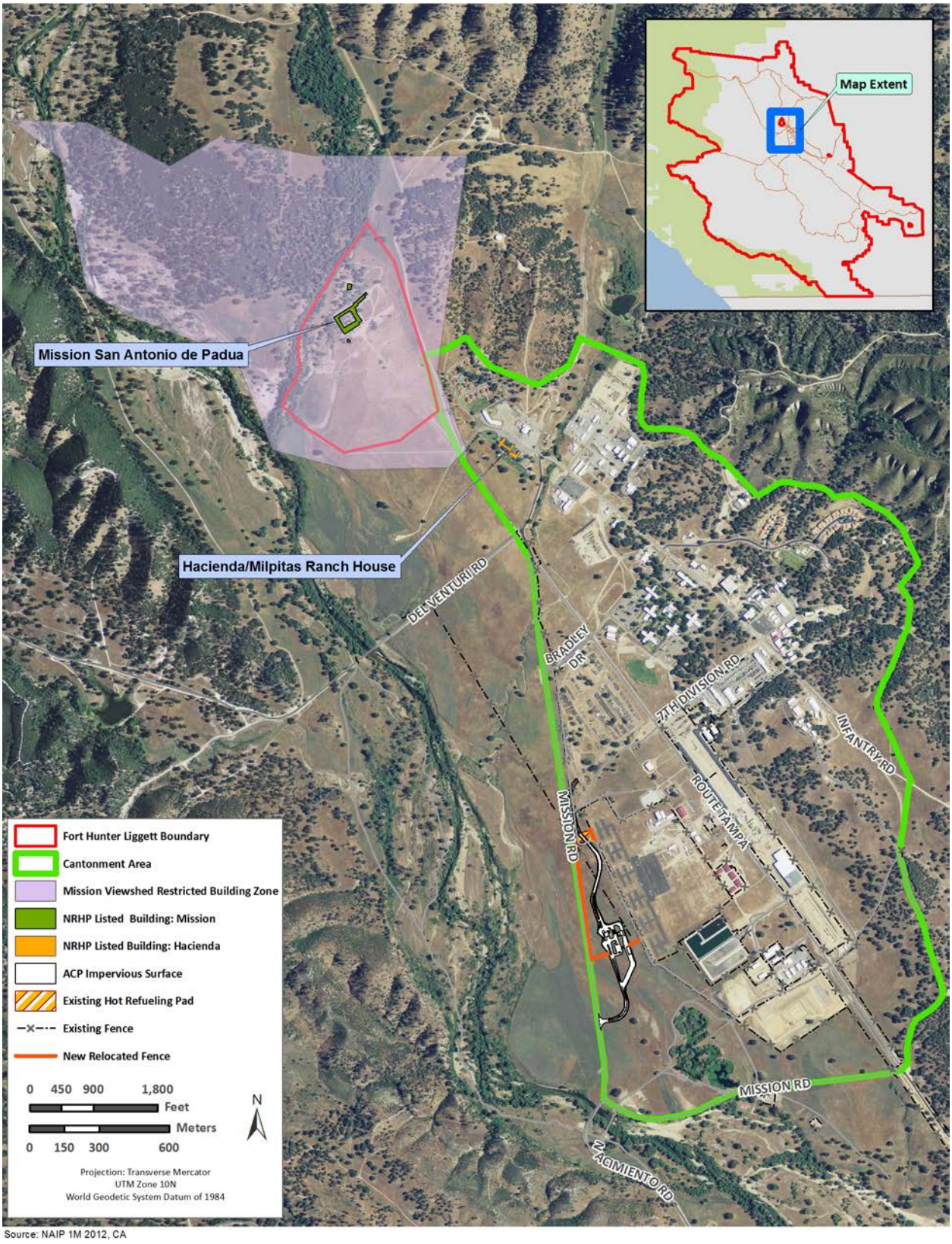


Figure 4-2. Historic Properties in the Vicinity of the Proposed Action

4.8.2 Existing Conditions

Traffic and transportation system conditions at FHL were reviewed with respect to the latest available information. Some installation roadways have been renamed since the 2010 IDTEA. Mission Road is now Route Tampa inside of the cantonment area; Nacimiento-Fergusson Road from Mission Road to the Nacimiento Bridge and Silo Road have been renamed Mission Road. The installation's former main gate on Mission Road just west of Jolon Road has been abandoned; currently the primary ACP is on Bradley Drive on the western side of the cantonment area. Except for naming conventions and relocation of the primary ACP, the overall traffic and transportation system conditions remain the same as those discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference. Additional detail regarding the existing Bradley Drive ACP, which provides access to the cantonment area, is presented in the following paragraph.

Access to the cantonment area of FHL is controlled through the existing primary ACP on Bradley Drive, between Mission Road and Route Tampa. The Bradley Drive ACP consists of two inbound lanes and one outbound lane and temporary facilities such as a canopy and a Visitor's Center. It is open 24 hours per day, 7 days per week and is manned by two ID checkers performing tandem processing during the morning peak hour. Total daily traffic demand is 771 vehicles with 166 vehicles occurring during the morning peak hour. The traffic volume during training exercises increases to 2,206 vehicles per day with 475 vehicles during the morning peak hour (MSDDC 2010). The Bradley Drive ACP does not meet minimum Army AT/FP requirements and is non-compliant in all ACP design categories. It does not provide adequate security for the installation.

5. Environmental Consequences

The specific criteria for evaluating the potential environmental effects of the Proposed Action or the No Action Alternative are described in the following subsections. The significance of an action is also measured in terms of its context and intensity. The context and intensity of potential environmental effects are described in terms of duration, whether they are direct or indirect, the magnitude of the impact, and whether they are adverse or beneficial, as summarized in the following paragraphs:

Short-term or long-term. In general, short-term effects are those that would occur only with respect to a particular activity, for a finite period, or only during the time required for construction or installation activities. Long-term effects are those that are more likely to be persistent and chronic.

Direct or indirect. A direct effect is caused by an action and occurs around the same time at or near the location of the action. An indirect effect is caused by an action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action.

Negligible, minor, moderate, or significant. These relative terms are used to characterize the magnitude or intensity of an impact. Negligible impacts are generally those that might be perceptible but are at the lower level of detection. A minor effect is slight, but detectable. A moderate effect is readily apparent. Significant effects are those that, in their context and due to their magnitude (severity), have the potential to meet the thresholds for significance set forth in CEQ regulations (40 CFR 1508.27) and, thus, warrant heightened attention and examination for potential means for mitigation to fulfill the policies set forth in NEPA. Significance criteria by resource area are presented in the following text.

Adverse or beneficial. An adverse effect is one having unfavorable or undesirable outcomes on the manmade or natural environment. A beneficial effect is one having positive outcomes on the man-made or natural environment.

5.1 Land Use

5.1.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on land use were presented in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.1.2 Environmental Consequences

5.1.2.1 Proposed Action

No effects on land use would be expected under the Proposed Action. The Proposed Action would change approximately 7.5 acres of undeveloped open space into a primary ACP; however, the proposed ACP and the relocated hot refueling pad would be sited in a manner compatible with the onsite and surrounding land uses. The Proposed Action would comply with existing land use plans and policies as identified in the FHL Master Plan, which consists of the Installation Design Guide, Installation Development Plan (including three Area Development Plans), Capital Investment Strategy, and Real Property Master Plan Digest. Additionally, the Proposed Action would comply with the safety-related planning criteria identified in UFC 4-022-01 and *Army Access Control Points Standard Design/Criteria*.

5.1.2.2 No Action Alternative

Under the No Action Alternative, FHL would not implement the Proposed Action and existing land use conditions, as described in **Section 4.1.2**, would continue. No environmental effects on land use would be expected.

5.2 Air Quality

5.2.1 Evaluation Criteria

The environmental consequences on local and regional air quality conditions from a proposed Federal action are determined based upon the increases or decreases in regulated air pollutant emissions, and upon existing conditions and ambient air quality. The evaluation criteria are dependent on whether the proposed action is located in an attainment, nonattainment, or maintenance area for criteria pollutants. Other evaluation criteria include whether Major New Source Review (NSR) air quality construction permitting is triggered or Title V operating permitting is triggered. Major NSR air quality permitting is divided into Nonattainment Major NSR for nonattainment pollutants and PSD permitting for attainment pollutants. All of these evaluation criteria are discussed in the following paragraphs, as applicable.

Attainment Area Pollutants. The attainment area pollutants at FHL are carbon monoxide (CO), nitrous oxides (NO_2) (measured as nitrogen oxides [NO_x]) sulfur dioxide (SO_2), lead (Pb), particulates equal to or less than 2.5 microns in diameter (PM_{10}), particulates equal to or less than 10 microns in diameter ($PM_{2.5}$), and ozone (O_3) (measured as NO_x and volatile organic compounds [VOCs]). The impact in NAAQS "attainment" areas would be considered significant if the net increases in these pollutant emissions from the Federal action would result in any one of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Expose sensitive receptors to substantially increased pollutant concentrations
- Exceed any evaluation criteria established by a SIP
- Cause an increase of 250 tpy of any attainment criteria pollutant (i.e., CO, NO_2 [measured as NO_x], SO_2, Pb, PM_{10}, $PM_{2.5}$, and O_3 [measured as NO_x and VOCs]) from stationary plus mobile source emissions[1].

Although the 250 tpy stationary plus mobile source threshold is not a regulatory driven threshold, it is being applied as a conservative measure of significance in attainment areas. The rationale for this conservative threshold is that it is consistent with the threshold for a PSD major source in attainment areas.

Nonattainment or Maintenance Area Pollutants. Monterey County, California, has been designated as unclassified/attainment by the USEPA for all criteria pollutants; therefore, nonattainment and maintenance area evaluation criteria are not applicable to this Proposed Action.

PSD and Title V Permits. The following factors were considered in determining the significance of air quality impacts with respect to PSD permitting requirements prior to construction:

[1] The Pb threshold would be 250 tpy but because emissions sources at an Army base have such low Pb emissions, a comparison to this threshold was not considered necessary.

- If the net increase in stationary source emissions qualifies as a PSD major source. This includes 250 tpy emissions per attainment pollutant (40 CFR 52.21[b][1] and 40 CFR 52.21[a][2]), or 100,000 tpy emissions of GHGs.
- If the net increase in stationary source emissions qualifies as a significant modification to an existing PSD major stationary source, (i.e., change that adds 10 to 40 tpy of regulated pollutants to the PSD major source's potential to emit depending on the pollutant, or adding 75,000 tpy of GHGs).
- If the Proposed Action occurs within 10 kilometers of a Class I area and if it would cause an increase in the 24 hour average concentration of any regulated pollutant in the Class I area of 1 $\mu g/m^3$ or more (40 CFR 52.21[b][23][iii] and 40 CFR 52.21[a][2]).

The following factor was considered in determining the significance of air quality impacts with respect to Title V operating permit requirements (40 CFR 71.2 and 40 CFR 71.3):

- If the increase in stationary source emissions under the Proposed Action qualifies as a Title V major source by itself, or the resulting stationary source emissions after the change exceed the Title V thresholds. This includes the potential to emit 100 tpy for regulated pollutants (lower thresholds apply in nonattainment areas and depend on the pollutant and severity of nonattainment), or 10 tpy of any individual HAP, or 25 tpy of all HAPs combined, or 100,000 tpy of GHGs.

Only operational emissions increases were evaluated for PSD and Title V permitting impacts as construction activity emissions are typically not subject to the above significance criteria for these permit programs.

5.2.2 Environmental Consequences

5.2.2.1 Proposed Action

Effects on air quality from the Proposed Action would not be significant. Effects on air quality from installation development were described in the 2010 IDTEA and are incorporated herein by reference. The following discussion provides an analysis specific to this Proposed Action.

Emissions Estimates. Short-term, minor, adverse effects on air quality would result from the implementation of the Proposed Action. The construction component of the Proposed Action would generate air pollutant emissions from site-disturbing activities such as grading, filling, compacting, and trenching and operation of construction equipment. Construction activities would also generate particulate emissions as fugitive dust from ground-disturbing activities and from the combustion of fuels in construction equipment. Fugitive dust emissions would be greatest during the initial site preparation activities and would vary from day to day depending on the work phase, level of activity, and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of construction activity. Construction workers commuting daily to and from the work site in their personal vehicles would also result in criteria pollutant emissions. Emissions from construction activities would be produced only for the duration of work activities, which, for the purposes of this air quality analysis, is conservatively assumed to be condensed into 240 workdays or 12 calendar months. Actual construction might occur over a longer period of time.

Construction activities would incorporate BMPs and environmental control measures (e.g., frequent use of water for dust-generating activities) to minimize fugitive particular matter emissions. Additionally, the construction vehicles are assumed to be well-maintained and could use diesel particle filters to reduce

emissions. Construction activities also would incorporate, as applicable, the BMPs and environmental control measures typically recommended by the Monterey Bay Unified Air Pollution Control District to minimize fugitive particular matter emissions at construction sites. Examples of such BMPs and environmental control measures could include the following:

- Water all active construction areas twice daily
- Prohibit grading during periods when winds are stronger than 15 miles per hour
- Apply chemical soil stabilizers on inactive construction areas
- Cover trucks hauling earthen materials and maintain 2 feet of freeboard
- Cover inactive storage piles, pave roadways on construction sites
- Sweep streets of visible earthen materials
- Limit the area under construction at any one time.

Long-term, negligible, adverse effects on air quality would be expected from the operational component of the Proposed Action. Day-to-day operations would generate air emissions as combustion products from the burning of diesel fuel for an emergency electrical generator. One emergency generator would be installed and is assumed to have 200 kilowatts of electrical output capacity and be used for a maximum of 500 hours per year. No other stationary source air emissions would be produced from the Proposed Action. Air emissions, if any, produced from the potential heating of the gate house, search office, and the other small buildings proposed for construction would be offset by the reduction in air emissions at the existing Bradley Drive ACP, which is proposed for closure.

Emissions from the Proposed Action would be low enough that they would not result in significant effects on air quality. Air emissions from the Proposed Action and applicable significance criteria are summarized in **Table 5-1**. **Appendix C** contains detailed calculations and the assumptions used to estimate the air emissions associated with the Proposed Action. In summary, the yearly net change in air emissions from the Proposed Action would be below all applicable significance criteria.

General Conformity. The General Conformity Rule applies only to significant Federal actions in nonattainment or maintenance areas. Monterey County, California, is in Federal attainment for all criteria pollutants; therefore, a conformity determination in accordance with 40 CFR 93-153(1) is not required.

Nonattainment NSR, PSD, and Title V Air Permitting. Monterey County, California, is in Federal attainment for all criteria pollutants; therefore, Federal nonattainment NSR permitting does not apply. Unless exempt, FHL might need to obtain a construction permit from the California Air Resources Board and the Monterey Bay Unified Air Pollution Control District for the emergency generator. For PSD and Title V permitting, emissions from the operation of the emergency generator would add to FHL's potential to emit for criteria air pollutants and GHGs; however, FHL's potential to emit would remain below both the PSD and Title V permitting thresholds.

Greenhouse Gas Emissions. Short-term, negligible, adverse effects on GHG emissions would occur from the Proposed Action. The Proposed Action would contribute directly to emissions of GHGs from the combustion of fossil fuels. Because CO_2 emissions account for approximately 92 percent of all GHG emissions in the United States, they are used for analyses of GHG emissions in this assessment.

The U.S. Department of Energy, Energy Information Administration estimates that in 2009 gross CO_2 emissions in the State of California were 376 million metric tons and in 2009 gross CO_2 emissions in the entire United States were 5,425.6 million metric tons (DOE/EIA 2011). Therefore, implementation of the Proposed Action would represent a negligible contribution towards statewide and national GHG inventories. **Table 5-2** summarizes the GHG emissions from the Proposed Action.

Table 5-1. Estimated Air Emissions Resulting from the Proposed Action

Activity	NO_x tpy	VOC tpy	CO tpy	SO_2 tpy	PM_{10} tpy	$PM_{2.5}$ tpy	CO_2 tpy
Air Emission Estimates							
Combustion	5.700	0.471	2.482	0.457	0.400	0.388	654.776
Fugitive Dust	-	-	-	-	22.527	2.253	-
Haul Truck On-Road	0.133	0.041	0.241	0.010	0.158	0.041	33.650
Construction Commuter	0.112	0.115	1.102	0.002	0.013	0.008	158.620
Total Construction Year	**5.945**	**0.627**	**3.825**	**0.469**	**23.097**	**2.690**	**847.046**
Emergency Generator	*2.510*	*0.205*	*0.541*	*0.165*	*0.176*	*0.176*	*93.328*
Subsequent Operational Years	***2.510***	***0.205***	***0.541***	***0.165***	***0.176***	***0.176***	***93.328***
Projected Potential to Emit for FHL after Proposed Action	*47.32*	*38.51*	*22.53*	*4.47*	*13.09*	*13.09*	*12,742*
Significance Criteria							
PSD Permit Significance Criteria (1) for FHL	***250***	***250***	***250***	***250***	***250***	***250***	***100,000***
Title V Permit Criteria (1) for FHL	***100***	***100***	***100***	***100***	***100***	***100***	***100,000***
Stationary Source plus Mobile Source Significance Criteria	**250**	**250**	**250**	**250**	**250**	**250**	**NA**

Notes: Italics detonates that air emissions are from or significance criteria are applicable to stationary sources only.

(1) = Criteria only applies to stationary sources; Construction year emissions are entirely mobile source emissions

NA = Not applicable for CO_2 emissions.

Table 5-2. CO_2 Emissions by Year from the Proposed Action

Year	CO_2 tpy	Percent of California 2009 CO_2 Emissions	Percent of United States 2009 CO_2 Emissions
Total Construction Year	768.270	0.00020%	0.000014%
Subsequent Operational Years	84.648	0.00002%	0.000002%

5.2.2.2 No Action Alternative

Under the No Action Alternative, FHL would not implement the Proposed Action. Existing conditions, as described in **Section 4.2.2**, would continue and no additional impacts on air quality would occur.

5.3 Geological Resources

5.3.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on geological resources were identified in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.3.2 Environmental Consequences

5.3.2.1 Proposed Action

Short-term, minor, adverse effects and long-term, negligible to minor, adverse effects on geological resources would be expected from implementation of the Proposed Action; however, the effects would not be significant.

Topography. Long-term, negligible, adverse effects would be expected on the natural topography as a result of site preparation and construction under the Proposed Action, however; the effects would not be significant. Minimal grading would be required for the Proposed Action given the level terrain of the proposed ACP site and surrounding area.

Geology. Long-term, negligible to minor, adverse effects on geological resources would be expected to result from site preparation and construction under the Proposed Action. Surface and sub-surface disturbance would occur in previously undisturbed land causing a change in the structure and configuration of geological resources.

Soils. Short-term, minor, adverse effects on soils would be expected to occur from site preparation and construction activities; however, the effects would not be significant. Clearing of vegetation would slightly increase erosion and sedimentation potential. Erosion-and-sediment-control plans would be developed and implemented during and following site development to contain soil and runoff on site, and would reduce potential for adverse effects associated with erosion and sedimentation and transport of sediments in runoff. These plans could include installing silt fencing and sediment traps, applying water to disturbed soil, phasing construction where possible, and revegetating disturbed areas as soon as possible following disturbance to minimize effects. Additional considerations should include appropriate project design considerations or BMPs to offset potential adverse effects.

Long-term, adverse effects would be expected to be minor. Soils would be compacted and soil structure would be disturbed and modified. Loss of soil structure due to excavation, construction, and compaction could result in changes in drainage patterns. Soil erosion- and sediment-control measures would be included in site plans to minimize long-term erosion and sediment production at the proposed ACP and relocated hot refueling pad sites. Soil productivity, which is the capacity of the soil to produce vegetative biomass, could decline in disturbed areas. Once construction activities have been completed, revegetation would occur in disturbed areas with no impervious surfaces, returning soil erosion and sedimentation rates to current conditions. Increased storm water runoff volume and velocity could increase velocity of flows locally into nearby streams during storm events, causing an increase in bank erosion and downstream sedimentation. The storm water drainage infrastructure would be designed with the goal of

maintaining or restoring the natural hydrologic functions of the site in accordance with Section 438 of the EISA.

Geologic Hazards. Adverse effects on humans and property could occur in the event of earthquake activity; however, the effects would not be significant. Any new construction under the Proposed Action would be designed consistent with requirements established in UFC 3-310-03, *Seismic Design for Buildings*, EO 12699, *Seismic Safety*, and seismic hazard codes found in the Guidelines for Evaluating and Mitigating Seismic Hazards in California, which would reduce the potential for adverse effects on humans associated with structural failure during or following a seismic event.

5.3.2.2 No Action Alternative

Under the No Action Alternative, FHL would not implement the Proposed Action and existing geological resources conditions, as described in **Section 4.3.2**, would continue. No direct environmental effects would be expected on geological resources.

5.4 Water Resources

5.4.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on water resources were identified in the 2010 IDTEA; thus, this information is incorporated by reference.

5.4.2 Environmental Consequences

5.4.2.1 Proposed Action

Effects on water resources from implementing the Proposed Action would not be significant. Effects on water quality from installation development were described in the 2010 IDTEA and are incorporated herein by reference. The following discussion provides an analysis specific to this Proposed Action.

The Proposed Action has the potential for short- and long-term, negligible to minor, adverse impacts on water resources. Effects on water resources would be anticipated from increases in impervious surfaces, and soil disturbance and compaction.

Short-term, minor, adverse impacts on groundwater and surface water quality could occur as a result of the Proposed Action. Impacts could occur from disturbance and exposure of soils of approximately 10.7 acres at the proposed ACP site and the relocated hot refueling pad. Soil disturbance and compaction from construction activities have the potential to result in minor disruption of natural drainage patterns, increased erosion and sedimentation in nearby receiving water bodies, and contamination of storm water discharge due to equipment spills or leaks.

Short-term and long-term, negligible, indirect, adverse impacts would result from the overall increase in impervious surfaces associated with the Proposed Action. Overall, the Proposed Action would result in an increase of approximately 326,700 ft^2 (7.5 acres) of impervious surfaces. Impervious surfaces prevent rainfall or snowmelt from infiltrating soils. Therefore, during precipitation events, impervious surfaces increase the volume and accelerate the speed at which water is directed into receiving surface water bodies. This runoff could impact surface water quality of the receiving water body. However, adverse effects would be minimized by implementing erosion-and-sediment-control and storm water management practices to minimize potential adverse effects associated with increased runoff.

The Proposed Action would be required to obtain coverage under the SWRCB NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (Order 2009-0009-DWQ, NPDES No. CAS000002 as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ), WDRs for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, also known as the CGP. WDRs for discharges to surface waters also serve as NPDES permits. FHL would install erosion- and sediment-control measures as identified and as necessary to comply with the CGP, including any WDRs. Under the CGP, FHL would develop an SWPPP for the proposed construction activities prior to implementation of the Proposed Action.

The goal of the SWPPP is to reduce or eliminate storm water pollution from construction activity by planning and implementing appropriate pollution control practices to protect water quality, and ensure compliance with the terms of the CGP. In addition, the SWPPP would prevent sedimentation and the introduction of pollutants to the San Antonio River and Gravel Pit Reservoir. The SWPPP would require BMPs such as the use of silt fences, fiber rolls, and fiber matting; limiting unnecessary disturbance; hydroseeding; using drip pans and secondary containment for toxic materials; storm drain protection; proper disposal of wastes and fluids; proper spill clean-up procedures; educational signage for storm drain inlets; and periodic employee training. Additionally, the SWPPP would include monitoring such as periodic visual inspections for unauthorized discharges and storm water sampling.

New ACP facilities and storm water controls would be designed with low-impact development (LID) features with the goal of maintaining or restoring the natural hydrologic functions of the site, in accordance with EISA Section 438. Therefore, existing hydrology (i.e., surface runoff and subsurface flow) at the proposed ACP site would be maintained, including the direction of surface flow. LID features could include practices such as maintaining vegetated buffers between drainages and development, or creating bio-swales for vegetation to trap sediments and pollutants before they can enter a waterway. BMPs would be consistent with those discussed in the 2010 IDTEA. If erosion BMPs are not properly implemented, increased sediment runoff would increase surface water turbidity in receiving waters, which could raise water temperature and impede photosynthetic processes. Sediment transported by runoff into surface waters also increases the potential for contaminant (e.g., heavy metals, excess nutrient concentrations) deposition into receiving water bodies. Preparing and implementing the SWPPP would also minimize adverse impacts.

In the event of a spill or leak of fuel or other construction-related products, there could be adverse effects on groundwater or surface water. All fuels and other potentially hazardous materials would be contained and stored appropriately in accordance with Federal, state, and installation regulations. In the event of a spill, procedures outlined in the installation's Spill Prevention, Control, and Countermeasures (SPCC) Plan would be followed. There remains the possibility that a spill or leak could occur, but implementation of the BMPs identified in the SPCC Plan would minimize the potential for and extent of associated contamination.

The Proposed Action would have no impact on floodplains because no activities would occur within the 100-year floodplain.

5.4.2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. The existing Bradley Drive ACP would continue to be used, and the Tusi AHP hot refueling pad and security fence would not be relocated. Existing water resources conditions, as described in **Section 4.4.2**, would remain the same, and no impacts on water resources would be expected.

5.5 Biological Resources

5.5.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on biological resources were presented in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.5.2 Environmental Consequences

5.5.2.1 Proposed Action

No significant effects on biological resources would be expected from implementing the Proposed Action. General effects on biological resources from installation development were described in the 2010 IDTEA and are incorporated by reference. The following discussion provides an analysis specific to the Proposed Action.

Vegetation. Short- and long-term, negligible, adverse effects on vegetation would result from implementing the Proposed Action. No trees are expected to be removed as a result of the Proposed Action. Existing FHL policies related to vegetation removal and compensation (i.e., replanting procedures) would be followed to minimize any impacts. Vegetation clearing would be minimized to the extent practicable, and revegetation and landscaping would be implemented to reduce the potential for long-term effects. All activities would be conducted in accordance with FHL's replanting procedures. Vegetation clearing also has the potential to result in direct and indirect, adverse effects on wildlife.

Long-term, minor adverse effects could occur from the increased spread of exotic species from construction activities. Use of new and existing roads and integration of current natural resources management practices would reduce potentially adverse effects on vegetation communities. Thus, effects of the Proposed Action are anticipated to be focused in a relatively small area of intense effects. With implementation of management protocols to control invasive species identified in the FHL Integrated Natural Resources Management Plan (INRMP) (FHL 2011b), and in other FHL installationwide management protocols, impacts would not be considered as significant.

Construction activities would result in a surface disturbance of undeveloped nonnative grassland habitats totaling 10.7 acres. Of that area, 7.5 acres (70 percent) would permanently become impervious surfaces. While runoff would likely increase as a result of this change in surface type, the increase is not expected to impact the surrounding area significantly. Although the primary habitat type affected by the Proposed Action would be grasslands, only 0.06 percent of grasslands on FHL would be converted to developed status.

Wetlands. No significant effects on wetlands would be expected to occur as a result of implementing the Proposed Action. Storm water management and erosion- and sediment-control BMPs would be implemented during construction and operation of the proposed ACP to minimize and avoid potential effects on wetlands nearby. The closest wetlands are approximately 750 feet to the east of the Proposed Action, but are separated by disturbed areas such as a road and fencing. Water drainage in the Proposed Action area is generally from east to west, and impacts on drainage as a result of the Proposed Action are not expected due to incorporation of appropriate storm water design.

Wildlife Resources. Short- and long-term, minor, adverse effects on wildlife could occur during construction activities. Indirect effects include those on wildlife from degradation and loss of habitat. Construction and improvement of existing roadways at the proposed ACP would most likely increase vehicle usage of the area and the "edge effect" on the existing wildlife. However, traffic entering and

exiting the proposed ACP would be on the paved roadways. As such, any effect would be localized in a relatively small area and would not be expected to significantly affect wildlife resources.

Short- and long-term, minor effects on migratory birds could occur by disturbing habitat, converting habitat, and disturbance from the use of access roads and noise associated with use of the proposed ACP. Impacts on migratory birds could occur from ground-disturbing activities and vegetation clearing associated with the Proposed Action. Any decrease in vegetation cover would result in direct effects on migratory bird species by potentially displacing adult or breeding birds. Some individuals could be permanently displaced if activities occurred during the breeding season. Implementation of seasonal timing and other natural resources management policies would avoid or minimize adverse effects during construction. Long-term effects could occur as a result of the use of the proposed ACP; however, the loss of habitat is relatively small (10.7 acres) when compared to the whole of FHL and is not expected to affect significantly bird species that might occur in the area.

5.5.2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. The existing Bradley Drive ACP would continue to be used, and the Tusi AHP hot refueling pad and security fence would not be relocated. Existing conditions, as described in **Section 4.5.2**, would remain the same and no additional impacts on biological resources would be expected.

5.6 Threatened and Endangered Species

5.6.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on threatened and endangered species were presented in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.6.2 Environmental Consequences

5.6.2.1 Proposed Action

No significant effects on threatened and endangered species would be expected from implementing the Proposed Action. General effects on threatened and endangered species from installation development were described in the 2010 IDTEA and are incorporated herein by reference. The following discussion provides an analysis specific to the Proposed Action.

Short- and long-term, negligible to minor, adverse effects on Federal- or state-threatened or endangered species could occur under the Proposed Action. Short- and long-term, negligible to minor, adverse effects would be expected on San Joaquin kit fox, California condor, and arroyo toad. Potential effects from the Proposed Action include short-term, negligible, adverse effects from construction activities and long-term, negligible to minor, adverse effects due to habitat modification and changes to functionality. Anticipated effects on these species are summarized in the following paragraphs. ESA Section 7 consultations would be needed for actions affecting Federal-listed species, and surveys and mitigation measures would need to be implemented to avoid violating the ESA and the Migratory Bird Treaty Act. Increases in take for these species are not expected.

Potential habitat for all of the Federal-listed species described in **Section 4.6.2** occurs at FHL. However, only habitat for the San Joaquin kit fox is known to occur in the Proposed Action area. Long-term, minor, adverse effects on the San Joaquin kit fox due to habitat alteration could occur when habitat is altered from disturbed grasses to permanently disturbed impervious and pervious surfaces. However,

given that kit foxes have not been seen in the Proposed Action area, and have not been seen on FHL since 2000 (USFWS 2010), effects are not expected to be significant.

Negligible, adverse effects on the California condor could occur due to disturbance during construction and use of the ACP. The 10.7-acre project site is adjacent to the cantonment area and supports human activities. Because the proposed ACP would be constructed in an area that is already disturbed by human presence, potential effects would be negligible.

Short and long-term, negligible, adverse effects on arroyo toads could occur due to increased or polluted runoff from construction and activities at the ACP. To minimize the potential for adverse effects on waterways and adjacent arroyo toad habitat, guidelines provided in the SWPPP and EISA Section 438 would be followed. See **Section 5.4.2.1** for more information on the SWPPP.

There would be no effect on vernal pool fairy shrimp from construction and use of the ACP. The pools are monitored annually and marked for avoidance, as needed. Given the flat terrain in the area and the avoidance measures already in place on FHL, vernal pools are not expected to be affected.

FHL would continue to comply with its INRMP (FHL 2007, FHL 2011b) and any potentially impacted state-listed species would be addressed through the goals and strategies of the INRMP. Protected species management goals have been identified in the most recent FHL INRMP (FHL 2011b), and the terms and conditions of the USFWS programmatic biological opinions for FHL from 2005 (USFWS 2005), and as amended in 2010 (USFWS 2010). However, any action potentially affecting Federal-listed species must be coordinated with USFWS, and ESA Section 7 consultation would be initiated with the USFWS for the Proposed Action.

5.6.2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. The existing Bradley Drive ACP would continue to be used, and the Tusi AHP hot refueling pad and security fence would not be relocated. Existing conditions, as described in **Section 4.6.2**, would remain the same, and no impacts on threatened and endangered species would be expected.

5.7 Cultural Resources

5.7.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on cultural resources were identified in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.7.2 Environmental Consequences

5.7.2.1 Proposed Action

Impacts on cultural resources from installation development were described in the 2010 IDTEA, and are incorporated herein by reference. Implementation of the Proposed Action would not result in significant impacts on cultural resources. The following paragraphs discuss effects specific to this Proposed Action.

There are no historic properties or known archaeological sites within the Proposed Action area and no adverse effects would be expected from the Proposed Action. Construction of the ACP and relocation of the hot refueling pad at Tusi AHP and relocation of the fence are not expected to affect cultural resources

due to the absence of known archaeological sites, a low probability for inadvertent discoveries, and distance between the project area and NRHP-eligible or NRHP-listed historic buildings at FHL.

Archaeological Resources. No adverse impacts on archaeological resources would be anticipated. There are no known NRHP-eligible archaeological sites in the Proposed Action area and no archaeological resources would be affected by the Proposed Action. The probability of an inadvertent discovery during construction is low. If cultural materials or human remains are discovered inadvertently during construction, work should cease and the procedures outlined under Standard Operation Procedure 11, "Inadvertent Discovery" required under the National Historic Preservation Act and outlined in Section 800.13 of 36 CFR 800 should be followed. FHL would take appropriate actions to protect or minimize impacts in compliance with Federal laws and regulations as outlined in the installation's Integrated Cultural Resources Management Plan (ICRMP).

Historic Buildings and Structures. No adverse impacts on historic buildings or structures would be anticipated as a result of the Proposed Action. No historic buildings or structures are located in the Proposed Action area. Further, the Proposed Action area is outside of the Mission Viewshed Restricted Building Zone, approximately 1 mile southeast of the southernmost edge of the zone. FHL is conscious of the importance of the views to and from the Mission San Antonio de Padua as character-defining features to the property's historic significance. The location of the Proposed Action would be obscured by distance, trees, and topography and would not be visible from the Mission; thus the proposed construction would have no effect on the Mission (see **Figures 5-1** and **5-2**).

The view of the location of the Proposed Action from the Hacienda/Milpitas Ranch House would be partially obscured by distance. The Proposed Action would still be visible from the Hacienda/Milpitas Ranch House, possibly affecting the viewshed of the historic property; however, the Hacienda's viewshed to the south-southeast is already affected by non-historic buildings, including the existing Bradley Drive ACP and Tusi AHP. Thus, the Proposed Action would have no adverse effect on the Hacienda/Milpitas Ranch House. Any visual intrusions of the Proposed Action on the Hacienda/Milpitas Ranch House could be further minimized through the use of landscaping, subdued colors that blend with the landscape and a low, one-story, horizontally oriented building.

5.7.2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and the existing conditions, as described in **Section 4.7.2**, would remain unchanged. No effects on cultural resources would be expected under the No Action Alternative.

5.8 Traffic and Transportation

5.8.1 Evaluation Criteria

The evaluation criteria used to determine significant effects on traffic and transportation systems were identified in the 2010 IDTEA; thus, this information is incorporated herein by reference.

5.8.2 Environmental Consequences

5.8.2.1 Proposed Action

Impacts on traffic and transportation systems from installation development were described in the 2010 IDTEA, and are incorporated herein by reference. Implementation of the Proposed Action would

Figure 5-1. View south-southeast from first story of Mission San Antonio de Padua towards Proposed Action site (approximately 1.25 miles in the background)

Figure 5-2. View south by east from belfry of Mission San Antonio de Padua towards Proposed Action site (approximately 1.25 miles in the background)

not result in significant impacts on traffic and transportation system resources. The following paragraphs discuss effects specific to the Proposed Action.

Short-term, minor, adverse effects on traffic and transportation systems would occur during the implementation of the Proposed Action. Construction activities would temporarily increase traffic on local and installation roads, particularly when heavy equipment arrives and departs. Effects would be greatest during commuter hours, as this is when construction workers would travel to and from FHL. This increase in traffic would only last for the duration of construction activities, and construction traffic would compose a small percentage of the total existing traffic on the installation. Many of the heavy construction vehicles would be driven to the site and kept on site for the duration of construction activities, resulting in relatively few additional trips.

Although construction activities would not require the closure of any roadways, minor disruptions in traffic flow along Mission Road in the vicinity of the proposed ACP might occur. Due to the close proximity of Mission Road to the proposed ACP, temporary barriers or flagging might be required to separate the roadway from the construction site. Brief interruptions in traffic might occur when traffic accessing the cantonment area is routed through the new ACP instead of staying on Mission Road to Bradley Drive.

Long-term, minor, beneficial effects on traffic and transportation systems would occur from the Proposed Action. The proposed ACP would improve traffic management by providing a primary ACP that meets minimum Army AT/FP requirements and properly controls traffic flow onto the installation. The proposed ACP would discharge traffic onto 7th Division Road, which is planned to be extended from its current western terminus at Route Tampa. Fencing or barriers would be installed across Bradley Drive to prevent unauthorized traffic from accessing the cantonment area via Bradley Drive after the existing ACP is deactivated. The Proposed Action would not increase the number of personnel at FHL or expand the installation's mission; therefore, no net increase in traffic volume would occur as a result of the Proposed Action.

5.8.2.2 No Action Alternative

Under the No Action Alternative, FHL would not implement the Proposed Action. Existing conditions, as described in **Section 4.8.2**, would remain the same. Long-term, minor, adverse impacts would result due to the continuation of inadequate traffic management at the existing Bradley Drive ACP, which create intermittent traffic flow issues.

6. Cumulative Effects, Best Management Practices, and Adverse Effects

6.1 Cumulative Effects

CEQ regulations stipulate that the cumulative effects analysis in an EA should consider the potential environmental effects resulting from "the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR Part 1508.7). CEQ guidance in considering cumulative effects affirms this requirement, stating that the first steps in assessing cumulative effects involve defining the scope of the other actions and their interrelationship with a proposed action. The scope must consider other projects that coincide with the location and timetable of a proposed action and other actions. Cumulative effects analyses must also evaluate the nature of interactions among these actions (CEQ 1997).

6.1.1 Projects Identified with the Potential for Cumulative Effects

The past, ongoing, and reasonably foreseeable future projects identified with the potential for cumulative effects were reviewed with respect to the latest available information and remain the same as that discussed in the 2010 IDTEA; thus, this information is incorporated herein by reference. However, the cantonment area was selected as the primary focus for potential cumulative effects because (1) the environmental effects anticipated as a result of the Proposed Action analyzed in this SEA would be minor and have limited potential for far-reaching cumulative effects, and (2) the large number of ongoing development activities that occur in the FHL cantonment area would be more likely to occur simultaneously and in close proximity to the Proposed Action. An effort was undertaken to identify projects at FHL and in the areas surrounding FHL for evaluation in the context of the cumulative effects analysis. This was further developed through review of public documents and information gained from the coordination with various applicable agencies.

6.1.2 Cumulative Effects Analysis

Table 6-1 summarizes potential cumulative effects on resources from the Proposed Action when combined with other past, present, and future activities. Only those actions that are additive to the Proposed Action are considered.

6.2 Reasonable and Prudent Measures and Best Management Practices

The Proposed Action would not result in significant adverse effects on the land or the surrounding area. However, BMPs and other minimization measures would be implemented to eliminate or reduce the impacts of adverse effects.

General BMPs that might be included as parts of the Proposed Action, and are consistent with those presented in the 2010 IDTEA, are summarized as follows:

- Clearing and grubbing would be timed with construction to minimize the exposure of cleared surfaces. Such activities would not be conducted during periods of wet weather. Construction activities would be staged to allow for the stabilization of disturbed soils. These BMPs would minimize adverse effects associated with soil and water resources.
- Fugitive dust-control techniques such as watering and stockpiling would be used to minimize adverse effects. All such techniques would comply with applicable regulations. These BMPs would minimize adverse effects associated with air quality, soil, and water resources.

Table 6-1. Cumulative Effects of the Proposed Action on Resources

Resource	Past Actions	Current Background Activities	Proposed Action	Known Future Actions	Cumulative Effects
Land Use	Past development has extensively modified land use.	Military installation land uses, including urban uses in the cantonment area.	No change in overall land use, and no significant effect would result.	FHL Master Plan designates land uses in the cantonment area.	Proposed Action would be consistent with FHL Master Plan, and would not induce additional development beyond the proposed activities.
Air Quality	AQCRs are classified as being in attainment.	Emissions from helicopter vehicle operations, and stationary sources.	Air emissions from combustion of fuels during construction and operation, and from asphalt paving and ground disturbance that results in dust generation during construction activities.	Combustion air emissions and dust generation during construction and demolition activities, increased helicopter operations.	Minor, short- and long-term, cumulative effects on air quality, including the generation of GHGs. The Proposed Action would have a small contribution to cumulative effects.
Geological Resources	Past development has modified topography and soils, and resulted in increased erosion and sedimentation.	Development contributes to ongoing modification of topography and soils and to erosion and sedimentation. Existing impervious surfaces can lead to locally increased storm runoff and erosion and sedimentation.	Negligible to minor, adverse impacts on topography, geology, and soils are anticipated. Use of BMPs identified in the SWPPP would help minimize impacts on soils through reduction of erosion and sedimentation.	Continued impacts on topography and soils, and increased erosion and sedimentation.	Long-term, minor cumulative effects on soils due to modification by development and increased erosion and sedimentation.
Water Resources	Groundwater and surface water quality moderately impacted by past development activity.	Pollution from industrial and municipal sources is generally low. Contaminated groundwater plumes are present in the cantonment area.	Potential sedimentation from construction could impact groundwater and surface water quality, and an increase in impervious surface area could result in increased storm water runoff. Implementation of SWPPP and LID features would minimize impacts.	Development would result in sedimentation from construction activities potentially affecting water quality, and increases in impervious surfaces resulting in increased storm water runoff.	Increased impervious area would have minor cumulative effects on storm water discharges and water quality. Proposed Action would not induce further degradation of water quality. Cumulative effects not significant.

Resource	Past Actions	Current Background Activities	Proposed Action	Known Future Actions	Cumulative Effects
Biological Resources	Degraded habitat of wildlife and plant species.	Presence and operation of facilities impact wildlife and their habitats, and plants.	Negligible disturbance of vegetation by construction. Minor effects on wildlife from habitat disturbance. No effects on wetlands would be expected.	Development of area would impact vegetation communities and wildlife habitat.	Permanent loss of vegetation and other habitat. Cumulative effects not significant.
Threatened and Endangered Species	Degraded habitat of threatened and endangered species.	Presence and operation of facilities impact threatened and endangered species and their habitat.	Minor, short-term disturbance and long-term loss of threatened and endangered species habit. No significant effect would result.	Development of area could have continuing minor effects on threatened and endangered species habitat.	Permanent loss of threatened and endangered species habitat would be minimized through continued natural resources management. The Proposed Action would have a minor cumulative effect from the loss of San Joaquin kit fox habitat.
Cultural Resources	Possible destruction of eligible historic properties and archaeological sites. Unknown impacts on traditional cultural properties.	Presence and operation of facilities have no significant effects.	No effect on archaeological resources or on historic properties anticipated.	General development could have effects on viewsheds, archaeological sites, and traditional cultural properties. Consultation with the SHPO would be required to avoid significant effects.	Implementation of procedures in the ICRMP including survey, monitoring, and site protection would help minimize cumulative effects. The Proposed Action would have no contribution to cumulative effects on cultural resources.
Traffic and Transportation Systems	Past division-level training exercises resulted in heavy convoy activity that could impact local traffic flows in the cantonment area.	Current traffic flow is primarily related to daily operations at the cantonment area. Units primarily arrive by bus or aircraft with minimal convoy activity.	Short-term, minor, adverse effects on traffic during construction activities. Long-term beneficial effects from an improved traffic management from the proposed primary ACP.	Increases in POVs arriving to the installation and increased combat vehicle activity on installation as a result of increases in operations.	The Proposed Action could have a negligible contribution to cumulative effects on traffic and transportation systems.

- Soil erosion-control measures, such as soil erosion-control mats, silt fences, straw bales, diversion ditches, riprap channels, water bars, water spreaders, vegetative buffer strips, and hardened stream crossings, would be used as appropriate. These BMPs would minimize adverse effects associated with soil and water resources.
- Storm water management would be used as appropriate during construction to minimize offsite runoff. Following construction, storm water management systems would ensure that predevelopment site hydrology is maintained or restored to the maximum extent technically feasible with respect to temperature, rate, volume, and duration of flow. These BMPs would minimize adverse effects associated with water resources.
- Minimize the disturbance of environmental resources and topography by integrating existing vegetation, trees, and topography into site design. These BMPs would minimize adverse effects associated with soil and biological resources.
- Where feasible, minimize areas of impervious surface through shared parking, decked or structured parking, increased building height, or other measures as appropriate. These BMPs would minimize adverse effects associated with soil and water resources.
- Provisions would be taken to prevent pollutants from reaching the soil, groundwater, or surface water. During project activities, contractors would be required to perform daily inspections of equipment, maintain appropriate spill-containment materials on site, and store all fuels and other materials in appropriate containers. Equipment maintenance activities would not be conducted on construction sites. These BMPs would minimize adverse effects associated with soil, water resources, and hazardous materials and waste.
- Physical barriers and "no trespassing" signs would be placed around the demolition and construction sites to deter children and unauthorized personnel. All construction vehicles and equipment would be locked or otherwise secured when not in use. These BMPs would minimize adverse effects associated with health and safety.
- Construction equipment would be used only as necessary during the daylight hours and would be maintained to the manufacturer's specifications to minimize noise impacts. These BMPs would minimize adverse effects associated with health and safety.

Construction impacts are short-term environmental effects resulting from the process of building the Proposed Action. Construction effects might involve temporary changes in noise levels, air quality, water quality, land use, and community access.

6.3 Unavoidable Adverse Effects

Unavoidable adverse effects would result from implementation of the Proposed Action. As discussed in detail in **Section 5**, the Proposed Action would result in short-term, adverse effects associated with construction activities, including increased air emissions and minor interruptions to traffic flow. Additional identical, non-significant impacts as those described in the 2010 IDTEA would also result from construction activities, including increased noise levels, use and generation of small amounts of hazardous materials and wastes, and generation of construction waste. None of these effects would be significant.

6.4 Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls

Effects on the ground surface as a result of the Proposed Action would occur entirely within the boundaries of FHL. The proposed construction activities would not result in any significant or incompatible land use changes on or off the installation. The proposed ACP has been sited according to existing land use zones, and the hot refueling pad would be relocated to a site within Tusi AHP that would adhere to all appropriate setback distances. Consequently, construction activities would not be in conflict with installation land use policies or objectives. The Proposed Action would not conflict with any applicable off installation land use ordinances or designated clear zones.

6.5 Relationship Between the Short-Term Use of the Environment and Long-Term Productivity

Short-term uses of the biophysical components of human environment include direct construction-related disturbances and direct effects associated with an increase activity that occurs over a period of less than 5 years. Long-term uses of human environment are those effects occurring over a period of more than 5 years, including permanent resource loss.

The Proposed Action would not result in an intensification of land use in the surrounding area. Construction of the Proposed Action would not represent a significant loss of open space. The long-term, beneficial effects of constructing a primary ACP that meets minimum Army AT/FP requirements and controls traffic flow onto the installation's cantonment area would support FHL's ongoing and future mission requirements and national security objectives.

6.6 Irreversible and Irretrievable Commitments of Resources

The irreversible environmental changes that would result from implementation of the Proposed Action involve the consumption of material resources, energy resources, and human resources. The use of these resources is considered to be permanent.

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that use of these resources will have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable timeframe (e.g., energy and minerals).

Material Resources. Material resources used for the Proposed Action include building materials (for of the ACP), concrete and asphalt (for parking lots and roads, and relocated hot refueling pad), and various material supplies (for infrastructure) and would be irreversibly lost. Most of the materials that would be consumed are not in short supply, would not limit other unrelated construction activities, and would not be considered significant.

Energy Resources. No significant effects would be expected on energy resources used as a result of the Proposed Action, though any energy resources consumed would be irretrievably lost. These include petroleum-based products (e.g., gasoline and diesel), and electricity. During construction, gasoline and diesel would be used for the operation of construction vehicles. During operation, gasoline or diesel would be used for the operation of privately owned and government-owned vehicles and possibly the proposed emergency generator. Electricity would be used by operational activities. Consumption of these energy resources would not place a significant demand on their availability in the region.

Biological Resources. The Proposed Action would result in the loss of some vegetation.

Human Resources. The use of human resources for construction and operation of the Proposed Action is considered an irretrievable loss, only in that it would preclude such personnel from engaging in other work activities. However, the use of human resources for the Proposed Action represents employment opportunities, and is considered beneficial.

7. Conclusions and Recommendations

This SEA contains a comprehensive evaluation of the existing conditions and environmental consequences of the Proposed Action. The conclusions in this section are limited to the Proposed Action and the No Action Alternative, as required under NEPA.

7.1 Impacts Identified

Implementation of the Proposed Action would not affect land use or cultural resources. Long-term, beneficial effects on traffic and transportation would be expected. Resources that could be adversely affected by the Proposed Action include air quality, geological resources, water resources, biological resources, threatened and endangered species habitat, and traffic and transportation. In all instances, effects on these resources are expected to be negligible to minor in significance. Use of BMPs identified in the SWPPP, SPCC Plan, and other BMPs and project-specific design features would help minimize effects on surface and groundwater resources. Permanent removal of suitable San Joaquin kit fox habitat would result in a long-term, minor, adverse impact. FHL would coordinate with and initiate consultation with USFWS for the Proposed Action. Implementation of the No Action Alternative would not result in a change in current conditions. Therefore, no significant direct or new indirect effects would occur under the No Action Alternative; however, adverse impacts could result from continuation of inadequate traffic management at the existing ACP.

Table 7-1 summarizes the potential effects of the Proposed Action and the activities that could be conducted during implementation to avoid or minimize these effects. Activities to minimize effects would be required by Federal or state regulations. Evaluation of each of the effect categories during preparation of this SEA resulted in negligible to minor adverse effects once BMPs are implemented, which can be considered an "insignificant" effect or "no effect" classification. No significant effects would be anticipated from implementing the Proposed Action.

7.2 Cumulative Effects Identified

The potential for cumulative effects on the environment was evaluated by reviewing other projects in the vicinity of the FHL that could affect the same environmental resources as the Proposed Action. Although some cumulative effects could occur, they are expected to be negligible to minor in significance. Implementation of the No Action Alternative would not result in a change in current conditions, and therefore, no cumulative effects would occur on the quality of the human or natural environment.

7.3 NEPA Determination

Based upon the findings of this SEA, implementation of the Proposed Action would not have a significant adverse direct, indirect, or cumulative effect on the quality of the human or natural environment on adjacent properties or on FHL. Implementation of the Proposed Action would ensure that FHL is provided with a primary ACP that meets minimum Army AT/FP requirements and controls traffic flow into cantonment area, thereby fully supporting FHL mission requirements and national security objectives.

Based upon the analysis of potential effects, it has been determined that the Proposed Action does not constitute a major Federal action affecting the quality of human health or the environment. Because there would be no significant effect resulting from the implementation of the Proposed Action, a FNSI has been prepared to accompany this SEA and concludes that an EIS, the next higher level of environmental effect investigation under NEPA, is not required for this action.

Table 7-1. Summary of Potential Environmental Consequences Associated with the Proposed Action

Resource Area	Proposed Action	No Action
Land Use	No effects on land use would be anticipated.	No adverse effects would be anticipated.
Air Quality	Short-term, minor, adverse effects would be anticipated from generation of emissions during construction activities. Dust control and proper equipment maintenance would help reduce overall emissions. Long-term, negligible, adverse effects would be anticipated from operation of the proposed ACP due to potential use of an emergency generator.	No new effects would be anticipated.
Geological Resources	Short- and long-term, minor, adverse effects on soils would be anticipated from ground disturbance during construction that could result in increased erosion. Long-term, negligible to minor, adverse effects on topography and surface and sub-surface geological resources would be anticipated from disturbance during construction. Implementation of BMPs identified in the SWPPP before, during, and after construction would minimize effects.	No adverse effects would be anticipated.
Water Resources	Short- and long-term, minor, adverse effects on groundwater and surface water quality would be anticipated from soil disturbance resulting in increased erosion and sedimentation, and possible contamination of storm water runoff. Short- and long-term adverse effects could result from increased impervious surfaces and soil compaction resulting in increased storm water runoff. Use of BMPs in the installation's SPCC Plan, SWPPP, and other project design features would help minimize effects.	No effects would be anticipated.
Biological Resources	Short- and long-term, negligible to minor, adverse effects on vegetation and wildlife would be anticipated from vegetation removal, disturbance or loss of habitat, and potential spread of exotic species. Natural resources management practices would be implemented to avoid or minimize impacts.	No new effects would be anticipated.
Threatened and Endangered Species	Short- and long-term, negligible to minor, adverse impacts on the San Joaquin kit fox, California condor, and arroyo toad could occur, primarily due to habitat disturbance. Use of BMPs could minimize impacts.	No effects would be anticipated.
Cultural Resources	No effects on cultural resources would be anticipated.	No effects would be anticipated.

Resource Area	Proposed Action	No Action
Traffic and Transportation	Short-term, minor, adverse effects due to increased traffic and long-term, minor, beneficial effects due to improved traffic management would be anticipated.	No new effects would be anticipated; however, adverse impacts could result from continuation of inadequate traffic management at the existing ACP.

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10. Abbreviations and Acronyms

$\mu g/m^3$	micrograms per cubic meter
ACP	access control point
AHP	Army Heliport
AQCR	air quality control region
AT/FP	anti-terrorism force protection
BMP	best management practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGP	Construction General Permit
CO	carbon monoxide
CO_2	carbon dioxide
CWA	Clean Water Act
DOD	Department of Defense
EISA	Energy Independence and Security Act
ELG	Effluent Limitations Guidelines
EO	Executive Order
FHL	Fort Hunter Liggett
FNSI	Finding of No Significant Impact
FPCON	Force Protection Condition
ft^2	square feet
FY	Fiscal Year
GHG	greenhouse gas
HAP	hazardous air pollutant
HHAT	Higher Headquarters' Anti-Terrorism
ICRMP	Integrated Cultural Resources Management Plan
ID	identification
IDTEA	Environmental Assessment Addressing Installation Development and Training
INRMP	Integrated Natural Resources Management Plan
LID	low-impact development
mg/m^3	milligrams per cubic meter
NEPA	National Environmental Policy Act
NO_2	nitrous oxides
NOA	Notice of Availability
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSR	New Source Review
O_3	ozone
Pb	lead
$PM_{2.5}$	particulates equal to or less than 2.5 microns in diameter
PM_{10}	particulates equal to or less than 10 microns in diameter
POV	privately owned vehicle
ppb	parts per billion
ppm	parts per million
PSD	Prevention of Significant Deterioration
RAM	random antiterrorism measures
RWQCB	Regional Water Quality Control Board
SEA	Supplemental Environmental Assessment
SHPO	State Historic Preservation Officer
SO_2	sulfur dioxide
SO_x	sulfur oxides
SPCC	Spill Prevention, Control, and Countermeasures
SSPP	Strategic Sustainability Performance Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
tpy	tons per year
UFC	Unified Facilities Criteria
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WDR	waste discharge requirement

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APPENDIX A

APPLICABLE LAWS, REGULATIONS, POLICIES, AND PLANNING CRITERIA

Appendix A

Applicable Laws, Regulations, Policies, and Planning Criteria

When considering the affected environment, the various physical, biological, economic, and social environmental factors must be considered. In addition to the National Environmental Policy Act (NEPA), there are other environmental laws and Executive Orders (EOs) to be considered when preparing environmental analyses. These laws are summarized below.

NOTE: This is not a complete list of all applicable laws, regulations, policies, and planning criteria potentially applicable to documents, however, it does provide a general summary for use as a reference.

Noise

Federal, state, and local governments have established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise. The Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978, requires compliance with state and local noise laws and ordinances.

The U.S. Department of Housing and Urban Development (HUD), in coordination with the Department of Defense (DOD) and the FAA, has established criteria for acceptable noise levels for aircraft operations relative to various types of land use.

The U.S. Army, through AR 200-1, *Environmental Protection and Enhancement*, implements Federal laws concerning environmental noise form U.S. Army activities. The USAF's Air Installation Compatible Use Zone (AICUZ) Program, (AFI 32-7063), provides guidance to air bases and local communities in planning land uses compatible with airfield operations. The AICUZ program describes existing aircraft noise and flight safety zones on and near USAF installations.

Land Use

The term "land use" refers to real property classifications that indicate either natural conditions or the types of human activities occurring on a defined parcel of land. In many cases, land use descriptions are codified in local zoning laws. However, there is no nationally recognized convention or uniform terminology for describing land use categories.

Land use planning in the USAF is guided by *Land Use Planning Bulletin, Base Comprehensive Planning* (HQ USAF/LEEVX, August 1, 1986). This document provides for the use of 12 basic land use types found on a USAF installation. In addition, land use guidelines established by the HUD and based on findings of the Federal Interagency Committee on Noise (FICON) are used to recommend acceptable levels of noise exposure for land use. The U.S. Army uses the 12 land use types for installation land use planning, and these land use types roughly parallel those employed by municipalities in the civilian sector.

Air Quality

The Clean Air Act (CAA) of 1970, and Amendments of 1977 and 1990, recognizes that increases in air pollution result in danger to public health and welfare. To protect and enhance the quality of the Nation's

air resources, the CAA authorizes the U.S. Environmental Protection Agency (USEPA) to set six National Ambient Air Quality Standards (NAAQS) which regulate carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter pollution emissions. The CAA seeks to reduce or eliminate the creation of pollutants at their source, and designates this responsibility to state and local governments. States are directed to utilize financial and technical assistance and leadership from the Federal government to develop implementation plans to achieve NAAQS. Geographic areas are officially designated by the USEPA as being in attainment or nonattainment for pollutants in relation to their compliance with NAAQS. Geographic regions established for air quality planning purposes are designated as AQCRs. Pollutant concentration levels are measured at designated monitoring stations within the AQCR. An area with insufficient monitoring data is designated as unclassified. Section 309 of the CAA authorizes USEPA to review and comment on impact statements prepared by other agencies.

An agency should consider what effect an action might have on NAAQS due to short-term increases in air pollution during construction and long-term increases resulting from changes in traffic patterns. For actions in attainment areas, a Federal agency could also be subject to USEPA's Prevention of Significant Deterioration (PSD) regulations. These regulations apply to new major stationary sources and modifications to such sources. Although few agency facilities will actually emit pollutants, increases in pollution can result from a change in traffic patterns or volume. Section 118 of the CAA waives Federal immunity from complying with the CAA and states all Federal agencies will comply with all Federal- and state-approved requirements.

The General Conformity Rule requires that any Federal action meet the requirements of a State Implementation Plan (SIP) or Federal Implementation Plan. More specifically, CAA conformity is ensured when a Federal action does not cause a new violation of the NAAQS; contribute to an increase in the frequency or severity of violations of NAAQS; or delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS.

The General Conformity Rule applies only to actions in nonattainment or maintenance areas and considers both direct and indirect emissions. The rule applies only to Federal actions that are considered "regionally significant" or where the total emissions from the action meet or exceed the *de minimis* thresholds presented in 40 Code of Federal Regulations (CFR) 93.153. If a Federal action does not meet or exceed the *de minimis* thresholds and is not considered regionally significant, then a full Conformity Determination is not required.

On May 13, 2010, the USEPA issued the Greenhouse Gas (GHG) Tailoring Rule that sets thresholds for GHG emissions from large stationary sources. The new GHG emissions thresholds for large stationary sources define when permits under the New Source Review Prevention of PSD and Title V Operating Permit programs are required for new and existing industrial facilities. Beginning January 2, 2011, large industrial facilities that have CAA permits for non-GHG emissions must also include GHGs in these permits. Beginning July 1, 2011, all new construction or renovations that increase GHG emissions by 75,000 tons of carbon dioxide or equivalent per year or more will be required to obtain construction permits for GHG emissions. Operating permits will be needed by all sources that emit GHGs above 75,000 tons of carbon dioxide or equivalent per year beginning in July 2011.

Health and Safety

Human health and safety relates to workers' health and safety during demolition or construction of facilities, or applies to work conditions during operations of a facility that could expose workers to conditions that pose a health or safety risk. The Federal Occupational Safety and Health Administration (OSHA) issues standards to protect persons from such risks, and the DOD and state and local jurisdictions

issue guidance to comply with these OSHA standards. Safety also can refer to safe operations of aircraft or other equipment.

U.S. Army regulations in AR 385-10, *Army Safety Program*, prescribe policy, responsibilities, and procedures to protect and preserve U.S. Army personnel and property from accidental loss or injury. AR 40-5, *Preventive Medicine*, provides for the promotion of health and the prevention of disease and injury.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (April 23, 1997), directs Federal agencies to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Federal agencies must also ensure that their policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks.

Geology and Soil Resources

Recognizing that millions of acres per year of prime farmland are lost to development, Congress passed the Farmland Protection Policy Act (FPPA) to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland (7 CFR Part 658). Prime farmland is described as soils that have a combination of soil and landscape properties that make them highly suitable for cropland, such as high inherent fertility, good water-holding capacity, and deep or thick effective rooting zones, and that are not subject to periodic flooding. Under the FPPA, agencies are encouraged to conserve prime or unique farmlands when alternatives are practicable. Some activities that are not subject to the FPPA include Federal permitting and licensing, projects on land already in urban development or used for water storage, construction for national defense purposes, or construction of new minor secondary structures such as a garage or storage shed.

Water Resources

The Clean Water Act (CWA) of 1977 is an amendment to the Federal Water Pollution Control Act of 1972, is administered by USEPA, and sets the basic structure for regulating discharges of pollutants into U.S. waters. The CWA requires USEPA to establish water quality standards for specified contaminants in surface waters and forbids the discharge of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits are issued by USEPA or the appropriate state if it has assumed responsibility. Section 404 of the CWA establishes a Federal program to regulate the discharge of dredge and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE). Waters of the United States include interstate and intrastate lakes, rivers, streams, and wetlands that are used for commerce, recreation, industry, sources of fish, and other purposes. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Each agency should consider the impact on water quality from actions such as the discharge of dredge or fill material into U.S. waters from construction, or the discharge of pollutants as a result of facility occupation.

Section 303(d) of the CWA requires states and USEPA to identify waters not meeting state water quality standards and to develop Total Maximum Daily Loads (TMDLs). A TMDL is the maximum amount of a pollutant that a waterbody can receive and still be in compliance with state water quality standards. After determining TMDLs for impaired waters, states are required to identify all point and nonpoint sources of pollution in a watershed that are contributing to the impairment and to develop an implementation plan that will allocate reductions to each source to meet the state standards. The TMDL program is currently the Nation's most comprehensive attempt to restore and improve water quality. The TMDL program does not explicitly require the protection of riparian areas. However, implementation of the TMDL plans typically calls for restoration of riparian areas as one of the required management measures for achieving reductions in nonpoint source pollutant loadings.

The Coastal Zone Management Act (CZMA) of 1972 declares a national policy to preserve, protect, and develop, and, where possible, restore or enhance the resources of the Nation's coastal zone. The coastal zone refers to the coastal waters and the adjacent shorelines, including islands, transitional and intertidal areas, salt marshes, wetlands, and beaches, including the Great Lakes. The CZMA encourages states to exercise their full authority over the coastal zone through the development of land and water use programs in cooperation with Federal and local governments. States may apply for grants to help develop and implement management programs to achieve wise use of the land and water resources of the coastal zone. Under Section 307, Federal agency activities that affect any land or water use or natural resource of a coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the state's coastal management program.

The Safe Drinking Water Act (SDWA) of 1974 establishes a Federal program to monitor and increase the safety of all commercially and publicly supplied drinking water. Congress amended the SDWA in 1986, mandating dramatic changes in nationwide safeguards for drinking water and establishing new Federal enforcement responsibility on the part of USEPA. The 1986 amendments to the SDWA require USEPA to establish Maximum Contaminant Levels (MCLs), Maximum Contaminant Level Goals (MCLGs), and Best Available Technology (BAT) treatment techniques for organic, inorganic, radioactive, and microbial contaminants; and turbidity. MCLGs are maximum concentrations below which no negative human health effects are known to exist. The 1996 amendments set current Federal MCLs, MCLGs, and BATs for organic, inorganic, microbiological, and radiological contaminants in public drinking water supplies.

The Wild and Scenic Rivers Act of 1968 provides for a wild and scenic river system by recognizing the remarkable values of specific rivers of the Nation. These selected rivers and their immediate environment are preserved in a free-flowing condition, without dams or other construction. The policy not only protects the water quality of the selected rivers but also provides for the enjoyment of present and future generations. Any river in a free-flowing condition is eligible for inclusion, and can be authorized as such by an Act of Congress, an act of state legislature, or by the Secretary of the Interior upon the recommendation of the governor of the state(s) through which the river flows.

EO 11988, *Floodplain Management* (May 24, 1977), directs agencies to consider alternatives to avoid adverse effects and incompatible development in floodplains. An agency may locate a facility in a floodplain if the head of the agency finds there is no practicable alternative. If it is found there is no practicable alternative, the agency must minimize potential harm to the floodplain, and circulate a notice explaining why the action is to be located in the floodplain prior to taking action. Finally, new construction in a floodplain must apply accepted floodproofing and flood protection to include elevating structures above the base flood level rather than filling in land.

EO 11990, *Protection of Wetlands* (May 24, 1977), directs agencies to consider alternatives to avoid adverse effects and incompatible development in wetlands. Federal agencies are to avoid new construction in wetlands, unless the agency finds there is no practicable alternative to construction in the wetland, and the proposed construction incorporates all possible measures to limit harm to the wetland. Agencies should use economic and environmental data, agency mission statements, and any other pertinent information when deciding whether or not to build in wetlands. EO 11990 directs each agency to provide for early public review of plans for construction in wetlands.

EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (October 5, 2009), directed the USEPA to issue guidance on Section 438 of the Energy Independence and Security Act (EISA). The EISA establishes into law new storm water design requirements for Federal construction projects that disturb a footprint of greater than 5,000 square feet of land. Under these requirements, predevelopment site hydrology must be maintained or restored to the maximum extent technically feasible with respect to temperature, rate, volume, and duration of flow. Predevelopment hydrology

would be calculated and site design would incorporate storm water retention and reuse technologies to the maximum extent technically feasible. Post-construction analyses will be conducted to evaluate the effectiveness of the as-built storm water reduction features. These regulations are applicable to DOD Unified Facilities Criteria. Additional guidance is provided in the USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*.

EO 13514 also requires Federal agencies to improve water efficiency and management by reducing potable water consumption intensity by 2 percent annually, or by 26 percent, by Fiscal Year (FY) 2020, relative to a FY 2007 baseline. Furthermore, Federal agencies must also reduce agency industrial, landscaping, and agricultural water consumption by 2 percent annually, or 20 percent, by FY 2020, relative to a FY 2010 baseline.

Biological Resources

The Endangered Species Act (ESA) of 1973 establishes a Federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. The ESA specifically charges Federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All Federal agencies must ensure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction of critical habitat for these species, unless the agency has been granted an exemption. The Secretary of the Interior, using the best available scientific data, determines which species are officially endangered or threatened, and the U.S. Fish and Wildlife Service (USFWS) maintains the list. A list of Federal endangered species can be obtained from the Endangered Species Division, USFWS (703-358-2171). States might also have their own lists of threatened and endangered species which can be obtained by calling the appropriate State Fish and Wildlife office. Some species also have laws specifically for their protection (e.g., Bald Eagle Protection Act).

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, implements treaties and conventions between the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless otherwise permitted by regulations, the MBTA makes it unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess; offer to or sell, barter, purchase, or deliver; or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. The MBTA also makes it unlawful to ship, transport, or carry from one state, territory, or district to another; or through a foreign country, any bird, part, nest, or egg that was captured, killed, taken, shipped, transported, or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest, or egg obtained contrary to the laws of the province from which it was obtained. The U.S. Department of the Interior has authority to arrest, with or without a warrant, a person violating the MBTA.

The Sikes Act (16 U.S.C. 670a-670o, 74 Stat. 1052), as amended, Public Law (P.L.) 86-797, approved September 15, 1960, provides for cooperation by the Departments of the Interior and Defense with state agencies in planning, development, and maintenance of fish and wildlife resources on military reservations throughout the United States. In November 1997, the Sikes Act was amended via the Sikes Act Improvement Amendment (P.L. 105-85, Division B, Title XXIX) to require the Secretary of Defense to carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. To facilitate this program, the amendments require the Secretaries of the military departments to prepare and implement Integrated Natural Resources Management Plans (INRMPs) for each military installation in the United States unless the absence of significant natural resources on a particular installation makes preparation of a plan for the installation inappropriate. INRMPs must be reviewed by the USFWS and applicable states every 5 years. The National Defense Authorization Act of

2004 modified Section 4(a) (3) of the ESA to preclude the designation of critical habitat on DOD lands that are subject to an INRMP, if the Secretary of the Interior determines in writing that such a plan provides a benefit to the species for which critical habitat is proposed for designation.

EO 11514, *Protection and Enhancement of Environmental Quality* (March 5, 1970), states that the President, with assistance from the Council on Environmental Quality (CEQ), will lead a national effort to provide leadership in protecting and enhancing the environment for the purpose of sustaining and enriching human life. Federal agencies are directed to meet national environmental goals through their policies, programs, and plans. Agencies should also continually monitor and evaluate their activities to protect and enhance the quality of the environment. Consistent with NEPA, agencies are directed to share information about existing or potential environmental problems with all interested parties, including the public, in order to obtain their views.

EO 13112, *Invasive Species* (February 3, 1999), provides direction to use relevant programs and authorities to prevent introduction of invasive species, detect and respond rapidly to control populations of invasive species, monitor invasive species populations, provide restoration of native species and habitat conditions in ecosystems that have been invaded, conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species, and promote public education on invasive species with means to address them. EO 13112 was created to minimize the economic, ecological, and human health impacts that invasive species cause.

EO 13186, *Conservation of Migratory Birds* (January 10, 2001), creates a more comprehensive strategy for the conservation of migratory birds by the Federal government. EO 13186 provides a specific framework for the Federal government's compliance with its treaty obligations to Canada, Mexico, Russia, and Japan. EO 13186 provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in a Memorandum of Understanding (MOU). EO 13186 will be coordinated and implemented by the USFWS. The MOU will outline how Federal agencies will promote conservation of migratory birds. EO 13186 requires the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.

Cultural Resources

The American Indian Religious Freedom Act of 1978 and Amendments of 1994 recognize that freedom of religion for all people is an inherent right, and traditional American Indian religions are an indispensable and irreplaceable part of Indian life. It also recognized the lack of Federal policy on this issue and made it the policy of the United States to protect and preserve the inherent right of religious freedom for Native Americans. The 1994 Amendments provide clear legal protection for the religious use of peyote cactus as a religious sacrament. Federal agencies are responsible for evaluating their actions and policies to determine if changes should be made to protect and preserve the religious cultural rights and practices of Native Americans. These evaluations must be made in consultation with native traditional religious leaders.

The Archaeological Resource Protection Act (ARPA) of 1979 protects archaeological resources on public and American Indian lands. It provides felony-level penalties for the unauthorized excavation, removal, damage, alteration, or defacement of any archaeological resource, defined as material remains of past human life or activities which are at least 100 years old. Before archaeological resources are excavated or removed from public lands, the Federal land manager must issue a permit detailing the time, scope, location, and specific purpose of the proposed work. ARPA also fosters the exchange of information about archaeological resources between governmental agencies, the professional archaeological community, and private individuals. ARPA is implemented by regulations found in 43 CFR Part 7.

The National Historic Preservation Act (NHPA) of 1966 sets forth national policy to identify and preserve properties of state, local, and national significance. The NHPA establishes the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers (SHPOs), and the National Register of Historic Places (NRHP). The ACHP advises the President, Congress, and Federal agencies on historic preservation issues. Section 106 of the NHPA directs Federal agencies to take into account effects of their undertakings (actions and authorizations) on properties included in or eligible for the NRHP. Section 110 sets inventory, nomination, protection, and preservation responsibilities for federally owned cultural properties. Section 106 of the act is implemented by regulations of the ACHP, 36 CFR Part 800. Agencies should coordinate studies and documents prepared under Section 106 with NEPA where appropriate. However, NEPA and NHPA are separate statutes and compliance with one does not constitute compliance with the other. For example, actions which qualify for a categorical exclusion under NEPA might still require Section 106 review under NHPA. It is the responsibility of the agency official to identify properties in the area of potential effects, and whether they are included or eligible for inclusion in the NRHP. Section 110 of the NHPA requires Federal agencies to identify, evaluate, and nominate historic property under agency control to the NRHP.

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 establishes rights of American Indian tribes to claim ownership of certain "cultural items," defined as Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, held or controlled by Federal agencies. Cultural items discovered on Federal or tribal lands are, in order of primacy, the property of lineal descendants, if these can be determined, and then the tribe owning the land where the items were discovered or the tribe with the closest cultural affiliation with the items. Discoveries of cultural items on Federal or tribal land must be reported to the appropriate American Indian tribe and the Federal agency with jurisdiction over the land. If the discovery is made as a result of a land use, activity in the area must stop and the items must be protected pending the outcome of consultation with the affiliated tribe.

EO 11593, *Protection and Enhancement of the Cultural Environment* (May 13, 1971), directs the Federal government to provide leadership in the preservation, restoration, and maintenance of the historic and cultural environment. Federal agencies are required to locate and evaluate all Federal sites under their jurisdiction or control which might qualify for listing on the NRHP. Agencies must allow the ACHP to comment on the alteration, demolition, sale, or transfer of property which is likely to meet the criteria for listing as determined by the Secretary of the Interior in consultation with the SHPO. Agencies must also initiate procedures to maintain federally owned sites listed on the NRHP.

EO 13007, *Indian Sacred Sites* (May 24, 1996), provides that agencies managing Federal lands, to the extent practicable, permitted by law, and not inconsistent with agency functions, shall accommodate American Indian religious practitioners' access to and ceremonial use of American Indian sacred sites, shall avoid adversely affecting the physical integrity of such sites, and shall maintain the confidentiality of such sites. Federal agencies are responsible for informing tribes of proposed actions that could restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites.

EO 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000), was issued to provide for regular and meaningful consultation and collaboration with Native American tribal officials in the development of Federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Native American tribes. EO 13175 recognizes the following fundamental principles: Native American tribes exercise inherent sovereignty over their lands and members, the United States government has a unique trust relationship with Native American tribes and deals with them on a government-to-government basis, and Native American tribes have the right to self-government and self-determination.

EO 13287, *Preserve America* (March 3, 2003), orders Federal agencies to take a leadership role in protection, enhancement, and contemporary use of historic properties owned by the Federal government, and promote intergovernmental cooperation and partnerships for preservation and use of historic properties. EO 13287 established new accountability for agencies with respect to inventories and stewardship.

Socioeconomics and Environmental Justice

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), directs Federal agencies to make achieving environmental justice part of their mission. Agencies must identify and address the adverse human health or environmental effects that its activities have on minority and low-income populations, and develop agencywide environmental justice strategies. The strategy must list "programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations, ensure greater public participation, improve research and data collection relating to the health of and environment of minority populations and low-income populations, and identify differential patterns of consumption of natural resources among minority populations and low-income populations." A copy of the strategy and progress reports must be provided to the Federal Working Group on Environmental Justice. Responsibility for compliance with EO 12898 is with each Federal agency.

Hazardous Materials and Waste

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 authorizes USEPA to respond to spills and other releases of hazardous substances to the environment, and authorizes the National Oil and Hazardous Substances Pollution Contingency Plan. CERCLA also provides a Federal "Superfund" to respond to emergencies immediately. Although the "Superfund" provides funds for cleanup of sites where potentially responsible parties cannot be identified, USEPA is authorized to recover funds through damages collected from responsible parties. This funding process places the economic burden for cleanup on polluters. Section 120(h) of CERCLA requires Federal agencies to notify prospective buyers of contaminated Federal properties about the type, quantity, and location of hazardous substances that would be present.

The Pollution Prevention Act (PPA) of 1990 encourages manufacturers to avoid the generation of pollution by modifying equipment and processes; redesigning products; substituting raw materials; and making improvements in management techniques, training, and inventory control. Consistent with pollution prevention principles, EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (January 24, 2007 [revoking EO 13148]), sets a goal for all Federal agencies to promote environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products; and use of paper of at least 30 percent post-consumer fiber content. In addition, EO 13423 sets a goal that requires Federal agencies to ensure that they reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of; increase diversion of solid waste, as appropriate; and maintain cost-effective waste prevention and recycling programs at their facilities. Additionally, in *Federal Register* Volume 58 Number 18 (January 29, 1993), CEQ provides guidance to Federal agencies on how to "incorporate pollution prevention principles, techniques, and mechanisms into their planning and decisionmaking processes and to evaluate and report those efforts, as appropriate, in documents pursuant to NEPA."

The Resource Conservation and Recovery Act (RCRA) of 1976 is an amendment to the Solid Waste Disposal Act. RCRA authorizes USEPA to provide for "cradle-to-grave" management of hazardous

waste and sets a framework for the management of nonhazardous municipal solid waste. Under RCRA, hazardous waste is controlled from generation to disposal through tracking and permitting systems, and restrictions and controls on the placement of waste on or into the land. Under RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by USEPA as being hazardous. With the Hazardous and Solid Waste Amendments (HSWA) of 1984, Congress targeted stricter standards for waste disposal and encouraged pollution prevention by prohibiting the land disposal of particular wastes. The HSWA strengthens control of both hazardous and nonhazardous waste and emphasizes the prevention of pollution of groundwater.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 mandates strong clean-up standards and authorizes USEPA to use a variety of incentives to encourage settlements. Title III of SARA authorizes the Emergency Planning and Community Right to Know Act (EPCRA), which requires facility operators with "hazardous substances" or "extremely hazardous substances" to prepare comprehensive emergency plans and to report accidental releases. If a Federal agency acquires a contaminated site, it can be held liable for cleanup as the property owner/operator. A Federal agency can also incur liability if it leases a property, as the courts have found lessees liable as "owners." However, if the agency exercises due diligence by conducting a Phase I Environmental Site Assessment, it can claim the "innocent purchaser" defense under CERCLA. According to Title 42 United States Code (U.S.C.) 9601(35), the current owner/operator must show it undertook "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" before buying the property to use this defense.

The Toxic Substance Control Act (TSCA) of 1976 consists of four titles. Title I established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. TSCA authorized USEPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. TSCA also singled out polychlorinated biphenyls (PCBs) for regulation, and, as a result, PCBs are being phased out. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse health effects on laboratory animals and could cause adverse health effects in humans. TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, clean-up, and release reporting requirements for numerous chemicals like PCBs. TSCA Title II provides statutory framework for "Asbestos Hazard Emergency Response," which applies only to schools. TSCA Title III, "Indoor Radon Abatement," states indoor air in buildings of the United States should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. TSCA Title IV, "Lead Exposure Reduction," directs Federal agencies to "conduct a comprehensive program to promote safe, effective, and affordable monitoring, detection, and abatement of lead-based paint and other lead exposure hazards." Further, any Federal agency having jurisdiction over a property or facility must comply with all Federal, state, interstate, and local requirements concerning lead-based paint.

Energy

The Energy Policy Act (EPAct) of 2005, P.L. 109-58, amended portions of the National Energy Conservation Policy Act and established energy management goals for Federal facilities and fleets. Section 109 of EPAct directs that new Federal buildings (commercial or residential) be designed 30 percent below American Society of Heating, Refrigerating, and Air-Conditioning Engineers standards or the International Energy Code. Section 109 also includes the application of sustainable design principles for new buildings and requires Federal agencies to identify new buildings in their budget requests that meet or exceed the standards. Section 203 of EPAct requires that all Federal agencies' renewable electricity consumption meet or exceed 3 percent from FY 2007 through FY 2009, with increases to at least 5 percent in FY 2010 through FY 2012 and 7.5 percent in FY 2013 and thereafter. Section 203 also

establishes a double credit bonus for Federal agencies if renewable electricity is produced onsite at a Federal facility, on Federal lands, or on Native American lands. Section 204 of EPAct establishes a photovoltaic energy commercialization program for Federal buildings.

EO 13514, *Federal Leadership In Environmental, Energy, And Economic Performance* (dated October 5, 2009), directs Federal agencies to improve water use efficiency and management; implement high performance sustainable Federal building design, construction, operation and management; and advance regional and local integrated planning by identifying and analyzing impacts from energy usage and alternative energy sources. EO 13514 also directs Federal agencies to prepare and implement a Strategic Sustainability Performance Plan to manage its greenhouse gas emissions, water use, pollution prevention, regional development and transportation planning, sustainable building design and promote sustainability in its acquisition of goods and services. Section 2(g) requires new construction, major renovation, or repair and alteration of buildings to comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings. The CEQ regulations at 40 CFR 1502.16(e) directs agencies to consider the energy requirements and conservation potential of various alternatives and mitigation measures.

Section 503(b) of EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, instructs Federal agencies to conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically, and fiscally sound, integrated, continuously improving, efficient, and sustainable manner. EO 13423 sets goals in energy efficiency, acquisition, renewable energy, toxic chemical reduction, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Sustainable design measures such as the use of "green" technology (e.g., photovoltaic panels, solar collection, heat recovery systems, wind turbines, green roofs, and habitat-oriented storm water management) would be incorporated where practicable.

APPENDIX B

INTERAGENCY COORDINATION AND PUBLIC INVOLVEMENT

HDR | ONE COMPANY *Many Solutions®*

19 June 2013

MEMORANDUM FOR: See Distribution List

FROM: U.S. Army Garrison Fort Hunter Liggett
California Avenue, Building 238
Fort Hunter Liggett, CA 93928-7000

SUBJECT: Supplemental Environmental Assessment (SEA) Addressing Construction of an Access Control Point at Fort Hunter Liggett, California and Draft Finding of No Significant Impact (FNSI)

Fort Hunter Liggett proposes to construct a primary Access Control Point (ACP) that meets the *Army Access Control Points Standard Design/Criteria* and Unified Facilities Criteria 4-022-01, *Security Engineering: Entry Control Facilities/Access Control Points*, for normally open operations. This SEA supplements the *Final Environmental Assessment Addressing Installation Development and Training (IDTEA) at Fort Hunter Liggett, California*, dated May 2010.

FHL developed the 2010 IDTEA to address the potential environmental impacts of implementing projects proposed over a 5-year time period and identified in FHL's Range Complex Master Plan and Real Property Master Plan. Also addressed were the associated increases in training and future development of the cantonment area.

We request your participation and solicit comments on the attached SEA and Draft FNSI for this Proposed Action. Please provide your comments no later than 18 July 2013. Comments may include any issues or concerns related to the Proposed Action. The SEA and Draft FNSI are also available at the following Web site: http://www.liggett.army.mil/sites/dpw/environmental.asp.

Please provide any comments or information within 30 days from the date of this correspondence to Liz Clark, Fort Hunter Liggett Environmental Office, 233 California Avenue, Fort Hunter Liggett, CA 93928-7090 or e-mail to elizabeth.r.clark14civ@mail.mil.

Sincerely,
HDR

Leigh Hagan

Leigh Hagan
Project Manager

Attachments:
SEA and Draft FNSI

Supplemental Environmental Assessment Distribution List

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APPENDIX C

AIR EMISSIONS CALCULATIONS

Air Emissions from the Proposed Action

		NO_x (ton)	VOC (ton)	CO (ton)	SO_2 (ton)	PM_{10} (ton)	$PM_{2.5}$ (ton)	CO_2 (ton)
Construction Year	Combustion	5.700	0.471	2.482	0.457	0.400	0.388	654.776
	Fugitive Dust	-	-	-	-	22.527	2.253	-
	Haul Truck On-Road	0.133	0.041	0.241	0.010	0.158	0.041	33.650
	Construction Commuter	0.112	0.115	1.102	0.002	0.013	0.008	158.620
	Total	***5.945***	***0.627***	***3.825***	***0.469***	***23.097***	***2.690***	***847.046***
Subsequent Operation Years	Emergency Generators	2.510	0.205	0.541	0.165	0.176	0.176	93.328
	Total	***2.510***	***0.205***	***0.541***	***0.165***	***0.176***	***0.176***	***93.328***

Note: Total $PM_{10}/_{2.5}$ fugitive dust emissions are assuming USEPA 50% control efficiencies.

Construction Year	CO_2 emissions converted to metric tons =	***768.270***	***metric tons***	
Subsequent Operation Years	CO_2 emissions converted to metric tons =	***84.648***	***metric tons***	
	State of California's CO_2 emissions =	***376,000,000***	***metric tons***	*(U.S. DOE/EIA 2011)*
Construction Year	Percent of California's CO_2 emissions =	***0.00020%***		
Subsequent Operation Years	Percent of California's CO_2 emissions =	***0.00002%***		
	United States' CO_2 emissions =	***5,425,600,000***	***metric tons***	*(U.S. DOE/EIA 2011)*
Construction Year	Percent of USA's CO_2 emissions =	***0.000014%***		
Subsequent Operation Years	Percent of USA's CO2 emissions =	***0.000002%***		

Source: U.S. Department of Energy, Energy Information Administration (U.S. DOE/EIA). 2011. *Table 1. State Emissions by Year (Million Metric Tons of Carbon Dioxide).* Available online: <http://www.eia.gov/environment/emissions/state/state_emissions.cfm>. Data released October 2011. Data accessed 22 January 2013.

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